



## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

registration statement for the same offering. |\_|

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. |\_|

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement the same offering. |\_|

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. |\_|

### CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED (1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE	AMOUNT OF REGISTRATION FEE
Common stock, \$.001 par value (4)	37,141,981	\$0.18 (2)	\$6,685,557 (2)	\$847 (6)
Common stock, \$.001 par value (5)	10,019,600	0.18 (2)	1,803,528 (2)	229 (6)
Common stock, \$.001 par value (4)	5,192,135	0.31 (3)	1,609,562 (3)	189
Common stock, \$.001 par value (5)	5,432,891	0.31 (3)	1,684,196 (3)	198
Total Registration Fee	57,786,607 =====			\$387 ===

(Footnotes to table on next page)

-----

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL HEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SUCH SECTION 8(A), MAY DETERMINE.

(1) In accordance with Rule 416(a), the Registrant is also registering hereunder an indeterminate number of additional shares of common stock that shall be issuable pursuant to Rule 416 to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) Estimated pursuant to Rule 457(c) of the Securities Act of 1933 solely for

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

the purpose of computing the amount of the registration fee based on the average of the bid and ask prices reported on the OTC Bulletin Board on November 22, 2004.

- (3) Estimated pursuant to Rule 457(c) of the Securities Act of 1933 solely for the purpose of computing the amount of the registration fee based on the average of the bid and ask prices reported on the OTC Bulletin Board on July 19, 2005.
- (4) Represents shares of the Registrant's common stock being registered for resale that have been issued to the selling stockholders named in the prospectus or a prospectus supplement.
- (5) Represents shares of the Registrant's common stock being registered for resale that have been or may be acquired upon the exercise of warrants issued to the selling stockholders named in the prospectus or a prospectus supplement.
- (6) Previously paid.

PROSPECTUS

Subject to Completion, Dated July 20, 2005

-----  
=====

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

=====

57,786,607 SHARES

IR BIOSCIENCES HOLDINGS, INC.

COMMON STOCK

This prospectus relates to 57,786,607 shares of common stock of IR BioSciences Holdings, Inc. that may be sold from time to time by the selling stockholders named in this prospectus. We will not receive any proceeds from the sales by the selling stockholders, but we will receive funds from the exercise of warrants held by selling stockholders, if exercised.

-----

Our common stock is traded on the OTC Bulletin Board maintained by the National Association of Securities Dealers, Inc. under the symbol "IRBO." On July 20, 2005, the closing sales price for our common stock on the OTCBB was \$0.30 per share.

-----

# Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

THE SECURITIES OFFERED BY THIS PROSPECTUS INVOLVE A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 5.

-----

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

-----

The date of this prospectus is July 20, 2005

## TABLE OF CONTENTS

PROSPECTUS SUMMARY.....	1
RISK FACTORS.....	5
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS.....	17
USE OF PROCEEDS.....	19
DIVIDEND POLICY.....	19
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.....	20
BUSINESS.....	30
MANAGEMENT.....	44
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.....	49
PRINCIPAL AND SELLING STOCKHOLDERS.....	52
DESCRIPTION OF CAPITAL STOCK.....	77
SHARES ELIGIBLE FOR FUTURE SALE.....	80
PLAN OF DISTRIBUTION.....	81
LEGAL MATTERS.....	84
EXPERTS.....	84
ADDITIONAL INFORMATION.....	84
INDEX TO FINANCIAL STATEMENTS.....	F-1

## ABOUT THIS PROSPECTUS

Please read this prospectus carefully. It describes our business, our financial condition and results of operations. We have prepared this prospectus so that you will have the information necessary to make an informed investment decision.

You should rely on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The selling stockholders are offering to sell shares of our common stock and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of the prospectus, regardless of the time the prospectus is delivered or the common stock is sold.

# Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

## PROSPECTUS SUMMARY

This summary highlights some information from this prospectus, and it may not contain all of the information that is important to you. You should read the following summary together with the more detailed information regarding our company and the common stock being sold in this offering, including "Risk Factors" and our consolidated financial statements and related notes, included elsewhere in, or incorporated by reference into, this prospectus. All share and per share information included in this prospectus has been adjusted for a 1-for-20 reverse split of our common stock that we effected in July 2003 and a 2-for-1 forward stock split of our common stock that we effected in April 2004.

## OUR COMPANY

### GENERAL

IR BioSciences Holdings, Inc. is a development-stage biopharmaceutical company. Through our wholly owned subsidiary, ImmuneRegen BioSciences, Inc., we are engaged in the research and development of health enhancing and potential life saving products. Our product development is focused around Homspera(TM), a proprietary compound that is derived from homeostatic substance P, a naturally occurring peptide. Our focus is on the research and development of products that we believe will treat the suppression of the body's immune system caused by exposure to various forms of radiation, toxic inhalants and viral infectious diseases. Currently, the majority of our efforts are in the research and development of Radilex(TM), a compound derived from Homspera, as a countermeasure to the effects of radiological and nuclear threats. Currently, we own or have obtained a license to 4 issued U.S. and foreign patents and 24 pending U.S. and foreign patent applications. As we continue our research and development efforts we will look to add to our portfolio of patents and trademarks.

### COMPANY HISTORY

We were originally incorporated in Delaware in June 1985 under the name Vocaltech, Inc. to develop, design, manufacture and market products utilizing proprietary speech-generated tactile feedback devices. We completed our initial public offering of our securities in October 1987. We changed our name to InnoTek, Inc. in November 1992. In January 1992, we effected a 1-for-6.3 reverse stock split of our common stock. In December 1994, we acquired all of the outstanding stock of InnoVisions, Inc., a developer and marketer of skin protective products, discontinued our prior operations in their entirety and changed our name to DermaRx Corporation. In April 2000, we effected a reverse merger with a subsidiary of Go Public Network, Inc., which was engaged in assisting early-stage development and emerging growth companies with financial and business development services. We changed our name to GoPublicNow.com, Inc., effected a 1-for-5 reverse stock split and discontinued our prior operations in their entirety. In November 2000, we changed our name to GPN Network, Inc. In July 2001, we discontinued the operations of GPN Network, Inc. in their entirety and began looking for appropriate merger partners. Our objective became the acquisition of an operating company with the potential for growth in exchange for our securities. In July 2003, we effected a reverse merger with ImmuneRegen BioSciences, Inc. and adopted our current business model. In July 2003, we effected a 1-for-20 reverse stock split, and in April 2004, we effected a 2-for-1 stock split. ImmuneRegen BioSciences, Inc. was incorporated in October 2002; all information contained herein refers to the operations of ImmuneRegen BioSciences, Inc., our wholly-owned operational subsidiary.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### RECENT DEVELOPMENTS

In January 2005, we made a tender offer to temporarily reduce the exercise price of certain warrants issued in October 2004 from \$0.50 to \$0.20 per share. The tender offer expired on March 4, 2005. We accepted for exercise a total of 6,600,778 warrants validly tendered and not withdrawn pursuant to the terms of the tender offer, which represents approximately 48% of the aggregate 13,780,449 warrants that were subject to the offer.

In October 2004, we completed a private placement, whereby we sold an aggregate of \$2,450,000 worth of units to accredited investors (the "Private Placement"). Each unit was sold for \$10,000 (the "Unit Price") and consisted of (a) a number of shares of our common stock determined by dividing the Unit Price by \$0.125, and (b) a warrant to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to fifty percent (50%) of the number of shares included within the unit, at a

-1-

price equal to \$0.50 per share of common stock. We issued in the Private Placement an aggregate of 27,560,897 shares of our common stock and warrants to purchase 13,780,449 shares of our common stock. In consideration of the investment, we granted to each investor certain registration rights and anti-dilution rights.

Pursuant to the terms of a placement agency agreement, dated September 3, 2004, by and between us and Joseph Stevens & Co., Inc., we issued 4,900,000 shares of our common stock to Joseph Stevens & Co., Inc. or its designees, upon the closing of the Private Placement. The shares were issued as consideration for the services of Joseph Stevens & Co., Inc. as our placement agent in the Private Placement.

Further to the Private Placement, we entered into a settlement agreement with certain creditors whereby for full and complete satisfaction of claims totaling an aggregate of \$158,017 (the "Claim Amount"), we issued to the creditors the following: (a) a number of shares of our common stock determined by dividing the Claim Amount by \$0.125, and (b) warrants to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to fifty percent (50%) of the number of shares described above, at a price equal to \$0.50 per share of common stock. The warrants are identical to the warrants issued in the Private Placement. Pursuant to the settlement we issued an aggregate of 1,264,138 shares of common stock and warrants to purchase 632,069 shares of common stock. Under the terms of the settlement agreement, the creditors released us from all claims, known or unknown, relating to the Claim Amount.

Between June 2003 and August 2004 eleven investors entered into fifteen convertible promissory notes totaling \$558,500 with interest rates ranging between 8% and 12% and having various maturities. In October 2004, these notes were converted into equity in the aggregate amount of \$558,500 plus accrued interest of \$56,757. For full and complete satisfaction of debt, we issued to the note holders the following: (a) a number of shares of our common stock determined by dividing the debt amount by \$0.125, and (b) warrants to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to fifty percent (50%) of

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

the number of shares described above, at a price equal to \$0.50 per share of common stock. The warrants are identical to the warrants issued in the Private Placement. Pursuant to the debt conversion we issued an aggregate of 6,694,149 shares of common stock and warrants to purchase 3,347,076 shares of common stock. Under the terms of the conversion agreement, the note holders released us from all claims, known or unknown, relating to the debt amount.

Effective December 17, 2004, Eric Hopkins resigned from his position as our Chief Financial Officer.

Effective December 22, 2004, Dr. Harris resigned from his position as a member of our Board of Directors and a member of the Board of Directors of ImmuneRegen BioSciences, Inc., our subsidiary

Effective December 22, 2004, Steven J. Scronic resigned from his position as our Corporate Secretary.

Our board of directors appointed John N. Fermanis to serve as our Chief Financial Officer, effective as of December 22, 2004. Our Board resolved to issue 100,000 shares of registered common stock to Mr. Fermanis for his acceptance of this position. These shares were issued to Mr. Fermanis in May 2005.

Our board of directors appointed Michelle R. Laroche to serve as our Corporate Secretary, effective as of December 22, 2004.

### THE OFFERING

Common stock offered by selling stockholders.....	57,786,607 shares (1)
Common stock outstanding.....	72,571,026 shares (2), (3)
Use of proceeds.....	We will not receive any proceeds from the sale of the common stock, but we will receive funds from the exercise of warrants by selling stockholders, if exercised.
OTC Bulletin Board.....	IRBO

-2-

- (1) Represents 48,934,894 shares of our common stock that were issued to selling stockholders and 8,851,713 shares of our common stock underlying warrants that were issued to selling stockholders.
- (2) The number of shares of common stock outstanding as of May 31, 2005 listed above includes:
  - o 740,551 common shares that have been accrued due to convertible features of notes, employment and advisory agreements.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- o 3,228,400 shares to be issued in connection with a penalty clause regarding the registrance of shares sold in our Private Offering in October 2004. For each 30-day period beyond 90-days following the second closing date (October 26, 2004), we have agreed to issue to the holders of units sold in the Private Offering an additional 2% a month, or in aggregate 461,200 shares and 181,600 warrants until such a time as this Registration Statement is made effective.
- (3) The number of shares of common stock outstanding as of May 31, 2005 listed above excludes:
- o 63,212 shares of our common stock issuable upon exercise of options at a weighted average exercise price of \$25.00 per share that were granted outside of our 2003 Stock Option, Deferred Stock and Restricted Stock Plan.
  - o 150,000 10-year common stock purchase options at an exercise price of \$0.40 have been granted under our 2003 Stock Option, Deferred Stock and Restricted Stock Plan; and,
  - o 16,342,351 shares of our common stock issuable upon exercise of warrants with exercise prices ranging from \$0.05 to \$2.00 per share.

### SUMMARY FINANCIAL INFORMATION

The following summary financial information has been derived from the financial statements that are included elsewhere in this prospectus. You should read this information in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and the related notes thereto included elsewhere in this prospectus.

	FOR THE THREE MONTHS ENDED MARCH 31,		FOR THE YEAR ENDED DECEMBER 31		CUMULAT (OCT TO
	2005 (UNAUDITED)	2004 (UNAUDITED)	2004	2003	
	-----	-----	-----	-----	
Revenues .....	\$ --	\$ --	\$ --	\$ --	
Operating expenses:					
Selling, general and					
administrative expenses ...	838,520	931,074	4,498,390	1,045,776	
Merger fees and costs .....	--	--	--	350,000	
Financing cost .....	--	--	--	90,000	
	-----	-----	-----	-----	
Total operating expenses	838,520	931,074	4,498,390	1,485,776	
	-----	-----	-----	-----	
Operating loss .....	(838,520)	(931,074)	(4,498,390)	(1,485,776)	
Interest expense .....	977	304,078	807,017	370,926	
	-----	-----	-----	-----	
Total other expense ....	977	304,078	807,017	370,926	
	-----	-----	-----	-----	
Loss before income taxes ..	(839,497)	(1,235,152)	(5,305,407)	(1,856,702)	
Provision for income taxes	--	--	--	--	
	-----	-----	-----	-----	

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Net loss .....	\$ (839,497)	\$ (1,235,152)	\$ (5,305,407)	\$ (1,856,702)
	=====	=====	=====	=====
Net loss per share - basic and diluted .....	\$ (0.01)	\$ (0.05)	\$ (0.16)	\$ (0.09)
	=====	=====	=====	=====
Weighted average shares outstanding - basic and diluted .....	62,863,440	24,845,493	33,510,168	21,317,292
	=====	=====	=====	=====

-3-

### ADDITIONAL INFORMATION

We were originally incorporated in Delaware under the name of Vocaltech, Inc. in June 1985. We changed our name to InnoTek, Inc. in November 1992, to DermaRx Corporation in December 1994, to GoPublicNow.com, Inc. in April 2000, to GPN Network, Inc. in November 2000 and to IR BioSciences Holdings, Inc. in August 2003. Our executive offices are located at 4021 N. 75th Street, Suite 201, Scottsdale, Arizona 85251. Our telephone number is (480) 922-3926.

In this prospectus, the terms "we," "us," and "our" refer to IR BioSciences Holdings, Inc., a Delaware corporation, and its consolidated subsidiary, as appropriate in the context, and, unless the context otherwise requires, "common stock" refers to the common stock, par value \$0.001 per share, of IR BioSciences Holdings, Inc.

-4-

### RISK FACTORS

Any investment in our common stock involves a high degree of risk. You should carefully consider the risks described below and all of the information contained in this prospectus before deciding whether to purchase our common stock. The risks described below are all of the material risks that we are currently aware of that are facing our company. Additional risks not presently known to us may also impair our business operations. If any of the following risks actually occur, our business, financial condition and results of operations could be harmed. The trading price of our common stock could decline, and you may lose all or part of your investment in our common stock.

#### RISKS RELATED TO OUR FINANCIAL RESULTS

WE HAVE AN ACCUMULATED DEFICIT, ARE NOT CURRENTLY PROFITABLE AND EXPECT TO INCUR SIGNIFICANT EXPENSES IN THE NEAR FUTURE.

We have incurred a substantial net loss for the period from our inception in October 2002 to March 31, 2005, and are currently experiencing negative cash flow. We expect to continue to experience negative cash flow and operating losses through at least 2007 and possibly thereafter. As a result, we will need

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

to generate significant revenues to achieve profitability.

WE MAY FAIL TO BECOME AND REMAIN PROFITABLE OR WE MAY BE UNABLE TO FUND OUR CONTINUING LOSSES, IN WHICH CASE OUR BUSINESS MAY FAIL.

We are focused on product development and have not generated any revenue to date. We have incurred operating losses since our inception. Our net loss for the three months ended March 31, 2005 and for fiscal year 2004 was \$839,497 and \$5,305,407, respectively. As of March 31, 2005, we had an accumulated deficit of \$8,047,524.

We currently have no product candidates for sale in the United States, and we cannot guarantee that we will ever have marketable products in the United States. We must demonstrate that our product candidates satisfy rigorous standards of safety and efficacy before the U.S. Food and Drug Administration ("FDA") and other regulatory authorities in the United States and abroad will approve the products for commercial marketing. We will need to conduct significant additional research, preclinical testing and clinical testing before we can file applications with the FDA for approval of our product candidates. In addition, to compete effectively, our future products must be easy to use, cost-effective and economical to manufacture on a commercial scale. We may not achieve any of these objectives.

We expect to incur losses as we research, develop and seek regulatory approvals for our products. If our products fail in clinical trials or do not gain regulatory approval, or if our products do not achieve market acceptance, we will not be profitable. If we fail to become and remain profitable, or if we are unable to fund our continuing losses, our business may fail.

OUR OPERATING EXPENSES ARE UNPREDICTABLE, WHICH MAY ADVERSELY AFFECT OUR BUSINESS, OPERATIONS AND FINANCIAL CONDITION.

As a result of our limited operating history and because of the emerging nature of the markets in which we will compete, our financial data is of limited value in planning future operating expenses. To the extent our operating expenses precede or are not rapidly followed by increased revenue, our business, results of operations and financial condition may be materially adversely affected. Our expense levels will be based in part on our expectations concerning future revenues. A significant portion of our revenue is anticipated to be derived from Homspera or derivatives thereof; however the size and extent of such revenues are wholly dependent upon the choices and demand of individuals, which are difficult to forecast accurately. We may be unable to adjust our operations in a timely manner to compensate for any unexpected shortfall in revenues. Further, business development and marketing expenses may increase significantly as we expand our operations.

-5-

WE MAY EXPERIENCE FLUCTUATION OF QUARTERLY OPERATING RESULTS WHICH MAY CAUSE OUR STOCK PRICE TO FLUCTUATE.

Our quarterly operating results may fluctuate significantly in the future as a result of a variety of factors, many of which are outside our control. These factors include: the level of demand for Radilex, Homspera and any other products; our ability to attract and retain personnel with the necessary strategic, technical and creative skills required for effective operations; the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

amount and timing of expenditures by customers; the amount and timing of capital expenditures and other costs relating to the expansion of our operations; government regulation and legal developments regarding the use of Homspera; and general economic conditions. As a strategic response to changes in the competitive environment, we may from time to time make certain pricing, service, technology or marketing decisions that could have a material adverse effect on our quarterly results. Due to all of these factors, our operating results may fall below the expectations of securities analysts, stockholders and investors in any future quarter.

### RISKS RELATED TO OUR BUSINESS

IF OUR PLAN IS NOT SUCCESSFUL OR MANAGEMENT IS NOT EFFECTIVE, THE VALUE OF OUR COMMON STOCK MAY DECLINE.

Our operating subsidiary, ImmuneRegen BioSciences, Inc., was founded in October 2002. As a result, we are a development stage company with a limited operating history that makes it impossible to reliably predict future growth and operating results. Our business and prospects must be considered in light of the risks and uncertainties frequently encountered by companies in their early stages of development. In particular, we have not demonstrated that we can:

- o ensure that our products function as intended in human clinical applications;
- o obtain the regulatory approvals necessary to commercialize products that we may develop in the future;
- o manufacture, or arrange for third-parties to manufacture, future products in a manner that will enable us to be profitable;
- o establish many of the business functions necessary to operate, including sales, marketing, administrative and financial functions, and establish appropriate financial controls;
- o make, use, and sell future products without infringing upon third party intellectual property rights; or,
- o respond effectively to competitive pressures.

We cannot be sure that we will be successful in meeting these challenges and addressing these risks and uncertainties. If we are unable to do so, our business will not be successful.

WE WILL BE REQUIRED TO RAISE ADDITIONAL CAPITAL TO FUND OUR OPERATIONS. IF WE CANNOT RAISE NEEDED ADDITIONAL CAPITAL IN THE FUTURE, WE WILL BE REQUIRED TO CEASE OPERATIONS.

As of March 31, 2005, our cash and cash equivalents totaled approximately \$1,600,000. Based on our current plans, we believe these financial resources, and interest earned thereon, will be sufficient to meet our operating expenses and capital requirements through January 2006. However, changes in our research and development plans or other events affecting our operating expenses may result in the expenditure of such cash before that time. We may require substantial additional funds in order to finance our drug discovery and development programs, fund operating expenses, pursue regulatory clearances, develop manufacturing, marketing and sales capabilities, and prosecute and defend our intellectual property rights. We may seek additional funding through public or private financing or through collaborative arrangements with strategic partners.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

You should be aware that in the future:

-6-

- o we may not obtain additional financial resources when necessary or on terms favorable to us, if at all; and,
- o any available additional financing may not be adequate.

If we cannot raise additional funds when needed, or on acceptable terms, we will not be able to continue to develop our drug candidates. We require substantial working capital to fund our operations. Since we do not expect to generate significant revenues in the foreseeable future, in order to fund operations, we will be completely dependent on additional debt and equity financing arrangements. There is no assurance that any financing will be sufficient to fund our capital expenditures, working capital and other cash requirements beyond January 2006. Our working capital as of March 31, 2005 was \$1,198,905. No assurance can be given that any such additional funding will be available or that, if available, can be obtained on terms favorable to us. If we are unable to raise needed funds on acceptable terms, we will not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements. A material shortage of capital will require us to take drastic steps such as reducing our level of operations, disposing of selected assets or seeking an acquisition partner. If cash is insufficient, we will not be able to continue operations.

ALL OUR APPLICATIONS ARE ALL DERIVED FROM THE USE OF HOMSPERA. IF HOMSPERA IS FOUND TO BE UNSAFE OR INEFFECTIVE, OUR BUSINESS WOULD BE MATERIALLY HARMED.

All our potential applications are derived from the use of Homspere. In addition, we expect to utilize Homspere in the development of any future products we market. If these current or future products are found to be unsafe or ineffective due to the use of Homspere, we may have to modify or cease production of the products. As all of our applications utilize or will utilize Homspere, any findings that Homspere is unsafe or ineffective would severely harm our business operations, since all of our primary revenue sources would be negatively affected by such findings.

IF WE FAIL TO SUCCESSFULLY DEVELOP AND COMMERCIALIZE PRODUCTS, WE WILL HAVE TO CEASE OPERATIONS.

Our failure to develop and commercialize products successfully will cause us to cease operations. Our potential therapies utilizing Homspere will require significant additional research and development efforts and regulatory approvals prior to potential commercialization in the future. We cannot guarantee that we, or our corporate collaborators, if any, will ever obtain any regulatory approvals of Homspere. We currently are focusing our core competencies on Homspere although there may be no assurance that we will be successful in so doing.

Our therapies and technologies utilizing Homspere are at early stages of development and may not be shown to be safe or effective and may never receive regulatory approval. Our technologies utilizing Homspere have not yet been

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

tested in humans. Regulatory authorities may not permit human testing of potential products based on these technologies. Even if human testing is permitted, any potential products based on Homspera may not be successfully developed or shown to be safe or effective.

The results of our preclinical studies and clinical trials may not be indicative of future clinical trial results. A commitment of substantial resources to conduct time-consuming research, preclinical studies and clinical trials will be required if we are to develop any products. Delays in planned patient enrollment in our clinical trials may result in increased costs, program delays or both. None of our potential products may prove to be safe or effective in clinical trials. Approval of the United States Food and Drug Administration, the FDA, or other regulatory approvals, including export license permissions, may not be obtained and even if successfully developed and approved, our potential products may not achieve market acceptance. Any products resulting from our programs may not be successfully developed or commercially available for a number of years, if at all.

Moreover, unacceptable toxicity or side effects could occur at any time in the course of human clinical trials or, if any products are successfully developed and approved for marketing, during commercial use of any of our proposed products. The appearance of any unacceptable toxicity or side effects could interrupt, limit, delay or abort the development of any of our proposed products or, if previously approved, necessitate their withdrawal from the market.

-7-

THE MARKET FOR TREATING ASPECTS OF ACUTE RADIATION SYNDROME IS UNCERTAIN AND WE MAY NOT BE ABLE TO SUCCESSFULLY COMMERCIALIZE RADILEX.

We do not believe any drug has ever been approved and commercialized for the treatment of severe acute radiation injury. In addition, the incidence of large-scale exposure to nuclear or radiological events has been low. Accordingly, even if Radilex, our leading drug candidate to treat aspects of Acute Radiation Syndrome (ARS), is approved by the FDA, we cannot predict with any certainty the size of this market. The potential market for Radilex is largely dependent on the size of stockpiling orders, if any, procured by the U.S. and foreign governments. While a number of governments have historically stockpiled drugs to treat indications such as smallpox, anthrax exposure, plague, tularemia and certain long-term effects of radiation exposure, we are unaware of any significant stockpiling orders for drugs to treat ARS. While we have filed a formal response to the U.S. Department of Health and Human Services Request for Information (RFI) for therapeutics to treat ARS, at least one other company has responded to this RFI, and we cannot guarantee that our response to this RFI will result in a U.S. Department of Health and Human Services Request for Proposal (RFP) or any stockpiling orders. A decision by the U.S. Government to enter into a commitment to purchase Radilex prior to FDA approval is largely out of our control. Our development plans and timelines may vary substantially depending on whether we receive such a commitment and the size of such commitment, if any. In addition, even if Radilex is approved by regulatory authorities, we cannot guarantee that we will receive any stockpiling orders for Radilex, that any such order would be profitable to us or that Radilex will achieve market acceptance by the general public.

THE LENGTHY PRODUCT APPROVAL PROCESS AND UNCERTAINTY OF GOVERNMENT REGULATORY REQUIREMENTS MAY DELAY OR PREVENT US FROM COMMERCIALIZING PROPOSED PRODUCTS.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Clinical testing, manufacture, promotion, export and sale of our proposed products are subject to extensive regulation by numerous governmental authorities in the United States, principally the FDA, and corresponding state and foreign regulatory agencies. This regulation may delay or prevent us from commercializing proposed products. Noncompliance with applicable requirements can result in, among other things, fines, injunctions, seizure or recall of such products, total or partial suspension of product manufacturing and marketing, failure of the government to grant premarket approval, withdrawal of marketing approvals and criminal prosecution.

The regulatory process for new therapeutic drug products, including the required preclinical studies and clinical testing, is lengthy and expensive. We may not receive necessary FDA clearances for any of our potential products in a timely manner, or at all. The length of the clinical trial process and the number of patients the FDA will require to be enrolled in the clinical trials in order to establish the safety and efficacy of our proposed products is uncertain.

We are currently preparing the protocols for additional formulation and stability studies. We expect these studies to be completed within 3 months. We expect to perform toxicity inhalation studies, followed by additional mouse studies. In these mouse studies we expect further validate our prior findings by collecting additional data as requested by the FDA and NIH. We expect to begin our eighth mouse study within the next 120 days. We estimate that the study will be completed within 3 months of inception at an estimated cost of \$100,000. Upon completion of the aforementioned study we intend to prepare the protocols necessary for a non-human primate study to test the efficacy of Radilex as a treatment to acute radiation sickness and apply for an Investigative New Drug ("IND") application. We expect to receive an IND and begin this study within the next twelve to eighteen months.

Even if human clinical trials of Homspera are initiated and successfully completed, the FDA may not approve Homspera for commercial sale. We may encounter significant delays or excessive costs in our efforts to secure necessary approvals. Regulatory requirements are evolving and uncertain. Future United States or foreign legislative or administrative acts could also prevent or delay regulatory approval of our products. We may not be able to obtain the necessary approvals for clinical trials, manufacturing or marketing of any of our products under development. Even if commercial regulatory approvals are obtained, they may include significant limitations on the indicated uses for which a product may be marketed.

The FDA has not designated expanded access protocols for Homspera as "treatment" protocols. The FDA may not determine that Homspera meets all of the FDA's criteria for use of an investigational drug for treatment use. Even if Homspera is allowed for treatment use, third party payers may not provide reimbursement for the costs

-8-

of treatment with Homspera. The FDA also may not consider Homspera to be an appropriate candidate for acceptance as Emergency Use Authorization for Promising Medical Countermeasures Under Development, accelerated approval, expedited review or fast track designation.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

IF WE OBTAIN REGULATORY APPROVAL OF OUR PRODUCTS, THEY WILL BE SUBJECT TO CONTINUING REVIEW AND EXTENSIVE REGULATORY REQUIREMENTS, WHICH COULD AFFECT THE MANUFACTURING AND MARKETING OF OUR PRODUCTS.

A marketed product is subject to continual FDA review. Later discovery of previously unknown problems or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market, as well as possible civil or criminal sanctions. The FDA could withdraw a previously approved product from the market upon receipt of newly discovered information, including a failure to comply with regulatory requirements, the occurrence of unanticipated problems with products following approval, or other reasons, which could adversely affect our operating results.

Among the other requirements for regulatory approval is the requirement that prospective manufacturers conform to the FDA's Good Manufacturing Practices, or GMP, requirements. In complying with the FDA's GMP requirements, manufacturers must continue to expend time, money and effort in production, record keeping and quality control to assure that products meet applicable specifications and other requirements. Failure to comply and maintain compliance with the FDA's GMP requirements subjects manufacturers to possible FDA regulatory action and as a result, may have a material adverse effect on us. We, or our contract manufacturers, if any, may not be able to maintain compliance with the FDA's GMP requirements on a continuing basis. Failure to maintain compliance could have a material adverse effect on us.

Additionally, the FDA's policies may change and additional government regulations may be enacted, which could prevent or delay regulatory approval of our applications. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we might not be permitted to market our future products and our business could suffer.

IF WE FAIL TO OBTAIN APPROVAL FROM FOREIGN REGULATORY AUTHORITIES, WE WILL NOT BE ALLOWED TO MARKET OR SELL OUR PRODUCTS IN OTHER COUNTRIES.

Marketing any drug products outside of the United States will subject us to numerous and varying foreign regulatory requirements governing the design and conduct of human clinical trials and marketing approval. Additionally, our ability to export drug candidates outside the United States on a commercial basis will be subject to the receipt from the FDA of export permission, which may not be available on a timely basis, if at all.

Approval procedures vary among countries and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Foreign regulatory approval processes include all of the risks associated with obtaining FDA approval set forth above, and approval by the FDA does not ensure approval by the health authorities of any other country.

SIGNIFICANT DELAY OR FAILURE TO OBTAIN REGULATORY APPROVALS WOULD IMPEDE OUR ABILITY TO GENERATE REVENUE.

The process of obtaining FDA and other regulatory approvals is time consuming, expensive and difficult to design and implement. Clinical trials are required and the marketing and manufacturing of our applications are subject to rigorous testing procedures. Significant delays in clinical trials will impede our ability to commercialize our applications and generate revenue and could significantly increase our development costs. The commencement and completion of clinical trials for our Homspera-based applications or any of our applications could be delayed or prevented by a variety of factors, including:

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- o delays in obtaining regulatory approvals to commence a study;
- o delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites;

-9-

- o delays in the enrollment of patients;
- o lack of efficacy during clinical trials; or,
- o unforeseen safety issues.

Even if marketing approval from the FDA is received, the FDA may impose post-marketing requirements, such as:

- o labeling and advertising requirements, restrictions or limitations, including the inclusion of warnings, precautions, contra-indications or use limitations that could have a material impact on the future profitability of our applications;
- o testing and surveillance to monitor our future products and their continued compliance with regulatory requirements;
- o submitting products for inspection and, if any inspection reveals that the product is not in compliance, prohibiting the sale of all products;
- o suspending manufacturing; or
- o withdrawing marketing clearance.

CLINICAL TRIALS MAY FAIL TO DEMONSTRATE THE SAFETY AND EFFICACY OF OUR APPLICATIONS, WHICH COULD PREVENT OR SIGNIFICANTLY DELAY REGULATORY APPROVAL.

Prior to receiving approval to commercialize any of our applications or therapies, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA and other regulatory authorities in the United States and abroad, that our applications are both safe and effective. We will need to demonstrate our applications' efficacy and monitor their safety throughout the process. If any future clinical trials are unsuccessful, our business and reputation would be harmed and our stock price would be adversely affected.

All of our applications are prone to the risks of failure inherent in biologic development. The results of early-stage clinical trials of our applications do not necessarily predict the results of later-stage clinical trials. Applications in later-stage clinical trials may fail to show desired safety and efficacy traits despite having progressed through initial clinical testing. Even if we believe the data collected from clinical trials of our applications is promising, this data may not be sufficient to support approval by the FDA or any other U.S. or foreign regulatory approval. Preclinical and clinical data can be interpreted in different ways. Accordingly, FDA officials could interpret such data in different ways than we do, which could delay, limit or prevent regulatory approval. The FDA, other regulatory authorities, or we may suspend or terminate clinical trials at any time. Any failure or significant

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

delay in completing clinical trials for our applications, or in receiving regulatory approval for the sale of any products resulting from our applications, may severely harm our business and reputation.

DELAYS IN THE CONDUCT OR COMPLETION OF OUR PRECLINICAL OR CLINICAL STUDIES OR THE ANALYSIS OF THE DATA FROM OUR PRECLINICAL OR CLINICAL STUDIES MAY RESULT IN DELAYS IN OUR PLANNED FILINGS FOR REGULATORY APPROVALS OR ADVERSELY AFFECT OUR ABILITY TO ENTER INTO COLLABORATIVE ARRANGEMENTS.

We may encounter problems with some or all of our completed or ongoing studies that may cause us or regulatory authorities to delay or suspend our ongoing studies or delay the analysis of data from our completed or ongoing studies. If the results of our ongoing and planned studies for our drug candidates are not available when we expect or if we encounter any delay in the analysis of the results of our studies for our drug candidates:

- o we may not have the financial resources to continue research and development of any of our drug candidates; and,

-10-

- o we may not be able to enter into collaborative arrangements relating to any drug candidate subject to delay in regulatory filing.

Any of the following reasons, among others, could delay or suspend the completion of our ongoing and future studies:

- o delays in enrolling volunteers;
- o interruptions in the manufacturing of our drug candidates or other delays in the delivery of materials required for the conduct of our studies;
- o lower than anticipated retention rate of volunteers in a trial;
- o unfavorable efficacy results;
- o serious side effects experienced by study participants relating to the drug candidate;
- o new communications from regulatory agencies about how to conduct these studies; or,
- o failure to raise additional funds.

IF THE MANUFACTURERS OF OUR PRODUCTS DO NOT COMPLY WITH CURRENT GOOD MANUFACTURING PRACTICES REGULATIONS, OR CANNOT PRODUCE THE AMOUNT OF PRODUCTS WE NEED TO CONTINUE OUR DEVELOPMENT, WE WILL FALL BEHIND ON OUR BUSINESS OBJECTIVES.

Manufacturers producing our drug candidates must follow current Good Manufacturing Practices, or GMP, regulations enforced by the FDA and foreign equivalents. If a manufacturer of our drug candidates does not conform to the GMP regulations and cannot be brought up to such a standard, we will be required to find alternative manufacturers that do conform. This may be a long and difficult process, and may delay our ability to receive FDA or foreign regulatory approval of our products.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

We also rely on our manufacturers to supply us with a sufficient quantity of our drug candidates to conduct clinical trials. If we have difficulty in the future obtaining our required quantity and quality of supply, we could experience significant delays in our development programs and regulatory process.

OUR LACK OF COMMERCIAL MANUFACTURING, SALES, DISTRIBUTION AND MARKETING EXPERIENCE MAY PREVENT US FROM SUCCESSFULLY COMMERCIALIZING PRODUCTS.

The manufacturing process of our proposed products is expected to involve a number of steps and requires compliance with stringent quality control specifications imposed by us and by the FDA. We have no experience in the sales, marketing and distribution of pharmaceutical or biotechnology products. We have not manufactured any of our products in commercial quantities. We may not successfully make the transition from manufacturing clinical trial quantities to commercial production quantities or be able to arrange for contract manufacturing and this could prevent us from commercializing products or limit our profitability from our products.

WE RELY ON THIRD PARTY MANUFACTURERS FOR THE MANUFACTURE OF HOMSPERA. OUR INABILITY TO MANUFACTURE HOMSPERA, AND OUR DEPENDENCE ON SUCH MANUFACTURERS, MAY DELAY OR IMPAIR OUR ABILITY TO GENERATE REVENUES, OR ADVERSELY AFFECT OUR PROFITABILITY.

We may enter into arrangements with contract manufacturing companies in order to meet requirements for our products or to attempt to improve manufacturing efficiency. If we choose to contract for manufacturing services, we may encounter costs, delays and/or other difficulties in producing, packaging and distributing our clinical trials and finished product. Further, contract manufacturers must also operate in compliance with the GMP requirements; failure to do so could result in, among other things, the disruption of our product supplies. Our

-11-

potential dependence upon third parties for the manufacture of our proposed products may adversely affect our profit margins and our ability to develop and deliver proposed products on a timely and competitive basis.

For the manufacture of the applications under development, we obtain synthetic peptides from third party manufacturers. A synthesized version of substance P is readily available at low cost from several life science and technology companies that provide biochemical and organic chemical products and kits used in scientific and genomic research, biotechnology, pharmaceutical development and the diagnosis of disease and chemical manufacturing. If any of these proposed manufacturing operations prove inadequate, there may be no assurance that any other arrangements may be established on a timely basis or that we could establish other manufacturing capacity on a timely basis. Although, we believe that the synthetic substance P and other materials necessary to produce Homspera are readily available from various sources, and several suppliers are capable of supplying substance P in both clinical and commercial quantities, our dependence on such manufacturers, may delay or impair our ability to generate revenues, or adversely affect our profitability.

ADVERSE DETERMINATIONS CONCERNING PRODUCT PRICING, REIMBURSEMENT AND RELATED MATTERS COULD PREVENT US FROM SUCCESSFULLY COMMERCIALIZING HOMSPERA.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Our ability to earn sufficient revenue on Homspera or any other proposed products will depend in part on the extent to which reimbursement for the costs of such products and related treatments will be available from government health administration authorities, private health coverage insurers, managed care organizations and other organizations. Failure to obtain appropriate reimbursement may prevent us from successfully commercializing Homspera or any proposed products. Third-party payers are increasingly challenging the prices of medical products and services. If purchasers or users of Homspera or any such other proposed products are not able to obtain adequate reimbursement for the cost of using such products, they may forego or reduce their use. Significant uncertainty exists as to the reimbursement status of newly approved health care products and whether adequate third party coverage will be available.

THE MEDICAL COMMUNITY MAY NOT ACCEPT AND UTILIZE HOMSPERA, WHICH WOULD PREVENT US FROM SUCCESSFULLY COMMERCIALIZING THE PRODUCT.

Our ability to market and commercialize Homspera depends on the acceptance and utilization of Homspera by the medical community. We will need to develop commercialization initiatives designed to increase awareness about us and Homspera among targeted audiences, including public health activists and community-based outreach groups in addition to the investment community. Currently, we have not developed any such initiatives. Without such acceptance of Homspera, the product upon which we expect to be substantially dependent, we may not be able to successfully commercialize Homspera or generate revenue.

PRODUCT LIABILITY EXPOSURE MAY EXPOSE US TO SIGNIFICANT LIABILITY OR COSTS.

We face an inherent business risk of exposure to product liability and other claims and lawsuits in the event that the development or use of our technology or prospective products is alleged to have resulted in adverse effects. We may not be able to avoid significant liability exposure. We may not have sufficient insurance coverage, and we may not be able to obtain sufficient coverage at a reasonable cost. An inability to obtain product liability insurance at acceptable cost or to otherwise protect against potential product liability claims could prevent or inhibit the commercialization of our products. A product liability claim could hurt our financial performance. Even if we avoid liability exposure, significant costs could be incurred that could hurt our financial performance.

AS A RESULT OF OUR INTENSELY COMPETITIVE INDUSTRY, WE MAY NOT GAIN ENOUGH MARKETSHARE TO BE PROFITABLE.

The biotechnology and pharmaceutical industries are intensely competitive. We have numerous competitors in the United States and elsewhere. Because we are pursuing potentially large markets, our competitors include major multinational pharmaceutical companies, specialized biotechnology firms and universities and other research institutions. Several of these entities have already successfully marketed and commercialized products that will compete with our products, assuming that our products gain regulatory approval. Competitors such as Hollis-Eden Pharmaceuticals, Inc. have developed or are developing products for treating aspects of severe acute radiation

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

injury. Companies such as VaxGen, Inc., Acambis plc and Emergent BioSolutions have developed or are developing vaccines against infectious diseases, including anthrax.

Many of our competitors have greater financial and other resources, larger research and development staffs and more effective marketing and manufacturing organizations than we do. In addition, academic and government institutions have become increasingly aware of the commercial value of their research findings. These institutions are now more likely to enter into exclusive licensing agreements with commercial enterprises, including our competitors, to develop and market commercial products.

Our competitors may succeed in developing or licensing technologies and drugs that are more effective or less costly than any we are developing. Our competitors may succeed in obtaining FDA or other regulatory approvals for drug candidates before we do. If competing drug candidates prove to be more effective or less costly than our drug candidates, our drug candidates, even if approved for sale, may not be able to compete successfully with our competitors' existing products or new products under development. If we are unable to compete successfully, we may never be able to sell enough products at a price sufficient to permit us to generate profits.

IF WE FAIL TO ATTRACT AND RETAIN HIGHLY SKILLED SCIENTIFIC PERSONNEL, OUR GROWTH COULD BE LIMITED, WHICH MAY ADVERSELY AFFECT OUR RESULTS OF OPERATIONS AND FINANCIAL POSITION.

Our future success depends in large part upon our ability to attract and retain highly skilled scientific personnel. The competition in the scientific industry for such personnel is intense, and we cannot be sure that we will be successful in attracting and retaining such personnel. Most of our consultants and employees and several of our executive officers began working for us recently, and all employees are subject to "at will" employment. We cannot guarantee that we will be able to replace any of our scientific personnel in the event their services become unavailable.

WE MAY FAIL TO PROTECT ADEQUATELY OUR PROPRIETARY TECHNOLOGY, WHICH WOULD ALLOW COMPETITORS TO TAKE ADVANTAGE OF RESEARCH AND DEVELOPMENT EFFORTS.

We own or have obtained a license to 4 issued U.S. and foreign patents and 24 pending U.S. and foreign patent applications. Our success will depend in part on our ability to obtain additional United States and foreign patent protection for our drug candidates and processes, preserve our trade secrets and operate without infringing the proprietary rights of third parties. We place considerable importance on obtaining patent protection for significant new technologies, products and processes.

Our long-term success largely depends on our ability to market technologically competitive processes and products. If we fail to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary rights. Our currently pending or future patent applications may not result in issued patents. In the United States, patent applications are confidential until patent applications are published or the patent is issued, and because third parties may have filed patent applications for technology covered by our pending patent applications without us being aware of those applications, our patent applications may not have priority over any patent applications of others. In addition, our issued patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products or provide us with any competitive advantage. If a third party initiates litigation regarding our patents, and is successful, a

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

court could revoke our patents or limit the scope of coverage for those patents.

Legal standards relating to the validity of patents covering pharmaceutical and biotechnology inventions and the scope of claims made under such patents are still developing. In some of the countries in which we intend to market our products, pharmaceuticals are either not patentable or have only recently become patentable. Past enforcement of intellectual property rights in many of these countries has been limited or non-existent. Future enforcement of patents and proprietary rights in many other countries may be problematic or unpredictable. Moreover, the issuance of a patent in one country does not assure the issuance of a similar patent in another country. Claim interpretation and infringement laws vary by nation, so the extent of any patent protection is uncertain and may vary in different jurisdictions. The U.S. Patent and Trademark Office, commonly referred to as the USPTO, and the courts have not consistently treated the breadth of claims allowed in biotechnology patents. If the USPTO or the courts begin to allow broader claims, the incidence and cost of patent interference proceedings and the risk of

-13-

infringement litigation will likely increase. On the other hand, if the USPTO or the courts begin to allow narrower claims, the value of our proprietary rights may be limited. Any changes in, or unexpected interpretations of the patent laws may adversely affect our ability to enforce our patent position.

We also rely upon trade secrets, proprietary know-how and continuing technological innovation to remain competitive. We protect this information with reasonable security measures, including the use of confidentiality agreements with our employees, consultants and corporate collaborators. It is possible that these individuals will breach these agreements and that any remedies for a breach will be insufficient to allow us to recover our costs. Furthermore, our trade secrets, know-how and other technology may otherwise become known or be independently discovered by our competitors.

OUR PATENTS AND PROPRIETARY TECHNOLOGY MAY NOT BE ENFORCEABLE AND THE PATENTS AND PROPRIETARY TECHNOLOGY OF OTHERS MAY PREVENT US FROM COMMERCIALIZING PRODUCTS.

Although we believe our inventions to be protected and our patents enforceable, the failure to obtain meaningful patent protection products and processes would greatly diminish the value of our potential products and processes.

In addition, whether or not our applications are issued, or issued with limited coverage, others may receive patents, which contain claims applicable to our products. Patents we are not aware of may adversely affect our ability to develop and commercialize products.

The patent positions of biotechnology and pharmaceutical companies are often highly uncertain and involve complex legal and factual questions. Therefore, the breadth of claims allowed in biotechnology and pharmaceutical patents cannot be predicted. We also rely upon non-patented trade secrets and know how, and others may independently develop substantially equivalent trade secrets or know how. We also rely on protecting our proprietary technology in part through confidentiality agreements with our current and former corporate

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

collaborators, employees, consultants and certain contractors. These agreements may be breached, and we may not have adequate remedies for any such breaches. Litigation may be necessary to defend against claims of infringement, to enforce our patents or to protect trade secrets. Litigation could result in substantial costs and diversion of management efforts regardless of the results of the litigation. An adverse result in litigation could subject us to significant liabilities to third parties, require disputed rights to be licensed or require us to cease using certain technologies.

Our products could infringe on the intellectual property rights of others, which may cause us to engage in costly litigation and, if not successful, could cause us to pay substantial damages and prohibit us from selling our products. Because patent applications in the United States are not publicly disclosed until the patent application is published or the patent is issued, applications may have been filed which relate to services similar to those offered by us. We may be subject to legal proceedings and claims from time to time in the ordinary course of our business, including claims of alleged infringement of the trademarks and other intellectual property rights of third parties.

If our products violate third-party proprietary rights, we cannot assure you that we would be able to arrange licensing agreements or other satisfactory resolutions on commercially reasonable terms, if at all. Any claims made against us relating to the infringement of third-party proprietary rights could result in the expenditure of significant financial and managerial resources and injunctions preventing us from providing services. Such claims could severely harm our financial condition and ability to compete.

In addition, if another party claims the same subject matter or subject matter overlapping with the subject matter that we have claimed in a United States patent application or patent, we may decide or be required to participate in interference proceedings in the United States Patent and Trademark Office in order to determine the priority of invention. Loss of such an interference proceeding would deprive us of patent protection sought or previously obtained and could prevent us from commercializing our products. Participation in such proceedings could result in substantial costs, whether or not the eventual outcome is favorable. These additional costs could adversely affect our financial results.

-14-

COMPLIANCE WITH ENVIRONMENTAL LAWS OR REGULATIONS COULD HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS.

We may be required to incur significant costs to comply with current or future environmental laws and regulations. Although we do not currently manufacture commercial quantities of our proposed products, we do produce limited quantities of these products for our clinical trials. Our research and development and manufacturing processes involve the controlled storage, use and disposal of hazardous materials, biological hazardous materials and radioactive compounds. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and some waste products. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by these laws and regulations, the risk of contamination or injury from these materials cannot be completely eliminated. In the event of an incident, ImmuneRegen BioSciences, Inc. could be held liable for any damages that result, and any liability could exceed our resources. Current or future environmental laws or regulations may have a material adverse effect on our

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

operations, business and assets.

WE DEPEND ON THE CONTINUED SERVICES OF OUR EXECUTIVE OFFICERS AND THE LOSS OF A KEY EXECUTIVE COULD SEVERELY IMPACT OUR OPERATIONS.

The execution of our present business plan depends on the continued services of Michael K. Wilhelm, our Chief Executive Officer and President, and Mark L. Witten, Ph.D., our acting Chief Scientific Officer. We do not currently maintain key-man insurance on their lives. While we have entered into employment agreements with each of them, the loss of any of their services would be detrimental to us and could have a material adverse effect on our business, financial condition and results of operations.

OUR COMPLIANCE WITH SECURITIES LAWS, RULES AND REGULATIONS TO WHICH WE ARE SUBJECT COULD SUBSTANTIALLY INCREASE OUR OPERATING EXPENSES AND DIVERT MANAGEMENT'S ATTENTION FROM THE OPERATION OF OUR BUSINESS.

Because our common stock is publicly traded, we are subject to a variety of rules and regulations of federal, state and financial market exchange entities charged with the protection of investors and the oversight of companies whose securities are publicly traded. These entities, including the SEC, the Public Company Accounting Oversight Board and the NASD OTC Bulletin Board, have recently issued new requirements and regulations and are currently developing additional regulations and requirements in response to recent laws enacted by Congress, most notably the Sarbanes-Oxley Act of 2002. As certain rules are not yet finalized, we do not know the level of resources we will have to commit in order to be in compliance. Our compliance with current and proposed rules is likely to require the commitment of significant financial and managerial resources. As a result, our management's attention might be diverted from other business concerns, which could negatively affect our business.

OUR EXECUTIVE OFFICERS, DIRECTORS AND PRINCIPAL STOCKHOLDERS CONTROL OUR BUSINESS AND MAY MAKE DECISIONS THAT ARE NOT IN OUR BEST INTERESTS.

Our officers, directors and principal stockholders, and their affiliates, in the aggregate, own over a majority of the outstanding shares of our common stock. As a result, such persons, acting together, have the ability to substantially influence all matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets, and to control our management and affairs. Accordingly, such concentration of ownership may have the effect of delaying, deferring or preventing a change in discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would be beneficial to other stockholders.

### RISKS RELATED TO THIS OFFERING

TRADING IN OUR SECURITIES COULD BE SUBJECT TO EXTREME PRICE FLUCTUATIONS THAT COULD ADVERSELY AFFECT YOUR INVESTMENT.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

The market prices for securities of life sciences companies, particularly those that are not profitable, have been highly volatile, especially recently. Publicized events and announcements may have a significant impact on the market price of our common stock. For example:

- o biological or medical discoveries by competitors;
- o public concern about the safety of our drug candidates;
- o delays in the conduct or analysis of our preclinical or clinical studies;
- o unfavorable results from preclinical or clinical studies;
- o unfavorable developments concerning patents or other proprietary rights; or
- o unfavorable domestic or foreign regulatory developments;

may have the effect of temporarily or permanently driving down the price of our common stock. In addition, the stock market from time to time experiences extreme price and volume fluctuations which particularly affect the market prices for emerging and life sciences companies, such as ours, and which are often unrelated to the operating performance of the affected companies. For example, our stock price has ranged from \$0.09 to \$1.00 between January 1, 2004 and May 23, 2005.

These broad market fluctuations may adversely affect the ability of a stockholder to dispose of his shares at a price equal to or above the price at which the shares were purchased. In addition, in the past, following periods of volatility in the market price of a company's securities, securities class-action litigation has often been instituted against that company. Any litigation against our company, including this type of litigation, could result in substantial costs and a diversion of management's attention and resources, which could materially adversely affect our business, financial condition and results of operations.

A LIMITED PRIOR PUBLIC MARKET AND TRADING MARKET MAY CAUSE VOLATILITY IN THE PRICE OF OUR COMMON STOCK.

Our common stock is currently traded on a limited basis on the OTC Bulletin Board (the "OTCBB") under the symbol "IRBO". The OTCBB is an inter-dealer, Over-The-Counter market that provides significantly less liquidity than the NASDAQ Stock Market. Quotes for stocks included on the OTCBB are not listed in the financial sections of newspapers as are those for the NASDAQ Stock Market. Therefore, prices for securities traded solely on the OTCBB may be difficult to obtain and holders of common stock may be unable to resell their securities at or near their original offering price or at any price.

The NASD has enacted recent changes that limit quotations on the OTC Bulletin Board to securities of issuers that are current in their reports filed with the Securities and Exchange Commission. The effect on the OTC Bulletin Board of these rule changes and other proposed changes cannot be determined at this time.

The quotation of our common stock on the OTCBB does not assure that a meaningful, consistent and liquid trading market currently exists, and in recent years such market has experienced extreme price and volume fluctuations that have particularly affected the market prices of many smaller companies like us. Our common stock is thus subject to this volatility.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

BROKER-DEALER REQUIREMENTS FOR "PENNY STOCK" TRANSACTIONS MAY AFFECT THE ABILITY OF OUR INVESTORS TO RESELL THEIR SECURITIES.

Our common stock is considered to be a "penny stock" since it meets one or more of the definitions in Rules 15g-2 through 15g-6 promulgated under Section 15(g) of the Securities Exchange Act of 1934, as amended. Section 15(g) of the Securities Exchange Act of 1934, as amended, and Rule 15g-2 promulgated thereunder by the SEC require broker-dealers dealing in penny stocks to provide potential investors with a document disclosing the

-16-

risks of penny stocks and to obtain a manually signed and dated written receipt of the document before effecting any transaction in a penny stock for the investor's account. Compliance with this and other requirements may make it more difficult for holders of our common stock to resell their shares to third parties or to otherwise dispose of them in the market or otherwise.

SALES OR ISSUANCES OF ADDITIONAL EQUITY SECURITIES MAY ADVERSELY AFFECT THE MARKET PRICE OF OUR COMMON STOCK AND YOUR RIGHTS IN US MAY BE REDUCED.

Certain of our stockholders have the right to register securities for resale that they hold pursuant to registration rights agreements. We expect to continue to incur product development and selling, general and administrative costs, and in order to satisfy our funding requirements, we will need to sell additional equity securities, which may be subject to similar registration rights. The sale or the proposed sale of substantial amounts of our common stock in the public markets may adversely affect the market price of our common stock. An aggregate of 57,786,607 shares of our common stock are being registered with the SEC in the registration statement. The registration and subsequent sales of such shares of common stock will likely have an adverse effect on the market price of our common stock.

The registration and subsequent sales of shares of our common stock will likely have an adverse effect on the market price of our common stock. From time to time, certain stockholders of our company may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144, promulgated under the Act ("Rule 144"), subject to certain limitations. In general, pursuant to Rule 144, a stockholder (or stockholders whose shares are aggregated) who has satisfied a one-year holding period may, under certain circumstances, sell within any three-month period a number of securities which does not exceed the greater of 1% of the then outstanding shares of our common stock or the average weekly trading volume of the class during the four calendar weeks prior to such sale. Rule 144 also permits, under certain circumstances, the sale of securities, without any limitations, by a non-affiliate of our company who has satisfied a two-year holding period. Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus may have an adverse effect on the market price of our securities.

Our stockholders may experience substantial dilution and a reduction in the price that they are able to obtain upon sale of their shares. Also, any new equity securities issued, including any new series of preferred stock authorized by our board of directors, may have greater rights, preferences or privileges than our existing common stock. To the extent stock is issued or options and warrants are exercised, holders of our common stock will experience further dilution. In addition, as in the case of the warrants, in the event that any

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

future financing should be in the form of, be convertible into or exchangeable for, equity securities and upon the exercise of options and warrants, security holders may experience additional dilution.

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

In addition to historical information, this prospectus contains statements relating to our future business and/or results, including, without limitation, the statements under the captions "Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." These statements include certain projections and business trends that are "forward-looking" within the meaning of the United States Private Securities Litigation Reform Act of 1995 (the "PSLRA"). You can identify these statements by the use of words like "may," "could," "should," "project," "believe," "anticipate," "expect," "plan," "estimate," "forecast," "potential," "intend," "continue" and variations of these words or comparable words. Forward-looking statements do not guarantee future performance and involve risks and uncertainties. Actual results will differ, and may differ materially, from projected results as a result of certain risks and uncertainties. These risks and uncertainties include, without limitation, those described under "Risk Factors" and those detailed from time to time in our filings with the SEC, and include, among others, the following:

- o Our ability to raise additional funding and the amounts raised, if any;
- o Our ability to successfully develop and commercialize products based on our therapies and technologies utilizing Homspera;

-17-

- o A lengthy approval process and the uncertainty of FDA and other government regulatory requirements may have a material adverse effect on our ability to commercialize our applications;
- o Clinical trials may fail to demonstrate the safety and effectiveness of our applications or therapies, which could have a material adverse effect on our ability to obtain government regulatory approval;
- o The degree and nature of our competition;
- o Our ability to employ and retain qualified employees; and
- o The other factors referenced in this prospectus, including, without limitation, under the sections entitled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business."

Other sections of this prospectus may include additional factors which could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or to the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. These forward-looking statements are made only as of the date of this prospectus. Except for our ongoing obligation to disclose material information as required by federal securities laws, we do not intend to update you concerning any future revisions to any forward-looking statements to reflect events or circumstances occurring after the date of this prospectus. The safe harbor for forward-looking statements under the PSLRA does not apply to our company.

-18-

### USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of common stock by the selling stockholders, but we will receive funds from the exercise of warrants held by selling stockholders, if exercised.

### MARKET FOR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Our common stock is approved for quotation on the NASD OTC Bulletin Board under the symbol "IRBO". Previous to July 2, 2003, the Company traded under the symbol "GPNN". The following table sets forth the high and low bid prices for our common stock for the periods noted, as reported by the National Daily Quotation Service and the Over-The-Counter Bulletin Board. Quotations reflect inter-dealer prices, without retail mark-up, markdown or commission and may not represent actual transactions.

	2004	
	High	Low
1st Quarter.....	\$ 1.00	\$ 0.28
2nd Quarter.....	0.60	0.11
3rd Quarter.....	0.23	0.09
4th Quarter.....	0.50	0.15

  

	2003	
	High	Low
1st Quarter.....	\$ 0.01	\$ 0.01
2nd Quarter.....	2.50	0.10
3rd Quarter.....	4.50	0.65
4th Quarter.....	1.13	0.28

On July 19, 2005, the closing price of our common stock as reported by the OTC Bulletin Board was \$0.30 per share. There were approximately 520 shareholders of record and beneficial stockholders of our common stock as of such date. We have not paid any dividends on our common stock since inception and do not intend to do so in the foreseeable future.

### DIVIDEND POLICY

We have not declared or paid any cash dividends on our common stock, and we currently intend to retain future earnings, if any, to finance the expansion

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

of our business, and we do not expect to pay any cash dividends in the foreseeable future. The decision whether to pay cash dividends on our common stock will be made by our board of directors, in their discretion, and will depend on our financial condition, operating results, capital requirements and other factors that the board of directors considers significant. We have never declared or paid any dividends on our securities. We currently intend to retain our earnings for funding growth and, therefore, do not expect to pay any dividends in the foreseeable future.

-19-

### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Please note that the safe harbor for forward-looking statements under the Securities Act of 1933 and the Securities Exchange Act do not apply to our company. Our actual results could differ materially from those set forth as a result of general economic conditions and changes in the assumptions used in making such forward-looking statements. The following discussion and analysis of our financial condition and results of operations should be read together with the audited consolidated financial statements and accompanying notes and the other financial information appearing else where in this prospectus. The analysis set forth below is provided pursuant to applicable Securities and Exchange Commission regulations and is not intended to serve as a basis for projections of future events.

Except for historical information contained herein, the matters discussed in this prospectus are forward-looking statements that are subject to certain risks and uncertainties that could cause actual results to differ materially from those set forth in such forward-looking statements. Such forward-looking statements may be identified by the use of certain forward-looking terminology, such as "may," "expect," "anticipate," "intend," "estimate," "believe," or comparable terminology that involves risks or uncertainties. Actual future results and trends may differ materially from historical and anticipated results, which may occur as a result of a variety of factors. Such risks and uncertainties include, without limitation, factors discussed in management's discussion and analysis of financial condition and results of operations set forth below, as well as in "risk factors" set forth herein. Except for our ongoing obligation to disclose material information as required by federal securities laws, we do not intend to update you concerning any future revisions to any forward-looking statements to reflect events or circumstances occurring after the date of this prospectus.

#### OVERVIEW

We were originally incorporated in Delaware in June 1985 under the name Vocaltech, Inc. to develop, design, manufacture and market products utilizing proprietary speech-generated tactile feedback devices. We completed our initial public offering of our securities in October 1987. We changed our name to InnoTek, Inc. in November 1992. In January 1992, we effected a 1-for-6.3 reverse stock split of our common stock. In December 1994, we acquired all of the outstanding stock of InnoVisions, Inc., a developer and marketer of skin protective products, discontinued our prior operations in their entirety and changed our name to DermaRx Corporation. In April 2000, we effected a reverse merger with a subsidiary of Go Public Network, Inc., which was engaged in

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

assisting early-stage development and emerging growth companies with financial and business development services. We changed our name to GoPublicNow.com, Inc., effected a 1-for-5 reverse stock split and discontinued our prior operations in their entirety. In November 2000, we changed our name to GPN Network, Inc. In July 2001, we discontinued the operations of GPN Network, Inc. in their entirety and began looking for appropriate merger partners. Our objective became the acquisition of an operating company with the potential for growth in exchange for our securities. In July 2003, we effected a reverse merger with ImmuneRegen BioSciences, Inc. and adopted our current business model. In July 2003, we effected a 1-for-20 reverse stock split, and in April 2004, we effected a 2-for-1 stock split. ImmuneRegen BioSciences, Inc. was incorporated in October 2002; all information contained herein refers to the operations of ImmuneRegen BioSciences, Inc., our wholly-owned operational subsidiary.

### GENERAL

IR BioSciences Holdings, Inc. is a development-stage biopharmaceutical company. Through our wholly owned subsidiary, ImmuneRegen BioSciences, Inc., we are engaged in the research and development of health enhancing and potential life saving products. Our product development is focused around Homspera(TM), a proprietary compound that is derived from homeostatic substance P, a naturally occurring peptide. Our focus is on the research and development of products that we believe will treat the suppression of the body's immune system caused by exposure to various forms of radiation, toxic inhalants and viral infectious diseases. Currently, the majority of our efforts are in the research and development of Radilex(TM), a compound derived from Homspera, as a countermeasure to some of the effects caused by exposure to certain radiological and nuclear threats.

-20-

In our studies to date, we have witnessed Homspera and Radilex to have high anti-inflammatory and immunostimulatory properties. We believe the compound is well-suited for treating some of the damaging effects of radiation injury when given shortly after total body exposure to radiation. We have generated a large amount of data in rodent animal models and toxicology studies relating to the activity and safety of both Homspera and Radilex. To date we have conducted two studies and co-sponsored five mouse studies in which Radilex was administered after exposure to lethal doses of radiation. In these studies we witnessed heightened survival rates in up to 50% of the exposed mice.

We own or have obtained a license to 4 issued U.S. and foreign patents and 24 pending U.S. and foreign patent applications. As we continue our research and development efforts we will look to add to our portfolio of patents and trademarks.

### PLAN OF OPERATIONS

We expect to continue to incur increasing operating losses for the foreseeable future, primarily due to our continued research and development activities attributable to new and existing products and general and administrative activities.

We spent approximately \$65,849 and \$21,382 for the first quarters ending March 31, 2005 and 2004, respectively, in research and development activities related to the development of Radilex as a protectant against the effects of chemical, biological, radiological and nuclear threats. Due to our liquidity and

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

limited cash available, our spending on research and development activities was limited. From our inception in October 2002, we have spent \$281,417 in research and development activities. These costs include the manufacture and delivery of our drug by third party manufacturers, payments to Contract Research Organizations ("CRO") for consulting related to our studies and costs of performing such studies.

We anticipate that during the next 12 months we will increase our research and development activities by approximately \$450,000 to a total of approximately \$600,000 in an effort to further develop Radilex as a universal protectant against chemical, biological, radiological and nuclear threats. The drug development, clinical trial and regulatory process is lengthy, expensive and uncertain and subject to numerous risks including, without limitation, the following risks discussed under "Risk Factors" - "All Our Applications Are All Derived From The Use Of Homospere. If Homospere Is Found To Be Unsafe Or Ineffective, Our Business Would Be Materially Harmed.," "If We Fail To Successfully Develop And Commercialize Products, We Will Have To Cease Operations.;" and, "The Lengthy Product Approval Process And Uncertainty Of Government Regulatory Requirements May Delay Or Prevent Us From Commercializing Proposed Products."

Our major research and development projects include:

DEVELOPMENT OF RADILEX AS A COUNTERMEASURE TO THE EFFECTS OF RADIOLOGICAL AND NUCLEAR THREATS.

-----

Because of the high anti-inflammatory and immunostimulatory properties of Radilex that we have witnessed, we believe the compound is well-suited for treating the damaging effects of radiation injury when given shortly after exposure to total body irradiation. We have generated a large amount of data in rodent animal models relating to the activity and safety of Radilex.

We are currently preparing the protocols for additional formulation and stability studies. We expect these studies to be completed within 3 months. Following these studies, we expect to perform toxicity inhalation studies. We estimate that it will cost approximately \$350,000 to complete the aforementioned studies. Following these studies we expect to begin mouse study number eight. In our eighth mouse study we expect further validate our prior studies by collecting additional data as requested by the FDA and NIH. We expect to begin the eighth study within the next 120 days. We estimate that the study will be completed within 3 months of inception at an estimated cost of \$100,000. Upon completion of the aforementioned study we intend to prepare the protocols necessary for a non-human primate study to test the efficacy of Radilex as a treatment to acute radiation sickness and apply for an Investigative New Drug ("IND") application. We expect this study to begin within the next twelve to eighteen months.

-21-

If we are successful in completing the study and achieve the desired results, we will submit the necessary documentation to the FDA and other regulatory agencies for approval. We believe that Radilex can be developed and approval granted under Project BioShield, if so, we believe that the approval process will be significantly shortened and less costly. If approval for Radilex is granted in a timely manner, we expect to begin to commercialize our product immediately thereafter. We are anticipating revenues from the sale of Radilex beginning in calendar year 2007 as a treatment to the effects caused by irradiation.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

If product development or approval does not occur as scheduled our time to reach market will be lengthened and our costs will likely increase. Additionally, we may be requested to expand our findings to gather additional data or we may not achieve the desired results. If so, we may have to design new protocols and conduct additional studies. This will increase our costs and delay the time to market for Radilex. Any of these occurrences would have a material negative impact on our business and our liquidity as it may cause us to seek additional capital sooner than expected and allow our competitors to successfully enter the market ahead of us.

### DEVELOPMENT OF RADILEX AS A COUNTERMEASURE TO THE EFFECTS OF CHEMICAL AND BIOLOGICAL THREATS.

---

We are currently continuing to research the efficacy of Radilex as a universal protectant to be used also as a treatment for exposure to various chemical and biological threats. We have generated data in preclinical studies indicating that Radilex could potentially be used in treating respiratory failure caused by exposure to various chemical and biological agents, such as anthrax, ricin poisoning and other poisonous inhalants, as well as, infectious diseases such as avian flu and SARS. We are continuing to design and perform studies for the further development of Radilex for these applications. We have budgeted approximately \$35,000 for studies related to the use of Radilex as a treatment for exposure to various chemical and biological threats. We anticipate additional studies to begin in the third or fourth quarters of calendar 2005 and continue on an ongoing basis over the next three years. If we are successful in achieving desirable results, we intend to design the protocols and begin studies for these indications, when capital is available. As we have only collected preliminary data and additional studies are required, we cannot predict when, if ever, a viable treatment can be commercialized. If we do not observe significant results or we lack the capital to further the development, we may abandon such research and development efforts; thereby limiting our future potential revenues.

### DEVELOPMENT OF HOMSPERA IN THE PROMOTION OF WOUND HEALING.

---

We have observed in early preclinical studies that Homspere may have an effect in promoting or accelerating wound healing. Within the next three months we plan to begin preclinical studies to determine if Homspere could become a candidate for further development as a compound used in wound healing. We believe that such an application would have a large potential market and would share synergies with potential uses for Radilex as a universal protectant. We expect to begin studies regarding the use of Homspere in the promotion of wound healing in the third quarter of calendar 2005. We do not have any research and development expenses associated with the use of Homspere in wound healing in 2004 or 2003, as our observations were generated while conducting our radiation studies. We have budgeted approximately \$60,000 for the costs of such studies over the next twelve months. We anticipate the completion of such studies within eight months of commencement of the studies. If we achieve desirable results, we will design the protocols and begin studies for these indications, when capital is available. As we have only collected preliminary data and additional studies are required, we cannot predict when, if ever, a viable product can be commercialized. If we do not observe significant results or we lack the capital to further the development, we may abandon such research and development efforts; thereby limiting our future potential revenues.

We will need to generate significant revenues from product sales and or related royalties and license agreements to achieve and maintain profitability. Through March 31, 2005, we had no revenues from any product sales, royalties or licensing fees, and have not achieved profitability on a quarterly or annual

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

basis. Our ability to achieve profitability depends upon, among other things, our ability to develop products, obtain regulatory approval for products under development and enter into agreements for product development, manufacturing and commercialization. Moreover, we may never achieve significant revenues or profitable operations from the sale of any of our products or technologies.

-22-

### OFF-BALANCE SHEET ARRANGEMENTS

There were no off-balance sheet arrangements made in the fiscal quarter ended March 31, 2005.

There were no off-balance sheet arrangements made in 2004.

### REVENUES

We have not generated any revenues from operations from our inception. We believe we will begin earning revenues from operations during calendar year 2007 as we transition from a development stage company to that of an active growth and acquisition stage company.

### COSTS AND EXPENSES

From our inception through March 31, 2005, we have incurred losses of \$8,047,524. These expenses were associated principally with equity-based compensation to employees and consultants, product development costs and professional services.

### LIQUIDITY AND CAPITAL RESOURCES

At March 31, 2005, we had current assets of \$1,607,085 consisting of cash of \$1,600,000 and other current assets of \$7,085. At March 31, 2005, we also had current liabilities of \$408,180, consisting of accounts payable and accrued liabilities of \$341,210 and notes payable of \$66,970. This resulted in net working capital at March 31, 2005 of \$1,198,905. During the three months ended March 31, 2005, the Company used cash in operating activities of (\$550,971). From the date of inception (October 30, 2002) to March 31, 2005, the Company has had a net loss of (\$8,047,524) and has used cash of (\$2,625,316) in operating activities.

The Company currently has no revenue. There is no guarantee that our business model will be successful, or that we will be able to generate sufficient revenue to fund future operations. As a result, we expect our operations to continue to use net cash, and that we will be required to seek additional debt or equity financings during the coming quarters. Since inception, the Company has financed its operations through debt and equity financing. While we have raised capital to meet our working capital and financing needs in the past, additional financing is required in order to meet our current and projected cash flow deficits from operations and development of our product line. We met our cash requirements from our inception through March 31, 2005 via the private placement of \$3,259,903 of our common stock, including \$1,190,857 net of costs from the exercise of common stock purchase warrants and \$973,500 from the issuance of notes payable, net of repayments.

In January 2005, we made a tender offer to temporarily reduce the exercise

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

price of certain warrants issued in October 2004 from \$0.50 to \$0.20 per share. The tender offer expired on March 4, 2005. We accepted for exercise a total of 6,600,778 warrants validly tendered and not withdrawn pursuant to the terms of the tender offer, which represents approximately 48% of the aggregate 13,780,449 warrants that were subject to the offer. We raised an aggregate of \$1,190,857 from the tender offer, net of costs.

During the three months ended March 31, 2005, the Company paid a note payable in the amount of \$10,000.

At March 31, 2005, the Company had outstanding two unsecured notes payable to Company shareholders in the aggregate amount of \$66,970. Interest accrues at 8% per annum. Accrued interest at March 31, 2005 is \$8,946. These notes were in default at March 31, 2005. One of the two notes payable as of March 31, 2005 was subsequently repaid in full for \$4,998 (\$3,900 principal & \$1,098 accrued interest) on April 11, 2005, releasing the Company from further obligations under the note. On June 7, 2005, the remaining note in the principal amount of \$50,000 and all accrued interest of \$15,003 were converted into 232,153 shares of our common stock in accordance with the terms of the note.

-23-

We also previously issued convertible promissory notes in the aggregate principal amount of \$35,000. On December 24, 2004 all outstanding principal and accrued interest was forgiven by the note holder. Consideration of \$100.00 was paid by us to the note holder. Under the terms of the agreement, the note holder released us from all claims, known or unknown, relating to the amount owed.

Between June 2003 and August 2004 eleven investors entered into fifteen convertible promissory notes totaling \$558,500 with interest rates ranging between 8% and 12% and having various maturities. In October 2004, these notes were converted into equity in the aggregate amount of \$558,500 plus accrued interest of \$56,757. For full and complete satisfaction of debt, we issued to the note holders the following: (a) a number of shares of our common stock determined by dividing the debt amount by \$0.125, and (b) warrants to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to fifty percent (50%) of the number of shares described above, at a price equal to \$0.50 per share of common stock. The warrants are identical to the warrants issued in the Private Placement. Pursuant to the debt conversion we issued an aggregate of 6,694,149 shares of common stock and warrants to purchase 3,347,076 shares of common stock. Under the terms of the conversion agreement, the note holders released us from all claims, known or unknown, relating to the debt amount.

Pursuant to our employment agreement with Michael Wilhelm, our President and Chief Executive Officer, dated December 16, 2002, we paid a salary of \$125,000 and \$175,000 to Mr. Wilhelm during the first and second years of his employment, respectively. Thereafter we paid, and will continue to pay, through the term of Mr. Wilhelm's employment, an annual salary of \$250,000. Mr. Wilhelm's salary is payable in regular installments in accordance with the customary payroll practices of our company.

Pursuant to our employment agreement with John Fermanis, our Chief Financial Officer, dated February 15, 2005, we paid a salary of \$60,000 until the company completed a financing of \$500,000 or more. This occurred on March 4, 2005 when the company completed a Tender Offer for warrants totaling \$1,190,857 net of fees. From March 4, 2005, until December 31, 2005, we will pay an annual salary of \$85,000. Thereafter, we will pay an annual salary of \$98,000 for the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

second year ending December 31, 2006 and an annual salary of \$112,000 for the third year ending December 31, 2007. Mr. Fermanis' salary is payable in regular installments in accordance with the customary payroll practices of our company.

On December 16, 2002 we entered into a consulting agreement on a month-to-month basis with Dr. Mark Witten, our chief research scientist and director. Under the terms of this agreement, Dr. Witten agrees to place at the disposal of us his judgment and expertise in the area of acute lung injury. In consideration for these services, we agree to pay Dr. Witten a non-refundable fee of \$5,000 per month. .

Since our inception, we have been seeking additional third-party funding. During such time, we have retained a number of different investment banking firms to assist us in locating available funding; however, we have not yet been successful in obtaining any of the long-term funding needed to make us into a commercially viable entity. During the period from October 2004 to March 2005, we were able to obtain financing of \$3,590,136 from a series of private placements of our securities (which resulted in net proceeds to us of \$3,182,845). Based on our current plan of operations all of our current funding is expected to be depleted by the end of January 2006. If we are not successful in generating sufficient liquidity from operations or in raising sufficient capital resources, it would have a material adverse effect on our business, results of operations, liquidity and financial condition.

While we have successfully raised capital to meet our working capital and financing needs in the past through debt and equity financings, additional financing will be required in order to implement our business plan and to meet our current and projected cash flow deficits from operations and development. There can be no assurance that we will be able to consummate future debt or equity financings in a timely manner on a basis favorable to us, or at all. If we are unable to raise needed funds, we will not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements. A material shortage of capital will require us to take drastic steps such as reducing our level of operations, disposing of selected assets or seeking an acquisition partner.

Until such time, if at all, as we receive adequate funding, we intend to continue to defer payment of all of our obligations which are capable of being deferred, which actions have resulted in some vendors demanding cash

-24-

payment for their goods and services in advance, and other vendors refusing to continue to do business with us. In the event that we are successful in obtaining third-party funding, we do not expect to generate a positive cash flow from our operations for at least several years, if at all, due to anticipated expenditures for research and development activities, administrative and marketing activities, and working capital requirements and expect to continue to attempt to raise further capital through one or more further private placements. Based on our operating expenses and anticipated research and development activities, we believe that we will require an additional \$1 million to meet our expenses over the next 12 months.

### ACQUISITION OR DISPOSITION OF PLANT AND EQUIPMENT

-----

We did not dispose or acquire any significant property, plant or equipment during the first quarter ended March 31, 2005.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

We do not anticipate the sale of any significant property, plant or equipment during the next twelve months.

### NUMBER OF EMPLOYEES

-----

From our inception through the period ended March 31, 2005, we have relied on the services of outside consultants for services and currently have five total employees, two contract employees and three full-time employees. Our full-time employees are Michael K. Wilhelm, our Chief Executive Officer; John Fermanis, our Chief Financial Officer; and, the third serves in an administrative role. In order for us to attract and retain quality personnel, we anticipate we will have to offer competitive salaries to future employees. We do not anticipate our employment base will significantly change during the next twelve months, other than the addition of one senior level appointment to the position of Senior Vice President of Scientific Development. As we continue to expand, we will incur additional cost for personnel. This projected increase in personnel is dependent upon our generating revenues and obtaining sources of financing. There is no guarantee that we will be successful in raising the funds required or generating revenues sufficient to fund the projected increase in the number of employees.

### CRITICAL ACCOUNTING POLICY

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and judgments that affect our reported assets, liabilities, revenues, and expenses, and the disclosure of contingent assets and liabilities.

We base our estimates and judgments on historical experience and on various other assumptions we believe to be reasonable under the circumstances. Future events, however, may differ markedly from our current expectations and assumptions. While there are a number of significant accounting policies affecting our consolidated financial statements; we believe the following critical accounting policy involves the most complex, difficult and subjective estimates and judgments:

### STOCK-BASED COMPENSATION

-----

In December 2002, the FASB issued SFAS No. 148 - Accounting for Stock-Based Compensation - Transition and Disclosure. This statement amends SFAS No. 123 - Accounting for Stock-Based Compensation, providing alternative methods of voluntarily transitioning to the fair market value based method of accounting for stock based employee compensation. FAS 148 also requires disclosure of the method used to account for stock-based employee compensation and the effect of the method in both the annual and interim financial statements. The provisions of this statement related to transition methods are effective for fiscal years ending after December 15, 2002, while provisions related to disclosure requirements are effective in financial reports for interim periods beginning after December 31, 2003.

We elected to continue to account for stock-based compensation plans using the intrinsic value-based method of accounting prescribed by APB No. 25, "Accounting for Stock Issued to Employees," and related interpretations. Under the provisions of APB No. 25, compensation expense is measured at the grant date for the difference between the fair value of the stock and the exercise price. From its inception, the Company has incurred significant costs in connection with the issuance of equity-based compensation, which is comprised primarily of

our

-25-

common stock and warrants to acquire our common stock, to non-employees. The Company anticipates continuing to incur such costs in order to conserve its limited financial resources. The determination of the volatility, expected term and other assumptions used to determine the fair value of equity based compensation issued to non-employees under SFAS 123 involves subjective judgment and the consideration of a variety of factors, including our historical stock price, option exercise activity to date and the review of assumptions used by comparable enterprises.

We account for equity based compensation, issued to non-employees in exchange for goods or services, in accordance with the provisions of SFAS No. 123 and EITF No. 96-18, "Accounting for Equity Instruments That are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services".

#### RECENT ACCOUNTING PRONOUNCEMENTS

-----

In November 2004, the Financial Accounting Standards Board (FASB) issued SFAS 151, Inventory Costs--an amendment of ARB No. 43, Chapter 4. This Statement amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing," to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). Paragraph 5 of ARB 43, Chapter 4, previously stated that ". . . under some circumstances, items such as idle facility expense, excessive spoilage, double freight, and rehandling costs may be so abnormal as to require treatment as current period charges. . . ." This Statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal." In addition, this Statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. This Statement is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. Management does not believe the adoption of this Statement will have any immediate material impact on the Company.

In December 2004, the FASB issued SFAS No.152, "Accounting for Real Estate Time-Sharing Transactions--an amendment of FASB Statements No. 66 and 67" ("SFAS 152) The amendments made by Statement 152 This Statement amends FASB Statement No. 66, Accounting for Sales of Real Estate, to reference the financial accounting and reporting guidance for real estate time-sharing transactions that is provided in AICPA Statement of Position (SOP) 04-2, Accounting for Real Estate Time-Sharing Transactions. This

-26-

Statement also amends FASB Statement No. 67, Accounting for Costs and Initial Rental Operations of Real Estate Projects, to state that the guidance for (a) incidental operations and (b) costs incurred to sell real estate projects does not apply to real estate time-sharing transactions. The accounting for those

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

operations and costs is subject to the guidance in SOP 04-2. This Statement is effective for financial statements for fiscal years beginning after June 15, 2005, with earlier application encouraged. The Company does not anticipate that the implementation of this standard will have a material impact on its financial position, results of operations or cash flows.

On December 16, 2004, the Financial Accounting Standards Board ("FASB") published Statement of Financial Accounting Standards No. 123 (Revised 2004), Share-Based Payment ("SFAS 123R"). SFAS 123R requires that compensation cost related to share-based payment transactions be recognized in the financial statements. Share-based payment transactions within the scope of SFAS 123R include stock options, restricted stock plans, performance-based awards, stock appreciation rights, and employee share purchase plans. The provisions of SFAS 123R are effective as of the first interim period that begins after June 15, 2005. Accordingly, the Company will implement the revised standard in the third quarter of fiscal year 2005. Currently, the Company accounts for its share-based payment transactions under the provisions of APB 25, which does not necessarily require the recognition of compensation cost in the financial statements. Management is assessing the implications of this revised standard, which may materially impact the Company's results of operations in the third quarter of fiscal year 2005 and thereafter.

On December 16, 2004, FASB issued Statement of Financial Accounting Standards No. 153, Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29, Accounting for Nonmonetary Transactions ("SFAS 153"). This statement amends APB Opinion 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. Under SFAS 153, if a nonmonetary exchange of similar productive assets meets a commercial-substance criterion and fair value is determinable, the transaction must be accounted for at fair value resulting in recognition of any gain or loss. SFAS 153 is effective for nonmonetary transactions in fiscal periods that begin after June 15, 2005. The Company does not anticipate that the implementation of this standard will have a material impact on its financial position, results of operations or cash flows.

RESULTS OF OPERATIONS FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2005 AND FOR THE PERIOD OF INCEPTION (OCTOBER 30, 2002) TO MARCH 31, 2005.

### REVENUE

We are in the development stage and have no revenue.

### SALES, GENERAL, AND ADMINISTRATIVE EXPENSES

Sales, general, and administrative expenses ("SG&A") were \$838,520 for the three months ended March 31, 2005, a decrease of \$92,554 or approximately 10% compared to SG&A of \$931,074 during the three months ended March 31, 2004. For the three months ended March 31, 2005, this amount consisted primarily of non-cash compensation issued to consultants of \$299,943, legal and accounting fees of \$161,806, other consulting fees of \$117,739, payroll and related costs of \$77,574, and research and development expenses of \$65,849.

The Company expects SG&A to increase during the coming twelve months as we continue to utilize non-cash compensation in order to conserve cash, we build out the Company's infrastructure, and continue to develop the Company's line of potential products.

### INTEREST EXPENSE

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Interest expense was \$977 for the three months ended March 31, 2005, a decrease of \$303,101 or approximately 99% compared to interest expense of \$304,078 for the three months ended March 31, 2004. Interest expense was dramatically reduced because the Company paid or converted to equity most of its outstanding debt during the three months ended December 31, 2004.

The Company expects interest expense to remain at low levels during the coming twelve months.

-27-

### NET LOSS

For the reasons above, the net loss for the three months ended March 31, 2005 was \$839,497, a decrease of \$395,655 or 32% compared to a net loss of \$1,235,152 for the three months ended March 31, 2004.

The Company expects losses to increase during the coming twelve months. The Company does not expect to begin to generate revenue in the coming twelve months, and our costs are likely to increase as we move our line of potential products through the testing and approval phases, and as we build out our corporate infrastructure.

### SALES, GENERAL, AND ADMINISTRATIVE EXPENSES

Sales, general, and administrative expenses ("SG&A") were \$6,428,404 from the period of inception (October 30, 2002) to March 31, 2005.

### INTEREST EXPENSE

Interest expense was \$1,179,120 from the period of inception (October 30, 2002) to March 31, 2005.

### NET LOSS

Our net loss was \$8,047,524 from the period of inception (October 30, 2002) to March 31, 2005.

RESULTS OF OPERATIONS FOR THE TWELVE MONTH PERIOD ENDED DECEMBER 31, 2004  
COMPARED TO THE TWELVE MONTH PERIOD ENDED DECEMBER 31, 2003.

### REVENUE

We are in the development stage and have no revenue.

### SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses were \$4,498,390 for the twelve months ended December 31, 2004 which is an increase of \$3,452,614 or 330% compared to selling, general and administrative expenses of \$1,045,776 for the twelve months ended December 31, 2003. These expenses are primarily comprised of non-cash compensation of \$3,284,577, legal and accounting fees of \$271,077, officer wages of \$175,000, research and development costs of \$150,091, consulting fees of \$169,311, and contract labor of \$89,989.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Over the coming twelve months, we expect legal and accounting fees to remain high due to the compliance requirements of our company's publicly-traded status. In addition, we intend to investigate possible acquisitions and strategic alliance arrangements which will require legal and accounting due diligence. Expenses related to contract labor and personnel are expected to increase over the coming twelve months as our overhead and administrative burden increases. Officer salary will increase during the coming twelve months to approximately \$250,000 pursuant to contractual arrangements. We may also hire additional and/or part-time employees to discharge certain critical functions during the next 12 months. We expect to hire one additional employee during the next 12 months. Research and development costs are expected to increase by approximately \$600,000 as we further focus on developing our products for the marketplace. Rent expense is expected to stay constant for the coming twelve months.

### INTEREST EXPENSE

Interest expense was \$807,017 for the twelve months ended December 31, 2004, an increase of \$436,091 or 117% compared to interest expense of \$370,926 for the twelve months ended December 31, 2003. This amount consists of amortization of the discount on notes payable of \$704,633 and interest on notes payable of \$102,384.

We expect interest expense will decrease over the next twelve months as we have either repaid or converted substantially all of this debt into shares of our common stock in November 2004.

-28-

### NET LOSS

For the reasons above, the net loss for the twelve months ended December 31, 2004 was \$5,305,407, an increase of \$3,448,705 or 186% compared to a net loss of \$1,856,702 for the twelve months ended December 31, 2003.

We expect our losses to continue and to increase over the coming twelve months. We do not expect to expect to begin to generate revenue in the next twelve months, and costs are likely to increase as we move our products through the testing and approval phases, and as we continue to build out our corporate infrastructure.

RESULTS OF OPERATIONS FOR THE TWELVE MONTH PERIOD ENDED DECEMBER 31, 2004 AND FOR THE PERIOD OF INCEPTION (OCTOBER 30, 2002) TO DECEMBER 31, 2004.

### REVENUE

We are currently in the development stage and have not yet generated any revenue.

### SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses were \$4,498,390 for the twelve months ended December 31, 2004. These expenses are primarily comprised of non-cash compensation of \$3,284,577, legal and accounting fees of \$271,077, officer wages of \$175,000, research and development costs of \$150,091, consulting fees of \$169,311, and contract labor of \$89,989.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Total selling, general and administrative expenses for the period of inception (October 30, 2002) through December 31, 2004, were \$5,589,884. This increase of \$1,091,494 from the twelve months ended December 31, 2004 consists primarily of an additional \$125,000 in officer wages, an additional \$264,630 in legal and accounting fees, an additional \$204,354 in consulting fees, and an additional \$86,611 in non-cash compensation.

### MERGER FEES AND COSTS

Merger fees and costs were \$0 for the twelve months end December 31, 2004 and \$350,000 for the period of inception (October 30, 2002) to December 31, 2004. This amount is related to the reverse merger between GPN Network, Inc. and ImmuneRegen Biosciences, Inc., which was consummated in July 2003. \$185,000 of this amount were monies paid to the former controlling shareholder of GPN Network, Inc., and the remaining \$165,000 of these funds were used to satisfy certain outstanding liabilities of GPN Network, Inc.

During the twelve months ending December 31, 2005 we may investigate potential acquisition candidates, and the potential cash costs of such an acquisition or acquisitions is not possible to forecast.

### FINANCING COST

Financing costs were \$0 for the twelve months ending December 31, 2004 and \$90,000 for the period of inception (October 30, 2003) to December 31, 2004. This amount consists of non-refundable prepaid travel and road show costs relating to the reverse merger and an aborted private offering.

### INTEREST EXPENSE

Interest expense during the twelve months ended December 31, 2004 was \$807,017. This amount consists of interest payable on our notes payable. An additional \$68,824 of interest was accrued during the period of inception (October 30, 2002) through December 31, 2004.

-29-

### NET LOSS

For the reasons stated above, our net loss for the twelve months ending December 31, 2004 was \$5,305,407 or \$0.16 per share. For the period of inception (October 30, 2002) through December 31, 2004, our net loss was \$7,208,027 or \$0.28 per share. We expect that losses will continue through the period ending December 31, 2005.

## BUSINESS

### OVERVIEW

IR BioSciences Holdings, Inc. is a development-stage biopharmaceutical company. Through our wholly owned subsidiary, ImmuneRegen BioSciences, Inc., we are engaged in the research and development of health enhancing and potential life saving products. Our product development is focused around Homspera(TM), a proprietary compound that is derived from homeostatic substance P, a naturally occurring peptide. We believe Homspera can be used as treatment for various medical conditions as our preclinical animal studies have shown the compound to

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

have very high anti-inflammatory and immunostimulatory properties when introduced into the body. To date, results from several animal studies and initial toxicology data have shown Homspera to be safe.

Our patents and continued substance P research are derived from discoveries made during research studies funded by the Air Force Office of Scientific Research in early 1991 by our Chief Scientific Officer and Director, Dr. Mark Witten. These studies further showed that the administration of Homspera prevented and reversed the damaging effects of jet fuel exposure in the lungs, as well as protecting and regenerating the immune system. These findings led to early research on treatments for exposure to acute radiation, toxic inhalants, viral infection and on the reversal of lung damage.

In December 2002 we entered into consulting agreements on a month-to-month basis with Dr. Mark Witten and Dr. David Harris, who are our two founders and largest shareholders. Under the terms of these agreements, Drs. Witten and Harris agree to place at the disposal of us their judgment and expertise in the area of acute lung injury. In consideration for these services, we agree to pay each of Drs. Witten and Harris a non-refundable fee of \$5,000 per month.

In December 2002, we entered into a royalty-free license agreement with Drs. Witten and Harris. Under the terms of the license agreement, Drs. Harris and Witten granted to us an exclusive license to use and sublicense certain patents, medical applications, and other technologies developed by them. Our obligations under this agreement include (i) reasonable efforts to protect any licensed patents or other associated property rights; (ii) reasonable efforts to maintain confidentiality of any proprietary information; (iii) upon the granting by the U. S. Food and Drug Administration to us the right to market a product, we will maintain a broad form general liability and product liability insurance.

Our current area of focus is on the development of Radilex(TM) as a universal protectant against various potential forms of injury caused by chemical, biological, radiological and nuclear threats. We are developing Radilex pursuant to a new rule enacted by the U.S. Food and Drug Administration ("FDA") under which approval may be granted solely on the basis of proof of safety in humans and proof of efficacy in relevant animal species. We have chosen this area of focus initially because we believe that it offers us the best potential to reach a large market quicker and more cost effectively as compared to the development of a drug under a traditional medical indication model.

The majority of our efforts are in the research and development of Radilex as a countermeasure to the effects of radiological and nuclear threats. Because of the high anti-inflammatory and immunostimulatory properties of Radilex that we have witnessed, we believe the compound is well-suited for treating the damaging effects of radiation injury when given shortly after total body irradiation. We have generated a large amount of data in rodent animal models relating to the activity and safety of both Homspera and Radilex. To date we have completed seven mouse studies in which Radilex was administered after exposure to lethal doses of radiation. In these studies we witnessed heightened survival rates in up to 50% of the exposed mice.

Based on data collected in our preclinical animal studies, we believe that similar results would be possible in humans. We are now finalizing the protocols that we believe will allow us to initiate pivotal large animal trials

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

that will be necessary for establishing efficacy in treating the effects of exposure to radiation. Within the next twelve months, we expect to begin studies in non-human primates in order to collect data on the efficacy of Radilex in the treatment of exposure to radiation. In conjunction, we are establishing all of the manufacturing, toxicology and human safety data that will be needed to support a New Drug Application (NDA).

We are continuing to research the efficacy of Radilex as a universal protectant, used to treat not only radiological and nuclear threats, but also as a treatment for exposure to potential chemical and biological threats. We have generated data in preclinical studies indicating that Radilex could conceivably be used in treating respiratory failure caused by exposure to various chemical and biological threats, such as anthrax, ricin poisoning and other poisonous inhalants, as well as infectious diseases such as avian flu and SARS. We are continuing to design and perform studies for the further development of Radilex in treating these potential threats.

We have observed in early preclinical studies that Homspira may have an effect in promoting or accelerating wound healing. We plan to conduct preclinical studies to determine if Homspira could become a candidate for further development as a compound to be used in wound healing. We believe that such an application would have a large potential market and would share synergies with potential uses for Radilex.

Our initial data shows that both Homspira and Radilex can be produced quickly and cost-effectively in large quantities, are easily administered using an inhaler or puffer device, are easy to store and have a reasonable shelf lives. Further, in that Radilex may have efficacy in the treatment of the life-threatening effects of radiation exposure, we believe there may be strong interest by government agencies to stockpile Radilex if it is successfully developed. We believe this would not only provide us with an existing market opportunity, but would also require less infrastructure to market our product, thereby allowing us to commercialize Radilex at a substantially lower cost. We are currently in discussions with drug manufacturers and government officials, both foreign and domestic, with regard to such possibilities.

Our principal offices are located at 4021 North 75th Street, Suite 201, Scottsdale, Arizona 85251 and our telephone number is (480) 922-3926. We are incorporated in Delaware. We maintain a website at [www.immuneregen.com](http://www.immuneregen.com). The reference to our worldwide web address does not constitute incorporation by reference of the information contained on our website.

### HOMSPERA AND SUBSTANCE P

Substance P (SP) is a naturally occurring small (1348 D molecular weight) peptide of 11 amino acids that is localized to the nerves in the airways of several species, including humans. It is the most potent member of the tachykinin family of neuropeptides, which are widely distributed in the peripheral and central nervous systems and have direct, receptor-mediated actions on most tissues and organs.

The receptor mediating the effects of Substance P is the NK-1 tachykinin receptor (Nantel, F., Rouissi, N., Rhaleb, N. E., Dion, S., Drapeau, G., & Regoli, D. (1990) *EUR. J. PHARMACOL.* 179, 457-462; Seelig A et al, (1996) *BIOCHEMISTRY* 35, 4365-4374), but unlike other tachykinins, SP does not induce bronchoconstriction when administered in vivo by infusion or inhalation. This non-classic behavior enables the inhalation of Substance P analogs such as Sar9, Met (02)11-Substance P without apparently compromising respiratory function. This in turn may provide an easily accessible access point for administration of such agents to large populations in the absence of trained health care professionals, a valuable trait for a Universal Protectant of potential use prophylactically or in mass casualty situations.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

The primary amino acid sequence of SP and of Sar9, Met (O2)11-Substance P are distinct from Neurokinin A and B in the region of the molecule associated with bioactivity rather than binding affinity, thus supporting the unique bioactivity profile of Sar9, Met (O2)11-Substance P and SP relative to other tachykinins.

### SUBSTANCE P

-----

A review of the Substance P literature reveals a number of activities attributable to the peptide which are initially homeostatic in stress situations, but which could be harmful if overactive in cases of severe or chronic stress. As such, as described below, they could be targets for Sar9, Met (O2)11-Substance P administration following

-31-

exposure to radiation or to respiratory trauma (e.g., inhalant toxicity, microbiological or virological exposure) to protect against cellular and organismal damage.

Example of some Substance P mediated activities reported in the literature:

- Vasodilation and increased blood flow
- Increased fibrinolysis
- Stimulates growth hormone secretion
- Enhance hematopoeisis
- Immune system stimulation

Additionally, SP has been shown by ImmuneRegen-associated and/or funded research scientists to protect respiratory function in a model of jet fuel induced pulmonary damage in a series of studies over the past decade (some also funded by the Department of Defense). Additional information is provided below, and is available from ImmuneRegen.

SP is associated with C-nerve fibers in the respiratory system and is implicated in airway reactivity, although as mentioned above, when SP is administered in vivo by infusion or inhalation, in contrast to other tachykinins, it does not induce bronchoconstriction.

SP has different dose (concentration) dependent effects on target cells and tissues, especially in the pulmonary system. At lower concentrations, SP demonstrates protective and immune stimulating effects. SP is regulated (deactivated) by an enzyme named Neutral Endopeptidase (NEP). Under normal conditions, there is adequate NEP available to deactivate SP a short time after release from the C-nerve fibers, thus the activity of SP will be protective to external triggers of cell damage. Once NEP activity is diminished or overwhelmed by high local SP concentrations, the relative overexpression of SP will cause negative tissue effects and promote inflammation and tissue damage. In the absence of SP due to either long term depletion or prolonged receptor blockade, but in the presence of normally balancing homeostatic factors, the inadequate levels will be pro-inflammatory as well. Thus the balance between SP and other peptidergic or stress-related factors can have profound impact on the organisms state of health.

The importance of SP in maintaining pulmonary (and immune) function was

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

investigated by ImmuneRegen-associated scientists, who reported that short-term (7 days) exposure of C57BL/6 mice to low concentrations of environmental hydrocarbons (i.e. jet fuels) resulted in profound and significant alterations in the pulmonary and immune systems as well as a depletion of Substance P in the bronchoalveolar fluids of the lung. In confirmatory experiments in which endogenous lung SP was depleted (by capsaicin injection) prior to hydrocarbon exposure, the effects of jet fuel on the pulmonary system were observed to be more severe.

When aerosolized SP was administered to jet fuel exposed animals it reversed and/or prevent many of the resulting pathological lung effects and the immunotoxicological effects.

### SAR9, MET (O2)11 - SUBSTANCE P

-----

Not as extensively investigated as endogenous SP, Sar9, Met (O2)11-Substance P has been reported to

- Enhance immunoglobulin production
- Enhance interleukin-2 production
- Facilitate platelet synthesis
- Enhance leukocyte (white blood cell) production
- Regulate PARP (poly-(adenosy-ribose)polymerase-1)

Briefly, PARP is a family of 18 proteins involved in DNA surveillance and repair, specifically of single and double-stranded breaks of the type induced by ionizing radiation. In circumstances of low to moderate DNA damage, PARP-1 activation is curative, but in situations of intense DNA damage, activation of PARP-1 causes depletion of cellular energy stores ((beta)-nicotinamide adenine dinucleotide (NAD) and ATP), ultimately leading to fatal energy loss and apoptosis, or programmed cellular death.

-32-

As we have added Dr. Mark Smulson to our Drug Development Advisory Board, an expert in PARP, enormous excitement has accompanied the recognition that PARP-1 suppression protects against cellular stresses accompanying ischemia, inflammation, diabetes and septic shock in animal models, and we have evidence that Sar9, Met (O2)11-Substance P can suppress PARP-1 activity and apoptosis.

### CYTOKINES AND IMMUNE FUNCTION

-----

Substance P and Homspera both exhibit various and powerful effects on different blood and tissue cell types at physiological levels, likely via the cytokines (termed interleukins) released from cells of the immune system (generally leukocytes). Some of the immune system cell targets and effects of Substance P and Homspera are presented.

Target	Effect
Macrophages	Chemotaxis, phagocytosis, release of IL- 1,6,12,TNF(alpha),
Monocytes	Chemotaxis, phagocytosis, release of IL- 1,6,12,TNF(alpha),
Mast Cells	Degranulation, release of TNF(alpha)

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Lymphocytes	Proliferation, chemotaxis, Ig synthesis, IL2 release
Neutrophils	Adhesion, chemotaxis, release of IL8 and superoxide
Eosinophils	Chemotaxis, degranulation, release of superoxide
Endothelial Cells	Chemotaxis, angiogenesis, ICAM1
Smooth Muscle Cells	Proliferation
Fibroblasts	Chemotaxis, proliferation

The immune system cells called macrophages play a major role in the actions of SP and Sar9, Met (O2)11-Substance P. These cells contain the DNA that codes for the precursors of many of the tachykinins, including SP. Additionally, macrophage NK1 receptors play an active role in the action of SP. SP binding to its macrophage receptor actually stimulates additional tachykinin synthesis. Thus, newly formed intracellular SP will be expelled from the macrophage via exocytosis and local SP levels will rise in the blood or tissues.

In response to these elevated SP levels, the macrophages will synthesize additional NK1 receptors on their surfaces. In the absence of balancing factors, available Neutral Endopeptidase (NEP) may not be sufficient to keep SP levels in a low or physiological range. Thus there will be an excess amount of SP available to activate the macrophage NK1 receptors, triggering a vicious cycle, and responsible for the destructive effects of high Substance P levels on cells and tissues.

Evidence reveals that Homspera has a higher NK1 receptor affinity (stronger receptor binding) than SP, thus it competes with SP at the NK1 receptor and prevents SP binding to the receptor. It is believed that Homspera although bound to the receptor, does not similarly activate SP transcription and thus there is no increase of intracellular SP and subsequently no exocytosis of SP that would increase local SP levels. Thus, due to the low endogenous SP activity expressed by Homspera, it appears to act as a partial agonist, providing immune stimulatory activity on its own, but protecting against the overload of excessive SP.

Thus it appears that Sar9, Met (O2)11-Substance P acts via a receptor mediated mechanism in two distinct ways, through endogenous partial agonist activation of immune system function and via inhibition of the SP-mediated positive feedforward loop that underlies SP-overexpression toxicity. Additionally, via inhibition of PARP-1, Sar9, Met (O2)11-Substance P can directly prevent apoptosis at the level of the cell nucleus.

### PRODUCTS IN DEVELOPMENT

#### Radilex

We are currently focusing our development efforts on Radilex as a potential countermeasure for exposure to lethal doses of radiation in humans. As traditional efficacy studies would require healthy human volunteers to be exposed to potentially lethal effects of radiation, Radilex is being developed pursuant to a new rule enacted by the U.S. Food and Drug Administration (FDA) under which approval may be granted solely on the basis of proof of efficacy in relevant animal species and proof of safety in humans. We believe that this will not only greatly

accelerate the development of Radilex(TM) but also will substantially reduce our development costs and allow us to enter the marketplace more quickly as compared

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

to following a traditional drug development program.

To date we have conducted two studies and co-sponsored five radiation studies using Radilex on mice to determine dose response to radiation, the maximum efficacious dose, the impact on survival and to distinguish survival response between aerosol versus intra muscular delivery. In each of these studies mice were exposed to varying levels of radiation.

Our studies to date are summarized below:

- o Pilot Studies numbers 1 and 2, co-sponsored by us, attempted to find a 50% lethal dose (LD50) total body dose of Gamma radiation in a C57BL/6 male mouse. We found that an LD50 dose was impractical because the threshold between no lethality and complete lethality was so small.
- o Pilot study number 3, co-sponsored by us, was intended to determine if Homspera treatment would prolong life in C57BL/6 male mice exposed to a single total body irradiation 9 gy dose of Gamma radiation. The radiation exposed, Homspera treated mice lived an average of two days longer than untreated, radiation exposed mice.
- o Pilot Study number 4, co-sponsored by us, analyzed whether Homspera treatment would prolong life in C57BL/6 male mice exposed to a single total body 7.75 gy dose of Gamma radiation. The Homspera Treated, radiation exposed mice lived an average of 17.3 days longer than untreated but radiation exposed mice.
- o Pilot Study number 5, co-sponsored by us, was meant to find a long-term survival rate of C57BL/6 male mice exposed to a single total body, 7.75 gy dose of Gamma radiation. 50% of radiation exposed, Homspera treated mice survived at 90 days post exposure. When compared with non-irradiated mice, the Homspera treated, radiation exposed mice showed no significant differences in their immune system.
- o Pilot Study number 6, conducted by us, was initiated at the request of the US FDA to determine efficacy in treating radiation exposure with Homspera by intramuscular injection, rather than inhalation. The study compared inhalation to direct injection over a range of radiation and Homspera doses, and found that direct injection did not offer any particular advantage.
- o Pilot Study number 7, conducted by us, was intended to find a maximum efficacious dose of Homspera in mice exposed to total body 7.75 gy dose of Gamma radiation. All mice remained alive until 17 days post exposure, when they were exposed to a second dose of radiation, at 9 gy. All of the mice died at roughly the same time. However, this study was confounded by the fact that the mice spent their first 7 days post-exposure in Biolevel 2 conditions.

### PLANNED STUDIES

Study planning is taking into account both the short-term and long-term needs to support both the Homeland Security opportunity regarding the Strategic National Stockpile as well as for NIH and FDA clearance under either the "Animal Rule" enabling accelerated approval for indications that can not ethically be tested in humans, or for more traditional marketing approval via the IND/NDA process.

Currently, we are finalizing the protocols for an eighth mouse study. We are designing this study to achieve proof of concept, as well as obtaining the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

optimum dosing regime, drug dosage levels and delivery method. This study will evaluate the survival impact of Radilex following exposure to various gamma radiation levels; to validate the effects of Radilex on PARP-1 levels/expression following irradiation; to determine Radilex levels in major organs; to determine the impact of Radilex on survival when administered 12, 24 and 36 hours following cobalt radiation exposure; and, to validate and compare survival rates of aerosol versus intra muscular delivery. We expect this study to begin within the next 60 days.

-34-

We are also determining the protocols that we believe will allow us to initiate pivotal large animal trials that will be necessary for establishing efficacy. We expect these studies to begin within the next 12 to 18 months. In conjunction with this, we are establishing protocols for toxicology and human safety studies that will be needed to support a New Drug Application (NDA).

Furthermore we are also researching the efficacy of Radilex as a treatment for exposure to various chemical and biological agents. We have generated data in preclinical studies indicating that Radilex could potentially be used in treating respiratory failure caused by exposure to various chemical and biological threats, such as anthrax, ricin poisoning and other poisonous inhalants, as well as infectious diseases.

Listed below are some of the studies that we currently anticipate performing over the next 12 months:

- o Confirm radiological dose-response in model system under GLP conditions for FDA/NIH review
- o Confirm inhalation route versus IM provides ease of dosing post-exposure in mass casualty environment
- o Qualify radiolabeled Radilex for pharmacokinetics and organ distribution on inhalation
- o Determine Radilex protection via Kaplan-Meier survival data analysis, log-probit transformation for Dose Reduction Factor determination
- o Determine Radilex effects on PARP-1 in various organs, as well as neutropenia and thrombocytopenia
- o Demonstrate Radilex efficacy versus inhaled biologics
- o Perform rodent and non-rodent FDA/ICH-compliant safety studies; and,
- o Perform Primate studies to confirm distribution, dose effect and biological safety.

### ACUTE RADIATION SICKNESS (ARS)

-----

Radiation sickness, known as acute radiation sickness or syndrome, is a serious illness that occurs when the entire body (or most of it) receives a high dose of radiation, usually over a short period of time. Severe body injury can result from such exposure including: skin damage; lung radiation injury, similar to Acute Respiratory Distress Syndrome; hematopoietic syndrome, which includes

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

thrombocytopenia and neutropenia; and, damage to the body's organs. The chance of survival for people with ARS decreases with increasing radiation dose. Most people who do not recover from ARS will die within several months of exposure. The cause of death in most cases is the destruction of the person's bone marrow, which results in infections and internal bleeding. For the survivors, the recovery process may last from several weeks up to 2 years.

### MARKET FOR OUR PRODUCTS

-----

Because of past terrorist events, people have expressed much greater concern about the possibility of a terrorist attack involving radioactive materials, possibly through the use of a "dirty bomb," and the harmful effects of radiation from such an event.

The adverse health consequences of a terrorist nuclear attack vary according to the type of attack and the distance a person is from the attack. In light of the current risk of terrorism, high-risk areas include military installations, major metropolitan areas and those areas surrounding nuclear power plants or spent fuel facilities. Additionally, Radilex could potentially be made available for distribution in the event of a natural disaster or accident to those individuals living near nuclear power plants, spent fuel facilities and those living along transport routes of radioactive materials. The uncertainties of terrorism, natural disasters and accidents coupled with a virtually unlimited number of individuals that could potentially be affected, presents us with significant, untapped market opportunities not only domestically, but also throughout the world.

-35-

Based on our studies we believe that Radilex must be administered as soon as possible after exposure to radiation. Due to the suddenness of a potential attack or disaster and the number of people that would be affected, we believe that Radilex would need to be stockpiled to be appropriately distributed. Administration of Radilex can be done quickly and cost effectively using an inhaler or puffer device. In that Radilex may prove effective in the treatment of the life-threatening effects of radiation exposure, we believe there may be strong interest by government agencies to stockpile Radilex if it is successfully developed. We are currently in discussions with drug manufacturers and government officials with regard to such possibilities.

### RESEARCH AND DEVELOPMENT

Due to our liquidity and limited cash available, our spending on research and development activities in 2003 and most of 2004 was limited. We spent approximately \$150,091 and \$42,972 in 2004 and 2003, respectively, in research and development activities related to the development of Radilex as a universal protectant against the effects of chemical, biological, radiological and nuclear threats. From our inception in October 2002, we have spent \$193,063 in research and development activities. These costs include the manufacture and delivery of our drug by third party manufacturers, payments to Contract Research Organizations ("CRO") for consulting related to our studies and costs of performing such studies.

We anticipate that during the next 12 months we will increase our research and development activities by approximately \$450,000 to a total of approximately \$600,000 in an effort to further develop Radilex as a universal protectant against chemical, biological, radiological and nuclear threats.

COMPETITION

We are engaged in segments of the biopharmaceutical industry that are intensely competitive and rapidly changing. Based on recent world events and aggressive governmental legislation, we believe a large market opportunity has developed. Given this large potential market, numerous pharmaceutical and biotechnology companies have directed their research efforts toward developing therapeutics to treat the same indications that we are researching.

If successfully developed and approved, we believe that there is a significant market for Radilex relating to the treatment of exposure to radiation and poisonous inhalants. We anticipate that, even if we successfully develop Homspera and Radilex and they are approved for marketing, we will face intense and increasing competition in the future as new products enter the market and advanced technologies become available. There can be no assurance that existing products or new products for the treatment of such ailments developed by competitors, including Hollis-Eden Pharmaceuticals, Inc., VaxGen, Inc., Acambis plc, Emergent BioSolutions, Inc. and other larger biopharmaceutical companies, will not be more effective or more effectively marketed and sold. Competitive products or the development by others of a cure or new treatment methods may render our technologies and products and compounds obsolete, noncompetitive or uneconomical prior to our recovery of development or commercialization expenses incurred with respect to any such technologies or products or compounds.

We believe that due to the global political environment that time to market is critical in the discovery of an effective countermeasure to radiation exposure and other biological and chemical threats. New developments in areas in which we are conducting our research and development are expected to continue at a rapid pace in both industry and academia. Many of our competitors have significantly greater financial, technical and human resources than us and may be better equipped to develop, manufacture, sell, market and distribute products. In addition, many of these companies have extensive experience in preclinical testing and clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products. Many of these competitors also have products for use individually or in combination therapy that have been approved or are in late-stage development and operate large, well-funded research and development programs. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and biotechnology companies.

If our product candidates and compounds are successfully developed and approved, we will face competition based on the safety and effectiveness of our products and compounds, the timing and scope of regulatory approvals, availability of manufacturing, sales, marketing and distribution capabilities, reimbursement

-36-

coverage, price and patent position. There can be no assurance that our competitors will not develop more effective or more affordable technology or products, or achieve earlier patent protection, product development or product commercialization than us. Accordingly, our competitors may succeed in commercializing products more rapidly or effectively than us, which could have a material adverse effect on our business, financial condition and results of operations.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### GOVERNMENTAL REGULATION

Our technologies are subject to extensive government regulation, principally by the U.S. Food and Drug Administration and state and local authorities in the United States and by comparable agencies in foreign countries. Governmental authorities in the United States extensively regulate the pre-clinical and clinical testing, safety, efficacy, research, development, manufacturing, labeling, storage, record-keeping, advertising, promotion, export, marketing and distribution, among other things, of pharmaceutical products under various federal laws including the Federal Food, Drug and Cosmetic Act, or FFDCA, and under comparable laws by the states and in most foreign countries.

### DOMESTIC REGULATION

-----

In the United States, the FDA, under the FFDCA, the Public Health Service Act and other federal statutes and regulations, subject pharmaceutical and biologic products to rigorous review. If we do not comply with applicable requirements, we may be fined, the government may refuse to approve our marketing applications or allow us to manufacture or market our products or product candidates, and we may be criminally prosecuted. The FDA also has the authority to discontinue or suspend manufacture or distribution, require a product withdrawal or recall or revoke previously granted marketing authorizations, if we fail to comply with regulatory standards or if we encounter problems following initial marketing.

#### Project Bioshield

The U.S. government, in response to the increased threat to its citizens, has enacted Project BioShield, a comprehensive effort to develop and make available modern, effective drugs and vaccines to protect against attack by biological and chemical weapons or other dangerous pathogens. Project BioShield will:

- o Ensure that resources are available to pay for "next-generation" medical countermeasures. Project BioShield will allow the government to buy improved vaccines or drugs for smallpox, anthrax, and botulinum toxin. Use of this authority is currently estimated to be \$6 billion over ten years. Funds would also be available to buy countermeasures to protect against other dangerous pathogens, such as Ebola and plague, as soon as scientists verify the safety and effectiveness of these products.
- o Strengthen the development capabilities of the National Institute of Health ("NIH") by speeding research and development on medical countermeasures based on the most promising recent scientific discoveries.
- o Give FDA the ability to make promising treatments quickly available in emergency situations. This tightly controlled new authority can make the newest treatments widely available to patients who need it in a crisis.

Project BioShield has three major components:

1. Spending Authority for the Delivery of Next-Generation Medical Countermeasures. This authority will enable the government to purchase vaccines and other therapies as soon as experts believe that they can be made safe and effective, ensuring that the private sector devotes efforts to developing the countermeasures.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

2. New NIH Programs to Speed Research and Development on Medical Countermeasures. NIH's usual methods for supporting research and development on conventional diseases have been extremely effective in those areas but may not always be suited to meet the urgent demands posed by the risk of

-37-

terrorism. The new authorities would apply only to support research and development on bioterrorism threat agents.

3. New FDA Emergency Use Authorization for Promising Medical Countermeasures Under Development. Some of the most promising treatments for a terrorist agent may still be under formal FDA review when an attack occurs. This will improve access to a potentially beneficial treatment in an emergency situation, when it is most likely to save lives, even if it has not yet been proven to be suitable for routine general use or has not completed the formal process for full FDA licensure.

Project BioShield contains provisions enabling the U.S. Department of Health and Human Services ("HHS") to begin purchasing new medical countermeasures for the Strategic National Stockpile in advance of formal FDA approval. This provision, known as an Emergency Use Authorization, has already been implemented for other development stage medical countermeasures to weapons of mass destruction.

As the result of the Project BioShield legislation, the Administration has already begun the process of acquiring several new medical countermeasures. In late 2004, the HHS issued a Request for Information ("RFI") for therapeutics to treat ARS. In December 2004 we filed a formal response to this request detailing the potential for Radilex in this indication.

If we are unable to develop Radilex under the legislation enacted by Project BioShield, we will be required to follow the traditional FDA approval process and guidelines. We believe that approval for Radilex under the traditional process would be considerably more costly and time consuming.

### FDA APPROVAL PROCESS

-----

To obtain approval of a new product from the FDA, we must, among other requirements, submit data demonstrating the product's safety and efficacy, as well as, detailed information and reports on the manufacture and composition of the product candidate. In most cases, this entails extensive laboratory tests, pre-clinical and clinical trials. This testing and the preparation of necessary applications and processing of those applications by the FDA are expensive and typically take many years to complete. The FDA may deny our applications or may not act quickly or favorably in reviewing these applications, and we may encounter significant difficulties or costs in our efforts to obtain FDA approvals that could delay or preclude us from marketing any products we may develop. The FDA also may require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products. Regulatory authorities may withdraw product approvals if we fail to comply with regulatory standards or if we encounter problems following initial marketing. With respect to patented products or technologies, delays imposed by the governmental approval process may materially reduce the period during which we will have the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

exclusive right to exploit the products or technologies.

The FDA does not apply a single regulatory scheme to human tissues and the products derived from human tissue. On a case-by-case basis, the FDA may choose to regulate such products as transplanted human tissue, medical devices or biologics. A fundamental difference in the treatment of products under these classifications is that the FDA generally permits human tissue for transplantation to be commercially distributed without marketing approval. In contrast, products regulated as medical devices or biologics usually require such approval.

The process required by the FDA before a new drug or biologic may be marketed in the United States generally involves the following:

- o completion of pre-clinical laboratory tests or trials and formulation studies;
- o submission to the FDA of an IND for a new drug or biologic, which must become effective before human clinical trials may begin;
- o performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug or biologic for its intended use; and,
- o submission and approval of a New Drug Application, or NDA, for a drug, or a BLA for a biologic.

-38-

Pre-clinical tests include laboratory evaluation of product chemistry formulation and stability, as well as studies to evaluate toxicity. In view of the nature of our product candidates and our prior clinical experience with our product candidates, we concluded that it was reasonably safe to initiate clinical trials and that the clinical trials would be adequate to further assess both the safety and efficacy of our product candidates. The results of pre-clinical testing, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND application. The FDA requires a 30-day waiting period after the filing of each IND application before clinical trials may begin, in order to ensure that human research subjects will not be exposed to unreasonable health risks. At any time during this 30-day period or at any time thereafter, the FDA may halt proposed or ongoing clinical trials, or may authorize trials only on specified terms. The IND application process may become extremely costly and substantially delay development of our products. Moreover, positive results of pre-clinical tests will not necessarily indicate positive results in clinical trials.

The sponsor typically conducts human clinical trials in three sequential phases, which may overlap. These phases generally include the following:

Phase I: The product is usually first introduced into healthy humans or, on occasion, into patients, and is tested for safety, dosage tolerance, absorption, distribution, excretion and metabolism.

Phase II: The product is introduced into a limited patient population to:

- o assess its efficacy in specific, targeted indications;
- o assess dosage tolerance and optimal dosage; and,

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- o identify possible adverse effects and safety risks.

Phase III: These are commonly referred to as pivotal studies. If a product is found to have an acceptable safety profile and to be potentially effective in Phase II clinical trials, new clinical trials will be initiated to further demonstrate clinical efficacy, optimal dosage and safety within an expanded and diverse patient population at geographically-dispersed clinical study sites.

If the FDA does ultimately approve the product, it may require post-marketing testing, including potentially expensive Phase IV studies, to monitor its safety and effectiveness.

Clinical trials must meet requirements for Institutional Review Board, or IRB, oversight, informed consent and the FDA's Good Laboratory Practices. Prior to commencement of each clinical trial, the sponsor must submit to the FDA a clinical plan, or protocol, accompanied by the approval of the committee responsible for overseeing clinical trials at one of the clinical trial sites. The FDA and the IRB at each institution at which a clinical trial is being performed may order the temporary or permanent discontinuation of a clinical trial at any time if it believes that the clinical trial is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients.

The sponsor must submit to the FDA the results of the pre-clinical and clinical trials, together with, among other things, detailed information on the manufacturing and composition of the product, in the form of an NDA, or, in the case of a biologic, a BLA. Once the submission has been accepted for filing, the FDA has 180 days to review the application and respond to the applicant. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the BLA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved, but the FDA is not bound by the recommendation of an advisory committee.

It is possible that our product candidates will not successfully proceed through this approval process or that the FDA will not approve them in any specific period of time, or at all. The FDA may deny or delay approval of applications that do not meet applicable regulatory criteria, or if the FDA determines that the clinical data do not adequately establish the safety and efficacy of the product. Satisfaction of FDA pre-market approval requirements for a new biologic is a process that may take several years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. The FDA reviews these applications and, when and

-39-

if it decides that adequate data are available to show that the product is both safe and effective and that other applicable requirements have been met, approves the drug or biologic for marketing. Government regulation may delay or prevent marketing of potential products for a considerable period of time and impose costly procedures upon our activities. Success in early stage clinical trials does not assure success in later stage clinical trials. Data obtained from clinical activities is not always conclusive and may be susceptible to varying interpretations that could delay, limit or prevent regulatory approval. Upon approval, a product candidate may be marketed only for those indications

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

approved in the BLA or NDA and may be subject to labeling and promotional requirements or limitations, including warnings, precautions, contraindications and use limitations, which could materially impact profitability. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-market regulatory standards is not maintained or if safety, efficacy or other problems occur after the product reaches the marketplace.

The FDA may, during its review of an NDA or BLA, ask for additional test data. If the FDA does ultimately approve the product, it may require post-marketing testing, including potentially expensive Phase IV studies, to monitor the safety and effectiveness of the product. In addition, the FDA may, in some circumstances, impose restrictions on the use of the product, which may be difficult and expensive to administer and may require prior approval of promotional materials.

### ONGOING FDA REQUIREMENTS

-----

Before approving an NDA or BLA, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facilities are in compliance with the FDA's current Good Manufacturing Practices, or cGMP, requirements which govern the manufacture, holding and distribution of a product. Manufacturers of biologics also must comply with the FDA's general biological product standards. Following approval, the FDA periodically inspects drug and biologic manufacturing facilities to ensure continued compliance with the cGMP requirements. Manufacturers must continue to expend time, money and effort in the areas of production, quality control, record keeping and reporting to ensure full compliance with those requirements. Failure to comply with these requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product, voluntary recall of product, withdrawal of marketing approval or civil or criminal penalties. Adverse experiences with the product must be reported to the FDA and could result in the imposition of marketing restrictions through labeling changes or market removal. Product approvals may be withdrawn if compliance with regulatory requirements is not maintained or if problems concerning safety or efficacy of the product occur following approval.

The labeling, advertising, promotion, marketing and distribution of a drug or biologic product also must be in compliance with FDA and FTC requirements which include, among others, standards and regulations for direct-to-consumer advertising, industry-sponsored scientific and educational activities, and promotional activities involving the internet. The FDA and FTC have very broad enforcement authority, and failure to abide by these regulations can result in penalties, including the issuance of a Warning Letter directing the company to correct deviations from regulatory standards, a requirement that future advertising and promotional materials be pre-cleared by the FDA and enforcement actions that can include seizures, injunctions and criminal prosecution.

Manufacturers are also subject to various laws and regulations governing laboratory practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances in connection with their research. In each of the above areas, the FDA has broad regulatory and enforcement powers, including the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products and deny or withdraw approvals.

### HIPAA REQUIREMENTS

-----

Other federal legislation may affect our ability to obtain certain health information in conjunction with our research activities. The Health Insurance

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Portability and Accountability Act of 1996, or HIPAA, mandates, among other things, the adoption of standards designed to safeguard the privacy and security of individually identifiable health information. In relevant part, the U.S. Department of Health and Human Services, or HHS, has released two rules to date mandating the use of new standards with respect to such health information. The first rule imposes new standards relating to the privacy of individually identifiable health information. These standards restrict the manner

-40-

and circumstances under which covered entities may use and disclose protected health information so as to protect the privacy of that information. The second rule released by HHS establishes minimum standards for the security of electronic health information. While we do not believe we are directly regulated as a covered entity under HIPAA, the HIPAA standards impose requirements on covered entities conducting research activities regarding the use and disclosure of individually identifiable health information collected in the course of conducting the research. As a result, unless they meet these HIPAA requirements, covered entities conducting clinical trials for us may not be able to share with us any results from clinical trials that include such health information.

In addition to the statutes and regulations described above, we are also subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other present and potential future federal, state and local regulations.

### MANUFACTURING

We do not have, and do not intend to establish, manufacturing facilities to produce Radilex or any future products. We have used and expect to continue to use third party manufacturers to obtain synthetic peptides. We believe synthesized versions of substance P is readily available at low cost from several life science and technology companies that provide biochemical and organic chemical products used in scientific and genomic research, biotechnology, pharmaceutical development and the diagnosis of disease and chemical manufacturing. We believe that the synthetic substance P and other materials necessary to produce Homspera and Radilex are readily available from various sources, and several suppliers are capable of supplying such in both clinical and commercial quantities. We have established relationships to fulfill our near-term production needs and we have had extensive discussions to fulfill any future commercial production needs.

The manufacture of our product candidates or any future products, whether done by outside contractors as planned or internally, will be subject to rigorous regulations, including the need to comply with the FDA's current Good Manufacturing Practice (GMP) standards. As part of obtaining FDA approval for each product, each of the manufacturing facilities must be inspected, approved by and registered with the FDA. In addition to obtaining FDA approval of the prospective manufacturer's quality control and manufacturing procedures, domestic and foreign manufacturing facilities are subject to periodic inspection by the FDA and/or foreign regulatory authorities.

### DISTRIBUTION

If Radilex receives approval from the FDA, we will attempt to commercialize the product. Upon such approval, we intend to use our best efforts to market Radilex as a treatment to the damaging effects of radiation injury

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

that result after exposure to total body irradiation, and possibly as a universal protectant against exposure to various biological and chemical threats. We intend to offer for sale the product to various governmental agencies at the local, state and federal levels, both domestically and outside the United States.

Prior to FDA approval, Radilex may become eligible for purchase by the U.S. government. Project BioShield legislation contains provisions enabling the HHS to begin purchasing new medical countermeasures for the Strategic National Stockpile in advance of formal FDA approval. This provision, known as an Emergency Use Authorization, has already been implemented for other development stage medical countermeasures to weapons of mass destruction. In that Radilex may have efficacy in the treatment of the life-threatening effects of radiation exposure, we believe there may be strong interest by government agencies to stockpile Radilex if it is successfully developed.

### PATENTS

Our patents and continued substance P research are derived from discoveries made during research studies funded by the Air Force Office of Scientific Research in early 1991 by our Chief Scientific Officer and Director, Dr. Mark Witten. These studies further showed that the administration of Homspera prevented and reversed the damaging effects of jet fuel exposure in the lungs, as well as protecting and regenerating the immune system. These findings led to early research on treatments for exposure to acute radiation, toxic inhalants, viral infection and on the reversal of lung damage.

-41-

We currently own or have obtained a license to two issued U.S. patents, six pending U.S. patents applications and 4 one-year provisional patents. We also currently own or have obtained two issued foreign patents and 18 pending foreign patent applications. Our issued patents and patent applications primarily cover the methods whereby Homspera is used in improving pulmonary function and stimulating the immune system. We are in the process of pursuing several other patent applications.

We believe that patents, trademarks, copyrights and other proprietary rights are important to our business. We also rely on trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position. We seek to protect our intellectual property rights by a variety of means, including obtaining patents, maintaining trade secrets and proprietary know-how, and technological innovation to operate without infringing on the proprietary rights of others and to prevent others from infringing on our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, actively seeking patent protection in the United States and foreign countries.

Our success depends in part on our ability to maintain our proprietary position through effective patent claims and their enforcement against our competitors. Although we believe our patents and patent applications provide a competitive advantage, the patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. We do not know whether any of our patent applications will result in the issuance of any patents. Our issued patents, those that may be issued in the future or those acquired by us, may be challenged, invalidated or circumvented, and the rights granted under any issued patent may not provide us with proprietary protection or competitive advantages against competitors with similar technology. In

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

particular, we do not know if competitors will be able to design variations on our treatment methods to circumvent our current and anticipated patent claims. Furthermore, competitors may independently develop similar technologies or duplicate any technology developed by us. Because of the extensive time required for the development, testing and regulatory review of a potential product, it is possible that, before any of our products can be commercialized or marketed, any related patent claim may expire or remain in force for only a short period following commercialization, thereby reducing the advantage of the patent. We also rely upon trade secrets, confidentiality agreements, proprietary know-how and continuing technological innovation to remain competitive, especially where we do not believe patent protection is appropriate or obtainable. We continue to seek ways to protect our proprietary technology and trade secrets, including entering into confidentiality or license agreements with our employees and consultants, and controlling access to and distribution of our technologies and other proprietary information. While we use these and other reasonable security measures to protect our trade secrets, our employees or consultants may unintentionally or willfully disclose our proprietary information to competitors.

Our commercial success will depend in part on our ability to operate without infringing upon the patents and proprietary rights of third parties. It is uncertain whether the issuance of any third party patents would require us to alter our products or technology, obtain licenses or cease certain activities. Our failure to obtain a license to technology that we may require to discover, develop or commercialize our future products may have a material adverse impact on us. One or more third-party patents or patent applications may conflict with patent applications to which we have rights. Any such conflict may substantially reduce the coverage of any rights that may issue from the patent applications to which we have rights. If third parties prepare and file patent applications in the United States that also claim technology to which we have rights, we may have to participate in interference proceedings in the USPTO to determine priority of invention.

Our rights to the US Patent Nos. 5,945,508 and 5,998,376 have certain limitations with respect to the University of Arizona and the United States Air Force.

Our agreements with the University of Arizona outline very specific rights in regard to our sponsored-supported projects. In accordance with our sponsored-supported project agreements, The University of Arizona retains the right to use data developed during these projects for non-commercial purposes, including teaching, research and education. ImmuneRegen BioSciences, Inc. retains the rights to trade secrets, inventions, developments and discoveries as limited by the University of Arizona's employment contracts in effect at the time the Intellectual Property was created. Further to this point, the two principal investigators at the University of Arizona, Dr. Mark Witten and Dr. David Harris, are consultants to ImmuneRegen BioSciences, and, under the terms of the consulting agreements, ImmuneRegen BioSciences, Inc. retains rights to any developments or discoveries that they may make in the course of working for us.

-42-

The United States Air Force has reserved a non-exclusive license to the patents in connection with Air Force grant F49620-94-1-0297 and may, under certain conditions, have commensurate or additional license rights under the Bayh-Dole Act.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

In December 2002 we entered into consulting agreements on a month-to-month basis with Dr. Mark Witten and Dr. David Harris, who are our two founders and largest shareholders. Under the terms of these agreements, Drs. Witten and Harris agree to place at the disposal of us their judgment and expertise in the area of acute lung injury. In consideration for these services, we agree to pay each of Drs. Witten and Harris a non-refundable fee of \$5,000 per month. In March 2005, Dr. Harris resigned as consultant to the Company and its subsidiaries.

In December 2002, we entered into a royalty-free license agreement with Drs. Witten and Harris. Under the terms of the license agreement, Drs. Harris and Witten granted to us an exclusive license to use and sublicense certain patents, medical applications, and other technologies developed by them. Our obligations under this agreement include (i) reasonable efforts to protect any licensed patents or other associated property rights; (ii) reasonable efforts to maintain confidentiality of any proprietary information; (iii) upon the granting by the U. S. Food and Drug Administration to us the right to market a product, we will maintain a broad form general liability and product liability insurance.

In February 2005, Drs. Witten and Harris executed assignment documents in which for good and valuable consideration patents and patents applications developed by them are assigned to ImmuneRegen BioSciences, Inc.

We may collaborate in the future with other entities on research, development and commercialization activities. Disputes may arise about inventorship and corresponding rights in know-how and inventions resulting from the joint creation or use of intellectual property by us and our collaborators, partners, licensors and consultants. As a result, we may not be able to maintain our proprietary position.

### EMPLOYEES

From our inception through the period ended March 31, 2005, we have relied on the services of outside consultants for services and currently have five total employees, two contract employees and three full-time employees. Our full-time employees are Michael K. Wilhelm, our Chief Executive Officer; John Fermanis, our Chief Financial Officer; and, the third serves in an administrative role. In order for us to attract and retain quality personnel, we anticipate we will have to offer competitive salaries to future employees. We do not anticipate our employment base will significantly change during the next twelve months, other than the addition of one senior level appointment to the position of Senior Vice President of Scientific Development. As we continue to expand, we will incur additional cost for personnel. This projected increase in personnel is dependent upon our generating revenues and obtaining sources of financing. There is no guarantee that we will be successful in raising the funds required or generating revenues sufficient to fund the projected increase in the number of employees.

### PROPERTY

Our corporate headquarters are currently located at 4021 N. 75th Street, Suite 201, Scottsdale, Arizona 85251, where we have leased approximately 1,800 square feet of office space through September 30, 2005. Our rent expense is \$2,614 per month. We believe that our facilities are adequate for our current needs and suitable additional or substitute space will be available in the future to replace our existing facilities, if necessary, or accommodate expansion of our operations.

### LEGAL PROCEEDINGS

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

On December 13, 2001, service of process was effectuated upon GPN Network, Inc. with regard to a fee agreement between GPN Network, Inc. and Silver & Deboskey, a Professional Corporation located in Denver, Colorado. The complaint sought compensation for legal services allegedly rendered to DermaRx Corp. On November 7, 2002, the District Court in Denver, Colorado rendered judgment in favor of Silver & Deboskey in the amount of \$28,091. At December 31, 2004, we had not paid any of this amount. The judgment of \$28,091 has been accrued and is contained in the \$341,210 of Accounts Payable and Accrued Liabilities on the Company's condensed consolidated balance sheet of March 31, 2005.

-43-

### MANAGEMENT

Executive officers are elected annually by the Board of Directors. Board members serve one-year terms until their death, resignation or removal by the Board of Directors.

Name	Age	Position
Michael K. Wilhelm	38	President, Chief Executive Officer and Director
John N. Fermanis	51	Chief Financial Officer
Mark L. Witten, Ph.D.	51	Director and Research Scientist
Theodore E. Staahl, M.D.	59	Director

MICHAEL K. WILHELM, PRESIDENT, CHIEF EXECUTIVE OFFICER AND DIRECTOR. Mr. Wilhelm has served as our President and Chief Executive Officer and on our Board of Directors since July 2003 and as President and Chief Executive Officer of ImmuneRegen BioSciences, Inc. since December 2002 and on its Board of Directors since November 2002. Mr. Wilhelm has been actively involved in the financial industry since 1990. After leaving the brokerage industry, Mr. Wilhelm founded Foresight Capital Partners in July 1996, a company designed to identify early stage companies with above average growth potential and assist them in reaching the next stage of development. In working with these companies, Mr. Wilhelm took an active role, provided advisory services and facilitated financing for continued growth and development. Mr. Wilhelm was Managing Director of Foresight Capital Partners until December 2002. Mr. Wilhelm works on average 70 hours per week.

JOHN N. FERMANIS, CHIEF FINANCIAL OFFICER. Mr. Fermanis was appointed as our Chief Financial Officer, effective as of December 22, 2004. Mr. Fermanis is a co-founder of AMPS Wireless Data, Inc., a privately held Arizona corporation founded in 1998, where he served as Chief Financial Officer from May, 2001 to October, 2004. Mr. Fermanis had overall financial responsibility at AMPS and was instrumental in raising over \$5 Million in venture capital. From 1997 to 2001, he held the position of Treasury Manager for Peter Piper, Inc., a national restaurant chain headquartered in Scottsdale, Arizona, where he was responsible for managing a \$25 Million revolving line of credit and cash concentration and disbursement for a company with over \$100 Million annual sales. Mr. Fermanis has over 18 years of financial management experience with both the American Express Corporation and Citigroup in New York City. Mr. Fermanis holds a Bachelor of Arts degree from the S.U.N.Y. at Stony Brook and attended Pace University's Graduate School of Management in New York City. Mr. Fermanis works on average 60 hours per week.

MARK L. WITTEN, PH.D., DIRECTOR AND RESEARCH SCIENTIST. Dr. Witten has served as a research scientist for our company and on our Board of Directors

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

since July 2003 and as a research scientist for ImmuneRegen BioSciences, Inc. since December 2002 and on its Board of Directors since November 2002. Dr. Witten has served as a Research Professor at the University of Arizona since July 2000. Since July 1998 Dr. Witten has served as the Director of the Joan B. and Donald R. Diamond Lung Injury Laboratory in the Department of Pediatrics at the University of Arizona College of Medicine. Dr. Witten obtained his Ph.D. from Indiana University in 1983 with a double major in physiology and exercise physiology. He conducted a post-doctoral fellowship in Respiratory Sciences at the University of Arizona College of Medicine from 1983 to 1988. He then spent two years as an Assistant Biologist at Massachusetts General Hospital and Instructor in Medicine at Harvard Medical School. He returned to The University of Arizona College of Medicine in 1990. Dr. Witten has authored over 200 published manuscripts, book chapters and abstracts. Dr. Witten works on average 40 hours per month.

THEODORE E. STAAHL, M.D., DIRECTOR. Dr. Staahl has served on our Board of Directors since April 2003. Dr. Staahl is employed at the Cosmetic, Plastic and Reconstructive Surgery Center, a company which he founded in 1978. Dr. Staahl's professional training was received at the University of Illinois and the University of Wisconsin and is board certified by the American Board of Facial, Plastic and Reconstruction Surgeons, the Board of Cosmetic Surgeons and the American Board of Head and Neck Surgeons. Dr. Staahl has presented papers at national and international meetings on hair transplant, rhinoplasty and cleft lip deformities. Additionally, Dr. Staahl is currently participating in the FDA approval process of another biotechnology company. Dr. Staahl works on average 12 hours per month.

-44-

### COMPENSATION OF DIRECTORS

STANDARD ARRANGEMENTS. Directors currently receive no cash compensation from IR BioSciences Holdings, Inc. for their services as members of the Board or for attendance at committee meetings. Members of the Board are reimbursed for some expenses in connection with attendance at Board and committee meetings.

OTHER ARRANGEMENTS. We may from time to time issue warrants to executives and directors for fulfilling certain performance goals.

On December 16, 2002 we entered into a consulting agreement with Mark Witten, our chief research scientist and director. The consulting agreement is on a month-to-month basis. Under the terms of this agreement, Dr. Witten agrees to place at the disposal of us his judgment and expertise in the area of acute lung injury. In consideration for these services, we agree to pay Dr. Witten a non-refundable fee of \$5,000 per month.

### COMMITTEES AND ATTENDANCE AT BOARD MEETINGS

Our board of directors does not maintain a separate audit, nominating or compensation committee. Functions customarily performed by such committees are performed by our board of directors as a whole. We are not required to maintain such committees under the applicable rules of the Over-the-Counter Bulletin Board. None of our independent directors qualify as an "audit committee financial expert" as that term is defined in Item 401(e) of Regulation S-B.

### EXECUTIVE COMPENSATION

The following table sets forth information concerning all compensation

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

awarded to, earned by, or paid to (1) our Chief Executive Officer and President, (2) our former Chief Executive Officer and President who served in such capacities until July 2003 when ImmuneRegen BioSciences, Inc. became a wholly-owned subsidiary of IR BioSciences, Inc. (the "Reorganization") and (3) each of the other executive officers whose annual salary and bonus during 2002, 2003 and 2004 exceeded \$100,000 (the "Named Executive Officers").

Name and Principal Position	Year	Annual Compensation	
		Salary (\$)	Bonus (\$)
	2004	175,000	247,301(2)
Michael K. Wilhelm	2003	125,000	0
Chief Executive Officer and President(1).....	2002	5,208	0
Todd M. Ficeto	2004	0	0
Chief Executive Officer, Chief Financial Officer,	2003	0	0
President and Secretary(3).....	2002	0	0

-----

(1) Michael K. Wilhelm has served as Chief Executive Officer and President of IR BioSciences Holdings, Inc. since July 2003 when the Reorganization was completed. Prior to the completion of the Reorganization, Mr. Wilhelm served as Chief Executive Officer and President of ImmuneRegen BioSciences, Inc. since December 2002. Mr. Wilhelm's compensation is reported in the table with respect to his positions at both IR BioSciences Holdings, Inc. and ImmuneRegen BioSciences, Inc. for the years ended December 31, 2003 and 2004.

(2) Reflects the value of 948,980 warrants granted to Michael K. Wilhelm as performance bonuses. In May 2004, the Company issued a warrant to Mr. Wilhelm to purchase 500,000 shares (post-split) of common stock at a price of \$0.25 per share (post-split). The warrants were issued as performance bonuses. The

-45-

Company valued these warrants using the Black-Scholes model, and charged the amount of \$134,604 to operations during the twelve months ended December 31, 2004. In October 2004, the Company issued a warrant to Mr. Wilhelm to purchase 448,980 shares (post-split) at a price of \$0.125 per share (post-split) as a performance bonus for achieving certain objectives. The Company valued this warrant using the Black-Scholes valuation model, and charged the amount of \$112,697 to operations during the twelve months ended December 31, 2004.

(3) Todd M. Ficeto served as Chief Financial Officer and Secretary of GPN Network, Inc. from July 2001 until the completion of the Reorganization in July 2003 and as Chief Executive Officer and President of GPN Network, Inc. from August 2001 until the completion of the Reorganization in July 2003.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### EMPLOYMENT AGREEMENTS

On December 16, 2002, we entered into an employment agreement with our President and CEO, Michael K. Wilhelm, for a period of three years terminating on December 16, 2005. The employment agreement calls for a salary at the rate of \$125,000 per annum for the first year, \$175,000 for the second year, and \$250,000 for the third year. This agreement also provides for the following various bonus incentives:

- i) A quarterly discretionary bonus based upon our performance in the previous quarter. This discretionary bonus will be in the form of stock options.
- ii) A quarterly five-year warrant to purchase up to 4,490 shares of our common stock at 75% of the fair market value of the stock on the date the warrant is granted.
- iii) At such time as Mr. Wilhelm introduces a financial partner to our company through which we raise at least \$1,500,000 in equity or debt financing, he shall be granted a five-year warrant to purchase 224,490 shares (post reverse-split) of our common stock.

On February 15, 2005, we entered into an employment agreement with John N. Fermanis, our Chief Financial Officer. The employment agreement expires on December 31, 2007, unless terminated earlier pursuant to the terms of the agreement. Under the terms of the employment agreement, Mr. Fermanis is entitled to a base salary of \$60,000 until the company completed a funding of \$500,000 or more which occurred on March 4, 2005, at which time the base salary was increased to \$85,000 until December 31, 2005. Thereafter, the second year salary will be \$98,000 per annum and the third year will be \$112,000 per annum. Severance provisions include two months salary for Termination For Cause and six months salary for Constructive Termination. This agreement also provides for the following various bonus incentives:

- i) A quarterly discretionary bonus based upon our performance in the previous quarter. This discretionary bonus will be in the form of stock options.
- ii) A quarterly five-year warrant to purchase up to 12,500 shares of our common stock at 75% of the fair market value of the stock on the date the warrant is granted.

### OPTION/SAR GRANTS IN LAST FISCAL YEAR

We did not grant stock options to any of the Named Executive Officers during the year ended December 31, 2004.

### AGGREGATE OPTION EXERCISED IN FISCAL 2004 AND FISCAL YEAR-END OPTION VALUES

None of the Named Executive Officers exercised any stock options during the year ended December 31, 2004. As of March 31, 2005 none of the Named Executive Officers held stock options.

### STOCK OPTIONS

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

We did not issue options to any of our employees during the first fiscal quarter ended March 31, 2005. Further, we did not issue options to any of our employees during the years ended December 31, 2003 and 2004.

### 2003 STOCK OPTION, DEFERRED STOCK AND RESTRICTED STOCK PLAN

We adopted the 2003 Stock Option, Deferred Stock and Restricted Stock Plan (the "Plan") which authorizes the Board of Directors in accordance with the terms of the Plan, among other things, to grant incentive stock options, as defined by Section 422(b) of the Internal Revenue Code, nonstatutory stock options (collectively, the "Stock Options") and awards of restricted stock and deferred stock and to sell shares of common stock of the Company ("Common Stock") pursuant to the exercise of such stock options for up to an aggregate of 3,600,000 shares. The options will have a term not to exceed ten years from the date of the grant. On May 20, 2005, our Board of Directors granted 150,000 discretionary incentive stock options to our Chief Executive Officer, Michael K. Wilhelm, per his employment agreement. The options have an exercise price of \$0.40 and a term of ten years.

We granted, prior to the merger with ImmuneRegen BioSciences, Inc., options to purchase 63,212 shares of our common stock at a weighted average exercise price of \$25.00 per share to certain employees and consultants that are exercisable over various periods through March 2010. These stock options were granted outside of our 2003 Stock Option, Deferred Stock and Restricted Stock Plan.

### SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table provides information as of December 31, 2004 regarding compensation plans (including individual compensation arrangements) under which equity securities of our company are authorized for issuance. All share information included in this table has been adjusted to reflect a 2-for-1 forward stock split of our common stock that was effected in April 2004.

Plan Category	Number of Securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted- average exercise price of outstanding options, warrants and rights (b)	Number ava unde (exclu
Equity compensation plans approved by security holders	0 (1)	N/A	
Equity compensation plans not approved by security holders .....	17,729,422 (2)	\$ 0.49	
Total .....	17,729,42 =====		

(1) Represents stock options outstanding under our 2003 Stock Option, Deferred

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Stock and Restricted Stock Plan.

- (2) Represents 17,666,210 stock purchase warrants at a weighted average price of \$0.49 and 63,212, options at a weighted average exercise price of \$20.00.
- (3) Represents 445,996 shares are available for future issuance under our 2003 Stock Option, Deferred Stock and Restricted Stock as of the date hereof.

-47-

### WARRANTS

The following table summarizes the changes in warrants outstanding and the related prices for the shares of the Company's common stock issued to non-employees of the Company. These warrants were granted in lieu of cash compensation for services performed or financing expenses and in connection with placement of convertible debentures.

Warrants Outstanding		Warrants Exercisable		
Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable
\$0.05-0.10	480,698	4.60	\$ 0.05-0.10	480,698
0.125-0.70	778,511	4.46	0.125-0.70	778,511
0.25-0.56	15,498,021	4.68	0.25-0.56	15,498,021
1.00	741,400	2.98	1.00	741,400
2.00	167,580	4.51	2.00	167,580
	-----	-----		-----
	17,666,210	4.59		17,666,210

Transactions involving warrants are summarized as follows:

The following table summarizes the changes in warrants outstanding issued to non-employees of the Company. These warrants were granted in lieu of cash compensation for services performed or financing expenses and in connection with placement of convertible debentures.

	Number of Shares (post-split)	Weighted Average Price Per Share (post-split)
Outstanding at January 1, 2003	26,938	\$0.84
Granted	805,572	0.89
Exercised	--	--
Canceled or expired	--	--
Outstanding at December 31, 2003	832,510	0.89
Granted	16,833,699	0.47
Exercised	--	--
Canceled or expired	--	--
Outstanding at December 31, 2004	17,666,210	\$0.49

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

A description of our warrant arrangements and issuances is included in our financial statements for the year ended December 31, 2004 under "Note H - Stock Options and Warrants," These financial statements were included in our annual report on Form 10-KSB for the year ended December 31, 2004, as originally filed on April 19, 2005.

The estimated value of the compensatory warrants granted to non-employees in exchange for services and financing expenses was determined using the Black-Scholes pricing model and the following assumptions:

	2004
	-----
Significant assumptions (weighted-average):	
Risk-free interest rate at grant date	3.75%
Expected stock price volatility	163% to 262%
Expected dividend payout	--
Expected option life-years (a)	

-48-

### CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS IMMUNEREGEN BIOSCIENCES, INC.

ImmuneRegen BioSciences, Inc. is a wholly-owned subsidiary of IR BioSciences Holdings, Inc. IR BioSciences Holdings, Inc. and ImmuneRegen BioSciences, Inc. have interlocking executive positions and share common ownership.

### IMMUNEREGEN BIOSCIENCES ASIA PTE. LTD.

ImmuneRegen BioSciences Asia PTE. LTD., a Singaporean company, is an affiliate of IR BioSciences Holdings, Inc. Approximately 99% of the company is owned equally between our Chief Executive Officer and Chairman, Michael K. Wilhelm, and our Chief Research Scientist and Director, Mark Witten. IR BioSciences Holdings, Inc. holds less than 1% ownership in the company. For the three month period ended March 31, 2005, we incurred expenses totaling approximately \$47,795 on a Singapore-based consultant. For the period of inception (October 30, 2002) to March 31, 2005, we incurred expenses totaling approximately \$92,745, \$91,102 on a Singapore-based consultant and \$1,700 on travel regarding corporate development and the attendance of symposiums and conferences.

### OFFICE LEASE

During the period from December 1, 2002 through August 31, 2004, the Company leased office space from an entity controlled by the Company's Chief Executive Officer under a sub-let agreement. The rental cost of \$2,734 per month was passed through to the Company at the same rental rate charged by the facility's primary landlord.

### INONE CONTRACT

We have entered into a series of contracts with InOne Advertising & Design, Inc. ("InOne"). At the time of the initiation of the contracts, InOne employed the spouse of Michael Wilhelm, the Company's CEO. These contracts include (i) a three-year agreement dated January 13, 2003 whereby InOne will

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

design and create certain corporate identity and marketing materials in exchange for 72,000 shares (post split) of our common stock and \$15,000. This Agreement also provides that InOne will bill us on an hourly basis for additional services, as well as a \$100,000 termination fee if the agreement is terminated as a result of a merger or acquisition of the Company; (ii) an Agreement dated March 14, 2003 whereby InOne will design, create, maintain, and host our website for one year in exchange for 140,000 shares (post split) of our common stock and \$4,200; (iii) an Agreement dated December 30, 2003 whereby InOne will name and design a logo for our new product for SARS application in exchange for \$5,000 and a warrant to purchase 20,000 shares (post-split) of our common stock at a price of \$0.125; (iv) an Agreement dated December 31, 2003 whereby InOne will name and design a logo for our new product for ARDS application in exchange for \$5,000 and a warrant to purchase 20,000 shares (post-split) of our common stock at a price of \$0.125.

At December 31, 2004, InOne no longer employs or has any business relationship with the spouse of Mr. Wilhelm.

The amounts due InOne at December 31, 2004 and 2003 are \$2,700 and \$19,565, respectively.

### RELATED PARTY LOANS

In October 2003, we were loaned \$30,000 by Gerald Witten, the father of one of our founders. Pursuant to the terms of this transaction, we provided this lender with a warrant to purchase 15,000 shares of our common stock at a price of \$2.00 per share. The original duration of the loan was 180 days and was extended to one year. The interest rate was 8% per annum. This loan was repaid in October 2004.

In October 2003, we were loaned \$40,000 by Foresight Capital Corporation, a company controlled by Michael Wilhelm, our President and CEO. Pursuant to the terms of this transaction, we provided this lender with a warrant to purchase 20,000 shares of our common stock at a price of \$2.00 per share. The loan was payable upon funding of \$150,000 in debt or equity and bore interest at 8% per annum. This loan was repaid in October 2004.

In December 2003, we were loaned \$20,000 by Carol Kraft, the mother-in-law of Michael Wilhelm, our President and CEO. Pursuant to the terms of this transaction, we provided this lender with a warrant to purchase

-49-

10,000 shares of our common stock at a price of \$2.00 per share. The original duration of the loan was 180 days and was extended to one year. The interest rate was 8% per annum. This loan was repaid in October 2004.

As of August 15, 2004, we had accrued payables due to our President and CEO, Michael Wilhelm, of \$109,374. In connection with our completed private offering in October 2004, \$89,500 of such amount was converted into 716,000 shares of common stock and warrants to purchase 358,000 shares of common stock.

### LICENSE AGREEMENT

In December 2002, we entered into a royalty-free license agreement with David Harris and Mark Witten, who are our two founders and largest shareholders. Under the terms of the license agreement, Messrs. Harris and Witten granted to us an exclusive license to use and sublicense certain patents, medical

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

applications, and other technologies developed by them. Our obligations under this agreement include (i) reasonable efforts to protect any licensed patents or other associated property rights; (ii) reasonable efforts to maintain confidentiality of any proprietary information; (iii) upon the granting by the U. S. Food and Drug Administration to us the right to market a product, we will maintain a broad form general liability and product liability insurance.

### CONSULTING AGREEMENTS

On December 16, 2002 we entered into consulting agreements with David Harris and Mark Witten, who were our two founders and research scientists. The consulting agreements are on a month-to-month basis. Under the terms of these agreements, Messrs. Harris and Witten agreed to place at the disposal of us their judgment and expertise in the area of acute lung injury. In consideration for these services, we agreed to pay each of them a non-refundable fee of \$5,000 per month.

Pursuant to consulting agreements entered into with David Harris and Mark Witten, who are our two founders and chief research scientists, during the period from October 30, 2002 (inception) to December 31, 2002, we accrued \$5,000 in consulting fees. During the period from January 1, 2003 to December 31, 2003, we accrued an additional \$120,000 in consulting fees. We had accrued payables collectively due to Drs. Harris and Witten of \$125,000 and \$5,000 as of December 31, 2003 and 2002, respectively. In connection with our recently completed private offering in October 2004, \$90,500 of such amount owed to Dr. Witten converted into 724,000 shares of our common stock and warrants to purchase 362,000 shares of common stock. In October 2004, because Dr. Harris had not taken an active role in the management of the Company, he agreed that he would forgive the amount accrued to him under the Consulting agreement of \$107,500. The Company accounted for the transaction as a forgiveness of indebtedness under FAS No. 140 during the period ended December 31, 2004.

### DUE TO RELATED PARTIES

Pursuant to consulting agreements entered into with David Harris and Mark Witten, who are our two founders and chief research scientists, during the period from October 30, 2002 (inception) to December 31, 2002, we accrued \$5,000 in consulting fees. During the period from January 1, 2003 to December 31, 2003, we accrued an additional \$120,000 in consulting fees. We had accrued payables collectively due to Drs. Harris and Witten of \$125,000 and \$5,000 as of December 31, 2003 and 2002, respectively. In connection with our recently completed private offering in October 2004, \$90,500 of such amount owed to Dr. Witten converted into 724,000 shares of our common stock and warrants to purchase 362,000 shares of common stock. In October 2004, because Dr. Harris had not taken an active role in the management of the Company, he agreed that he would forgive the amount accrued to him under the Consulting agreement of \$107,500. The Company accounted for the transaction as a forgiveness of indebtedness under FAS No. 140 during the period ended December 31, 2004.

As of August 15, 2004, we had accrued payables due to our President and CEO, Michael Wilhelm, of \$109,374. In connection with our recently completed private offering in October 2004, \$89,500 of such amount was converted into 716,000 shares of common stock and warrants to purchase 358,000 shares of common stock.

### OUTSTANDING LOANS

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

In October 2003, we were loaned \$30,000 by Gerald Witten, the father of one of our founders. Pursuant to the terms of this transaction, we provided this lender with a warrant to purchase 15,000 shares of our common stock at a price of \$2.00 per share. The original duration of the loan was 180 days and was extended to one year. The interest rate was 8% per annum. This loan was repaid in October 2004.

In October 2003, we were loaned \$40,000 by Foresight Capital Corporation, a company controlled by Michael Wilhelm, our President and CEO. Pursuant to the terms of this transaction, we provided this lender with a warrant to purchase 20,000 shares of our common stock at a price of \$2.00 per share. The loan was payable upon funding of \$150,000 in debt or equity and bore interest at 8% per annum. This loan was repaid in October 2004.

In December 2003, we were loaned \$20,000 by Carol Kraft, the mother-in-law of Michael Wilhelm, our President and CEO. Pursuant to the terms of this transaction, we provided this lender with a warrant to purchase 10,000 shares of our common stock at a price of \$2.00 per share. The original duration of the loan was 180 days and was extended to one year. The interest rate was 8% per annum. This loan was repaid in October 2004.

As of August 15, 2004, we had accrued payables due to our President and CEO, Michael Wilhelm, of \$109,374. In connection with our completed private offering in October 2004, \$89,500 of such amount was converted into 716,000 shares of common stock and warrants to purchase 358,000 shares of common stock.

-51-

### PRINCIPAL AND SELLING STOCKHOLDERS

This prospectus relates to the resale from time to time of up to a total of 57,786,607 shares of common stock by the selling stockholders, comprising:

- o 48,934,894 shares of our common stock that were issued to selling stockholders pursuant to transactions exempt from registration under the Securities Act of 1933; and
- o 8,851,713 shares of common stock underlying warrants that were issued to selling stockholders pursuant to transactions exempt from registration under the Securities Act of 1933.
- o The total number of shares of common stock offered for resale by the selling stockholders includes 3,228,400 shares and 1,271,200 five-year warrants with an exercise price of \$0.50 to be issued in connection with a penalty clause regarding the registerance of shares sold in our Private Offering in October 2004. For each 30-day period beyond 90-days following the second closing date (October 26, 2004), we have agreed to issue to the holders of units sold in the Private Offering an additional 2% a month, or in aggregate 461,200 shares and 181,600 warrants until such a time as this Registration Statement is made effective ("Registration Penalty"). We have accrued these shares.

The following table sets forth certain information regarding the selling stockholders and the beneficial ownership of our common stock as to (1) each person known to us to beneficially own more than five percent of our common stock, (2) each director, (3) our Named Executive Officers, (4) all directors

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

and executive officers as a group and (5) the shares offered by them in this prospectus. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission, or SEC. In computing the number of shares beneficially owned by a selling stockholder and the percentage of ownership of that selling stockholder, shares of common stock underlying shares of convertible preferred stock, options or warrants held by that selling stockholder that are convertible or exercisable, as the case may be, within 60 days of June 30, 2005 are included. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other selling stockholder. Each selling stockholder's percentage of ownership in the following table is based upon 73,032,226 shares of common stock outstanding as of June 30, 2005.

Except as described below, none of the selling stockholders within the past three years has had any material relationship with us or any of our affiliates:

- o Michael Wilhelm has served as our company's Chief Executive Officer since December 2002 and on our Board of Directors since November 2002;
- o Mark Witten has served as a research scientist for our company since December 2002 and on our Board of Directors since November 2002;
- o Theodore Staahl has served on our Board of Directors since April 2003;
- o CDM Group, Synergos, Inc., Spelling Communications, Stratum Consulting Group, LLC, Debra Gessner, and Michael Caridi have provided services to our company within the past three years, and we agreed to issue shares of our common stock and warrants to purchase additional shares of our common stock to each of them in exchange for the settlement of outstanding indebtedness; and,
- o Steven J. Scronic, our company's former Secretary, is a control party of Stratum Consulting Group, LLC.

The term "selling stockholders" also includes any transferees, pledges, donees, or other successors in interest to the selling stockholders named in the table below. To our knowledge, subject to applicable community property laws, each person named in the table has sole voting and investment power with respect to the shares of common stock set forth opposite such person's name.

-52-

Named Executive Officers and Directors:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
-----	-----	-----	-----

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Michael K. Wilhelm 11007 N. Ridgeview Ct. Fountain Hills, AZ 85268	7,829,146 (2)	10.3%	1,254,000 (2)
Mark L. Witten 7032 E. Rosewood St. Tucson, AZ 85710-1236	9,721,138 (3)	13.0%	1,086,000 (3)
John N. Fermanis 11375 E. Sahuaro Dr., #2041 Scottsdale, AZ 85259	159,165 (4)	*	41,665 (4)
Theodore Staahl 1329 Spanos Court Suite A-1 Modesto, CA 95356	3,489,464 (5)	4.7%	2,350,000 (5)
All directors and executive officers as a group (4 persons)	21,198,913 (6)	27.6%	4,731,665 (6)
OWNERS OF 5% OR MORE: -----			
David Harris 1501 N Campbell Ave Dept B1M Build 90 U of A Tucson, AZ 85721	5,106,138 (7)	6.9%	0

-53-

Other Selling Stockholders: -----	Number of Shares of Common Stock Beneficially Owned Prior to Offering -----	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering -----	Number of Shares of Common Stock Registered for Sale Hereby -----
Wayne Adams 4845 Campo Ct. Coral Gables, FL 33146	336,000 (8)	*	336,000 (8)
David Benadum 13960 Fox Trail Dr. Holland, MI 49424	134,400 (36)	*	134,400 (36)
Delaware Charter Guarantee Trust Co. F/B/O ML Bond Dental MP-Money Purch Keogh/FBO Betty C. Bond** 601 S. Main St. Gretna, VA 24557	134,400 (9)	*	134,400 (9)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Delaware Charter Guarantee Trust Co.  
F/B/O ML Bond Dental MP-Money Purch  
Keogh/FBO

Michael L. Bond\*\*  
601 S. Main St.  
Gretna, VA 24557

134,400 (9) \*

134,400 (9)

Michael L. Bond  
601 S. Main St.  
Gretna, VA 24557

268,800 (10)

\*

268,800 (10)

David Briskie  
15006 Beltway Dr.  
Addison, TX 75001

336,000 (37)

\*

336,000 (37)

Edward L. Chant  
226 Edward Street  
Suite #2  
Aurora Ontario L4G 3S8  
Canada

672,000 (38)

\*

672,000 (38)

-54-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Jerry Chitwood 3276 Lexington Rd. Richmond, KY 40475	134,400 (9)	*	134,400 (9)
Keith H. Cooper 5840 De Claire Ct. Atlanta, GA 30328	268,800 (39)	*	268,800 (39)
Raymond B. Cromer 873 Westtown Rd. West Chester, PA 19382	134,400 (9)	*	134,400 (9)
Sherida Downer & Paul Downer JT WROS 546 Merimont Blvd. Auburn AL 36830	201,600 (40)	*	201,600 (40)
John R. Durant 1867 S. Ashe Ct. Auburn, AL 36830	268,800 (39)	*	268,800 (39)
Matt Earl			

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

5120 Aihama Dr. Woodland Hills, CA 91364	134,400 (36)	*	1 34,400 (36)
Gary Ecklar 1630 N. Broadway Lexington, KY 40505	806,400 (13)	1.1%	806,400 (13)
Robert Lee England IV 3 Montcrest Dr. Birmingham, AL 35213	134,400 (36)	*	134,400 (36)
Roger Erickson 850 S. Boulder Hwy. 222 Henderson, NV 89015	403,200 (41)	*	403,200 (41)

-55-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Delaware Charter Guarantee & Trust Co. F/P/O Roger Erickson** SEP IRA 850 S. Boulder Hwy. 222 Henderson, NV 89015	268,800 (39)	*	268,800 (39)
Arturo L. Filipppe 1300 N. Portrero Grande Dr. S. San Gabriel, CA 91770	134,400 (36)	*	134,400 (36)
Flagship Mortgage Co. c/o Brian Shannon** 30 East Padonia Rd. Ste 207 Timonium, MD 21093	134,400 (9)	*	134,400 (9)
William L. Fox & Lynne Fox JT WROS 450 Music Mountain Rd. Falls Village, CT 06031	672,000 (38)	*	672,000 (38)
Delaware Charter G&T Co. Trust Co. F/B/O Anthony Gentile** IRA 7076 Via Quito Pleasanton, CA 94566	336,000 (8)	*	336,000 (8)
Myron Gerber			

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

84 Gifford St. #33 New Bedford, MA 02744	268,800 (10)	*	268,800 (10)
Gummersbach LTD Lisa Marshall 22 Victoria St. Hamilton, Bermuda HMF 12	672,000 (38)	*	672,000 (38)

-56-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Steven Gurewitsch 930 5th Ave. Apt. 3-G New York, NY 10021	537,600 (42)	*	537,600 (42)
Jack Ham Revocable Living Trust Dtd. 3/22/00 Jack Ham** Trustee 3143 Marcus Pointe Blvd. Pensicola, FL 32505	268,800 (39)	*	268,800 (39)
William J. Kathol 7220 S. 141st Omaha, NE 68138	672,000 (38)	*	672,000 (38)
Reichert, Wenner, Koch, & Provinzino Profit Sharing Plan F/B/O John Koch** 501 St. Germain St. Cloud, MN 56302	201,600 (40)	*	201,600 (40)
Robert Koch 1825 Eye St. N.W. Ste 1100 Washington, DC 20006	268,800 (10)	*	268,800 (10)
Peter J. Lawrence 5 Landsdowne Crescent London W11 2NH United Kingdom	403,200 (41)	*	403,200 (41)
David Lind 267 Dedham St.			

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Norfolk, MA 02056 336,000 (37) \* 336,000 (37)

-57-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Lind Family Investments LP Barry Lind**, General Partner Philip Lind**, Limited Partner 1000 West Washington St. Suite #502 Chicago, IL 60607	134,400 (9)	*	134,400 (9)
Barry Lind Revocable Trust Barry Lind** Trustee U/A/D 12/19/1989 1000 West Washington St. Suite #502 Chicago, IL 60607	806,400 (13)	1.1%	806,400 (13)
Randall K. Lowry, Jr. 14511 Falling Creek Dr. Houston, TX 77014	672,000 (38)	*	672,000 (38)
Mike Marr 3577 Fruitville Ave. Oakland, CA 94602	268,800 (10)	*	268,800 (10)
Glen Miskiewicz 48 Par-La-Ville Rd. Apt. 724 Hamilton, HM11 Bermuda	672,000 (38)	*	672,000 (38)
MSB Family Trust D/T/D 6/25/93 Michael Blechman** TTEE 295 Shadowood Ln. Northfield, IL 60093	604,800 (16)	*	604,800 (16)
Daniel Navarro Jr. & Richard Navarro JT WROS 2036 Highway 35 N. South Amboy, NJ 08879	134,400 (44)	*	134,400 (44)

-58-

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
David R. Nichols & Angela S. Nichols Revocable Trust 1993 David Nichols and Angela Nichols** TTEES 2250 Applewood Ln. Camarillo, CA 93012	672,000 (38)	*	672,000 (38)
Michael O'Brien 1575 Professional Way P.O. Box 2737 Auburn, AL 36831	201,600 (40)	*	201,600 (40)
Nelson Pan 985 Main St. Melrose, MA 02176	201,600 (40)	*	201,600 (40)
Prahalathan Rajasekaran** c/o Jupiter Asset Management 1 Grosvenor Place London SW1X 7JJ England	403,200 (41)	*	403,200 (41)
The Richardson Family Trust D/T/D 07/19/90 Dennis L. Richardson & Evette Richardson** TTEES 537 Ocampo Dr. Pacific Palisades, CA 90272	537,600 (15)	*	537,600 (15)
Barry Saxe 35 McDaniel Rd. Shady, NY 12409	2,112,800 (17)	2.9%	2,112,800 (17)
Jody R. Saxe & Richard Saxe JT WROS 3 West Ledge Rd. Marblehead, MA 01945	134,400 (36)	*	134,400 (36)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
-----	-----	-----	-----
Lawrence M. Silver 225 West Hubbard Suite #600 Chicago, IL 60610	470,400 (18)	*	470,400 (18)
Delaware Charter Guarantee Trust Co. F/B/O Richard S. Simms** II Keogh Plan 5951 S. Middlefield Rd. Ste. 105 Littleton, CO 80123	134,400 (9)	*	134,400 (9)
John Spiziri 5 Nettie Lane Lancaster, PA 17603	134,400 (36)	*	134,400 (36)
Charles D. Stadterman 5620 Elgin St. Pittsburgh, PA 15206	201,600 (40)	*	201,600 (40)
William S. Tyrrell Dogwood Townhouses #A12 4601 Henry Hudson Parkway Bronx, NY 10471	806,400 (13)	1.1%	806,400 (13)
Peter T. White 122 Wilsondale St. Westwood, MA 02090	336,000 (37)	*	336,000 (37)
Robert Wilner 787 King St. Rye Brook, NY 10573	537,600 (43)	*	537,600 (43)
Olen C. Wilson 2404 Teckla Blvd. Amarillo, TX 79106	201,600 (40)	*	201,600 (40)
Tad Wilson 877 Maple Dr. Spencer, IN 47460	134,400 (36)	*	134,400 (36)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Jonathan H. Witherspoon 730 Yorkshire Road Winston Salem, NC 27106	134,400 (36)	*	134,400 (36)
Alan J. Young 1750 Braeside Avenue Northbrook, IL 60062	470,400 (18)	*	470,400 (18)
Roger Bouchard 32 Walnut Road Rocky Hill, CT 06067	994,625 (19)	1.4%	842,291 (19)
John Dann 895 Moraga Road, Suite 7 Lafayette, CA 94549	1,274,958 (48)	1.8%	1,183,125 (48)
Donn Fassero 600 Coffee Road Modesto, CA 95355	607,771 (49)	*	557,771 (49)
Jerome French 1600 N. Foliage Dr. Wichita, KS 67206	1,653,229 (20)	2.3%	1,528,229 (20)
Jeffrey Friedman 12074 Broadway Terrace Oakland, CA 94611	2,894,518 (21)	4.0%	2,596,468 (21)
Steven Moore 1026 Rodeo Rd. Pebble Beach, CA 93953	1,365,242 (50)	1.9%	1,215,242 (50)
Daniel P. Neri 308 Bordeaux Lane Cary, NC 27511	457,334 (22)	*	407,334 (22)
Warren Stout 800 E. Colorado Blvd., Suite 450 Pasadena, CA 91101	1,267,838 (51)	1.7%	1,117,838 (51)

-61-

Number of Shares of	Percentage of Shares of Common	Number of
------------------------	-----------------------------------	-----------

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Other Selling Stockholders:	Common Stock Beneficially Owned Prior to Offering	Stock Beneficially Owned Prior to the Offering	Shares of Common Stock Registered for Sale Hereby
Stephen Walker 5829 Niwot Road Longmont, CO 80503	41,162 (52)	*	39,912 (52)
CDM Group Jerry Teich** 3541 East Broadway Rd. Phoenix, AZ 85040	102,564 (24)	*	102,564 (24)
Jerry Teich 3541 East Broadway Rd. Phoenix, AZ 85040	75,113 (53)	*	67,613 (53)
Synergos, Inc. Jaye Thompson and J.T. Thompson** 2202 Timberloch Place, Suite 230 The Woodlands, TX 77380	839,091 (25)	1.2%	839,091 (25)
Spelling Communications Daniel Spelling** 2211 Corinth Avenue, Suite 210 Los Angeles, CA 89064	300,532 (26)	*	300,532 (26)
Daniel Spelling** 2211 Corinth Avenue, Suite 210 Los Angeles, CA 89064	60,000 (54)	*	40,000 (54)
Stratum Consulting Group, LLC Steve Scronic** 11442 E. Aster Drive Scottsdale, AZ 85259	268,800 (27)	*	268,800 (27)
Steve Scronic 7575 E. Indian Bend Rd. #2107 Scottsdale, AZ 85250	357,987 (55)	*	282,679 (55)
Sloane M. Miles 10660 E. Mercer Dr. Scottsdale, AZ 85259	136,000	*	116,000

-62-

Number of Shares of Common Stock Beneficially Owned Prior to	Percentage of Shares of Common Stock Beneficially Owned Prior to	Number of Shares of Common Stock Registered for
--	--	--

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Other Selling Stockholders:	Offering	the Offering	Sale Hereby
Debra Gessner 9331 E. Calle de Valle Scottsdale, AZ 85255	270,000 (56)	*	270,000 (56)
Richard Ackner 14643 Drafthorse Ln. Wellington, FL 33414	134,400 (36)	*	134,400 (36)
Jason J. Aiello & Rachel Aiello JT WROS 714 Willowbrook Rd. Staten Island, NY 10314	134,400 (9)	*	134,400 (9)
Richard B. Aronson 11 Lawrence Ln. Lexington, MA 02421	134,400 (36)	*	134,400 (36)
Richard E. Beattie 101 Graystone Farm Rd. White Hall, MD 21161	268,800 (39)	*	268,800 (39)
John J. Bender 2803 S. 22nd St. LaCrosse, WI 54601	134,400 (36)	*	134,400 (36)
Lester B. Boelter 50 Shady Oak Ct. Winona, MN 55987	1,008,000 (29)	1.4%	1,008,000 (29)
Elliot Braun 3775 Park Ave. Edison, NJ 08820	336,000 (37)	*	336,000 (37)
Robert Burkhardt 2615 Kingston Point Fort Wayne, IN 46815	268,800 (10)	*	268,800 (10)
William Crowell & Patricia Crowell JT WROS 9045 E. Havasupia Dr. Scottsdale, AZ 85255	134,400 (36)	*	134,400 (36)

-63-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
-----------------------------	--	--	---

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Edward Duffy 178 Hanson Ln. New Rochelle, NY 10804	134,400 (9)	*	134,400 (9)
Franz Family Trust D/T/D 8/16/02 David Franz & Nicole Franz** TTEES 5553 Wellesley Dr. Calabasas, CA 91302	134,400 (36)	*	134,400 (36)
Bernie Gallas 5200 N. Diversey Blvd. #204 Milwaukee, WI 53217	201,600 (40)	*	201,600 (40)
William M. Goldstein 787 Trethanny Ln. Wayne, PA 19087	168,000 (30)	*	168,000 (30)
Mark Hellner 900 West Olive Merced, CA 95348	537,600 (43)	*	537,600 (43)
Michael Hennessy 686 Bowman Rd. Chamberburg, PA 17201	134,400 (36)	*	134,400 (36)
Joel Katz** c/o American Business 1205 Northern Blvd. Manhasset, NY 11030	336,000 (37)	*	336,000 (37)
Michael Kramm & Doris Kramm JT WROS 39 Rugen Dr. Harrington Pk., NY 07640	134,400 (9)	*	134,400 (9)
Indy S. Kullar 3-8699 10th Ave. Burnaby, BC V3N2S9 Canada	201,600 (40)	*	201,600 (40)

-64-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
-----	-----	-----	-----

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

David Bruce Laughton 12065 Beaufait Ave. Northridge, CA 91326	134,400 (36)	*	134,400 (36)
Myron A. Leon 2806 Saklan Indian Dr. Walnut Creek, CA 94595	134,400 (9)	*	134,400 (9)
Dwight E. Long 406 Belle Glen Ln. Brentwood, TN 37027	403,200 (41)	*	403,200 (41)
George F. McCabe Jr. Family Trust DTD 2/11/98 George F. McCabe** TTEE 926 Hawk Landing Frontland Park, FL 34731	336,000 (37)	*	336,000 (37)
James L. McCormack 3355 Fruitvale Rd. Lincoln, CA 95648	134,400 (36)	*	134,400 (36)
John Kevin McCrary 4520 Red Fox Rd. Fort Collins, CO 80526	134,400 (36)	*	134,400 (36)
E. Scott Millbury Southshore Dr. Millbury Lane Rangely, ME 04970	134,400 (36)	*	134,400 (36)
John Richard Miller 29 Bishop Kirk Place Oxford, OX27HJ UK	672,000 (38)	*	672,000 (38)
Sanford J. Miller & Babette D. Miller JT WROS 7606 Forsyth Blvd. St. Louis, MO 63105	336,000 (37)	*	336,000 (37)

-65-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
-----	-----	-----	-----
Enrico Monaco 2230 Ocean Ave.			

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Brooklyn, NY 11229	201,600 (40)	*	201,600 (40)
James Mulryan & Maureen Mulryan JT WROS 9925 S. Bell Ave. Chicago, IL 60643	134,400 (36)	*	134,400 (36)
Allen Notowitz 2710 Victoria Mnr. San Carlos, CA 94070	134,400 (36)	*	134,400 (36)
Paul B. Poulsen & Kathleen J. Poulsen JT WROS 215 Alvarado Ave. Los Angeles, CA 94022	268,800 (39)	*	268,800 (39)
Progressive Ins. Services, Inc. Money Purchase Pension Plan Russell E. Davis** TTEE 205 E. Reynolds Rd. Lexington, KY 40571	134,400 (36)	*	134,400 (36)
Palangat Radhakrishnan & Devika Radhakrishnan JT WROS 115 White Ave. New Hyde Pk., NY 11040	336,000 (37)	*	336,000 (37)
Frank Restivo 1311 S. Hidden Valley Dr. W. Covina, CA 91791	134,400 (36)	*	134,400 (36)
Delaware Charter Guaranty & Trust Co. FBO Stanley Riggins** IRA 1349 Biltmore Drive Charlotte, NC 28207	134,400 (36)	*	134,400 (26)

-66-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
-----	-----	-----	-----
Paul Sallwasser & Teri Sallwasser JT WROS 301 Windmill Palm Ave. Plantation, FL 33324	268,800 (10)	*	268,800 (10)
Ronald S. Sheldon Self Directed Profit Sharing Plan & Trust			

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Ronald S. Sheldon** TTEE 1488 Old Barn Lane Highland Pk., IL 60035	268,800 (39)	*	268,800 (39)
Delaware Charter Guarantee & Trust Co. FBO Stanley Sides** IRA 631 Walker Ferry Rd. Alexander City, AL 35010	268,800 (39)	*	268,800 (39)
Claire Spooner 111 Seaview Ct. Neptune, NJ 07753	134,400 (36)	*	134,400 (36)
Henry Steinberg 934 Southern Drive Franklin Sq., NY 02038	134,400 (36)	*	134,400 (36)
Daniel C. Strum 95 Upper Hampden Rd. Monson, MA 01057	268,800 (39)	*	268,800 (39)
Frank Sylva 450 Sylva Lane Lakeport, CA 95453	134,400 (44)	*	134,400 (44)
Michael Van Petten 5113 Rolling Fairway Dr. Valrilo, FL 33594	134,400 (36)	*	134,400 (36)
John Wechsler 159 Bedford Rd. Greenwich, CT 06831	168,000 (23)	*	168,000 (23)

-67-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
----- Michael Kulick, MD Profit Shared Plan Michael Kulick, MD 450 Sutter, Suite 2620 San Francisco, CA 94118	1,122,020 (57)	1.5%	922,020 (57)
Michael Caridi 32 Cutler Road Greenwich, CT 06831	444,778 (58)	*	120,000 (58)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Salvatore Clark P.O. Box 317 Deer Park, NY 11729	246,400 (59)	*	246,400 (59)
Antonio Coladonato 2526 Harway Ave. Brooklyn, NY 11214	5,600 (60)	*	5,600 (60)
Kris Destefano 2 Manchester Drive Bethpage, NY 11714	207,200 (61)	*	207,200 (61)
Kristina Fasullo 77 Claradon Lane Staten Island, NY 10305	5,600 (60)	*	5,600 (60)
Alan Ferraro 7201 4th Avenue Apt. #C-14 Brooklyn, NY 11209	184,800 (62)	*	184,800 (62)
William Christopher Frasco 532 Nugent Ave. Staten Island, NY 10305	112,000 (63)	*	112,000 (63)
Steven Markowitz c/o Joseph Stevens & Co., Inc. 59 Maiden Lane 32nd Fl. New York, NY 10038	672,700 (64)	*	672,700 (64)

-68-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
----- Matthew S. Menies 52 Beach Road Massapequa, NY 11758	140,000 (65)	*	140,000 (65)
Fabio Migliaccio 658 Henry Street Brooklyn, NY 11231	224,000 (66)	*	224,000 (66)
Dina Mondelli 1 74th Street Apt. #2S Brooklyn, NY 11209	5,600 (60)	*	5,600 (60)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Peter Orthos 52 Stone Hill Drive S. Manhasset, NY 11030	224,000 (66)	*	224,000 (66)
Alexander Orthos & Peter Orthos JT WROS 52 Stone Hill Drive S. Manhasset, NY 11030	1,496,600 (67)	2.1%	1,496,600 (67)
George Paxinos 32043 46th Street Astoria, NY 11103	95,200 (68)	*	95,200 (68)
Robert Petrozzo 20 Woods Lane East Hampton, NY 11937	380,800 (69)	*	380,800 (69)
James Rathgeber 14 Richboyne Lane Melville, NY 11747	459,200 (70)	*	459,200 (70)
Joseph Sorbara 4 Windham Court Muttontown, NY 11545	672,700 (71)	*	672,700 (71)

-69-

	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Other Selling Stockholders: -----	-----	-----	-----
Edward Taylor 6415 Boulevard East West New York, NJ 07093	52,500 (72)	*	52,500 (72)
Andrea Todaro 55 92nd Street Apt. #2F Brooklyn, NY 11209	22,400 (73)	*	22,400 (73)
Drew Tranchina 178-15 69th Ave. Fresh Meadows, NY 11365	61,600 (74)	*	61,600 (74)
Louis John Ventre 1339 85th Street Brooklyn, NY 11228	112,000 (63)	*	112,000 (63)
Westrock Advisors			

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Ed Taylor** 230 Park Ave. Suite #934 New York, NY 10169	17,500 (32)	*	17,500 (32)
Jeffrey Blake Woolf 80 Park Ave. Apt. #7F New York, NY 10016	89,600 (75)	*	89,600 (75)
SBM Certificate Company Eric Westbury 5101 River Road, Suite 101 Bethesda, MD 20816	900,000 (33)	1.2%	900,000 (33)
Professional Traders Fund LLC Marc Swickle and Howard Berger** 1400 Old Country Road, Suite 206 Westbury, NY 11590	366,420 (34)	*	366,420 (34)

-70-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
----- Don Jackler 246 E 51st Street, Suite 8 New York, NY 10022	700,000	*	700,000
Chris Messalas c/o Clayton Dunning 40 Wall Street 31st floor New York, NY 10005	250,000	*	250,000
Robert C. Lau c/o Clayton Dunning 40 Wall Street 31st floor New York, NY 10005	166,290	*	166,290
Kenneth E. Sidler c/o Clayton Dunning 40 Wall Street 31st floor New York, NY 10005	69,945	*	69,945
Ava Proudian c/o Clayton Dunning 40 Wall Street 31st floor New York, NY 10005	13,765	*	13,765

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Dian Griesel 11 Stone Street, 4th Floor New York, NY 10004	300,000 (76)	*	300,000 (76)
John Alderson Hunter World Markets, Inc. 9300 Wilshire Blvd Suite 600 Beverly Hills, CA 90212	200,000 (77)	*	200,000 (77)
Carol & Jesse Kahn Revocable Trust P.O. Box 5213 Carmel, CA 93921	39,062	*	39,062

-71-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
----- Gerald Witten 206 S. Union St. Emporia, KS 66801-4830	87,616 (79)	*	27,616 (79)
Simon S. Wong 2370 N. Emerald Lake Court Tucson, AZ 85749	122,689	*	20,000
Michael Barreras 6750 W. Gelding Road Peoria, AZ 85381	53,727 (80)	*	19,288 (80)
Carol Kraft** 225 Ruth Ave. Idaho Falls, ID 83401	81,414 (81)	*	31,414 (81)
Stuart Quan 1501 N. Campbell Avenue Tuscon, AZ 85724-0001	8,700 (85)	*	8,000 (85)
Janet Neal 5712 Chenault Dr Modesto, CA 95356	5,118	*	5,118
Lynn Pont 7537 Del Cielo Way Modesto, CA 95356	5,118	*	5,118

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Pam Rozycki 999 Country Club Dr. Modesto, CA 95356	5,118	*	5,118
Kylie Allison** 11007 N Ridgeview Ct Fountain Hills, AZ 65268	3,592	*	3,592
Bonnie Hahn 710 S. Stout St. Blackfoot, ID 83221	86,092 (88)	*	3,592 (88)

-72-

Other Selling Stockholders:	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Percentage of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby
Kimberly Wilhelm** 11007 N Ridgeview Ct Fountain Hills, AZ 65268	314,226 (89)	*	253,226 (89)
Hallie Wilhelm** 11007 N Ridgeview Ct Fountain Hills, AZ 65268	3,592	*	3,592
Hannah Wilhelm** 11007 N Ridgeview Ct Fountain Hills, AZ 65268	3,592	*	3,592
Klaus Wilhelm & Renate Wilhelm JTWROS 8733 Elm Leaf Ct Port Richey, FL 34668	3,592	*	3,592
Eric Hopkins 3183-F Airway Ave. # 122 Costa Mesa, CA 92626	10,140 (90)	*	10,140 (90)
John G. Nesbett 11 Stone Street, 4th Floor New York, NY 10004	50,000	*	50,000
Rick Cheng 1910 S. Michigan Avenue, #406 Chicago, IL 60616	25,000 (91)	*	25,000 (91)
Shawn Valukas 900 W. Eric #B Chicago, IL 60632	25,000 (91)	*	25,000 (91)

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Value Management Research AG  
Attn: Kevin Devine, CEO  
Campus Kronberg 7  
D-61476 Kronberg im Taunus  
Germany

232,153 (78)

\*

232,153 (78)

-73-

-----  
\* Less than 1 percent.

\*\* Beneficial owner(s) based information provided to us by the selling stockholder.

- (1) Represents the amount of shares that will be held by the selling stockholders after completion of this offering based on the assumption that all shares registered for sale hereby will be sold. However, the selling stockholders may offer all, some or none of the shares pursuant to this prospectus, and to our knowledge there are currently no agreements, arrangements or understanding with respect to the sale of any of the shares that may be held by the selling stockholders after completion of this offering.
- (2) Includes 5,628,718 shares underlying warrants that are currently exercisable, 3,840,000 of which represent warrants, exercisable at prices ranging from \$0.005 to \$0.25, to purchase shares held by David T. Harris. Includes 1,788,718 shares underlying warrants exercisable at prices ranging from \$0.25 to \$2.00. Includes 150,000 stock purchase options at a \$0.40 strike price. Also includes 20,000 shares held by Michael K Wilhelm that underlie currently exercisable warrants held by one individual.
- (3) Includes 712,000 shares underlying warrants that are currently exercisable at prices ranging from \$0.125 to \$0.50. Includes 163,000 shares held by Mark L. Witten that underlie currently exercisable warrants held by 6 individuals.
- (4) Includes 41,665 common shares which have been accrued. These shares to be issued per Mr. Fermanis's employment agreement. Includes 17,500 shares underlying warrants that are currently exercisable at prices ranging from \$0.25 to \$0.41.
- (5) Includes 93,300 common shares which have been accrued. These shares are being issued in conjunction with the conversion of an outstanding convertible promissory note in September 2003. Includes 203,000 shares underlying warrants that are currently exercisable at prices ranging from \$0.038 to \$1.00, 17,500 of which represent warrants to purchase shares held by David T. Harris and 17,500 of which represent warrants to purchase shares held by Mark L. Witten.
- (6) Includes 134,965 common shares that have been accrued. Includes 150,000 common stock purchase warrants issued to Michael K. Wilhelm per his employment agreement. Includes 6,596,218 shares underlying warrants that are currently exercisable at prices ranging from \$0.005 to \$1.00, and 3,875,000 of which are underlying warrants to purchase shares held by David T. Harris. Includes an aggregate of 386,000 shares held by Michael, K. Wilhelm, Mark L. Witten and David T. Harris that underlie currently

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

exercisable warrants held by 9 individuals.

- (7) Includes 3,840,000 shares held by David T. Harris that underlie currently exercisable warrants held by Michael K. Wilhelm a and an additional 163,000 shares held by Mr. Harris that underlie currently exercisable warrants held by 7 individuals.
- (8) Includes 100,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 24,000 common shares and 12,000 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (9) Includes 40,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 9,600 common shares and 4,800 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty. Barry Lind is the General Partner and control person of Lind Family Investments LP. Brian Shannon is the control person of Flagship Mortgage Co.
- (10) Includes 80,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 19,200 common shares and 9,600 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (11) Not used.
- (12) Not used
- (13) Includes 240,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 57,600 common shares and 28,800 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (14) Not used.
- (15) Includes 160,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 38,400 common shares and 19,200 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (16) Includes 180,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 43,200 common shares and 21,600 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (17) Includes 115,200 common shares and 57,600 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (18) Includes 140,000 shares underlying warrants that are currently exercisable at \$0.50. Includes 33,600 common shares and 16,800 common stock purchase warrants that are currently exercisable at \$0.50 that have been accrued due to Registration Penalty.
- (19) Includes 367,264 shares underlying warrants that are currently exercisable at prices ranging from \$0.038 to \$1.00, 8,000 of which represent warrants to purchase shares held by Mark L. Witten and 8,000 of which represent warrants to purchase shares held by David T. Harris.
- (20) Includes 634,410 shares underlying warrants that are currently exercisable at prices ranging from \$0.038 to \$1.00.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

(21) Includes 40,000 shares that have been accrued pending issuance. Includes 1,038,540 shares underlying warrants that are currently exercisable at prices ranging from \$0.09 to \$2.00, 62,750 of which represent warrants to purchase shares held by Mark L. Witten and 62,750 of which represent warrants to purchase shares held by David T. Harris.

-74-

(22) Includes 50,000 shares underlying warrants that are currently exercisable, 25,000 at a price of \$1.00, 12,500 of which represent warrants to purchase shares held by Mark L. Witten and 12,500 of which represent warrants to purchase shares held by David T. Harris.

(23) Includes 50,000 shares underlying warrants that are currently exercisable. Includes 12,000 common shares and 6,000 common stock purchase warrants that are currently exercisable that have been accrued due to Registration Penalty.

(24) Includes 34,188 shares underlying warrants that are currently exercisable at a price of \$0.50. Excludes 7,500 shares underlying warrants that are currently exercisable held by the owner of CDM Group. Jerry Teich is the control person of CDM Group.

(25) Includes 279,697 shares underlying warrants that are currently exercisable at a price of \$0.50. Excludes 20,000 shares underlying warrants that are currently exercisable held by the shareholders of Synergos, Inc, Jaye Thompson and J.T. Thompson. Jaye Thompson is the control person of Synergos, Inc.

(26) Includes 95,388 shares underlying warrants that are currently exercisable at a price of \$0.50. Excludes 40,000 shares and 20,000 shares underlying warrants that are currently exercisable held by the owner of Spelling Communications. Daniel Spelling is the control person of Spelling Communications.

(27) Includes 89,600 shares underlying warrants that are currently exercisable at a price of \$0.50. Excludes 301,048 shares and 26,939 shares underlying warrants that are currently exercisable held by the owner of Stratum Consulting Group, LLC. Steven J. Scronic is the control person of Stratum Consulting Group, LLC.

(28) Not used.

(29) Includes 72,000 common shares and 36,000 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.

(30) Includes 12,000 common shares and 6,000 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.

(31) Not used.

(32) Includes 1,875 common shares that have been accrued due to Registration Penalty. Dan Hunter is the Chief Operating Officer and control person of Westrock Advisors.

(33) Eric Westbury is the control person of SBM Certificate Company.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- (34) Mark Swickle and Howard Berger are the control persons of Professional Traders Fund LLC.
- (35) Not used.
- (36) Includes 9,600 common shares and 4,800 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (37) Includes 24,000 common shares and 12,000 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (38) Includes 48,000 common shares and 24,000 common stock purchase warrants at a price of \$0.50 that are currently exercisable that have been accrued due to Registration Penalty Lisa Marshall is the President and control person of Gummersback LTD.
- (39) Includes 19,200 common shares and 9,600 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (40) Includes 14,400 common shares and 7,200 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (41) Includes 28,800 common shares and 14,400 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (42) Includes 65,000 shares underlying warrants that are currently exercisable at a price of \$0.50. Includes 38,400 common shares and 19,200 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (43) Includes 38,400 common shares and 19,200 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (44) Includes 20,000 shares underlying warrants that are currently exercisable at a price of \$0.50. Includes 9,600 common shares and 4,800 common stock purchase warrants that are currently exercisable at a price of \$0.50 that have been accrued due to Registration Penalty.
- (45) Not used.
- (46) Not used.
- (47) Not used.
- (48) Includes 486,208 shares underlying warrants that are currently exercisable at prices ranging from \$0.25 to \$0.50.
- (49) Includes 235,924 shares underlying warrants that are currently exercisable at prices ranging from \$0.038 to \$1.00.
- (50) Includes 75,000 shares underlying warrants that are currently exercisable at prices ranging from \$0.50 to \$1.00, 37,500 of which represent warrants to purchase shares held by Mark L. Witten and 37,500 of which represent warrants to purchase shares held by David T. Harris.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- (51) Includes 522,613 shares underlying warrants that are currently exercisable at prices ranging from \$0.038 to \$1.00.
- (52) Includes 14,554 shares underlying warrants that are currently exercisable at prices ranging from \$0.35 to \$0.50.
- (53) Includes 67,613 common shares that have been accrued. Includes 7,500 shares underlying warrants that are currently exercisable at prices ranging from \$0.09 to \$2.00. Jerry Teich is the control person of CDM Group.
- (54) Includes 20,000 shares underlying warrants that are currently exercisable at a price of \$1.00. Daniel Spelling is the control person of Spelling Communications.

-75-

- (55) Includes 26,939 shares underlying warrants that are currently exercisable at \$0.278 per share. Steven J. Scronic is the control person of Stratum Consulting Group, LLC.
- (56) Includes 90,000 shares underlying warrants that are currently exercisable at a price of \$0.50 per share.
- (57) Includes 507,340 shares underlying warrants that are currently exercisable at prices ranging from \$0.038 to \$1.00.
- (58) Includes 364,778 shares underlying warrants that are currently exercisable at prices ranging from \$0.125 to \$0.50.
- (59) Includes 26,400 common shares that have been accrued due to Registration Penalty.
- (60) Includes 600 common shares that have been accrued due to Registration Penalty.
- (61) Includes 22,200 common shares that have been accrued due to Registration Penalty.
- (62) Includes 19,800 common shares that have been accrued due to Registration Penalty.
- (63) Includes 12,000 common shares that have been accrued due to Registration Penalty.
- (64) Includes 72,075 common shares that have been accrued due to Registration Penalty.
- (65) Includes 15,000 common shares that have been accrued due to Registration Penalty.
- (66) Includes 24,000 common shares that have been accrued due to Registration Penalty.
- (67) Includes 160,350 common shares that have been accrued due to Registration Penalty.
- (68) Includes 10,200 common shares that have been accrued due to Registration

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- Penalty.
- (69) Includes 40,800 common shares that have been accrued due to Registration Penalty.
  - (70) Includes 49,200 common shares that have been accrued due to Registration Penalty.
  - (71) Includes 10,200 common shares that have been accrued due to Registration Penalty.
  - (72) Includes 5,625 common shares that have been accrued due to Registration Penalty.
  - (73) Includes 2,400 common shares that have been accrued due to Registration Penalty.
  - (74) Includes 6,600 common shares that have been accrued due to Registration Penalty.
  - (75) Includes 9,600 common shares that have been accrued due to Registration Penalty.
  - (76) Includes 100,000 common shares that have been accrued.
  - (77) Includes 200,000 shares underlying warrants that are currently exercisable at a price of \$0.125 per share.
  - (78) Includes 232,153 common shares which have been accrued.
  - (79) Includes 60,000 shares underlying warrants that are currently exercisable, 30,000 exercisable at \$1.00, 15,000 of which represent warrants to purchase shares held by David T. Harris and 15,000 of which represent warrants to purchase shares held by Mark L. Witten.
  - (80) Includes 19,288 common shares which have been accrued.
  - (81) Includes 13,454 common shares which have been accrued. Includes 50,000 shares underlying warrants that are currently exercisable, 30,000 of which are exercisable at prices ranging between \$0.25 and \$1.00, 10,000 of which represent warrants to purchase shares held by David T. Harris and 10,000 of which represent warrants to purchase shares held by Mark L. Witten.
  - (82) Not used.
  - (83) Not used.
  - (84) Not used.
  - (85) Includes 700 shares underlying warrants that are currently exercisable at \$1.00 per share.
  - (86) Not used.
  - (87) Not used.
  - (88) Includes 82,500 shares underlying warrants that are currently exercisable at prices ranging between \$0.05 and \$2.00.
  - (89) Includes 61,000 shares underlying warrants that are currently exercisable at prices between \$0.25 and \$1.00.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

(90) Includes 10,000 shares underlying warrants that are currently exercisable at a price of \$2.00 per share. (91) Includes 25,000 shares underlying warrants that are currently exercisable at a price of \$0.038.

We will not receive any of the proceeds from the sale of the shares by the selling stockholders. We have agreed to bear expenses incurred by the selling stockholders, up to a maximum limit of \$15,000, that relate to the registration of the shares being offered and sold by the selling stockholders, including the Securities and Exchange Commission registration fee and legal, accounting, printing and other expenses of this offering.

-76-

### DESCRIPTION OF CAPITAL STOCK

We are authorized to issue 100,000,000 shares of common stock, \$0.001 par value per share, and 10,000,000 shares of preferred stock, \$0.001 par value per share. The following description of our capital stock does not purport to be complete and is governed by and qualified by our certificate of incorporation and bylaws, which are included as exhibits to the registration statement of which this prospectus forms a part, and by the provisions of applicable Delaware law.

#### COMMON STOCK

As of May 31, 2005, we had 69,063,275 shares of common stock outstanding, which were held of record and beneficially by approximately 520 stockholders. We also have accrued common shares pending issuance of 740,551. Additionally, in regard to the penalty for delayed registration we have accrued 3,228,400 common shares for issuance. As of May 31, 2005, there were 16,218,951 shares of common stock underlying outstanding warrants, and options to purchase 63,212 shares of common stock had been granted or were outstanding outside our 2003 Stock Option, Deferred Stock and Restricted Stock Plan. 150,000 options had been granted or were outstanding under our 2003 Stock Option, Deferred Stock and Restricted Stock Plan; 445,996 shares remain available for issuance under this plan.

The holders of our common stock are entitled to one (1) vote per share on all matters submitted to a vote of our stockholders. In addition, such holders are entitled to receive ratably such dividends, if any, as may be declared from time to time by our Board of Directors out of funds legally available therefore. No dividends may be paid on the common stock until all accrued but unpaid dividends on the shares of our preferred stock have been paid. In the event of the dissolution, liquidation or winding up of our company, the holders of common stock are entitled to share ratably in all assets remaining after payment of all liabilities of our company and the preference amount distributable to the holders of the shares of preferred stock. The holders of common stock do not have any subscription, redemption or conversion rights, nor do they have any preemptive or other rights to acquire or subscribe for additional, unissued or treasury shares.

Pursuant to our bylaws, except for any matters which pursuant to Delaware law require a greater percentage vote for approval, the holders of a majority of the outstanding shares of common stock, if present in person or by proxy, are sufficient to constitute a quorum for the transaction of business at meetings of our stockholders. Except as to any matters which pursuant to Delaware law require a greater percentage vote for approval, the affirmative vote of the holders of a majority of the shares of common stock present in person or by

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

proxy at any meeting (provided a quorum is present) is sufficient to authorize, affirm or ratify any act or action, including the election of our Board of Directors.

The holders of the common stock do not have cumulative voting rights. Accordingly, the holders of more than half of the outstanding shares of common stock can elect all of the directors to be elected in any election, if they choose to do so. In such event, the holders of the remaining shares of common stock would not be able to elect any directors. Our Board of Directors is empowered to fill any vacancies on the Board created by the resignation, death or removal of directors.

In addition to voting at duly called meetings at which a quorum is present in person or by proxy, Delaware law and our bylaws provide that stockholders may take action without the holding of a meeting by written consent or consents signed by the holders of a majority of the outstanding shares of our capital stock entitled to vote thereon. Prompt notice of the taking of any action without a meeting by less than unanimous consent of the stockholders will be given to those stockholders who do not consent in writing to the action. The purposes of this provision are to facilitate action by stockholders and to reduce the corporate expense associated with special meetings of stockholders.

### MARKET PRICE OF OUR COMMON STOCK

The price of our common stock has been volatile in the past and will likely continue to fluctuate in the future. The stock market in general and the market for shares of life science companies in particular have

-77-

experienced extreme stock price fluctuations. In some cases, these fluctuations have been unrelated to the operating performance of the affected companies. Many companies in the life science and related industries have experienced dramatic volatility in the market prices of their common stock. We believe that a number of factors, both within and outside our control, could cause the price of our common stock to fluctuate, perhaps substantially. Factors such as the following could have a significant adverse impact on the market price of our common stock:

- o Our ability to obtain additional financing and, if available, the terms and conditions of the financing;
- o Our financial position and results of operations;
- o The results of preclinical studies and clinical trials by us, our collaborators or our competitors;
- o Concern as to, or other evidence of, the safety or efficacy of our proposed products or our competitors' products;
- o Announcements of technological innovations or new products by us or our competitors;
- o U.S. and foreign governmental regulatory actions;
- o Actual or anticipated changes in drug reimbursement policies;
- o Developments with our collaborators, if any;

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- o Developments concerning patent or other proprietary rights of us or our competitors (including litigation);
- o Status of litigation;
- o Period-to-period fluctuations in our operating results;
- o Changes in estimates of our company's performance by any securities analysts;
- o New regulatory requirements and changes in the existing regulatory environment;
- o Market conditions for life science stocks in general.
- o The issuance of new equity securities pursuant to a future offering;
- o Changes in interest rates;
- o Competitive developments, including announcements by competitors of new products or services or significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- o Variations in quarterly operating results;
- o Change in financial estimates by securities analysts;
- o The depth and liquidity of the market for our common stock;
- o Investor perceptions of our company and the technologies industries generally; and
- o General economic and other national conditions.

-78-

### PREFERRED STOCK

Under our certificate of incorporation, shares of our preferred stock may, without any action by our stockholders, be issued by our Board of Directors from time to time in one or more series for such consideration and with such relative rights, privileges and preferences as the Board may determine. Accordingly, our Board of Directors has the power, without stockholder approval, to fix the dividend rate and to establish the provisions, if any, relating to voting rights, redemption rate, sinking fund, liquidation preferences and conversion rights for any series of preferred stock (subject to the preferences of the shares of common stock offered hereby) issued in the future, which could adversely affect the voting power or other rights of the holders of common stock.

Our Board of Directors' authority to issue preferred stock provides a convenient vehicle in connection with possible acquisitions and other corporate purposes, but could have the effect of making it more difficult for a person or group to gain control of our company. As of the date of the prospectus, there are no shares of preferred stock outstanding, and we do not have present plans to issue any shares of preferred stock or designate any series of preferred stock.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### STOCK OPTIONS

As of April 3, 2005, there were 150,000 outstanding stock options at a weighted average exercise price of \$0.40 per share under our 2003 Stock Option, Deferred Stock and Restricted Stock Plan and 445,996 shares were reserved for future grant under our 2003 Stock Option, Deferred Stock and Restricted Stock Plan. There were outstanding stock options to purchase an additional 63,212 shares of our common stock that were granted outside of our 2003 Stock Option, Deferred Stock and Restricted Stock Plan at a weighted average exercise price of \$25.00 per share.

### WARRANTS

As of May 31, 2005, there were outstanding warrants to purchase 16,218,951 shares of our common stock with exercise prices ranging from \$0.05 to \$2.00 per share.

### DELAWARE ANTI-TAKEOVER LAW AND CHARTER AND BYLAW PROVISIONS

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, this statute prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date that the person became an interested stockholder unless, with certain exceptions, the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the stockholder.

Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns or within three years prior, did own 15% or more of the corporation's voting stock. These provisions may have the effect of delaying, deferring or preventing a change in control of us without further action by our stockholders.

Our certificate of incorporation and bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or making a tender offer or delaying or preventing a change in control of our company, including changes a stockholder might consider favorable. In particular, our certificate of incorporation and bylaws, as applicable, among other things, will:

- o provide our board of directors with the ability to alter our bylaws without stockholder approval;
  - o provide that special meetings of stockholders can only be called by our Board of Directors or by a committee of our Board of Directors that has been duly designated by the Board and whose powers and authority included the power to call such meetings;
- 79-
- o provide for an advance notice procedure with regard to the nomination of candidates for election as directors and with regard to business to be brought before a meeting of stockholders;

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- o provide that vacancies on our board of directors may be filled by a majority of directors in office, although less than a quorum; and
- o allow us to issue up to 10,000,000 shares of preferred stock with rights senior to those of the common stock and that otherwise could adversely affect the rights and powers, including voting rights, of the holders of common stock. In some circumstances, this issuance could have the effect of decreasing the market price of our common stock, as well as having the anti-takeover effects discussed above.

Such provisions may have the effect of discouraging a third-party from acquiring us, even if doing so would be beneficial to our stockholders. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by them, and to discourage some types of transactions that may involve an actual or threatened change in control of our company. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage some tactics that may be used in proxy fights. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms. However, these provisions could have the effect of discouraging others from making tender offers for our shares that could result from actual or rumored takeover attempts. These provisions also may have the effect of preventing changes in our management.

### TRANSFER AGENT AND REGISTRAR

The transfer agent for our common stock is Stalt, Inc., located at 671 Oak Grove Avenue, Suite C, Menlo Park, California 94025.

### SHARES ELIGIBLE FOR FUTURE SALE

As of May 31, 2005, we had outstanding 72,571,026 shares of common stock.

### RULE 144

All of the 48,934,894 shares registered in this offering will be and 3,225,200 shares issued under our 2003 Stock Option, Deferred Stock, and Restricted Stock plan are freely tradable without restriction or further registration under the Securities Act of 1933. As of May 31, 2005, we also have outstanding an additional 20,407,732 shares of common stock outstanding that were issued and sold in reliance on exemptions from the registration requirements of the Securities Act of 1933. If shares are purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act of 1933, their sales of shares would be governed by the limitations and restrictions that are described below.

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who has beneficially owned shares of our common stock for at least one year, including any person who may be deemed to be an "affiliate" (as the term "affiliate" is defined under the Securities Act of 1933), would be entitled to sell, within any three-month period, a number of shares that does not exceed the greater of:

- o 1% of the number of shares of common stock then outstanding, which

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

as of May 31, 2005 would equal approximately 725,710 shares; or

- o the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 are also governed by other requirements regarding the manner of sale, notice filing and the availability of current public information about us. Under Rule 144, however, a person who is not, and for

-80-

the three months prior to the sale of such shares has not been, an affiliate of the issuer is free to sell shares that are "restricted securities" which have been held for at least two years without regard to the limitations contained in Rule 144. The selling stockholders will not be governed by the foregoing restrictions when selling their shares pursuant to this prospectus.

### RULE 144(K)

Under Rule 144(k), a person who is not deemed to have been one of our affiliates at any time during the three months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner other than an affiliate, is entitled to sell such shares without complying with the manner of sale, notice filing, volume limitation or notice provisions of Rule 144.

### PLAN OF DISTRIBUTION

The selling stockholders, and any of their pledgees, assignees and successors-in-interest, may, from time to time, sell any or all of their shares of our common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- o ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- o block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- o purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- o an exchange distribution in accordance with the rules of the applicable exchange;
- o privately negotiated transactions;

-81-

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- o settlement of short sales entered into after the date of this prospectus;
- o broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- o a combination of any such methods of sale; or
- o through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise.

The selling stockholders may also sell shares under Rule 144 under the Securities Act of 1933, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. Each selling stockholder does not expect these commissions and discounts relating to its sales of shares to exceed what is customary in the types of transactions involved.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may, after the date of this prospectus, also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholders has informed us that it does not have any agreement or understanding, directly or indirectly, with any person to distribute our common stock.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling stockholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. Each selling stockholder has advised us that they have not entered into any agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale shares. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling stockholders.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

We agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling stockholders without registration and without regard to any volume limitations by reason of Rule 144(k) under the Securities Act or any other rule of similar effect or (ii) all of the shares have been sold pursuant to the prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale

-82-

in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

### DISCLOSURE OF COMMISSION POSITION OF INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Under Section 145 of the General Corporation Law of the State of Delaware, we can indemnify our directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). Our certificate of incorporation provides that, pursuant to Delaware law, our directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care to us and our stockholders. This provision in the certificate of incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as injunctive or other forms of nonmonetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to us or our stockholders, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of the law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Our bylaws provide for the indemnification of our directors to the fullest extent permitted by the Delaware General Corporation Law. Our bylaws further provide that our Board of Directors has sole discretion to indemnify our officers and other employees. We may limit the extent of such indemnification by individual contracts with our directors and executive officers, but have not done so. We are required to advance, prior to the final disposition of any proceeding, promptly on request, all expenses incurred by any director or executive officer in connection with that proceeding on receipt of an undertaking by or on behalf of that director or executive officer to repay those amounts if it should be determined ultimately that he or she is not entitled to

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

be indemnified under our bylaws or otherwise. We are not, however, required to advance any expenses in connection with any proceeding if a determination is reasonably and promptly made by our Board of Directors by a majority vote of a quorum of disinterested Board members that (a) the party seeking an advance acted in bad faith or deliberately breached his or her duty to us or our stockholders and (b) as a result of such actions by the party seeking an advance, it is more likely than not that it will ultimately be determined that such party is not entitled to indemnification pursuant to the applicable sections of our bylaws.

We have been advised that in the opinion of the Securities and Exchange Commission, insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Securities Act") may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event a claim for indemnification against such liabilities (other than our payment of expenses incurred or paid by our director, officer or controlling person in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

-83-

### LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon for us by Kirkpatrick & Lockhart Nicholson Graham LLP, Los Angeles, California.

### EXPERTS

The financial statements appearing in this Prospectus and Registration Statement have been audited by Russell Bedford Stefanou Mirchandani LLP, independent accountants; to the extent and for the periods indicated in their report appearing elsewhere herein, and are included in reliance upon such report and upon the authority of such firms as experts in accounting and auditing.

### ADDITIONAL INFORMATION

We filed with the Securities and Exchange Commission a registration statement on Form SB-2 under the Securities Act of 1933 for the shares of common stock in this offering. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule that were filed with the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedule that were filed with the registration statement. Statements contained in this prospectus about the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and we refer you to the full text of the contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules that were filed with the registration

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

statement may be inspected without charge at the Public Reference Room maintained by the Securities and Exchange Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from the Securities and Exchange Commission upon payment of the prescribed fee. Information regarding the operation of the Public Reference Room may be obtained by calling the Securities and Exchange Commission at 1-800-SEC-0330. The Securities and Exchange Commission maintains a web site that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC. The address of the site is [www.sec.gov](http://www.sec.gov).

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, and in accordance with the Securities Exchange Act of 1934, we file annual, quarterly and special reports, and other information with the Securities and Exchange Commission. These periodic reports, and other information are available for inspection and copying at the regional offices, public reference facilities and website of the Securities and Exchange Commission referred to above.

-84-

### INDEX TO FINANCIAL STATEMENTS

	PAGE
	-----
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM.....	F-2
CONSOLIDATED FINANCIAL STATEMENTS	
	PAGE NO.
	-----
Consolidated Balance Sheet at December 31, 2004.....	F-3
Consolidated Statements of Losses for the two years ended December 31, 2004 and 2003 and the period October 30, 2002 (Date of Inception) through December 31, 2004.....	F-4
Consolidated Statements of Stockholders' Equity for the period October 30, 2002 (Date of Inception) through December 31, 2004.....	F-5 to F-7
Consolidated Statements of Cash Flows for the two years ended December 31, 2004 and 2003 and the period October 30, 2002 (Date of Inception) through December 31, 2004.....	F-8 to F-9
Notes to Consolidated Financial Statements.....	F-10 to F-26
Consolidated Balance Sheet as of March 31, 2005 (unaudited).....	F-27
Consolidated Statements of Operations for the three months ended March 31, 2005 and 2004 (unaudited).....	F-28
Consolidated Statements of Stockholders' Equity (Deficit) from the date of inception (October 30,2002) to March 31, 2005 (unaudited).....	F-29 to F-32

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Consolidated Statements of Cash Flows for the three months ended  
March 31, 2005 and 2004 (unaudited).....F-33 to F-34

Notes to Consolidated Financial Statements for the three months  
ended March 31, 2005 and 2004 (unaudited).....F-35 to F-44

F-1

RUSSELL BEDFORD STEFANOU MIRCHANDANI LLP  
CERTIFIED PUBLIC ACCOUNTANTS

REPORT OF INDEPENDENT REGISTERED CERTIFIED PUBLIC ACCOUNTING FIRM

Board of Directors  
IR Biosciences Holdings, Inc.  
Scottsdale, Arizona

We have audited the accompanying consolidated balance sheets of I R Biosciences Holdings, Inc., development stage company, (the "Company") as of December 31, 2004 and the related consolidated statements of losses, stockholders' equity, and cash flows for the two years December 31, 2004 and 2003 and the period October 30, 2002 (date of inception) through December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based upon our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States of America). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of IR Biosciences Holdings, Inc. , a development stage company, as of December 31, 2004 , and the results of its operations and its cash flows for the years ended December 31, 2004 and 2003 and for the period October 30, 2002 (date of inception) through December 31, 2004 , in conformity with accounting principles generally accepted in the United States of America.

/s/ RUSSELL BEDFORD STEFANOU MIRCHANDANI LLP

-----  
Russell Bedford Stefanou Mirchandani LLP

New York, New York  
March 4, 2005

F-2

IR BioSciences Holdings, Inc. and Subsidiary  
(A Development Stage Company)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Consolidated Balance Sheet

	December 31, 2004
	-----
Assets	
Current assets	
Cash and cash equivalents	\$ 970,114
Prepaid services and other current assets	6,713
	-----
Total current assets	976,827
Licensed proprietary rights, net	7,320
Furniture and equipment, net	6,500
	-----
Total assets	\$ 990,647
	=====
Liabilities and Stockholders' Equity	
Current liabilities	
Current portion of notes payable, net of discount	75,993
Accounts payable and accrued liabilities	307,301
	-----
Total current liabilities	383,294
Commitments and Contingencies	
Stockholders' Equity Preferred stock, 0.001 par value:	
10,000,000 shares authorized, no shares issued and outstanding	0
Common stock, \$0.001 par value; 100,000,000 shares authorized;	
62,423,388 shares issued and outstanding at December 31, 2004	62,423
Additional paid-in capital	7,922,943
Deferred compensation	(169,986)
Deficit accumulated during the Development Stage	(7,208,027)
Total stockholder's equity	607,353
	-----
Total liabilities and stockholders' equity	\$ 990,647
	=====

The accompanying notes are an integral part of these consolidated financial statements.

F-3

IR BioSciences Holdings, Inc. and Subsidiary  
(A Development Stage Company)  
Consolidated Statements of Losses

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

	For the Twelve Months Ended December 31, 2004	For the Twelve Months Ended December 31, 2003	Cumulative from Inception (October 30, 2002 to December 31, 2004
	-----	-----	-----
Operating expenses:			
Selling, general and administrative expenses	\$ 4,498,390	\$ 1,045,776	\$ 5,589,884
Merger fees and costs	0	350,000	350,000
Financing cost	0	90,000	90,000
	-----	-----	-----
Total operating expenses	4,498,390	1,485,776	6,029,884
Operating loss	(4,498,390)	(1,485,776)	(6,029,884)
Other expense:			
Interest expense	807,017	370,926	1,178,143
	-----	-----	-----
Total other expense	807,017	370,926	1,178,143
Loss before income taxes	(5,305,407)	(1,856,702)	(7,208,027)
Provision for income taxes	--	--	--
	-----	-----	-----
Net loss	\$ (5,305,407)	\$ (1,856,702)	\$ (7,208,027)
	=====	=====	=====
Net loss per share - basic and diluted	\$ (0.16)	\$ (0.09)	\$ (0.28)
	=====	=====	=====
Weighted average shares outstanding - basic and diluted	33,510,168	21,317,292	25,698,261
	=====	=====	=====

The accompanying notes are an integral part of these consolidated financial statements.

F-4

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Consolidated Statement of  
Stockholders' Equity (Deficit) From Date of  
Inception (October 30, 2002) to December 31, 2004

	Common Stock		Additional		Deferre
	Shares	Amount	Paid-In Capital	Compensa	
	-----	-----	-----	-----	-----
Balance at October 30, 2002 (date of inception)	--	\$ --	\$ --	\$ --	--
Shares of common stock issued at \$0.0006					

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

per share to founders for license of proprietary right in December 2002	16,612,276	16,612	(7,362)	
Shares of common stock issued at \$0.0006 per share to founders for services rendered in December 2002	1,405,310	1,405	(623)	
Shares of common stock issued at \$0.1671 per share to consultants for services rendered in December 2002	53,878	54	8,946	(9,
Sale of common stock for cash at \$0.1671 per share in December 2002	185,578	186	30,815	
Net loss for the period from inception (October 30, 2002) to December 31, 2002	--	--	--	
Balance at December 31, 2002 (reflective of stock splits)	18,257,042	18,257	31,776	(9,
Shares granted to consultants at \$0.1392 per share for services rendered in January 2003	98,776	99	13,651	
Sale of shares of common stock for cash at \$0.1517 per share in January 2003	329,552	330	49,670	
Shares granted to consultants at \$0.1392 per share for services rendered in March 2003	154,450	154	21,346	
Conversion of notes payable to common stock at \$0.1392 per share in April 2003	1,436,736	1,437	198,563	
Shares granted to consultants at \$0.1413 per share for services rendered in April 2003	14,368	14	2,016	
Sale of shares of common stock for cash at \$0.2784 per share in May 2003	17,960	18	4,982	
Sales of shares of common stock for cash at \$0.2784 per share in June 2003	35,918	36	9,964	
Conversion of notes payable to common stock at \$0.1392 per share in June 2003	718,368	718	99,282	
Beneficial conversion feature associated with notes issued in June 2003	--	--	60,560	
Amortization of deferred compensation	--	--	--	9,
Costs of GPN Merger in July 2003	2,368,130	2,368	(123,168)	
Value of warrants issued with extended notes payable in October 2003	--	--	189,937	
Value of Company warrants issued in conjunction with fourth quarter notes payable issued October through				
December 2003	--	--	207,457	
Value of warrants contributed by founders in conjunction with fourth quarter				

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

notes payable issued October through			
December 2003	--	--	183,543
Value of warrants issued for services in October through December 2003	--	--	85,861
Net loss for the twelve month period ended December 31, 2003	--	--	--
	-----	-----	-----

F-5

	Common Stock		Additional	Deferre
	Shares	Amount	Paid-In Capital	Compensa
	-----	-----	-----	-----
Balance at December 31, 2003	23,431,300	23,431	1,035,441	
Shares granted at \$1.00 per share pursuant to the Senior Note Agreement in January 2004	600,000	600	599,400	(600,
Shares issued at \$1.00 per share to a consultant for services rendered in January 2004	800,000	800	799,200	(800,
Shares issued to a consultant at \$0.62 per share for services rendered in February 2004	40,000	40	24,760	(24,
Shars issued to a consultant at \$0.40 per share for services rendered in March 2004	1,051,600	1,051	419,589	(420,
Shares issued to a consultant at \$0.50 per share for services rendered in March 2004	500,000	500	249,500	(250,
Shares sold for cash at \$0.15 per share in March, 2004	8,000	8	1,192	
Shares issued at \$0.50 per share to consultants for services rendered in March 2004	20,000	20	9,980	
Shares issued to a consultant at \$0.40 per share for services rendered in March 2004	2,000	2	798	
Shares issued to consultants at \$0.32 per share for services rendered in March 2004	91,600	92	29,220	
Shares to be issued to consultant at \$0.41 per share in April 2004 for services to be rendered through March 2005	--	--	--	(82,
Shares granted pursuant to the New Senior Note				

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Agreement in April 2004	600,000	600	149,400	(150,
Shares issued to officer at \$0.32 per share for services rendered in April 2004	200,000	200	63,800	
Conversion of note payable to common stock at \$0.10 per share in May 2004	350,000	350	34,650	
Beneficial Conversion Feature associated with note payable in May 2004	--	--	35,000	
Issuance of warrants to officers and founder for services rendered in May 2004	--	--	269,208	
Shares to a consultant at \$0.20 per share as a due dilligence fee in May 2004	125,000	125	24,875	
Shares issued to a consultant at \$1.00 per share for services to be rendered over twelve months beginning May 2004	500,000	500	499,500	(500,
Benefial Conversion Feature associated with notes payable issued in June 2004	--	--	3,000	
Issuance of warrants to note holders in April, May, and June 2004	--	--	17,915	
Issuance of warrants to employees and consultants for services rendered in April through June 2004	--	--	8,318	
Shares issued in July to a consultant at \$0.10 for services to be rendered through July 2005	250,000	250	24,750	(25,
Shares issued to a consultant in July and September at \$0.41 per share for services to be rendered through April 2005	200,000	200	81,800	
Shares issued to a consultant in September at \$0.12 to \$0.22 for services rendered through September 2004	127,276	127	16,782	
Shares issued in July to September 2004 as interest on note payable	300,000	300	35,700	
Issuance of warrants with notes payable in July and August 2004	--	--	72,252	

The accompanying notes are an integral part of these consolidated financial statements.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

(A Development Stage Company)  
 Consolidated Statement of  
 Stockholders' Equity (Deficit) From Date of  
 Inception (October 30, 2002) to December 31, 2004 (continued)

	Common Stock		Additional Paid-In Capital	Deferre Compensa
	Shares	Amount		
Accrued deferred compensation in August 2004 to a consultant for 100,000 shares at \$0.10 per share, committed but unissued	--	--	--	(10,
Shares issued in August 2004 at \$0.14 to a consultant for services to be performed through October 2004	100,000	100	13,900	(14,
Shares issued in August 2004 at \$0.125 per share for conversion of \$30,000 demand loan	240,000	240	29,760	
Shares issued in August 2004 at \$0.16 per share to a consultant for services provided	125,000	125	19,875	
Shares issued to employees at \$0.16 to \$0.25 per share	48,804	49	8,335	
Commitment to issue 100,000 shares of stock to a consultant at \$0.23 per share for services to be provided through September 2005	--	--	--	(23,
Sale of stock for cash in October at \$0.125 per share, net of costs of \$298,155	18,160,000	18,160	1,345,763	
Value of warrants issued with sale of common stock in October, net of costs	--	--	607,922	
Issuance of warrant to officer in October	--	--	112,697	
Issuance of stock to investment bankers in October 2004 for commissions earned	4,900,000	4,900	(4,900)	
Conversion of accounts payable to stock in October at \$0.125 per share	1,257,746	1,258	107,382	
Value of warrants issued with accounts payable conversions	--	--	48,579	
Conversion of demand loan to stock in October at \$0.11 per share	93,300	93	10,170	
Forgiveness of notes payable in October 2004	--	--	36,785	
Issuance of stock to officer and director at \$0.125 per share in October for conversion of liability	1,440,000	1,440	122,493	
Value of warrants issued with officer and director conversion of liabilities	--	--	56,067	

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Conversion of debt and accrued interest to common stock at \$0.075 to \$0.125 per share	6,703,151	6,703	417,514	
Value of warrants issued with conversion of debt	--	--	191,111	
Conversion of note payable in October into common stock at \$0.075 per share	67,613	68	4,932	
Issuance of warrants to note holders in October 2004	--	--	112,562	
Value of shares issued to CFO as compensation	100,000	100	34,900	
Value of warrants issued to members of advisory committees in in November and December	--	--	16,348	
Beneficial conversion feature associated with notes payable	--	--	124,709	
Shares issued in error to be cancelled	(9,002)	(9)	9	
Amortization of deferred compensation through December 31, 2004	--	--	--	2,729,
Loss for the twelve months ended December 31, 2004	--	--	--	
Balance at December 31, 2004	62,423,388	62,423	7,922,943	(169,

F-7

IR BioSciences Holdings, Inc. and Subsidiary  
(A Development Stage Company)  
Consolidated Statements of Cash Flows

	For the Twelve Months Ended December 31, 2004	For the Twelve Months Ended December 31, 2003	Cumul from In (Octob 2002 Decem 20
Cash flows from operating activities:			
Net loss	\$ (5,305,407)	\$ (1,856,702)	\$ (7,208
ADJUSTMENTS TO RECONCILE NET LOSS TO NET CASH USED IN OPERATING ACTIVITIES:			
Non-cash compensation	3,284,577	114,641	3,400
Interest expense	83,776	68,624	152
Amortization of discount on notes payable	704,633	302,302	1,006

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Depreciation and amortization	13,255	12,685	26
Changes in operating assets and liabilities:			
Prepaid services and other assets	29,130	(35,842)	(6)
Accounts payable and accrued expenses	148,854	397,402	555
	-----	-----	-----
NET CASH USED IN OPERATING ACTIVITIES	(1,041,182)	(996,890)	(2,074)
Cash flows from investing activities:			
Acquisition of property and equipment	(4,783)	(3,304)	(8)
	-----	-----	-----
NET CASH USED IN INVESTING ACTIVITIES	(4,783)	(3,304)	(8)
Cash flows from financing activities:			
Net proceeds from notes payable	32,500	1,186,000	1,233
Principal payments on notes payable	--	(250,000)	(250)
Shares of stock sold for cash	1,973,045	65,000	2,069
Officer repayment of amounts paid on behalf of officer	--	19,880	19
Cash paid on behalf of officer	--	(19,880)	(19)
Cash paid on amount due to officer	--	(22,427)	(22)
	-----	-----	-----
NET CASH PROVIDED BY FINANCING ACTIVITIES	2,005,545	978,573	3,030
Net increase in cash and cash equivalents	959,580	(21,621)	947
Cash and cash equivalents at beginning of period	10,534	32,155	
	-----	-----	-----
Cash and cash equivalents at end of period	\$ 970,114	\$ 10,534	\$ 970
	=====	=====	=====

The accompanying notes are an integral part of these consolidated financial statements.

F-8

IR BioSciences Holdings, Inc. and Subsidiary  
(A Development Stage Company)  
Consolidated Statements of Cash Flows (continued)

Non-cash investing and financing activities:

	For the Twelve Months Ended December 31, 2004	For the Twelve Months Ended December 31, 2003	Cum from (Oct 2 De
	-----	-----	-----
Supplemental Disclosures of Cash Flow Information:			
Acquisition and Capital Restructure:			
Assets acquired	\$ --	\$ --	\$

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Liabilities assumed	--	(120,799)	(
Common stock retained	--	(2,369)	
Adjustment to additional paid in capital	--	123,168	
Organization costs	--	350,000	
	-----	-----	-----
Total consideration paid	\$ --	\$ 350,000	\$
	=====	=====	=====
Cash paid during the period for interest	\$ 54	\$ 41,793	\$
	=====	=====	=====
Cash paid during the period for taxes	\$ --	\$ --	\$
	=====	=====	=====
Common stock issued in exchange for proprietary rights	\$ --	\$ --	\$
	=====	=====	=====
Common stock issued in exchange for services	\$ 2,878,006	\$ 37,280	\$ 2,
	=====	=====	=====
Common stock issued in exchange for previously incurred debt and accrued interest	\$ 695,591	\$ 300,000	\$
	=====	=====	=====
Common stock issued in exchange as interest	\$ 36,000	\$ --	\$
	=====	=====	=====
Amortization of beneficial conversion feature	\$ 162,709	\$ 60,560	\$
	=====	=====	=====
Stock options and warrants issued in exchange for services rendered	\$ 406,571	\$ 85,861	\$
	=====	=====	=====
Debt and accrued interest forgiveness from note holders	\$ 36,785	\$ --	\$
	=====	=====	=====
Common stock issued in satisfaction of accounts payable	\$ 157,219	\$ --	\$
	=====	=====	=====
Common stock issued in satisfaction of amounts due to an Officer and a Director	\$ 180,000	\$ --	\$
	=====	=====	=====

The accompanying notes are an integral part of these consolidated financial statements.

F-9

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of the significant accounting policies applied in the preparation of

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

the accompanying consolidated financial statements follows.

### Nature of Business

-----

IR Biosciences Holdings Inc. ("Company") formerly GPN Network, Inc. ("GPN") is currently a development stage company under the provisions of Statement of Financial Accounting Standards ("SFAS") No. 7. The Company, which was incorporated under the laws of the State of Delaware on October 30, 2002, is a biotechnology company and plans to develop and market applications utilizing modified substance P, a naturally occurring immunomodulator. From its inception through the date of these financial statements, the Company has recognized minimal revenues and has incurred significant operating expenses.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, ImmuneRegen BioSciences, Inc.. Significant intercompany transactions have been eliminated in consolidation.

### Acquisition and Corporate Restructure

-----

On July 20, 2003 ImmuneRegen Biosciences Inc. ("ImmuneRegen") entered into an Agreement of Plan and Merger ("Agreement") with GPN Network, Inc. ("GPN") an inactive publicly registered shell corporation with no significant assets or operations. In accordance with SFAS No. 141, the Company was the acquiring entity. While the transaction is accounted for using the purchase method of accounting, in substance the Agreement is a recapitalization of the Company's capital structure.

For accounting purposes, the Company has accounted for the transaction as a reverse acquisition and the Company shall be the surviving entity. The total purchase price and carrying value of net assets acquired was \$0. From July 2001 until the date of the Agreement the Company was inactive. The Company did not recognize goodwill or any intangible assets in connection with the transaction.

Effective with the Agreement, all previously outstanding common stock, preferred stock, options and warrants owned by the Company's shareholders were exchanged for an aggregate of 21,063,170 (post-split) shares of GPN common stock. The value of the stock that was issued was the historical cost of GPN's net tangible assets, which did not differ materially from their fair value.

Effective with the Agreement, GPN changed its name to IR Biosciences Holdings Inc.

The accompanying financial statements present the historical financial condition, results of operations and cash flows of the Company prior to the merger with GPN.

### Use of Estimates

-----

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported periods. Actual results could materially differ from those estimates.

# Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

## NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### Cash and Cash Equivalents

-----

For purposes of the statement of cash flows, cash equivalents include all highly liquid debt instruments with original maturities of three months or less which are not securing any corporate obligations.

### Long-lived Assets

-----

The Company has adopted Statement of Financial Accounting Standards No. 144 (SFAS 144). The Statement requires that long-lived assets and certain identifiable intangibles held and used by the Company be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Events relating to recoverability may include significant unfavorable changes in business conditions, recurring losses, or a forecasted inability to achieve break-even operating results over an extended period. The Company evaluates the recoverability of long-lived assets based upon forecasted undercounted cash flows. Should an impairment in value be indicated, the carrying value of intangible assets will be adjusted, based on estimates of future discounted cash flows resulting from the use and ultimate disposition of the asset. SFAS No. 144 also requires assets to be disposed of be reported at the lower of the carrying amount or the fair value less costs to sell.

### Income Taxes

-----

The Company has implemented the provisions on Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" (SFAS 109). SFAS 109 requires that income tax accounts be computed using the liability method. Deferred taxes are determined based upon the estimated future tax effects of differences between the financial reporting and tax reporting bases of assets and liabilities given the provisions of currently enacted tax laws.

### Net Loss Per Common Share

-----

The Company computes earnings per share under Financial Accounting Standard No. 128, "Earnings Per Share" (SFAS 128). Net loss per common share is computed by dividing net loss by the weighted average number of shares of common stock and dilutive common stock equivalents outstanding during the year. Dilutive common stock equivalents consist of shares issuable upon conversion of convertible notes and the exercise of the Company's stock options and warrants (calculated using the treasury stock method). During 2004, 2003 and 2002, common stock equivalents are not considered in the calculation of the weighted average number of common shares outstanding because they would be anti-dilutive, thereby decreasing the net loss per common share.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### Liquidity

As shown in the accompanying financial statements, the Company has incurred a net loss of \$7,208,027 from its inception through December 31, 2004. The Company's has net working capital of \$593,533, with cash and cash equivalents of \$970,114 of this amount as of December 31, 2004.

F-11

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

### NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Research and Development

The Company accounts for research and development costs in accordance with the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 2 ("SFAS 2"), "Accounting for Research and Development Costs. Under SFAS 2, all research and development costs must be charged to expense as incurred. Accordingly, internal research and development costs are expensed as incurred. Third-party research and developments costs are expensed when the contracted work has been performed or as milestone results have been achieved. Company-sponsored research and development costs related to both present and future products are expensed in the period incurred. Total expenditures on research and product development for the years 2004, 2003, and the period from October 30, 2002 (date of inception) to December 31, 2004 were \$150,091, \$42,972 and \$193,063, respectively.

#### Concentrations of Credit Risk

Financial instruments and related items, which potentially subject the Company to concentrations of credit risk, consist primarily of cash, cash equivalents and related party receivables. The Company places its cash and temporary cash investments with credit quality institutions. At times, such investments may be in excess of the FDIC insurance limit. The Company periodically reviews its trade receivables in determining its allowance for doubtful accounts. There is no allowance for doubtful accounts established as of December 31, 2004.

#### Comprehensive Income

Statement of Financial Accounting Standards No. 130 ("SFAS 130"), "Reporting Comprehensive Income," establishes standards for reporting and displaying of comprehensive income, its components and accumulated balances. Comprehensive income is defined to include all changes in equity except those resulting from investments by owners and distributions to owners. Among other disclosures, SFAS 130 requires that all items that are required to be recognized under current

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

accounting standards as components of comprehensive income be reported in a financial statement that is displayed with the same prominence as other financial statements. The Company does not have any items of comprehensive income in any of the periods presented.

### Stock Based Compensation

-----

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure-an amendment of SFAS 123." This statement amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary charge to the fair value based method of accounting for stock-based employee compensation. In addition, this statement amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The Company has chosen to continue to account for stock-based compensation using the intrinsic value method prescribed in APB Opinion No. 25 and related interpretations. Accordingly, compensation expense for stock options is measured as the excess, if any, of the fair market value of the Company's stock at the date of the grant over the exercise

F-12

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

### NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### STOCK BASED COMPENSATION (CONTINUED)

-----

price of the related option. The Company has adopted the annual disclosure provisions of SFAS No. 148 in its financial reports for the year ended December 31, 2004 and 2003 and for subsequent periods. The Company did not issue any stock-based employee compensation during the years ended December 31, 2004 and 2003.

#### SEGMENT INFORMATION

-----

Statement of Financial Accounting Standards No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS 131") establishes standards for reporting information regarding operating segments in annual financial statements and requires selected information for those segments to be presented in interim financial reports issued to stockholders. SFAS 131 also establishes standards for related disclosures about products and services and geographic areas. Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision-making group, in making decisions how to allocate resources and assess performance. The information disclosed herein materially represents all of the financial information related to the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Company's principal operating segment.

### FAIR VALUE OF FINANCIAL INSTRUMENTS

-----

The Company measures its financial assets and liabilities in accordance with accounting principles generally accepted in the United States of America. The estimated fair values approximate their carrying value because of the short-term maturity of these instruments or the stated interest rates are indicative of market interest rates.

### PROPERTY AND EQUIPMENT

-----

Property and equipment are valued at cost. Depreciation and amortization are provided over the estimated useful lives up to seven years using the straight-line method. The estimated service lives of property and equipment are as follows:

Computer equipment	3 years
Furniture	7 years

### WEBSITE DEVELOPMENT COSTS

-----

The Company recognizes website development costs in accordance with Emerging Issue Task Force ("EITF") No. 00-02, "Accounting for Website Development Costs." As such, the Company expenses all costs incurred that relate to the planning and post implementation phases of development of its website. Direct costs incurred in the development phase are capitalized and recognized over the estimated useful life of two years. The Company follows the policy of charging costs associated with repair or maintenance for the website to expenses incurred.

### ADVERTISING

-----

The Company follows the policy of charging the costs of advertising to expenses incurred. The Company has not incurred any advertising costs during the years ended December 31, 2004 or 2003, or for the period from October 30, 2002 (inception) through December 31, 2004.

F-13

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### RECLASSIFICATIONS

-----

Certain reclassifications have been made in prior year's financial statements to

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

conform to classifications used in the current year.

### NEW ACCOUNTING PRONOUNCEMENTS

-----

In November 2004, the Financial Accounting Standards Board (FASB) issued SFAS151, Inventory Costs- an amendment of ARB No. 43, Chapter 4. This Statement amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing," to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). Paragraph 5 of ARB 43, Chapter 4, previously stated that "under some circumstances, items such as idle facility expense, excessive spoilage, double freight, and rehandling costs may be so abnormal as to require treatment as current period charges" This Statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal." In addition, this Statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. This Statement is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. Management does not believe the adoption of this Statement will have any immediate material impact on the Company.

In December 2004, the FASB issued SFAS No.152, "Accounting for Real Estate Time-Sharing Transactions-an amendment of FASB Statements No. 66 and 67" ("SFAS 152) The amendments made by Statement 152. This Statement amends FASB Statement No. 66, Accounting for Sales of Real Estate, to reference the financial accounting and reporting guidance for real estate time-sharing transactions that is provided in AICPA Statement of Position (SOP) 04-2, Accounting for Real Estate Time-Sharing Transactions. This Statement also amends FASB Statement No. 67, Accounting for Costs and Initial Rental Operations of Real Estate Projects, to state that the guidance for (a) incidental operations and (b) costs incurred to sell real estate projects does not apply to real estate time-sharing transactions. The accounting for those operations and costs is subject to the guidance in SOP 04-2. This Statement is effective for financial statements for fiscal years beginning after June 15, 2005. with earlier application encouraged. The Company does not anticipate that the implementation of this standard will have a material impact on its financial position, results of operations or cash flows.

On December 16, 2004, the Financial Accounting Standards Board ("FASB") published Statement of Financial Accounting Standards No. 123 (Revised 2004), Share-Based Payment ("SFAS 123R"). SFAS 123R requires that compensation cost related to share-based payment transactions be recognized in the financial statements. Share-based payment transactions within the scope of SFAS 123R include stock options, restricted stock plans, performance-based awards, stock appreciation rights, and employee share purchase plans. The provisions of SFAS 123R are effective as of the first interim period that begins after June 15, 2005. Accordingly, the Company will implement the revised standard in the third quarter of fiscal year 2005. Currently, the Company accounts for its share-based payment transactions under the provisions of APB 25, which does not necessarily require the recognition of compensation cost in the financial statements. Management is assessing the implications of this revised standard, which may materially impact the Company's results of operations in the third quarter of fiscal year 2005 and thereafter.

On December 16, 2004, FASB issued Statement of Financial Accounting Standards No. 153, Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29, Accounting for Nonmonetary Transactions (" SFAS 153"). This statement amends APB Opinion 29 to eliminate the exception for

# Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

## NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### NEW ACCOUNTING PRONOUNCEMENTS (CONTINUED)

-----

nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. Under SFAS 153, if a nonmonetary exchange of similar productive assets meets a commercial-substance criterion and fair value is determinable, the transaction must be accounted for at fair value resulting in recognition of any gain or loss. SFAS 153 is effective for nonmonetary transactions in fiscal periods that begin after June 15, 2005. The Company does not anticipate that the implementation of this standard will have a material impact on its financial position, results of operations or cash flows.

## NOTE B - PROPERTY, PLANT AND EQUIPMENT

The Company's property and equipment at December 31, 2004 consists of the following:

	2004
	-----
Office Equipment	\$6,665
Office Fixtures and Furniture	1,423
	-----
	8,088
Accumulated Depreciation	(1,588)
	-----
	\$6,500
	=====

Depreciation expense included as a charge to income amounted to \$1,078, \$510, and \$1,588 for the years ended December 31, 2004 and 2003 and from inception to December 31, 2004, respectively.

## NOTE C - INTANGIBLE ASSETS

The Company has adopted SFAS No. 142, Goodwill and Other Intangible Assets, whereby the Company periodically tests its intangible assets for impairment. On an annual basis, and when there is reason to suspect that their values have been diminished or impaired, these assets will be tested for impairment, and write-downs to be included in results from operations may be necessary.

The Company has licensed from its founders certain proprietary rights which the Company intends to utilize in the execution of its business plan. Consideration for this license was the issuance of 16,612,276 shares (post-split) of the Company's restricted common, valued at the shares' par value of \$0.001 per share, aggregating \$ 9,250. These proprietary rights are being amortized over the term of the license agreement, or ten years.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

The costs and accumulated amortization of intangible assets at December 31 are summarized as follows:

	2004
Technology License	\$9,250
Website	22,500
Less: accumulated amortization	(24,430)
Intangible assets, net	\$7,320

Amortization expense included as a charge to income amounted to \$12,177 and \$12,175 and \$24,430 for the years ended December 31, 2004 and 2003, and the period from inception to December 31, 2004, respectively.

F-15

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
 (A DEVELOPMENT STAGE COMPANY)  
 NOTES TO FINANCIAL STATEMENTS  
 FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
 AND FOR THE PERIOD FROM OCTOBER 30, 2002  
 (INCEPTION) TO DECEMBER 31, 2004

NOTE D - ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities at December 31, 2004 are as follows:

	2004
Accounts payable & accrued liabilities	\$292,190
Accrued interest	8,946
Accrued payroll and payroll taxes	6,165
Total	\$307,301

NOTE E - RELATED-PARTY TRANSACTIONS

CONSULTING AGREEMENTS

On December 16, 2002, the Company entered into consulting agreements (the "Consulting Agreements") with its two founders and chief research scientists (the "Consultants"). The Consulting Agreements were on a month-to-month basis. Under the terms of the Consulting Agreements, the Consultants agreed to place at the disposal of the Company their judgment and expertise in the area of acute lung injury. In consideration for these services, the Company agreed to pay each consultant a non-refundable fee of \$5,000 per month, which shall accrue until such time as the Company raises at least \$2,000,000 in equity or debt financing, at which time such accrued amount will become due and payable. Pursuant to the Consulting Agreements, during the period from January 1, 2003 to December 31, 2003, the Company accrued \$120,000 in consulting fees. During the period from

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

January 1, 2004 to December 31, 2004, the Company accrued an additional \$90,000 in consulting fees. The amounts due the Consultants at December 31, 2003 was \$125,000 and was included in accounts payable and accrued expenses.

In October 2004, the Company achieved the threshold amount of \$2,000,000 in equity or debt financing (see Note I). As of October, 2004, the aggregate amounts due the Consultants under the Consulting Agreements was \$215,000.

In October, 2004, one of the Consultants elected to exchange 724,000 shares of the Company's common stock and a warrant to purchase an additional 362,000 (post-split) shares of common stock at an exercise price of \$0.50 (post-split) in exchange for \$90,500 of the \$107,500 of the previously accrued and unpaid fees due him under the Consulting Agreement, and the balance of \$17,000 was paid to the consultant. At December 31, 2004, there is no balance due to the Consultant.

In October 2004, because the remaining Consultant had not taken an active role in the management of the Company, he agreed that would forgive the amount accrued to him under the Consulting agreement of \$107,500. The Company accounted for the transaction as a forgiveness of indebtedness under FAS No. 140 during the period ended December 31, 2004.

### PROPRIETARY RIGHTS AGREEMENT

-----

In December 2002, the Company entered into a royalty-free license agreement (the "License Agreement") with its two founders and largest shareholders (the "Licensors"). Under the terms of the License Agreement, the Licensors grant to the Company an exclusive license to use and sublicense certain patents, medical applications, and other technologies developed by the Licensors. The Company's obligations under the License Agreement include (i) reasonable efforts to protect any licensed patents or other associated property rights; (ii) reasonable efforts to maintain confidentiality of any proprietary information; (iii) upon the granting by the U. S. Food and Drug Administration to the Company the right to market a product, the

F-16

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

### NOTE E - RELATED-PARTY TRANSACTIONS (CONTINUED)

#### PROPRIETARY RIGHTS AGREEMENT (CONTINUED)

-----

Company will maintain a broad form general liability and product liability insurance (see Note C).

#### OFFICE LEASE

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

-----

During the period from December 1, 2002 through August 31, 2004, the Company leased office space from an entity controlled by the Company's Chief Executive Officer under a sub-let agreement. The rental cost of \$2,734 per month was passed through to the Company at the same rental rate charged by the facility's primary landlord.

In July 2004, the Company leased a new office facility from a third party (see Note J).

### INONE CONTRACT

-----

The Company has entered into a series of contracts with InOne Advertising & Design, Inc. ("InOne"). At the time of the initiation of the contracts, InOne employed the spouse of the Company's Chief Executive Officer. These contracts include (i) a three-year agreement dated January 13, 2003 whereby InOne will design and create certain corporate identity and marketing materials in exchange for 72,000 shares (post split) of the Company's common stock and \$15,000. This Agreement also provides that InOne will bill the Company on an hourly basis for additional services, as well as a \$100,000 termination fee if the agreement is terminated as a result of a merger or acquisition of the Company; (ii) an Agreement dated March 14, 2003 whereby InOne will design, create, maintain, and host the Company's website for one year in exchange for 140,000 shares (post split) of the Company's common stock and \$4,200; (iii) an Agreement dated December 30, 2003 whereby InOne will name and design a logo for the Company's new product for SARS application in exchange for \$5,000 and a warrant to purchase 20,000 shares (post-split) of the Company's common stock at a price of \$0.125; (iv) an Agreement dated December 31, 2003 whereby InOne will name and design a logo for the Company's new product for ARDS application in exchange for \$5,000 and a warrant to purchase 20,000 shares (post-split) of the Company's common stock at a price of \$0.125.

At December 31, 2004, InOne no longer employs or has any business relationship with the spouse of the Company's Chief Executive officer, and InOne is no longer considered a related party to the Company.

The amounts due InOne at December 31, 2004 and 2003 are \$2,700 and \$19,565, respectively.

Notes payable to related parties at December 31, 2004 consists of the following:

	2004
	-----
Promissory notes payable and accrued interest of \$12,093 to Company shareholders, interest at 6% per annum, unsecured; The Company is in default under these agreements	\$65,993
Less: current portion	(65,993)
	-----
	\$ --
	=====

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### NOTES TO FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003 AND FOR THE PERIOD FROM OCTOBER 30, 2002 (INCEPTION) TO DECEMBER 31, 2004

#### NOTE F - NOTES PAYABLE

Notes payable at December 31, 2004 consists of the following:

	2004
	-----
Convertible note payable, interest at 8% per annum, due in August 2004; Noteholder has the option, with the consent of the Company, to convert unpaid note principal together with accrued and unpaid interest to the Company's common stock at a price equal to \$.835 per share, under certain terms and conditions. In addition, the Company granted the noteholder a warrant to acquire 26,938 shares of the Company's common stock at a price equal to \$0.835 per share. The Company is in default under this note agreement.	\$ 10,000
Less: current portion	(10,000)
	-----
	\$ --
	=====

At December 31, 2003, the Company had outstanding 17 notes payable in the aggregate amount of \$713,171. During the twelve months ended December 31, 2004, the Company entered into 14 other note agreements in the aggregate amount of \$575,100. The Company repaid principal in the amount of \$572,600 under these notes, and converted principal in the amount of \$638,500 plus accrued interest of \$57,091 into 7,445,062 shares of common stock. Two of these notes in the aggregate amount of \$35,000 plus accrued interest of \$1,885 were forgiven for consideration of \$100 during the twelve months ended December 31, 2004.

#### NOTE G - CAPITAL STOCK

The Company is authorized to issue 10,000,000 shares of preferred stock, par value \$0.001 per share. No shares of preferred stock have been issued as of December 31, 2004. The company has authorized 100,000,000 shares of common stock, with a par value of \$.001 per share. In July, 2003 a one for twenty reverse stock split of the Company's common stock was effected. On April 6, 2004, the Company effected a 2 for 1 forward split of its common stock. Total authorized shares and par value remain the unchanged. Accordingly, the effect of the reverse and subsequent forward split has been presented in the accompanying financial statement and footnote disclosures. As of December 31, 2004, the Company has 62,423,388 shares of common stock issued and outstanding.

During the period ended December 31, 2002, the Company issued an aggregate of 1,459,188 shares of common stock to employees and consultants for services in the amount of \$ 9,782. All valuations of common stock issued for services were based upon the value of the services rendered, which did not differ materially from the fair value of the Company's common stock during the period the services were rendered. In addition, the Company issued 16,612,276 shares of common stock to its founders in exchange for a proprietary license charged to operations, valued at \$ 9,250 (see Note C) . The Company also issued an aggregate of 185,578 shares of common stock in exchange for \$ 31,001, net of costs and fees.

During the year ended December 31, 2003, the Company issued an aggregate of 267,594 shares of common stock to consultants for services in the amount of \$37,280. All valuations of common stock issued for services were based upon the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

value of the services rendered, which did not differ materially from the fair value of the Company's common stock during the period the services were rendered. In addition, the Company issued 2,155,104 shares of common stock in exchange for \$ 300,000 of previously incurred debt. The Company also issued an aggregate of 383,430 shares of common stock in exchange for \$ 65,000 net of

F-18

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

### NOTE G - CAPITAL STOCK (CONTINUED)

costs and fees. In July, 2003, the Company issued 2,368,130 in connection with the Company's acquisition and merger with GPN Network, Inc. (see Note A.)

During the year ended December 31, 2004, the Company issued an aggregate of 5,481,280 shares of common stock to consultants for services in the amount of \$2,877,872. All valuations of common stock issued for services were based upon the value of the services rendered, which did not differ materially from the fair value of the Company's common stock during the period the services were rendered. In addition, the Company issued 300,000 shares of common stock as with a fair value of \$36,000 as interest on a note payable. In addition, in conjunction with a private placement of stock (see below), the Company issued 6,855,062 shares of common stock in exchange for \$ 630,591 of previously incurred debt and accrued interest. In addition, the Company issued 590,000 shares of common stock in exchange for \$65,000 of previously issued debt. Total debt exchanged for stock during the year ended December 31, 2004 was \$695,591 of debt and interest for 7,745,062 shares of common stock. The Company also sold an aggregate of 18,160,000 shares of common stock in exchange for \$ 1,971,045 cash, net of costs and fees. The Company also sold 8,000 shares of common stock for \$1,200. The Company also issued an aggregate of 4,900,000 shares of common stock to its investment bankers as fees. The Company also issued 1,257,746 shares of common stock in settlement of \$157,219 of accounts payable. In addition, the Company issued an aggregate 1,440,000 shares of common stock to an officer and a director in satisfaction \$180,000 of liabilities.

### PRIVATE PLACEMENT OF COMMON STOCK

-----

In October 2004, the Company completed a private placement of its common stock (the "Private Placement") whereby the Company sold an aggregate of \$2,450,000 worth of units (each a "Unit" and collectively, the "Units") to accredited investors (as defined by Rule 501 under the Securities Act of 1933, as amended) (the transaction is referred to herein as the "Private Placement"). The Company received proceeds of \$1,971,845 after costs of the issuance of \$298,155. Included in the \$2,450,000 sale was conversion of \$180,000 of accrued salary and consulting fees due to an officer and an director of the Company. The number of shares of common stock issued pursuant to the Private Placement was 19,600,000, along with warrants to purchase an additional 9,080,000 shares, plus warrants to purchase an additional 720,000 shares issued to the officer and director. The Company also issued an additional 4,900,000 shares of common stock to its

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

investment banker as commission. The investment bankers did not acquire any warrants pursuant to this transaction.

Pursuant to the terms of the Private Placement, each Unit was sold for \$10,000 (the "Unit Price") and consisted of the following:

(a) a number of shares (the "Shares") of common stock of the Registrant, par value \$0.001 per share (the "Common Stock"), determined by dividing: (i) the Unit Price by (ii) \$0.125; and

(b) a warrant (each a "Warrant" and collectively, the "Warrants") to purchase, at any time prior to the fifth (5th) anniversary following the date of issuance of the Warrant, a number of shares of Common Stock equal to fifty percent (50%) of the number of Shares included within the Unit, at a price equal to fifty cents (\$0.50) per share of Common Stock. A form of the Warrant is attached hereto as Exhibit 4.1.

In consideration of the investment, the Company granted to each investor certain registration rights and anti-dilution rights. The Company is obligated to file a registration statement for the shares of common stock issued in the private placement and shares of common stock underlying the warrants issued in the private placement within 30 days of the final closing date of October 26, 2004, or November 25, 2004. The Company is also obligated to effectuate the registration statement within 90 days of the final closing date of October 26, 2004, or January 24, 2005. Failure to meet either of these deadlines results in the Company subject to a penalty of a 2% increase in the number of shares to be registered, or 461,200 shares and warrants to purchase an additional 181,600 shares, for every 30 day period beyond the deadline date. The Company filed a registration statement on November 24, 2004. However, at March 7, 2005, the registration statement has not yet been deemed effective by the Securities and Exchange Commission. Accordingly, at April 3, 2005, the Company has accrued a penalty of two 30-day periods, or 922,400 shares and warrants to purchase an additional 363,200 shares. If the Company fails to complete a registration by April 24, 2005, an additional penalty of 461,200 shares and warrants to purchase 181,600 shares will be incurred.

F-19

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

NOTE G - CAPITAL STOCK

Private Placement of Common Stock (continued)

-----  
Also in October 2004, the Company converted certain notes payable with an aggregate principal amount of \$573,500 plus accrued interest of \$57,091 for a total of \$630,328 into Units with terms identical to those provided to investors in the Private Placement. The number of shares of common stock issued via these note conversions was 6,855,062 along with warrants to purchase an additional 3,427,531 shares (see Note H).

Also in October 2004, the Company entered into a settlement agreements with

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

certain creditors whereby for full and complete satisfaction of claims totaling an aggregate of \$157,219 the Company issued Units with terms identical to those provided to investors in the Private Placement. The number of shares of common stock issued via these creditor conversions was 1,257,746, along with warrants to purchase an additional 628,873 shares.

### NOTE H - STOCK OPTIONS AND WARRANTS

#### Employee Stock Options

-----

The Company has adopted the 2003 Stock Option, Deferred Stock and Restricted Stock Plan (the "Plan") which authorizes the Board of Directors in accordance with the terms of the Plan, among other things, to grant incentive stock options, as defined by Section 422(b) of the Internal Revenue Code, nonstatutory stock options (collectively, the "Stock Options") and awards of restricted stock and deferred stock and to sell shares of common stock of the Company ("Common Stock") pursuant to the exercise of such stock options for up to an aggregate of 6,465,316 shares. The options will have a term not to exceed ten years from the date of the grant. There have been no options granted under this Plan.

Through December 31, 2002, GPN had granted pre-merger stock options to certain employees and consultants which are exercisable over various periods through March 2010. These stock options are currently held by the Company outside of the Plan.

The following table summarizes the changes in options outstanding and the related prices for the shares of the Company's common stock issued to employees of the Company under a non-qualified employee stock option plan.

	Options Outstanding		Options Exercisable		
Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$25.00	63,212	5.25	\$25.00	63,212	\$

Transactions involving stock options issued to employees are summarized as follows:

F-20

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
 (A DEVELOPMENT STAGE COMPANY)  
 NOTES TO FINANCIAL STATEMENTS  
 FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
 AND FOR THE PERIOD FROM OCTOBER 30, 2002  
 (INCEPTION) TO DECEMBER 31, 2004

NOTE H - STOCK OPTIONS AND WARRANTS (CONTINUED)

EMPLOYEE STOCK OPTIONS (CONTINUED)

-----

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

	Number of Shares	Weighted Average Price Per Share
-----		
Outstanding at January 1, 2003	63,212	\$25.00
Granted (as restated)	--	
Exercised	--	
Canceled or expired	--	
-----		
Outstanding at December 31, 2003	63,212	25.00
Granted	--	
Exercised	--	
Canceled or expired	--	
-----		
Outstanding at December 31, 2004	63,212	\$25.00
=====		

The Company did not issue options to employees during the years ended December 31, 2003 and 2004.

Warrants

-----

The following table summarizes the changes in warrants outstanding and the related prices for the shares of the Company's common stock issued to non-employees of the Company. These warrants were granted in lieu of cash compensation for services performed or financing expenses and in connection with placement of convertible debentures.

Warrants Outstanding			Warrants Exercisable		
-----					
Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighed Average Exercise Price	Number Exercisable	Weighted Av Remaini Contractua (Year
-----					
\$0.05-0.10	480,698	4.60	\$0.05-0.10	480,698	4.
0.125-0.70	778,511	4.46	0.125-0.70	778,511	4.
0.25-0.56	15,498,021	4.68	0.25-0.56	15,498,021	4.
1.00	741,400	2.98	1.00	741,400	2.
2.00	167,580	4.51	2.00	167,580	4.
-----			-----		
	17,666,210	4.59		17,666,210	4.
=====			=====		

Transactions involving warrants are summarized as follows:

	Number of Shares (post-split)	Weighted Average Price Per Share (POST-SPLIT)
-----		
Outstanding at January 1, 2003	26,938	\$ .84
Granted	805,572	.89
Exercised	--	
Canceled or expired	--	
-----		
Outstanding at December 31, 2003	832,510	.89
Granted	16,833,699	.47

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Exercised	--	--
Canceled or expired	--	--
Outstanding at December 31, 2004	17,666,210	\$ .49
	=====	=====

F-21

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

NOTE H - STOCK OPTIONS AND WARRANTS (CONTINUED)

Warrants (continued)

-----  
The estimated value of the compensatory warrants granted to non-employees in exchange for services and financing expenses was determined using the Black-Scholes pricing model and the following assumptions:

	2004	2003
	----	----
Significant assumptions (weighted-average):		
Risk-free interest rate at grant date	3.75%	2.375%
Expected stock price volatility	163% to 262%	312%
Expected dividend payout	--	--
Expected option life-years (a)	5	5

(a) The expected option life is based on contractual expiration dates.

The amount of the expense charged to operations for compensatory warrants granted in exchange for services was \$406,571 and \$85,861 during the years ended December 31, 2004 and 2003, respectively.

The Company also capitalized financing costs of \$184,814 and \$397,394 for warrants granted in connection with placement of convertible debentures for the years ended December 31, 2004 and 2003, respectively. The unamortized financing costs were written off as of December 31, 2003 commensurate with the conversion of the debentures.

At December 31, 2002, the Company had outstanding warrants to purchase 26,939 shares (post-split) of common stock at \$0.835 per share (post-split).

During the twelve months ended December 31, 2003, the Company issued warrants to purchase 169,572 shares (post-split) of common stock at prices ranging from \$0.125 to \$1.00 per share (post-split) to eight service providers. The Company valued the warrants using the Black-Scholes calculation model, and the warrants were deemed to have a combined value of \$85,860. This amount was charged to expense on the Company's financial statements for the twelve months ending December 31, 2003.

In October 2003, pursuant to the Amended Note agreements, the Company issued the Amended Note Warrants to purchase 245,000 shares (post-split) of its common stock at a price of \$1.00 per share (post-split). The Company valued the Amended Note Warrants using the Black-Scholes calculation model, and the warrants were

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

deemed to have a combined value of \$189,937. This amount was recorded as a discount to the Amended Notes and an addition to paid-in capital, and was charged to expense over the term of the notes, or 180 days. During the twelve months ended December 31, 2003, the Company recognized \$84,169 of expense in relation to these warrants. During the twelve months ended December 31, 2004, the remaining \$105,768 was charged to operations.

In October, November, and December 2003, pursuant to the Fourth Quarter Note agreements, the Company issued the Fourth Quarter Company Warrants to purchase 391,000 shares (post-split) of its common stock at a price of \$1.00 per share (post-split).

As an additional incentive to investors in the Secured Convertible Promissory Notes, the Company provided five-year warrants (the "Secured Note Warrants") to purchase that number of shares of common stock equal to one-half the initial principal amount of the Secured Convertible Promissory Notes. For example, an investor who purchased a \$10,000 Secured Convertible Promissory Note would receive a warrant to purchase 8,979 shares (post-split) of common stock. The exercise price of the Secured Note Warrants is equal to 60% of the price per share paid by investors in a future equity financing (the "Reorganization Financing"). The Secured Note Warrants are not considered granted until the completion of the Reorganization Financing. In accordance with EITF 00-27, because the Reorganization Financing had not occurred at December 31, 2003, the Company ascribed no value to the Secured Note Warrants at December 31, 2003. At the time of the first closing of the Private Placement in October 2004, warrants to purchase a total of 444,490 shares (post-split) of common stock at \$0.075 per share (post-split) were issued under the Secured Note Warrants. The value of these warrants was computed utilizing the Black-Scholes valuation model, and the total value of these warrants, or \$112,562 was charged to operations during the twelve months ended December 31, 2004.

F-22

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

NOTE H - STOCK OPTIONS AND WARRANTS (CONTINUED)

Warrants (continued)

-----  
The Company has outstanding warrants to purchase 250,000 shares of common stock at \$0.30 per share which were issued in 2002 by its predecessor company GPN Network.

In April through June 2004, the Company issued warrants to purchase 32,500 shares (post-split) at price ranging from \$0.25 to \$2.00 to consultants for services performed. The Company valued these warrants using the Black-Scholes valuation model, and charged the amount of \$8,318 to operations during the twelve months ended December 31, 2004.

In May 2004, the Company issued a warrant to its president and a warrant to a director, each warrant to purchase 500,000 shares (post-split) of common stock at a price of \$0.25 per share (post-split). The warrants were issued as

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

performance bonuses. The Company valued these warrants using the Black-Scholes model, and charged the amount of \$134,604 for each warrant, or a total of \$269,208, to operations during the twelve months ended December 31, 2004.

In October 2004, the Company issued a warrant to its president to purchase 448,980 shares (post-split) at a price of \$0.125 per share (post-split) as a performance bonus for achieving certain objectives. The Company valued this warrant using the Black-Scholes valuation model, and charged the amount of \$112,697 to operations during the twelve months ended December 31, 2004.

In November and December 2004, the Company issued a warrant to purchase 50,000 shares (post-split) of its common stock at a price of \$0.125 per share (post-split) and a warrant to purchase 10,000 shares (post-split) of its common stock at a price of \$0.075 per share (post-split) to two members of its advisory boards. The Company valued these warrants using the Black-Scholes valuation model, and charged the aggregate amount of \$16,348 to operations during the twelve months ended December 31, 2004.

In October 2004, the Company issued warrants to purchase 9,080,000 shares (post-split) of its common stock at a price of \$0.50 per share (post-split) to the investors in its private placement of equity securities. The Company allocated \$607,922 of the total proceeds of \$1,971,845 to the warrants, and charged this amount to additional paid-in capital during the twelve months ended December 31, 2004.

In October 2004, the Company issued warrants to purchase an aggregate of 720,000 shares (post-split) of its common stock at a price of \$0.50 per share (post-split) to the an officer and a director for converting a total of \$180,000 of amounts owed to these individuals for accrued salary and accrued consulting fees. The Company allocated \$56,067 of the total proceeds of \$180,000 to the warrants, and charged this amount to additional paid-in capital during the twelve months ended December 31, 2004.

In October 2004, the Company issued warrants to purchase 3,347,076 shares (post-split) of its common stock at a price of \$0.50 per share (post-split) to the convertible note holders who invested its private placement of equity securities via conversion of their notes. The Company allocated \$191,111 of the total amount converted of \$615,328 to the warrants, and charged this amount to additional paid-in capital during the twelve months ended December 31, 2004.

In October 2004, the Company issued warrants to purchase 628,873 shares (post-split) of its common stock at a price of \$0.50 per share (post-split) to the vendors who invested in its private placement of equity securities via conversion of amounts owed to them by the Company. The Company allocated \$48,579 of the total amount converted of \$157,219 to the warrants, and charged this amount to additional paid-in capital during the twelve months ended December 31, 2004.

In April through June 2004, the Company issued warrants to purchase 77,500 shares (post-split) of its common stock at prices ranging from \$0.25 to \$2.00

F-23

per share (post-split) to certain investors as additional incentive under notes payable agreements. The Company valued these warrants using the Black-Scholes model, and charged the amount of \$17,915 to additional paid-in capital during the twelve months ended December 31, 2004.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

In July and August 2004, the Company issued warrants to purchase 744,280 shares (post-split) of its common stock at prices ranging from \$0.05 to \$2.00 per share (post-split) to certain investors as additional incentive under notes payable agreements. The Company valued these warrants using the Black-Scholes model, and charged the amount of \$72,252 to additional paid-in capital during the twelve months ended December 31, 2004.

### NOTE I - COMMITMENTS AND CONTINGENCIES

#### Office Leases

-----

The Company lease office space under a short term agreement, expiring in September 2005. Rent expense amounted to \$31,369 for the years ended December 31, 2003, \$41,051 for the year ended December 31, 2004, and \$75,154 for the period from October 30, 2002 (inception) through December 31, 2004.

F-24

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

### NOTE I - COMMITMENTS AND CONTINGENCIES (CONTINUED)

#### EMPLOYMENT AND CONSULTING AGREEMENTS

-----

The Company has employment agreements with all of its President and Chief Executive Officer. In addition to salary and benefit provisions, the agreements include non-disclosure and confidentiality provisions for the protection of the Company's proprietary information.

The Company has consulting agreements with outside contractors to provide marketing and financial advisory services. The Agreements are generally for a term of 12 months from inception and renewable automatically from year to year unless either the Company or Consultant terminates such engagement by written notice.

The Company has a three-year contract for the period January 2003 to January 2006 with its advertising and design agency. This contract stipulates that there will be a minimum guaranteed annual fee for consultation, planning, creative and account service of \$100,000 for each of the three years of the contract if termination of the contract is the result of a merger or acquisition of the Company. The contract was not terminated upon the GPN Merger Agreement.

#### LITIGATION

-----

On December 13, 2001, service of process was effectuated upon GPN with regard to a fee agreement between GPN and Silver and Deboskey, a Professional Corporation located in Denver, Colorado. On November 27, 2002, judgment was entered in favor of Silver & Deboskey in the amount of \$28,091 and the amount of the judgment is included in accounts payable at December 31, 2004.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

The Company is subject to other legal proceedings and claims which arise in the ordinary course of its business. Although occasional adverse decisions or settlements may occur, the Company believes that the final disposition of such matters should not have a material adverse effect on its financial position, results of operations or liquidity.

### OBLIGATION TO REGISTER SHARES

-----

In October 2004, the Company sold shares of its common stock to investors in a private placement transaction. The Company is obligated to file a registration statement for the shares of common stock issued in the private placement and shares of common stock underlying the warrants issued in the private placement within 30 days of the final closing date of October 26, 2004, or November 25, 2004. The Company is also obligated to effectuate the registration statement within 90 days of the final closing date of October 26, 2004, or January 24, 2005. Failure to meet either of these deadlines results in the Company subject to a penalty of a 2% increase in the number of shares to be registered, or 461,200 shares and warrants to purchase an additional 181,600 shares, for every 30 day period beyond the deadline date. The Company filed a registration statement on November 24, 2004. However, at March 7, 2005, the registration statement has not yet been deemed effective by the Securities and Exchange Commission. Accordingly, at April 3, 2005, the Company has accrued a penalty of two 30-day periods, or 922,400 shares and warrants to purchase an additional 363,200 shares. If the Company fails to complete a registration by April 24, 2005, an additional penalty of 461,200 shares and warrants to purchase 181,600 shares will be incurred.

### NOTE J - INCOME TAXES

The Company has adopted Financial Accounting Standard No. 109 which requires the recognition of deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statement or tax returns. Under this method, deferred tax liabilities and assets are determined based on the difference between financial statements and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Temporary

F-25

IR BIOSCIENCES HOLDINGS, INC. AND SUBSIDIARY  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003  
AND FOR THE PERIOD FROM OCTOBER 30, 2002  
(INCEPTION) TO DECEMBER 31, 2004

### NOTE J - INCOME TAXES (CONTINUED)

differences between taxable income reported for financial reporting purposes and income tax purposes are insignificant.

For income tax reporting purposes, the Company's aggregate unused net operating losses approximate \$7,200,000 which expire through 2023, subject to limitations of Section 382 of the Internal Revenue Code, as amended. The deferred tax asset related to the carryforward is approximately \$2,400,000. The Company has provided a valuation reserve against the full amount of the net operating loss benefit, because in the opinion of management based upon the earning history of

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

the Company, it is more likely than not that the benefits will not be realized.

Components of deferred tax assets as of December 31, 2004 are as follows:

Non Current:

Net operating loss carryforward	\$ 2,400,000
Valuation allowance	(2,400,000)
	-----
Net deferred tax asset	\$ --
	=====

NOTE K - LOSSES PER COMMON SHARE

The following table presents the computations of basic and dilutive loss per share:

	2004	2003	For the Period From October 30, 2002 (Date of Inception) Through December 31, 2002
	-----	-----	-----
Net loss available to common shareholders	\$ (5,305,407)	\$ (1,856,702)	\$ (7,208,027)
	=====	=====	=====
Basic and fully diluted loss per share	\$ (0.16)	\$ (0.09)	\$ (0.28)
	=====	=====	=====
Weighted average common shares outstanding	33,510,168	21,317,292	25,698,261
	=====	=====	=====

Net loss per share is based upon the weighted average of shares of common stock outstanding. In June, 2003 a .897960946 for one (1) reverse stock split of the Company's common stock was effected (See Note A). Accordingly, all historical weighted average share and per share amounts have been restated to reflect the reverse stock split.

On April 6, 2004, the Company effected a 2 for 1 forward split of its common stock. Accordingly, the effect of the forward split has been presented in the accompanying financial statement and footnote disclosures.

NOTE L - SUBSEQUENT EVENTS

In January, 2005, the Company made a tender offer to temporarily reduce the exercise price of certain warrants issued in October, 2004 from \$0.50 to \$0.20 per share. The tender offer expired on March 4, 2005. We accepted for exercise a total of 6,600,778 warrants validly tendered and not withdrawn pursuant to the terms of the tender offer, which represents approximately 48% of the aggregate 13,780,449 warrants that were available in the tender offer. The Company raised net proceeds of \$1,211,000 via the tender offer.

F-26

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

	March 31, 2005
	-----
Assets	
Current assets	
Cash and cash equivalents	\$ 1,600,000
Prepaid services and other current assets	7,085
	-----
Total current assets	1,607,085
Licensed proprietary rights, net	7,088
Furniture and equipment, net	6,330
	-----
Total assets	\$ 1,620,503
	=====
Liabilities and Stockholders' Equity	
Current liabilities	
Accounts payable and accrued liabilities	341,210
Current portion of notes payable, net of discount	66,970
	-----
Total current liabilities	408,180
Commitments and Contingencies	
Stockholders' Equity	
Preferred stock, 0.001 par value; 10,000,000 shares authorized, no shares issued and outstanding	--
Common stock, \$0.001 par value; 100,000,000 shares authorized; 69,024,166 shares issued and outstanding	69,024
Additional paid-in capital	9,244,248
Deferred compensation	(53,425)
Deficit Accumulated during the Development Stage	(8,047,524)
	-----
Total stockholder's equity	1,212,323
	-----
Total liabilities and stockholders' equity	\$ 1,620,503
	=====

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-27

IR BioSciences Holdings, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Operations For the three  
months ended March 31, 2005 and 2004,  
And for the period of inception  
(October 30, 2002) to March 31, 2005  
(Unaudited)

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

	For the Three Months Ended March 31, 2005 -----	For the Three Months Ended March 31, 2004 -----	Cumulative from Inception (October 30, 2002) to March 31, 2005 -----
Operating expenses:			
Selling, general and administrative expenses	\$ 838,520	\$ 931,074	\$ 6,428,404
Merger fees and costs	0	0	350,000
Financing cost	0	0	90,000
	-----	-----	-----
Total operating expenses	838,520	931,074	6,868,404
Operating loss	(838,520)	(931,074)	(6,868,404)
Other expense:			
Interest expense	977	304,078	1,179,120
	-----	-----	-----
Total other expense	977	304,078	1,179,120
Loss before income taxes	(839,497)	(1,235,152)	(8,047,524)
Provision for income taxes	--	--	--
	-----	-----	-----
Net loss	\$ (839,497)	\$ (1,235,152)	\$ (8,047,524)
	=====	=====	=====
Net loss per share - basic and diluted	\$ (0.01)	\$ (0.05)	\$ (0.27)
	=====	=====	=====
Weighted average shares outstanding - basic and diluted	62,863,440	24,845,493	29,486,331
	=====	=====	=====

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-28

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Stockholders' Equity For the  
period from inception (October 30, 2002) to March 31, 2005  
(unaudited)

	Common Stock		Additional	Defer
	Shares	Amount	Paid-In Capital	Compens
	-----	-----	-----	-----
Balance at October 30, 2002 (date of inception)	--	\$ --	\$ --	--

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Shares of common stock issued at \$0.0006 per share to founders for license of proprietary right in December 2002	16,612,276	16,612	(7,362)
Shares of common stock issued at \$0.0006 per share to founders for services rendered in December 2002	1,405,310	1,405	(623)
Shares of common stock issued at \$0.1671 per share to consultants for services rendered in December 2002	53,878	54	8,946
Sale of common stock for cash at \$0.1671 per share in December 2002	185,578	186	30,815
Net loss for the period from inception (October 30, 2002) to December 31, 2002	--	--	--
Balance at December 31, 2002 (reflective of stock splits)	18,257,042	18,257	31,776
Shares granted to consultants at \$0.1392 per share for services rendered in January 2003	98,776	99	13,651
Sale of shares of common stock for cash at \$0.1517 per share in January 2003	329,552	330	49,670
Shares granted to consultants at \$0.1392 per share for services rendered in March 2003	154,450	154	21,346
Conversion of notes payable to common stock at \$0.1392 per share in April 2003	1,436,736	1,437	198,563
Shares granted to consultants at \$0.1413 per share for services rendered in April 2003	14,368	14	2,016
Sale of shares of common stock for cash at \$0.2784 per share in May 2003	17,960	18	4,982
Sales of shares of common stock for cash at \$0.2784 per share in June 2003	35,918	36	9,964
Conversion of notes payable to common stock at \$0.1392 per share in June 2003	718,368	718	99,282
Beneficial conversion feature associated with notes issued in June 2003	--	--	60,560
Amortization of deferred compensation	--	--	--
Costs of GPN Merger in July 2003	2,368,130	2,368	(123,168)
Value of warrants issued with extended notes payable in October 2003	--	--	189,937
Value of Company warrants issued in conjunction with fourth quarter notes payable issued October through December 2003	--	--	207,457
Value of warrants contributed by founders in conjunction with fourth quarter notes payable issued October through December 2003	--	--	183,543

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Value of warrants issued for services in October through December 2003	--	--	85,861
Net loss for the twelve month period ended December 31, 2003	--	--	--
Balance at December 31, 2003	23,431,300	23,431	1,035,441

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-29

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Stockholders' Equity For the  
period from inception (October 30, 2002) to March 31, 2005  
(unaudited) (continued)

	Common Stock		Additional	Deferr
	Shares	Amount	Paid-In Capital	Compensa
Shares granted at \$1.00 per share pursuant to the Senior Note Agreement in January 2004	600,000	600	599,400	(600,0
Shares issued at \$1.00 per share to a consultant for services rendered in January 2004	800,000	800	799,200	(800,0
Shares issued to a consultant at \$0.62 per share for services rendered in February 2004	40,000	40	24,760	(24,8
Shares issued to a consultant at \$0.40 per share for services rendered in March 2004	1,051,600	1,051	419,589	(420,6
Shares issued to a consultant at \$0.50 per share for services rendered in March 2004	500,000	500	249,500	(250,0
Shares sold for cash at \$0.15 per share in March, 2004	8,000	8	1,192	
Shares issued at \$0.50 per share to consultants for services rendered in March 2004	20,000	20	9,980	
Shares issued to a consultant at \$0.40 per share for services rendered in March 2004	2,000	2	798	
Shares issued to consultants at \$0.32 per share for services rendered in March 2004	91,600	92	29,220	

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Shares to be issued to consultant at \$0.41 per share in April 2004 for services to be rendered through March 2005	--	--	--	(82,0
Shares granted pursuant to the New Senior Note Agreement in April 2004	600,000	600	149,400	(150,0
Shares issued to officer at \$0.32 per share for services rendered in April 2004	200,000	200	63,800	
Conversion of note payable to common stock at \$0.10 per share in May 2004	350,000	350	34,650	
Beneficial Conversion Feature associated with note payable in May 2004	--	--	35,000	
Issuance of warrants to officers and founder for services rendered in May 2004	--	--	269,208	
Shares to a consultant at \$0.20 per share as a due dilligence fee in May 2004	125,000	125	24,875	
Shares issued to a consultant at \$1.00 per share for services to be rendered over twelve months beginning May 2004	500,000	500	499,500	(500,0
Benefial Conversion Feature associated with notes payable issued in June 2004	--	--	3,000	
Issuance of warrants to note holders in April, May, and June 2004	--	--	17,915	
Issuance of warrants to employees and consultants for services rendered in April through June 2004	--	--	8,318	
Shares issued in July to a consultant at \$0.10 for services to be rendered through July 2005	250,000	250	24,750	(25,0

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-30

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Stockholders' Equity For the  
period from inception (October 30, 2002) to March 31, 2005  
(unaudited) (continued)

Common Stock		Additional Paid-In Capital	Deferre Compensa
Shares	Amount		
-----	-----	-----	-----

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Shares issued to a consultant in July and September at \$0.41 per share for services to be rendered through April 2005	200,000	200	81,800	
Shares issued to a consultant in September at \$0.12 to \$0.22 for services rendered through September 2004	127,276	127	16,782	
Shares issued in July to September 2004 as interest on note payable	300,000	300	35,700	
Issuance of warrants with notes payable in July and August 2004	--	--	72,252	
Accrued deferred compensation in August 2004 to a consultant for 100,000 shares at \$0.10 per share, committed but unissued	--	--	--	(10,
Shares issued in August 2004 at \$0.14 to a consultant for services to be performed through October 2004	100,000	100	13,900	(14,
Shares issued in August 2004 at \$0.125 per share for conversion of \$30,000 demand loan	240,000	240	29,760	
Shares issued in August 2004 at \$0.16 per share to a consultant for services provided	125,000	125	19,875	
Shares issued to employees at \$0.16 to \$0.25 per share	48,804	49	8,335	
Commitment to issue 100,000 shares of stock to a consultant at \$0.23 per share for services to be provided through September 2005	--	--	--	(23,
Sale of stock for cash in October at \$0.125 per share, net of costs of \$298,155	18,160,000	18,160	1,345,763	
Value of warrants issued with sale of common stock in October, net of costs	--	--	607,922	
Issuance of warrant to officer in October	--	--	112,697	
Issuance of stock to investment bankers in October 2004 for commissions earned	4,900,000	4,900	(4,900)	
Conversion of accounts payable to stock in October at \$0.125 per share	1,257,746	1,258	107,382	
Value of warrants issued with accounts payable conversions	--	--	48,579	
Conversion of demand loan to stock in October at \$0.11 per share	93,300	93	10,170	
Forgiveness of notes payable in October 2004	--	--	36,785	
Issuance of stock to officer and director at \$0.125 per share in October for conversion of liability	1,440,000	1,440	122,493	

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Value of warrants issued with officer and director conversion of liabilities	--	--	56,067
Conversion of debt and accrued interest to common stock at \$0.075 to \$0.125 per share	6,703,151	6,703	417,514
Value of warrants issued with conversion of debt	--	--	191,111
Conversion of note payable in October into common stock at \$0.075 per share	67,613	68	4,932

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-31

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Stockholders' Equity For the  
period from inception (October 30, 2002) to March 31, 2005  
(unaudited) (continued)

	Common Stock		Additional Paid-In Capital	Deferr Compensa
	Shares	Amount		
Issuance of warrants to note holders in October 2004	--	--	112,562	
Value of shares issued to CFO as compensation	100,000	100	34,900	
Value of warrants issued to members of advisory committees in in November and December	--	--	16,348	
Beneficial conversion feature associated with notes payable	--	--	124,709	
Shares issued in error to be cancelled	(9,002)	(9)	9	
Amortization of deferred compensation through December 31, 2004	--	--	--	2,729
Loss for the twelve months ended December 31, 2004	--	--	--	
Balance at December 31, 2004	62,423,388	62,423	7,922,943	(169)
Sale of shares of common stock for cash at \$0.20 per share in March 2005 for warrant exercise, net of costs	6,600,778	6,601	1,184,256	

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Value of warrants issued to members of advisory committees				137,049
Accrued Deferred compensation In February, 2005 to a consultant For 50,000 shares at \$0.65 per share. Committed but unissued.				(32,5
Amortization of deferred compensation for three months ended March 31, 2005				149,0
Loss for the three months ended March 31, 2005				
	-----	-----	-----	-----
	69,024,166	\$ 69,024	\$ 9,244,248	\$ (53,4
	=====	=====	=====	=====

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-32

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Cash Flows For the three  
months ended March 31, 2005 and  
2004, And for the period of inception (October 30, 2002)  
to March 31, 2005  
(Unaudited)

	For the Three Months Ended March 31, 2005	For the Three Months Ended March 31, 2004	Cumulative from Incept (October 30, 2002) to March 31, 2005
	-----	-----	-----
Cash flows from operating activities:			
Net loss	\$ (839,497)	\$ (1,235,152)	\$ (8,047,52
ADJUSTMENTS TO RECONCILE NET LOSS TO NET CASH USED IN OPERATING ACTIVITIES:			
Non-cash compensation	299,943	688,027	3,699,94
Interest expense	977	953	153,37
Amortization of discount on notes payable	0	287,241	1,006,93
Depreciation and amortization	402	11,651	26,41
Changes in operating assets and liabilities:	--		
Prepaid services and other assets	(372)	23,543	(7,08
Accounts payable and accrued expenses	(12,424)	89,558	542,61
	-----	-----	-----
NET CASH USED IN OPERATING ACTIVITIES	(550,971)	(134,179)	(2,625,31

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Cash flows from investing activities:

Acquisition of property and equipment	0	0	(8,08
	-----	-----	-----
NET CASH USED IN INVESTING ACTIVITIES	0	0	(8,08

Cash flows from financing activities:

Proceeds from notes payable	--	150,000	1,233,50
Principal payments on notes payable and demand loans	(10,000)	(15,000)	(260,00
Shares of stock sold for cash	1,190,857	1,200	3,259,90
Officer repayment of amounts paid on his behalf	19,880		
Cash paid on behalf of officer	(19,880)		
Cash paid on amount due to officer	--		
	-----	-----	-----
NET CASH PROVIDED BY FINANCING ACTIVITIES	1,180,857	136,200	4,233,40
Net increase in cash and cash equivalents	629,886	2,021	1,600,00
Cash and cash equivalents at beginning of period	970,114	10,534	-
	-----	-----	-----
Cash and cash equivalents at end of period	\$ 1,600,000	\$ 12,555	\$ 1,600,00
	=====	=====	=====

Supplemental disclosure of cash flow information:

Cash paid during the period for:

Interest:	\$ --	\$ 953	\$ 41,84
	=====	=====	=====
Taxes:	\$ --	\$ --	\$ -
	=====	=====	=====

The accompanying notes are an integral part of these condensed consolidated financial statements.

F-33

IR Biosciences Holding, Inc. and Subsidiary  
(A Development Stage Company)  
Condensed Consolidated Statement of Cash Flows For the three  
months ended March 31, 2005 and  
2004, And for the period of inception (October 30, 2002)  
to March 31, 2005  
(Unaudited)

For the Three Months Ended March 31, 2005	For the Three Months Ended March 31, 2004	Cumulati from Incep (October 2002) t March 31,
--	--	--

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

	-----	-----	-----
Non-cash investing and financing activities:			
Acquisition and capital restructure:	\$	--	\$
Assets acquired		--	--
Liabilities assumed		--	(120,7
Common stock retained		--	(2.3
Adjustment to additional paid-in capital		--	123,1
Organization costs		--	350,0
	-----	-----	-----
Total consideration paid	\$	--	\$ 350,0
	=====	=====	=====
Common stock issued in exchange for proprietary rights	\$	--	\$ 9,2
	=====	=====	=====
Common stock issued in exchange for services	\$	--	\$ 2,878,006
	=====	=====	\$ 2,915,2
Common stock issued in exchange for previously incurred debt and accrued interest	\$	--	\$ 695,591
	=====	=====	\$ 995,5
Common stock issued in exchange as interest	\$	--	\$ 36,000
	=====	=====	\$ 36,0
Amortization of beneficial conversion feature	\$	--	\$ 162,709
	=====	=====	\$ 223,2
Stock options and warrants issued in exchange for services rendered	\$	137,049	\$ 406,571
	=====	=====	\$ 629,4
Debt and accrued interest forgiveness from note holders	\$	--	\$ 36,785
	=====	=====	\$ 36,8
Common stock issued in satisfaction of accounts payable	\$	--	\$ 157,219
	=====	=====	\$ 157,2
Common stock issued in satisfaction of amounts due to an Officer and a Director	\$	--	\$ 180,000
	=====	=====	\$ 180,0
Deferred compensation to a consultant accrued in March 2005	\$	32,500	\$ --
	=====	=====	\$ 32,5

F-34

IR BIOSCIENCES HOLDINGS, INC.  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS  
March 31, 2005  
(Unaudited)

NOTE 1 - SUMMARY OF ACCOUNTING POLICIES

General

-----

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

The accompanying unaudited condensed financial statements have been prepared in accordance with the instructions to Form 10-QSB, and therefore, do not include all the information necessary for a fair presentation of financial position, results of operations and cash flows in conformity with accounting principles generally accepted in the United States of America for a complete set of financial statements.

In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. The results from operations for the three-month periods ended March 31, 2005 and 2004 are not necessarily indicative of the results that may be expected for the years ended December 31, 2005. The unaudited condensed consolidated financial statements should be read in conjunction with the December 31, 2004 financial statements and footnotes thereto included in the Company's Securities and Exchange Commission Form 10-KSB.

### Business and Basis of Presentation

-----

IR BioSciences Holdings, Inc. ("Company") formerly GPN Network, Inc. ("GPN") is currently a development stage company under the provisions of Statement of Financial Accounting Standards ("SFAS") No. 7. The Company, which was incorporated under the laws of the State of Delaware on October 30, 2002, is a biopharmaceutical company. Through our wholly owned subsidiary, ImmuneRegen BioSciences, Inc., we are engaged in the research and development of health enhancing and potential life saving products. Our product development is focused around Homspera(TM), a proprietary compound that is derived from homeostatic substance P, a naturally occurring peptide. Our focus is on the research and development of products that we believe will treat the suppression of the body's immune system caused by exposure to various forms of radiation, toxic inhalants and viral infectious diseases. Currently, the majority of our efforts are in the research and development of Radilex(TM), a compound derived from Homspera, as a countermeasure to the effects of radiological and nuclear threats. From its inception through the date of these financial statements, the Company has recognized minimal revenues and has incurred significant operating expenses.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, ImmuneRegen BioSciences, Inc. Significant intercompany transactions have been eliminated in consolidation.

### Reclassification

-----

Certain reclassifications have been made to conform to prior periods' data to the current presentation. These reclassifications had no effect on reported losses.

### Stock Based Compensation

-----

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure-an amendment of SFAS 123." This statement amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, this statement amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The Company has chosen to continue to account for stock-based compensation using the intrinsic value method prescribed in APB Opinion No. 25 and related interpretations. Accordingly, compensation expense for stock options

is measured as the excess, if any, of the fair market value of the Company's stock at the date of the grant over the exercise price of the related option. The Company has adopted the annual disclosure provisions of SFAS No. 148 in its financial reports for the year ended December 31, 2002 and for the subsequent periods.

Interim Financial Statements  
-----

The accompanying balance sheet as of March 31, 2005, the statements of operations for the three months ended March 31, 2005 and 2004, and for the period of inception (October 30, 2002) to March 31, 2005, and the statements of cash flows for three months ended March 31, 2005 and 2004, and from the period of inception (October 30, 2002) to March 31, 2005 are unaudited. These unaudited interim financial statements include all adjustments (consisting of normal recurring accruals), which, in the opinion of management, are necessary for a fair presentation of the results of operations for the periods presented. Interim results are not necessarily indicative of the results to be expected for a full year.

Use of Estimates  
-----

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported periods. Actual results could materially differ from those estimates.

Prepaid Services and Other Current Assets  
-----

Prepaid services and other current assets consist of (i) outside services that the Company has paid for in advance in the amount of \$2,525; (ii) salary advance to an employee of \$2,300; and (iii) deposits of \$2,260.

Licensed Proprietary Rights  
-----

The Company has licensed from its founders certain proprietary rights which the Company intends to utilize in the execution of its business plan. These proprietary rights are being amortized over the term of the license agreement, or ten years. The amount amortized during the three months ended March 31, 2005 and 2004 was \$232 during each period.

Furniture and Equipment  
-----

Furniture and equipment are valued at cost. Depreciation and amortization are provided over the estimated useful lives up to seven years using the straight-line method. The estimated service lives of property and equipment are as follows:

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Computer equipment	3 years
Furniture	7 years

The amounts depreciated for the three months ended March 31, 2005 and 2004 were \$170 and 169, respectively. The amount depreciated from the date of inception (October 30, 2002) through March 31, 2005 was \$1,758.

### NOTE 2 - RELATED PARTY TRANSACTIONS

#### Proprietary Rights Agreement

-----

In December 2002, the Company entered into a royalty-free license agreement (the "License Agreement") with its two founders and largest shareholders (the "Licensors"). Under the terms of the License Agreement, the Licensors grant to the Company an exclusive license to use and sublicense certain patents, medical applications, and other technologies developed by the Licensors. The Company's

F-36

obligations under the License Agreement include (i) reasonable efforts to protect any licensed patents or other associated property rights; (ii) reasonable efforts to maintain confidentiality of any proprietary information; (iii) upon the granting by the U. S. Food and Drug Administration to the Company the right to market a product, the Company will maintain a broad form general liability and product liability insurance.

#### Consulting Agreements

-----

On December 16, 2002, the Company entered into consulting agreements (the "Consulting Agreements") with its two founders and chief research scientists (the "Consultants"). The Consulting Agreements were on a month-to-month basis. Under the terms of the Consulting Agreements, the Consultants agreed to place at the disposal of the Company their judgment and expertise in the area of acute lung injury. In consideration for these services, the Company agreed to pay each consultant a non-refundable fee of \$5,000 per month, which shall accrue until such time as the Company raises at least \$2,000,000 in equity or debt financing at which time such accrued amount will become due and payable. Pursuant to the Consulting Agreements, during the period from January 1, 2003 to December 31, 2003, the Company accrued \$120,000 in consulting fees. During the period from January 1, 2004 to December 31, 2004, the Company accrued an additional \$90,000 in consulting fees. The amounts due the Consultants at December 31, 2003 was \$125,000 and was included in accounts payable and accrued expenses.

In October 2004, the Company achieved the threshold amount of \$2,000,000 in equity or debt financing (see Note I). As of October, 2004, the aggregate amounts due the Consultants under the Consulting Agreements was \$215,000.

In October, 2004, one of the Consultants elected to exchange 724,000 shares of the Company's common stock and a warrant to purchase an additional 362,000 (post-split) shares of common stock at an exercise price of \$0.50 (post-split) in exchange for \$90,500 of the \$107,500 of the previously accrued and unpaid fees due him under the Consulting Agreement, and the balance of \$17,000 was paid to the consultant. At December 31, 2004, there is no balance due to the Consultant.

In October 2004, because the remaining Consultant had not taken an active role

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

in the management of the Company, he agreed that would forgive the amount accrued to him under the Consulting agreement of \$107,500. The Company accounted for the transaction as a forgiveness of indebtedness under FAS No. 140 during the period ended December 31, 2004.

During the three months ended March 31, 2005 and 2004, the Company accrued \$19,000 and \$30,000, respectively, in consulting fees payable to the Company's founders.

### Employment Agreements

-----

Pursuant to our employment agreement with Michael Wilhelm, our President and Chief Executive Officer, dated December 16, 2002, we paid a salary of \$125,000 and \$175,000 to Mr. Wilhelm during the first and second years of his employment, respectively. Thereafter we paid, and will continue to pay, through the term of Mr. Wilhelm's employment, an annual salary of \$250,000. Mr. Wilhelm's salary is payable in regular installments in accordance with the customary payroll practices of our company.

Pursuant to our employment agreement with John Fermanis, our Chief Financial Officer, dated February 15, 2005, we paid a salary of \$60,000 until the company completed a financing of \$500,000 or more. This occurred on March 4, 2005 when the company completed a Tender Offer for warrants totaling \$1,190,857 net of fees. From March 4, 2005, until December 31, 2005, we will pay an annual salary of \$85,000. Thereafter, we will pay an annual salary of \$98,000 for the second year ending December 31, 2006 and an annual salary of \$112,000 for the third year ending December 31, 2007. Mr. Fermanis' salary is payable in regular installments in accordance with the customary payroll practices of our company.

### NOTE 3 - DEBT

During the three months ended March 31, 2005, the Company repaid a note payable in the amount of \$10,000. At March 31, 2005, the Company had outstanding two unsecured notes payable to Company shareholders in the aggregate amount of \$66,970. Interest accrues at 6% per annum. Accrued interest at March 31, 2005 is \$9,923. These notes were in default at March 31, 2005.

F-37

### NOTE 4 - EQUITY

#### Common Stock

-----

On January 24, 2005, the Company made a tender offer to certain of the Company's shareholders whereby the exercise price of certain warrants issued in October 2004 (the "Warrants") would be reduced from \$0.50 to \$0.20 per share. In March 2005, 6,600,778 shares of common stock were sold pursuant to this offer for aggregate proceeds of \$1,320,156 less costs of \$129,300.

#### Warrants

-----

In January through March 2005, the Company issued warrants to purchase 268,033 shares at prices ranging from \$0.125 to \$1.00 to consultants for services performed. The Company valued these warrants using the Black-Scholes valuation model, and charged the amount of \$137,049 to operations during the three months

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

ended March 31, 2005.

The following table summarizes the changes in warrants outstanding and the related prices for the shares of the Company's common stock issued to non-employees of the Company. These warrants were granted in lieu of cash compensation for services performed or financing expenses and in connection with placement of convertible debentures.

Warrants Outstanding		Warrants Exercisable			
Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighed Average Exercise Price	Number Exercisable	Weighted Remaining Contractual Life (Years)
\$0.05-0.10	480,698	4.35	\$0.05-0.10	480,698	4.35
0.125-0.70	782,411	4.21	0.125-0.70	782,411	4.21
0.25-0.56	9,147,932	4.31	0.25-0.56	9,147,932	4.31
1.00	754,844	2.73	1.00	754,844	2.73
2.00	167,580	4.27	2.00	167,580	4.27
	-----	-----		-----	-----
	11,333,465	4.20		11,333,465	4.20
	=====	=====		=====	=====

Transactions involving warrants are summarized as follows:

	Number of Shares (post-split)	Weighted Average Price Per Share (post-split)
Outstanding at January 1, 2005	17,666,210	\$ .49
Granted	268,033	.48
Exercised	(6,600,778)	.50
Canceled or expired	--	--
	-----	-----
Outstanding at March 31, 2005	11,333,465	\$ .47
	=====	=====

The estimated value of the compensatory warrants granted to non-employees in exchange for services and financing expenses was determined using the Black-Scholes pricing model and the following assumptions:

	2005
Significant assumptions (weighted-average):	
Risk-free interest rate at grant date	3.75%
Expected stock price volatility	154% to 163%
Expected dividend payout	--
Expected option life-years (a)	3

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### Special Note Regarding Forward-looking Statements

-----

Some of the statements under "Risk Factors," "Business" and elsewhere in this Quarterly Report on Form 10-QSB constitute forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Such factors include, among other things, those described under "Risk Factors" and elsewhere in this Quarterly Report on Form 10-QSB.

In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "could," "expects," "plans," "intends," "anticipates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of such terms or other comparable terminology.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance, or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of such statements. We are under no duty to update any of the forward-looking statements after the date of this report.

The following information should be read in conjunction with the financial statements and the notes thereto. The analysis set forth below is provided pursuant to applicable Securities and Exchange Commission regulations and is not intended to serve as a basis for projections of future events.

#### Overview

-----

IR BioSciences Holdings, Inc. is a development-stage biopharmaceutical company. Through our wholly owned subsidiary, ImmuneRegen BioSciences, Inc., we are engaged in the research and development of health enhancing and potential life saving products. Our product development is focused around Homspera(TM), a proprietary compound that is derived from homeostatic substance P, a naturally occurring peptide. Our focus is on the research and development of products that we believe will treat the suppression of the body's immune system caused by exposure to various forms of radiation, toxic inhalants and viral infectious diseases. Currently, the majority of our efforts are in the research and development of Radilex(TM), a compound derived from Homspera, as a countermeasure to the effects of radiological and nuclear threats.

In our studies to date, we have witnessed Homspera and Radilex to have high anti-inflammatory and immunostimulatory properties. We believe the compound is well-suited for treating the damaging effects of radiation injury when given shortly after total body exposure to radiation. We have generated a large amount of data in rodent animal models and toxicology studies relating to the activity and safety of both Homspera and Radilex. To date we have completed seven mouse studies in which Radilex was administered after exposure to lethal doses of radiation. In these studies we witnessed survival rates of up to 50% of the exposed mice.

We own or have obtained a license to 4 issued U.S. and foreign patents and 24 pending U.S. and foreign patent applications. As we continue our research and development efforts we will look to add to our portfolio of patents and trademarks.

RESULTS OF OPERATIONS FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2005

Revenue

-----

We are in the development stage and have no revenue.

Sales, General, and Administrative Expenses

-----

Sales, general, and administrative expenses ("SG&A") were \$838,520 for the three months ended March 31, 2005, an decrease of \$92,554 or approximately 10% compared to SG&A of \$931,074 during the three months ended

F-39

March 31, 2004. For the three months ended March 31, 2005, this amount consisted primarily of non-cash compensation issued to consultants of \$299,943, legal and accounting fees of \$161,806, other consulting fees of \$117,739, payroll and related costs of \$77,574, and research and development expenses of \$65,849.

The Company expects SG&A to increase during the coming twelve months as we continue to utilize non-cash compensation in order to conserve cash, we build out the Company's infrastructure, and continue to develop the Company's line of potential products.

Interest Expense

-----

Interest expense was \$977 for the three months ended March 31, 2005, a decrease of \$303,101 or approximately 99% compared to interest expense of \$304,078 for the three months ended March 31, 2004. Interest expense was dramatically reduced because the Company paid or converted to equity most of its outstanding debt during the three months ended December 31, 2004.

The Company expects interest expense to remain at low levels during the coming twelve months.

Net Loss

-----

For the reasons above, the net loss for the three months ended March 31, 2005 was \$839,497, a decrease of \$395,655 or 32% compared to a net loss of \$1,235,152 for the three months ended March 31, 2004.

The Company expects losses to increase during the coming twelve months. The Company does not expect to begin to generate revenue in the coming twelve months, and our costs are likely to increase as we move our line of potential products through the testing and approval phases, and as we build out our corporate infrastructure.

PLAN OF OPERATIONS

We expect to continue to incur increasing operating losses for the foreseeable future, primarily due to our continued research and development activities attributable to new and existing products and general and administrative activities.

Product Research and Development

-----

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

We spent approximately \$65,849 and \$21,382 for the first quarters ending March 31, 2005 and 2004, respectively, in research and development activities related to the development of Radilex as a universal protectant against the effects of chemical, biological, radiological and nuclear threats. Due to our liquidity and limited cash available, our spending on research and development activities was limited. From our inception in October 2002, we have spent \$258,912 in research and development activities. These costs include the manufacture and delivery of our drug by third party manufacturers, payments to Contract Research Organizations ("CRO") for consulting related to our studies and costs of performing such studies.

We anticipate that during the next 12 months we will increase our research and development activities by approximately \$450,000 to a total of approximately \$600,000 in an effort to further develop Radilex as a universal protectant against chemical, biological, radiological and nuclear threats. The drug development, clinical trial and regulatory process is lengthy, expensive and uncertain and subject to numerous risks including, without limitation, the following risks discussed under "Risk Factors" - "All Our Applications Are All Derived From The Use Of Homspira. If Homspira Is Found To Be Unsafe Or Ineffective, Our Business Would Be Materially Harmed.," "If We Fail To Successfully Develop And Commercialize Products, We Will Have To Cease Operations.;" and, "The Lengthy Product Approval Process And Uncertainty Of Government Regulatory Requirements May Delay Or Prevent Us From Commercializing Proposed Products."

F-40

Our major research and development projects include:

Development of Radilex as a Countermeasure to the Effects of Radiological and Nuclear Threats.

-----

Because of the high anti-inflammatory and immunostimulatory properties of Radilex that we have witnessed, we believe the compound is well-suited for treating the damaging effects of radiation injury when given shortly after exposure to total body irradiation. We have generated a large amount of data in rodent animal models relating to the activity and safety of Radilex.

We are currently preparing the protocols for our eighth mouse study in which we will further validate our prior studies by collecting additional data as requested by the FDA and NIH. We expect to begin the eighth study within the next 120 days. We estimate that the study will be completed within 3 months upon commencement at an estimated cost of \$100,000. Upon completion of the aforementioned study we will prepare the protocols necessary for a non-human primate study to test the efficacy of Radilex as a treatment to acute radiation sickness. We expect this study to begin within the next twelve months. We believe that preliminary results will be available within 90 days from beginning of study, with analysis within an additional 60 to 90 days. We have budgeted approximately \$310,000 for expenses related to this study in our fiscal year ending December 31, 2005. We expect an additional \$450,000 will be required to complete this study in 2006.

If we are successful in completing the study and achieve the desired results, we will submit the necessary documentation to the FDA and other regulatory agencies for approval. We believe that Radilex can be developed and approval granted under Project BioShield, if so, we believe that the approval process will be significantly shortened and less costly. If approval for Radilex is granted in a

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

timely manner, we expect to begin to commercialize our product immediately thereafter. We are anticipating revenues from the sale of Radilex beginning in calendar year 2007 as a treatment to the effects caused by irradiation.

If product development or approval does not occur as scheduled our time to reach market will be lengthened and our costs will likely increase. Additionally, we may be requested to expand our findings to gather additional data or we may not achieve the desired results. If so, we may have to design new protocols and conduct additional studies. This will increase our costs and delay the time to market for Radilex. Any of these occurrences would have a material negative impact on our business and our liquidity as it may cause us to seek additional capital sooner than expected and allow our competitors to successfully enter the market ahead of us.

Development of Radilex as a Countermeasure to the Effects of Chemical and Biological Threats.

-----

We are currently continuing to research the efficacy of Radilex as a universal protectant to be used also as a treatment for exposure to various chemical and biological threats. We have generated data in preclinical studies indicating that Radilex could potentially be used in treating respiratory failure caused by exposure to various chemical and biological agents, such as anthrax, ricin poisoning and other poisonous inhalants, as well as, infectious diseases such as avian flu and SARS. We are continuing to design and perform studies for the further development of Radilex for these applications. We have budgeted approximately \$35,000 for studies related to the use of Radilex as a treatment for exposure to various chemical and biological threats. We anticipate additional studies to begin in the third or fourth quarters of calendar 2005 and continue on an ongoing basis over the next three years. If we are successful in achieving desirable results, we intend to design the protocols and begin studies for these indications, when capital is available. As we have only collected preliminary data and additional studies are required, we cannot predict when, if ever, a viable treatment can be commercialized. If we do not observe significant results or we lack the capital to further the development, we may abandon such research and development efforts; thereby limiting our future potential revenues.

F-41

Development of Homspera in the Promotion of Wound Healing.

-----

We have observed in early preclinical studies that Homspera may have an effect in promoting or accelerating wound healing. Within the next three months we plan to begin preclinical studies to determine if Homspera could become a candidate for further development as a compound used in wound healing. We believe that such an application would have a large potential market and would share synergies with potential uses for Radilex as a universal protectant. We expect to begin studies regarding the use of Homspera in the promotion of wound healing in the third quarter of calendar 2005. We do not have any research and development expenses associated with the use of Homspera in wound healing in 2004 or 2003, as our observations were generated while conducting our radiation studies. We have budgeted approximately \$60,000 for the costs of such studies over the next twelve months. We anticipate the completion of such studies within eight months of commencement of the studies. If we achieve desirable results, we will design the protocols and begin studies for these indications, when capital is available. As we have only collected preliminary data and additional studies

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

are required, we cannot predict when, if ever, a viable product can be commercialized. If we do not observe significant results or we lack the capital to further the development, we may abandon such research and development efforts; thereby limiting our future potential revenues.

We will need to generate significant revenues from product sales and or related royalties and license agreements to achieve and maintain profitability. Through March 31, 2005, we had no revenues from any product sales, royalties or licensing fees, and have not achieved profitability on a quarterly or annual basis. Our ability to achieve profitability depends upon, among other things, our ability to develop products, obtain regulatory approval for products under development and enter into agreements for product development, manufacturing and commercialization. Moreover, we may never achieve significant revenues or profitable operations from the sale of any of our products or technologies.

### OFF-BALANCE SHEET ARRANGEMENTS

There were no off-balance sheet arrangements made in the fiscal quarter ended March 31, 2005.

### REVENUES

We have not generated any revenues from operations from our inception. We believe we will begin earning revenues from operations during calendar year 2007 as we transition from a development stage company to that of an active growth and acquisition stage company.

### COSTS AND EXPENSES

From our inception through March 31, 2005, we have incurred losses of \$8,047,524. These expenses were associated principally with equity-based compensation to employees and consultants, product development costs and professional services.

### LIQUIDITY AND CAPITAL RESOURCES

At March 31, 2005, we had current assets of \$1,607,085 consisting of cash of \$1,600,000 and other current assets of \$7,085. At March 31, 2005, we also had current liabilities of \$408,180, consisting of accounts payable and accrued liabilities of \$341,210 and notes payable of \$66,970. This resulted in net working capital at March 31, 2005 of \$1,198,905. During the three months ended March 31, 2005, the Company used cash in operating activities of (\$550,971). From the date of inception (October 30, 2002) to March 31, 2005, the Company has had a net loss of (\$8,047,524) and has used cash of (\$2,625,316) in operating activities.

The Company currently has no revenue. There is no guarantee that our business model will be successful, or that we will be able to generate sufficient revenue to fund future operations. As a result, we expect our operations to continue to use net cash, and that we will be required to seek additional debt or equity financings during the coming quarters. Since inception, the Company has financed its operations through debt and equity financing. While we have raised capital to meet our working capital and financing needs in the past, additional financing is required in order to meet our current and projected cash flow deficits from operations and development of our product line. We met our cash requirements from our inception through March 31, 2005 via the private placement of \$3,259,903 of our common stock, \$973,500 from the issuance of notes payable,

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

net of repayments and \$1,190,857, net of costs, from the exercise of common stock purchase warrants.

In January 2005, we made a tender offer to temporarily reduce the exercise price of certain warrants issued in October 2004 from \$0.50 to \$0.20 per share. The tender offer expired on March 4, 2005. We accepted for exercise a total of 6,600,778 warrants validly tendered and not withdrawn pursuant to the terms of the tender offer, which represents approximately 48% of the aggregate 13,780,449 warrants that were subject to the offer. We raised an aggregate of \$1,190,857 from the tender offer, net of costs.

Since our inception, we have been seeking additional third-party funding. During such time, we have retained a number of different investment banking firms to assist us in locating available funding; however, we have not yet been successful in obtaining any of the long-term funding needed to make us into a commercially viable entity. During the period from October 2004 to March 2005, we were able to obtain financing of \$3,770,156 from a series of private placements of our securities. Included in this amount was the conversion of \$180,000 of accrued salary and consulting fees due to an officer and a director of the company. These private placements of our securities resulted in net proceeds to us of \$3,162,711. Based on our current plan of operations all of our current funding is expected to be depleted by the end of January 2006. Although we are continuing with our efforts to obtain funding to maintain our operations, we cannot assure you that we will be successful or that any funding we receive will be received timely or on commercially reasonable terms. Due to our working capital deficiency, and if we do not receive adequate financing, we will be unable to pay our vendors, lenders and other creditors if we cease our operations, since the net realizable value of our non-current assets will not generate adequate cash. We currently have no commitments for financing. There is no guarantee that we will be successful in raising the funds required.

In the event that we are successful in obtaining third-party funding, we do not expect to generate a positive cash flow from our operations for at least several years, if at all, due to anticipated expenditures for research and development activities, administrative and marketing activities, and working capital requirements and expect to continue to attempt to raise further capital through one or more further private placements.

While we have successfully raised capital to meet our working capital and financing needs in the past through debt and equity financings, additional financing will be required in order to implement our business plan and to meet our current and projected cash flow deficits from operations and development. There can be no assurance that we will be able to consummate future debt or equity financings in a timely manner on a basis favorable to us, or at all. If we are unable to raise needed funds, we will not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements. A material shortage of capital will require us to take drastic steps such as reducing our level of operations, disposing of selected assets or seeking an acquisition partner. We believe that we have sufficient capital resources to meet projected cash flow deficits through the end of December 2005. However, if thereafter, we are not successful in generating sufficient liquidity from operations or in raising sufficient capital resources, this would have a material adverse effect on our business, results of operations, liquidity and financial condition.

During the three months ended March 31, 2005, the Company paid a note payable in the amount of \$10,000. At March 31, 2005, the Company had outstanding two unsecured notes payable to Company shareholders in the aggregate amount of \$66,970. Interest accrues at 6% per annum. Accrued interest at March 31, 2005 is \$9,923. These notes were in default at March 31, 2005.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Pursuant to our employment agreement with Michael Wilhelm, our President and Chief Executive Officer, dated December 16, 2002, we paid a salary of \$125,000 and \$175,000 to Mr. Wilhelm during the first and second years of his employment, respectively. Thereafter we paid, and will continue to pay, through the term of Mr. Wilhelm's employment, an annual salary of \$250,000. Mr. Wilhelm's salary is payable in regular installments in accordance with the customary payroll practices of our company.

Pursuant to our employment agreement with John Fermanis, our Chief Financial Officer, dated February 15, 2005, we paid a salary of \$60,000 until the company completed a financing of \$500,000 or more. This occurred on March 4, 2005 when the company completed a Tender Offer for warrants totaling \$1,190,856 net of fees. From March 4, 2005, until December 31, 2005, we will pay an annual salary of \$85,000. Thereafter, we will pay an annual salary of \$98,000 for the second

F-43

year ending December 31, 2006 and an annual salary of \$112,000 for the third year ending December 31, 2007. Mr. Fermanis' salary is payable in regular installments in accordance with the customary payroll practices of our company.

On December 16, 2002 we entered into a consulting agreement on a month-to-month basis with Dr. Mark Witten, our chief research scientist and director. Under the terms of this agreement, Dr. Witten agrees to place at the disposal of us his judgment and expertise in the area of acute lung injury. In consideration for these services, we agree to pay Dr. Witten a non-refundable fee of \$5,000 per month. Under the terms of our consulting agreement with Dr. Mark Witten, he is to receive a non-refundable fee equal to \$5,000 per month. The consulting agreement is on a month-to-month basis.

### Acquisition or Disposition of Plant and Equipment

-----

We did not dispose or acquire any significant property, plant or equipment during the first quarter ended March 31, 2005.

We do not anticipate the sale of any significant property, plant or equipment during the next twelve months.

F-44

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 24 INDEMNIFICATION OF DIRECTORS AND OFFICERS

Under Section 145 of the General Corporation Law of the State of Delaware, we can indemnify our directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). Our certificate of incorporation provides that, pursuant to Delaware law, our directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care to us and our stockholders.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

This provision in the certificate of incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as injunctive or other forms of nonmonetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to us or our stockholders, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of the law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Our bylaws provide for the indemnification of our directors to the fullest extent permitted by the Delaware General Corporation Law. Our bylaws further provide that our Board of Directors has sole discretion to indemnify our officers and other employees. We may limit the extent of such indemnification by individual contracts with our directors and executive officers, but have not done so. We are required to advance, prior to the final disposition of any proceeding, promptly on request, all expenses incurred by any director or executive officer in connection with that proceeding on receipt of an undertaking by or on behalf of that director or executive officer to repay those amounts if it should be determined ultimately that he or she is not entitled to be indemnified under our bylaws or otherwise. We are not, however, required to advance any expenses in connection with any proceeding if a determination is reasonably and promptly made by our Board of Directors by a majority vote of a quorum of disinterested Board members that (a) the party seeking an advance acted in bad faith or deliberately breached his or her duty to us or our stockholders and (b) as a result of such actions by the party seeking an advance, it is more likely than not that it will ultimately be determined that such party is not entitled to indemnification pursuant to the applicable sections of our bylaws.

We also have directors' and officers' liability insurance.

### ITEM 25 OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, if any, payable by the Registrant relating to the sale of common stock being registered. All amounts are estimates except the SEC registration fee.

SEC registration fee .....	\$ 1,463
Printing and engraving expenses .....	5,000
Legal fees and expenses .....	85,000
Accounting fees and expenses .....	50,000
Transfer agent and registrar's fees and expenses .....	2,000
Miscellaneous expenses .....	6,537
	-----
Total.....	\$150,000
	=====

The Registrant has agreed to bear expenses incurred by the selling stockholders, up to a maximum limit of \$15,000, that relate to the registration of the shares of common stock being offered and sold by the selling stockholders. All such expenses in excess of \$15,000 will be borne by the selling stockholders in proportion to the number of shares being registered by each stockholder.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

### ITEM 26 RECENT SALES OF UNREGISTERED SECURITIES

During the last three years, we have issued unregistered securities to the persons, as described below. None of these transactions involved any underwriters, underwriting discounts or commissions, except as specified below, or any public offering, and we believe that each transaction was exempt from the registration requirements of the Securities Act of 1933 by virtue of Section 4(2) thereof and/or Regulation D promulgated thereunder. All recipients had adequate access, through their relationships with us, to information about us.

In January 2002, we sold to Todd M. Ficeto, who was the sole director and officer of GPN Network, Inc., 2,500,000 units at \$0.06 per unit for an aggregate purchase price of \$150,000. Each unit sold included two shares of our common stock and one five-year warrant to purchase one share of our common stock at \$0.03 per share. The sale of the units resulted in the issuance of 5,000,000 shares of our common stock and warrants exercisable for an additional 2,500,000 shares of our common stock. The securities were offered and sold in reliance upon exemption from registration pursuant to Section 4(2) of the Securities Act and Rule 506 promulgated thereunder.

On January 20, 2003, the Company entered into a \$15,000 Convertible Promissory Note bearing 8% interest per month with an accredited individual investor. The principal on the note was subsequently repaid. On March 31, 2005 in accordance with the terms of the Promissory Note, accrued interest of \$2,410.96 was converted into 19,288 shares of our common stock releasing the Company from any further obligation under the Note. These shares have been accrued pending issuance. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note and the shares. The investor represented to the Company that the investor was purchasing the securities for the investor's own account and not with a present view towards the distribution thereof. In addition, each investor acknowledged and agreed that the note and the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On June 11, 2003, the Company entered into a \$50,000 Convertible Promissory Note bearing 10% interest for a term of 120 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement (see below). Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 746,108 shares of our common stock along with five-year warrants to purchase an additional 373,054 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On June 11, 2003, the Company entered into a \$50,000 Convertible Promissory Note bearing 10% interest for a term of 120 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement,

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 745,225 shares of our common stock along with five-year warrants to purchase an additional 372,613 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes

that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On June 13, 2003, the Company entered into a \$100,000 Convertible Promissory Note bearing 10% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, 50% of the outstanding principal was paid back in cash and 50% of the principal and accrued interest converted into 614,680 shares of our common stock along with five-year warrants to purchase an additional 307,340 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On June 16, 2003, the Company entered into a \$20,000 Convertible Promissory Note bearing 10% interest for a term of 120 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 297,722 shares of our common stock along with five-year warrants to purchase an additional 148,861 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

On July 20, 2003, we entered into and consummated an agreement and plan of merger, pursuant to which we acquired ImmuneRegen BioSciences, Inc ("ImmuneRegen") in a reverse merger, which resulted in the issuance of 2,368,130 shares of our common stock. Pursuant to the terms of the merger, the stockholders of ImmuneRegen were issued shares of our common stock exchange for their shares in ImmuneRegen. The securities were issued to less than 35 purchasers and in reliance upon exemption from registration pursuant to Section 4(2) of the Securities Act and Rule 506 promulgated thereunder. No general solicitation or advertising was undertaken in connection with the offer and sale of the securities. The stockholders were also provided with access to our SEC filings, including the Company's annual reports on Form 10-KSB and its quarterly reports on Form 10-QSB.

In May and June 2003, ImmuneRegen BioSciences, Inc. had sold and issued eight secured convertible promissory notes in the aggregate principal amount of \$495,000 that were due 120 days from the date of issuance. When the notes were due, three were paid and five were exchanged for 8% amended secured convertible notes ("Amended Notes") in the aggregate principal amount of \$245,000 in October 2003. The five accredited investors who received the Amended Notes were also issued five-year warrants to purchase a total of 245,000 shares of our common stock at an exercise price of \$1.00 per share. The securities were offered and sold in reliance upon exemption from registration pursuant to Section 4(2) of the Securities Act and Rule 506 promulgated thereunder. No general solicitation or advertising was undertaken in connection with the offer and sale of the securities. Each investor represented to the Company that the investor was purchasing the securities for the investor's own account and not with a present view towards the distribution thereof. In addition, each investor acknowledged and agreed that the securities and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements.

On September 9, 2003, the Company entered into a \$25,000 Convertible Promissory Note bearing 8% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 272,711 shares of our common stock along with five-year warrants to purchase an additional 136,356 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On September 9, 2003, the Company entered into a \$25,000 Convertible Promissory Note bearing 8% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 371,847 shares of our common stock

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

along with five-year warrants to purchase an additional 185,924 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On September 23, 2003, the Company entered into a \$125,000 Convertible Promissory Note bearing 8% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 1,359,511 shares of our common stock along with five-year warrants to purchase an additional 679,756 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On September 25, 2003, the Company entered into a \$25,000 Convertible Promissory Note bearing 8% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 271,787 shares of our common stock along with five-year warrants to purchase an additional 135,894 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements.

Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On September 29, 2003, the Company entered into a \$25,000 Convertible Promissory Note bearing 8% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 271,556 shares of our common stock along with five-year warrants to purchase an additional 135,778 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In October through December 2003, we sold and issued ten 8% secured convertible promissory notes ("Fourth Quarter Notes") in the aggregate principal amount of \$391,000 that were due 180 days from the date of issuance. The ten accredited investors who received the Fourth Quarter Notes were also issued five-year warrants to purchase a total of 391,000 shares of our common stock at an exercise price of \$1.00 per share. The securities were offered and sold in reliance upon exemption from registration pursuant to Section 4(2) of the Securities Act and Rule 506 promulgated thereunder. No general solicitation or advertising was undertaken in connection with the offer and sale of the Fourth Quarter Notes. Each investor represented to the Company that the investor was purchasing the Fourth Quarter Notes for the investor's own account and not with a present view towards the distribution thereof. In addition, each investor acknowledged and agreed that the Fourth Quarter Notes and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements.

In October 2003 through December 2003, we issued, in exchange for accounting, marketing, business consulting, investor relations and public relations services valued at approximately \$85,861, five-year warrants to eight investors for the purchase of an aggregate of 169,572 shares of our common stock at exercise prices ranging from \$0.25 to \$2.00 per share. The securities were offered and sold in reliance upon exemption from registration pursuant to Section 4(2) of the Securities Act and Rule 506 promulgated thereunder. The investors were financially able to bear the economic risk of the investment and capable of evaluating the merits and risks of the acquisition of the securities. Each investor also had received and reviewed all information necessary or appropriate for deciding whether to purchase the securities, including the Company's periodic SEC reports. No general solicitation or advertising was undertaken in connection with the offer and sale of the securities. Each investor represented to the Company that the investor was purchasing the securities for the investor's own account and not with a present view towards the distribution thereof. In addition, each investor acknowledged and agreed that the securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements.

On November 10, 2003, the Company entered into a \$50,000 Convertible Promissory Note bearing 8% interest for a term of 180 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 538,374 shares of our common stock along with five-year warrants to purchase an additional 269,187 shares of common stock at \$.50 per share releasing the Company from any further obligation under

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently

registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On November 18, 2003, the Company entered into a \$16,000 Convertible Promissory Note bearing 8% interest for a term of 220 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, \$5,000 of the outstanding principal was paid back in cash and the remaining \$11,000 of the principal plus accrued interest converted into 129,886 shares of our common stock along with five-year warrants to purchase an additional 64,943 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On December 12, 2003, the Company entered into a \$20,000 Convertible Promissory Note bearing 8% interest per month with an accredited investor, the mother-in-law Of our Chief Executive Officer. The principal on the note was subsequently repaid. On October 15, 2004 in accordance with the terms of the Promissory Note, accrued interest of \$1,354.52 was converted into 13,454 shares of our common stock releasing the Company from any further obligation under the Note. These shares have been accrued pending issuance. No general solicitation or advertising was undertaken in connection with the offer and sale of the securities. The investor represented to the Company that the investor was purchasing the securities for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In January 2004, we entered into a 12% senior secured promissory note ("Senior Note") that had a term of 90 days. As an additional incentive to enter into the Senior Note, we issued 600,000 shares of our common stock to the note holder, and such shares were valued at \$600,000. In April 2004, the Senior Note was paid and we entered into a new 12% senior secured promissory note ("New

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Senior Note") that had a term of 90 days. As an additional incentive to enter into the New Senior Note, we issued another 600,000 shares of our common stock to the note holder, and such shares were also valued at \$600,000. The note holders were financially able to bear the economic risk of the investment and capable of evaluating the merits and risks of the acquisition of the securities. Each note holder also had received and reviewed all information necessary or appropriate for deciding whether to purchase the securities, including the Company's periodic SEC reports. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The note holder represented to the Company that the note holder was purchasing the securities for the note holder's own account and not with a present view towards the distribution thereof. In addition, the note holder acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In February 2004, we issued 40,000 shares of our common stock at \$0.62 per share to a consultant that is an accredited investor in exchange for public relations services to be provided through August 2004. The services were valued at approximately \$24,800. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be

offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In March 2004, we sold and issued 8,000 shares of our common stock at \$0.15 per share for an aggregate purchase price of \$1,200 to an investor. The investor was financially able to bear the economic risk of the investment and capable of evaluating the merits and risks of the acquisition of the securities. The investor also had received and reviewed all information necessary or appropriate for deciding whether to purchase the securities, including the Company's periodic SEC reports. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. Each investor represented to the Company that the investor was purchasing the securities for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In May 2004 we also issued 350,000 shares of our common stock to a note holder upon conversion of a note payable in the principal amount of \$35,000 plus accrued interest. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The note holder represented to the Company that the he was acquiring the shares for the his own account and not

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

with a present view towards the distribution thereof. In addition, the note holder acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In April 2004 extended a 90 day offer to purchase certain rights to our patents for Homspera for \$30,000 to an accredited investor. On August 17, 2004, at the conclusion of the 90-day period, if not exercised, the option would convert into common shares of stock and warrants. In accordance with the terms of the option, upon expiration the \$30,000 was converted into 240,000 shares of our common stock along with five-year warrants to purchase an additional 120,000 shares of common stock at \$.50 per share. No general solicitation or advertising was undertaken in connection with the offer and sale of the securities. The investor represented to the Company that the he was acquiring the shares for the his own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On May 6, 2004, the Company entered into a \$2,500 Convertible Promissory Note bearing 12% interest for a term of 160 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 26,608 shares of our common stock along with five-year warrants to purchase an additional 13,304 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On May 14, 2004, the Company entered into a \$75,000 Convertible Promissory Note bearing 12% interest for a term of 160 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 788,750 shares of our common stock along with five-year warrants to purchase an additional 394,375 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In May 2004, we issued five-year warrants to purchase 500,000 shares of our common stock at an exercise price of \$0.25 per share to each of one of our founders and our Chief Executive Officer, Michael Wilhelm. The securities were issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In May 2004 we also issued 125,000 shares of our common stock at \$0.20 per share to a consultant as a due diligence fee. The consultant was financially able to bear the economic risk of the investment and capable of evaluating the merits and risks of the acquisition of the shares. The consultant also had received and reviewed all information necessary or appropriate for deciding whether to purchase the shares, including the Company's periodic SEC reports. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In May 2004 we also issued 500,000 shares of our common stock to a consultant in exchange for business consulting services to be provided through December 2004, and the stock price of \$1.00 per share was determined as of the date that we entered into the related consulting agreement in December 2003. The consultant was financially able to bear the economic risk of the investment and capable of evaluating the merits and risks of the acquisition of the shares. The consultant also had received and reviewed all information necessary or appropriate for deciding whether to purchase the shares, including the Company's periodic SEC reports. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On June 18, 2004, the Company entered into a \$10,000 Convertible Promissory Note bearing 8% interest for a term of 120 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 136,919 shares of our common stock along with five-year warrants to purchase an additional 68,460 shares of common stock at \$.50 per share releasing the Company from any further obligation under

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered,

sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In July 2004, we issued 250,000 shares of common stock at \$0.10 per share to an accredited entity in exchange for Investor and Public Relations services to be provided through July, 2005. The services were valued at approximately \$25,000. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities act of 1933, as amended, and Rule 506 promulgated thereunder.

In August 2004, we issued 100,000 shares of common stock at \$0.14 per share to an accredited consultant in exchange for Strategic Planning services to be provided through October 2004. The services were valued at approximately \$14,000. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities act of 1933, as amended, and Rule 506 promulgated thereunder.

In July and September of 2004, we issued a total of 200,000 shares of common stock at \$0.41 per share to an accredited consultant in exchange for financial consulting services to be provided through April 2005. The services were valued at approximately \$82,000. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities act of 1933, as amended, and Rule 506 promulgated thereunder.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

On August 16, 2004, the Company entered into a \$15,000 Convertible Promissory Note bearing \$500 interest per month for a term of 30 days to an individual accredited investor. The term was extended to October 16, 2004, the closing date of the Private Placement. Immediately upon the closing of the Private Placement, and in accordance with the terms of the Promissory Note, all outstanding principal and accrued interest converted into 131,467 shares of our common stock along with five-year warrants to purchase an additional 65,734 shares of common stock at \$.50 per share releasing the Company from any further obligation under the Note. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

On August 23, 2004, the Company entered into a \$5,000 Convertible Promissory Note bearing 8% interest per month to an individual accredited investor. On October 26, 2004 in accordance with the terms of the Promissory Note, principal of \$5,000 and accrued interest of \$71 was converted into 67,613 shares of our common stock releasing the Company from any further obligation under the Note. These shares have been accrued pending

issuance. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In September 2004, we issued 127,276 shares of common stock at \$0.12 - \$0.22 per share to an accredited consultant in exchange for financial consulting services provided through September 2004. The services were valued at approximately \$16,909. No general solicitation or advertising was undertaken in connection with the offer and sale of the shares. The consultant represented to the Company that the consultant was purchasing the securities for the consultant's own account and not with a present view towards the distribution thereof. In addition, the consultant acknowledged and agreed that the shares had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from registration requirements. Therefore, the Company believes that the shares were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities act of 1933, as amended, and Rule 506 promulgated thereunder

On September 26, 2004, the Company entered into a \$30,000 Convertible Promissory Note bearing 8% interest per month with the farther of one of our Directors. The principal on the note was subsequently repaid. On January 28, 2005 in accordance with the terms of the Promissory Note, accrued interest of

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

\$2,021.10 was converted into 27,616 shares of our common stock releasing the Company from any further obligation under the Note. These shares have been accrued pending issuance. No general solicitation or advertising was undertaken in connection with the offer and sale of the Note. The investor represented to the Company that the investor was purchasing the Note for the investor's own account and not with a present view towards the distribution thereof. In addition, the investor acknowledged and agreed that the Note and the underlying securities had not been registered under the Securities Act and may not be offered or sold unless subsequently registered and/or offered, sold or transferred pursuant to an exemption from the registration requirements. Therefore, the Company believes that the securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

In October 2004, we completed a private placement, whereby we sold an aggregate of \$2,450,000 worth of units to accredited investors (the "Private Placement"). Each unit was sold for \$10,000 (the "Unit Price") and consisted of (a) a number of shares of our common stock determined by dividing the Unit Price by \$0.125, and (b) a warrant to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to fifty percent (50%) of the number of shares included within the unit, at a price equal to \$0.50 per share of common stock. Thus, each unit consisted of 80,000 shares of our common stock and a five-year warrant to purchase an additional 40,000 shares of our common stock at an exercise price of \$0.50 per share. We issued an aggregate 27,560,897 shares of our common stock and warrants to purchase 13,780,449 shares of our common stock in the Private Placement. In consideration of the investment, we granted to each investor certain registration rights and anti-dilution rights. The registration rights provide, if the Registration Statement is not effective as of 90-days following the second closing date (October 26, 2004), we must issue to the holders of units sold in the Private Offering an additional 2% of their securities each month. To date we are obligated to issue an aggregate of 3,228,400 shares and 1,271,200 warrants pursuant to this penalty provision.

Further to the Private Placement, we entered into a settlement agreement with 8 creditors whereby for full and complete satisfaction of claims totaling an aggregate of \$158,017.25 (the "Claim Amount"), we issued to the creditors the following: (a) a number of shares of our common stock determined by dividing the Claim Amount by \$0.125, and (b) warrants to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to fifty percent (50%) of the number of shares described above, at a price equal to \$0.50 per share of common stock. The warrants are identical to the warrants issued in the Private Placement.

Pursuant to the terms of a placement agency agreement, dated September 3, 2004, by and between us and Joseph Stevens & Co., Inc., we issued 4,900,000 shares of our common stock to Joseph Stevens & Co., Inc. or its designees, upon the closing of the Private Placement. The shares were issued as consideration for the services of Joseph Stevens & Co., Inc. as our placement agent in the Private Placement. There were 98 accredited investors who purchased units in the Private Placement. The securities were offered and sold in reliance upon exemption from registration pursuant to Section 4(2) of the Securities Act and Rule 506 promulgated thereunder.

In September 2004 we entered into a settlement agreement with one of our Directors, Theodore Staahl, whereby for full and complete satisfaction of claims totaling \$10,263.01, we issued to our Director 93,300 shares of our common stock, determined by dividing the amount owed by \$0.11. Under the terms of the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

settlement agreement, our Director released us from all claims, known or unknown, relating to the amount owed. The securities were issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder. The Director qualified as an accredited investor (as defined by Rule 501 under the Securities Act of 1933, as amended).

On November 18, 2004 we issued warrants to a member of our Bioterrorism Preparedness Advisory Board to purchase, at any time prior to the third anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to 50,000, at a price equal to \$0.125 per share of common stock for advice on logistics, introductions to various organizations and attendance of meetings. The securities were issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder. The investor qualified as an accredited investor (as defined by Rule 501 under the Securities Act of 1933, as amended).

On December 16, 2004 we issued warrants to a member of our Oncology and Dermatology Advisory Board to purchase, at any time prior to the third anniversary following the date of issuance of the warrant, a number of shares of our common stock equal to 10,000, at a price equal to \$0.50 per share of common stock for advice on potential oncology applications for Homspira. The securities were issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder. The investor qualified as an accredited investor (as defined by Rule 501 under the Securities Act of 1933, as amended).

In January 2005, we made a tender offer to temporarily reduce the exercise price of certain warrants issued in October 2004 from \$0.50 to \$0.20 per share. The tender offer expired on March 4, 2005. We accepted for exercise a total of 6,600,778 warrants validly tendered and not withdrawn pursuant to the terms of the tender offer, which represents approximately 48% of the aggregate 13,780,449 warrants that were subject to the offer. The tender offer was made in reliance upon exemption from registration pursuant to Sections 3(a)(9), which provide an exemption for any security exchanged by the issuer with its existing security holders where no commission or other remuneration is paid or given directly or indirectly for soliciting such exchange. We did not pay or give any commission or other remuneration to any person for soliciting the tender offer. The tender offer also falls within Section 4(2) of the Securities Act since all the investors were current holders of the warrants and received their securities from the October 2004 private placement or from issuances in October 2004 pursuant to the terms of settlement agreements or convertible promissory notes. These transactions were conducted under Section 4(2) and the rules and regulations promulgated thereunder, including Regulation D.

In May 2005, we issued to our Chief Executive Officer, Michael Wilhelm, per his employment agreement, 150,000 stock options at a weighted average exercise price of \$0.40 per share under our 2003 Stock Option, Deferred Stock and Restricted Stock Plan. In May 2005, per his employment agreement we issued 100,000 shares of our common stock to our Chief Financial Officer, John Fermanis. The securities were issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

The Company has accrued the issuance of 384,100 shares of common stock as of May 31, 2005. Pursuant to the terms of their respective agreement with us, 41,665 of these shares are to be issued to our Chief Financial Officer and 114,464 are to be issued to consultants per agreements for the first quarter 2005. Also included is 127,971 shares relating to the conversion of convertible notes. 100,000 of these shares are issued to two advisory board members. The shares will bear a restrictive legend regarding the sale or transfer of such.

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

The shares were

issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder. Our Chief Financial Officer and the consultants each qualifies as an accredited investor (as defined by Rule 501 under the Securities Act of 1933, as amended). No general solicitation or advertising was undertaken in connection with the offer and sale of these shares.

The Company accrued the issuance of 359,921 common stock purchase warrants during the three months ended March 31, 2005. The exercise prices of these warrants range from \$0.125 to \$0.50 per share. The warrants expire three years after date of issuance. Pursuant to the term of his employment agreement, our Chief Executive Officer, is to receive 79,388 warrants. Pursuant to the term of his employment agreement, our Chief Financial Officer, is to receive 12,500 warrants. Pursuant to the terms of their respective agreement with us, 268,033 of these warrants are to be granted to current members of the Bioterrorism Advisory Board, Drug Development Advisory Board and the Oncology and Dermatology Advisory Board for participation during the first quarter ended March 31, 2005. The warrants will bear a restrictive legend regarding the sale or transfer of such or the underlying securities. The warrants were issued in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder. There were less than 35 investors and each investor had such knowledge and experience in financial and business matters that the investor was capable of evaluating the merits and risks of investing in the warrants. No general solicitation or advertising was undertaken in connection with the offer and sale of these shares. Each investor was also provided with access to our Exchange Act reports including our annual report on Form 10-KSB and our quarterly reports on Form 10-QSB.

### ITEM 27 EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

#### (A) EXHIBITS

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT
2.1	Agreement and Plan of Merger dated July 2, 2003 among the Registrant, GPN Acquisition Corporation and ImmuneRegen BioSciences, Inc. (incorporated by reference to exhibit 2 of the Registrant's current report on Form 8-k filed with the Securities and Exchange Commission on July 7, 2003).
3.1	Certificate of Incorporation filed with the Delaware Secretary of State on June 4, 1985 (incorporated by reference to exhibit 3.1 of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
3.1(a)	Certificate of Amendment filed with the Delaware Secretary of State on July 16, 1987 (incorporated by reference to exhibit 3.1(a) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
3.1(b)	Certificate of Amendment filed with the Delaware Secretary of State on February 3, 1992 (incorporated by reference to exhibit 3.1(b) of the Registrant's annual report on Form

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).

- 3.1(c) Certificate of Amendment filed with the Delaware Secretary of State on November 23, 1992 (incorporated by reference to exhibit 3.1(c) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
- 3.1(d) Certificate of Amendment filed with the Delaware Secretary of State on December 15, 1994 (incorporated by reference to exhibit 3.1(d) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
- 3.1(e) Certificate of Amendment filed with the Delaware Secretary of State on November 7, 1995 (incorporated by reference to exhibit 3.1(e) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
- 3.1(f) Certificate of Amendment filed with the Delaware Secretary of State on December 30, 1996 (incorporated by reference to exhibit 3.1(f) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT
-----	-----
3.1(g)	Certificate of Amendment filed with the Delaware Secretary of State on November 8, 2000 (incorporated by reference to exhibit 3.1(h) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
3.2	Amended and Restated Bylaws of the Registrant dated as of January 1, 2002 (incorporated by reference to exhibit 3(b) of the Registrant's annual report on Form 10-KSB for the year ended December 31, 2001 filed with the Securities and Exchange Commission on April 16, 2002).
4.1*	Specimen Common Stock Certificate.
4.2	2003 Stock Option, Deferred Stock and Restricted Stock Plan (incorporated by reference to exhibit 4.1 of the Registrant's registration statement on Form S-8 (file no. 333-113511) filed with the Securities and Exchange Commission on March 11, 2004).
4.3	Form of Warrant by and between the Registrant and each of the Investors or Creditors, as the case may be, who entered into an Agreement filed as Exhibit 10.6, 10.7, 10.8 or 10.9 herewith (incorporated by reference to exhibit 4.1 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2004).
4.4	Form of Registration Rights (Annex A to Subscription Agreement) by and between the Registrant and each of the

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

Investors who entered into the Agreements filed as Exhibits 10.6 and 10.8 herewith (incorporated by reference to exhibit 4.2 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2004).

4.5+	Form of Anti-Dilution Rights (Annex B to Subscription Agreement) by and between the Registrant and each of the Investors who entered into the Agreements filed as Exhibits 10.6 and 10.8 herewith (incorporated by reference to exhibit 4.3 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2004).
4.6+	Promissory Note issued from the Registrant to SBM Certificate Company as of April 28, 2004.
5.1*	Opinion of Kirkpatrick & Lockhart Nicholson Graham LLP
10.1+	Employment Agreement dated December 16, 2002 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and Michael Wilhelm.
10.2+	Consulting Agreement dated December 16, 2002 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and David Harris.
10.2(a)+	First Amendment to Consulting Agreement dated January 2003 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and David Harris.
10.3+	Consulting Agreement dated December 16, 2002 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and Mark Witten.
10.3(a)+	First Amendment to Consulting Agreement dated January 2003 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and Mark Witten.
10.4+	License Agreement dated December 16, 2002 among ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and Mark Witten.
10.4(a)+	First Amendment to License Agreement dated December 20, 2002 among ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, David Harris and Mark Witten.
10.4(b)+	Second Amendment to License Agreement dated June 26, 2003 among ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, David Harris and Mark Witten.
10.4(c)	Assignment Agreement dated February 23, 2005 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant and Mark Witten.

EXHIBIT NUMBER

DESCRIPTION OF EXHIBIT

-----

-----

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

- 10.4(d) Assignment Agreement dated February 23, 2005 among ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, David Harris and Mark Witten.
- 10.5+ Lease Agreement dated July 1, 2004 between ImmuneRegen BioSciences, Inc., a subsidiary of the Registrant, and The Clayton Companies.
- 10.6 Form of Subscription Agreement entered into as of October 13, 2004 between the Registrant and each of the Investors set forth on the Schedule of Investors thereto (incorporated by reference to exhibit 10.1 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2004).
- 10.7 Form of Settlement Agreement entered into as of October 13, 2004 between the Registrant and each of the Creditors set forth on the Schedule of Creditors thereto (incorporated by reference to exhibit 10.2 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2004).
- 10.8 Form of Subscription Agreement entered into as of October 26, 2004 between the Registrant and each of the Investors set forth on the Schedule of Investors thereto (incorporated by reference to exhibit 10.1 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 27, 2004).
- 10.9 Form of Settlement Agreement entered into as of October 26, 2004 between the Registrant and each of the Creditors set forth on the Schedule of Creditors thereto (incorporated by reference to exhibit 10.2 of the Registrant's current report on Form 8-K filed with the Securities and Exchange Commission on October 27, 2004).
- 10.10 Employment Agreement dated February 15, 2005 between the Registrant and John N. Fermanis (incorporated by reference to exhibit 10.10 of the Registrant's Amendment No. 1 on Form 10-K/A to its annual report for the year ended December 31, 2004).
- 21.1+ Subsidiaries of Registrant.
- 23.1 Consent of Russell Bedford Stefanou Mirchandani LLP.
- 23.2\* Consent of Kirkpatrick & Lockhart Nicholson Graham LLP (contained in Exhibit 5.1).
- 24.1+ Power of Attorney (included on signature page).

-----  
+ Previously filed.

\* To be filed by amendment.

(B) FINANCIAL STATEMENT SCHEDULES

## Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

All such schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

### ITEM 28 UNDERTAKINGS

The undersigned small business issuer hereby undertakes to:

(1) For determining any liability under the Securities Act, treat the information omitted from this form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the small business issuer under Rule 424(b)(1), or (4) or 497(h) under the Securities Act of 1933 as part of this registration statement as of the time the Securities and Exchange Commission declared it effective.

(2) For determining any liability under the Securities Act of 1933, treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in this registration statement, and that offering of the securities at that time as the initial BONA FIDE offering of those securities.

The undersigned small business issuer hereby undertakes with respect to the securities being offered and sold in this offering:

(1) To file, during any period in which it offers or sells securities, a post-effective amendment to this Registration Statement to:

(a) Include any prospectus required by Section 10(a)(3) of the Securities Act;

(b) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(c) Include any additional or changed material information on the plan of distribution.

(2) For determining liability under the Securities Act of 1933, treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial BONA FIDE offering.

(3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

Insofar as indemnification by the undersigned small business issuer for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the small business issuer

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities (other than the payment by the small business issuer of expenses incurred or paid by a director, officer or controlling person of the small business issuer in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the undersigned small business issuer will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Scottsdale, State of Arizona, on the 19th day of July, 2005.

IR BioSciences Holdings, Inc.

By: /S/ MICHAEL K. WILHELM

-----  
 Michael K. Wilhelm  
 President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

SIGNATURE	TITLE	DATE
/s/ Michael K. Wilhelm ----- Michael K. Wilhelm	Chief Executive Officer, President and Director (Principal Executive Officer)	July 19, 2005
/s/ John N. Fermanis ----- John N. Fermanis	Chief Financial Officer (Principal Financial and Accounting Officer)	July 19, 2005
* ----- Mark L. Witten, Ph.D.	Director and Research Scientist	July 19, 2005

Edgar Filing: IR BIOSCIENCES HOLDINGS INC - Form SB-2/A

\*

----- Director  
Theodore E. Staahl, M.D.

July 19, 2005

\*By: /s/ Michael K. Wilhelm

-----  
Michael K. Wilhelm  
Attorney in Fact