Axovant Sciences Ltd.
Form 424B5
June 22, 2018

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Filed pursuant to Rule 424(b)(5)
Registration Statement No. 333-215387

PROSPECTUS SUPPLEMENT **(to Prospectus dated January 13, 2017)**

$75,000,000

Common Shares

We have entered into a sales agreement with Cowen and Company, LLC, or Cowen, relating to the common shares offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, we may offer and sell our common shares having an aggregate offering price of up to $75,000,000 from time to time through Cowen acting as our agent.

Our common shares are traded on The Nasdaq Global Select Market, or the Nasdaq, under the symbol "AXON." On June 21, 2018, the last reported sale price of our common shares on the Nasdaq was $2.67 per common share.

Sales of our common shares, if any, under this prospectus supplement and the accompanying prospectus may be made in sales deemed to be "at-the-market" offerings, as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on the Nasdaq or any other trading market for our common shares. Cowen is not required to sell any specific amount of securities, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Cowen and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to Cowen for sales of common shares sold pursuant to the sales agreement will be an amount equal to up to 3% of the gross proceeds of any common shares sold under the sales agreement. See "Plan of Distribution" beginning on page S-33 for additional information regarding the compensation to be paid to Cowen. In connection with the sale of the common shares on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Cowen will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Cowen with respect to certain liabilities, including liabilities under the Securities Act or the Exchange Act of 1934, as amended, or the Exchange Act.

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, and, as such, are subject to reduced public company reporting requirements.

Investing in our common shares involves a high degree of risk. See "Risk Factors" on page S-17 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus concerning factors you should consider before investing in our common shares.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Consent under the Exchange Control Act 1972 (and its related regulations) has been obtained from the Bermuda Monetary Authority for the issue and transfer of our common shares to and between residents and non-residents of Bermuda for exchange control purposes provided our common shares remain listed on an appointed stock exchange, which includes the Nasdaq. In granting such consent, neither the Bermuda Monetary Authority nor the Registrar of Companies in Bermuda accepts any responsibility for our financial soundness or the correctness of any of the statements made or opinions expressed in this prospectus supplement.

Cowen

June 22, 2018

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document contains two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also supplements and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to this offering. If the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus, you should rely on the information set forth in this prospectus supplement. Under this prospectus supplement, we may offer our common shares having an aggregate offering price of up to $75,000,000 from time to time at prices and on terms to be determined by market conditions at the time of offering.

We have not, and Cowen has not, authorized anyone else to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, along with the information contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. Neither we nor Cowen take any responsibility for, or can provide any assurance as to the reliability of, any information other than the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any permitted free writing prospectuses we have authorized for use in connection with this offering.

We are offering to sell, and seeking offers to buy, our common shares only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of the date of this prospectus supplement or the date of the accompanying prospectus, and the information in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our common shares. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should read both this prospectus supplement and the accompanying prospectus, as well as the documents incorporated by reference into this prospectus supplement and the accompanying prospectus and the additional information described under "Where You Can Find More Information" in this prospectus supplement and in the accompanying prospectus, before investing in our common shares.

Unless otherwise indicated or the context otherwise requires, references in this prospectus supplement and the accompanying prospectus to "Axovant," the "Company," "we," "us" and "our" refer to Axovant Sciences Ltd. and its consolidated subsidiaries.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing. Before investing in our common shares, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the section titled "Risk Factors" in this prospectus supplement, and the consolidated financial statements and accompanying notes, and other information incorporated by reference in this prospectus supplement and the accompanying prospectus.

Our Company

We are a clinical-stage biopharmaceutical company focused on the acquisition, development and commercialization of novel therapeutics in the fields of neurology and psychiatry. We are developing a pipeline of clinical and nonclinical product candidates that focuses on the various aspects of debilitating neurodegenerative diseases such as Parkinson's disease, Alzheimer's disease, Lewy body dementia, and other indications in the fields of neurology and psychiatry. Our goal is to be the leading biopharmaceutical company focused on the fields of neurology and psychiatry.

Our near-term focus is to develop our gene therapy product candidate, AXO-Lenti-PD, as a one-time treatment for Parkinson's disease. We intend to begin a Phase 1/2 study of AXO-Lenti-PD in advanced Parkinson's disease patients before the end of 2018. Prior to the recent in-licensing of AXO-Lenti-PD in June 2018, our primary focus had been on developing nelotanserin, a selective inverse agonist of the 5-HT_{2A} receptor, and intepirdine, an antagonist of the 5-HT_{6} receptor. In January 2018, we announced the results of a pilot Phase 2 study of nelotanserin in patients with Lewy body dementia, or LBD, that experience visual hallucinations. We plan to make a determination of the overall development strategy for nelotanserin once we have reviewed topline data in the second half of 2018 from our currently ongoing Phase 2 study of nelotanserin in REM Sleep Behavior Disorder, or RBD, and have completed our ongoing comprehensive clinical, regulatory and commercial review. In addition, we will determine our development plans for RVT-104, a combination of rivastigmine and a peripheral muscarinic receptor antagonist, as a potential treatment for patients with Alzheimer's disease or dementia with Lewy bodies, or DLB, once we have completed our ongoing comprehensive clinical, regulatory and commercial review in the context of our recent acquisition of AXO-Lenti-PD and any newly acquired assets.

In January 2018, we announced the discontinuation of our development of intepirdine following our announcement that neither the Phase 2b HEADWAY clinical trial of intepirdine in patients with DLB nor the pilot Phase 2 Gait and Balance clinical trial of intepirdine in patients with dementia and gait impairment met their respective primary endpoints, and the September 2017 announcement that our Phase 3 MINDSET clinical trial of intepirdine in patients with mild-to-moderate Alzheimer's disease did not meet its co-primary efficacy endpoints. Following the announcement of Phase 3 MINDSET clinical trial results, we also discontinued further development of RVT-103 which had been intended for use in combination with intepirdine. We remain committed to identifying, developing and commercializing other novel treatments for unmet needs in neurology and psychiatry. We are continuing to actively explore opportunities to acquire or in-license additional products, product candidates and technologies to further build our pipeline.

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AXO-Lenti-PD

Overview

AXO-Lenti-PD (previously known as OXB-102) is an *in vivo* lentiviral gene therapy investigational product candidate currently being developed for the one-time treatment of Parkinson's disease. We licensed the worldwide development and commercialization rights to AXO-Lenti-PD and its predecessor product ProSavin from Oxford BioMedica (UK) Ltd., or BioMedica, under an exclusive license agreement entered into in June 2018, or the License Agreement. See " Our Key Agreements Oxford BioMedica License Agreement for AXO-Lenti-PD."

AXO-Lenti-PD delivers a construct of three genes that encode the critical enzymes required for the biochemical synthesis of endogenous dopamine from tyrosine. The three enzymes are: Tyrosine Hydroxylase (TH, the enzyme that converts tyrosine to L-dopa), Cyclohydrolase 1 (CH1, the rate-limiting enzyme for synthesis of Tetrahydrobiopterin, or BH4, a critical cofactor for production of L-dopa), and Aromatic L-Amino Acid Decarboxylase (AADC, the enzyme that converts L-dopa to dopamine). AXO-Lenti-PD is delivered by a one-time MRI-guided stereotactic infusion into the putamen. We believe that delivery of all three of these genes will enable the continuous, tonic, endogenous synthesis of dopamine in non-dopaminergic cells. Dopamine deficiency plays a central role in Parkinson's disease and we believe that restoring dopamine synthesis capability in patients will offer lasting improvement in the symptoms of Parkinson's disease. Oxford BioMedica previously conducted a Phase 1/2 clinical study with ProSavin (also known as OXB-101), an earlier version of this product candidate. In this clinical trial, ProSavin was observed to have a favorable long-term safety profile and demonstrated effects on motor function, supporting proof-of-concept. AXO-Lenti-PD delivers an optimized transgene construct relative to ProSavin.

Theoretical Benefit of AXO-Lenti PD on Dopamine Concentrations Based on Postulated Mechanism of Action

Parkinson's Disease Overview

Parkinson's disease is a chronic neurodegenerative disorder that primarily results in progressive and debilitating motor symptoms. It is estimated that up to 1,000,000 people in the United States and 7,000,000 to 10,000,000 people worldwide suffer from Parkinson's disease. It typically develops between the ages of 55 and 65 years and affects approximately 1% of people over 60 years of age. The underlying factors that result in the development of Parkinson's disease are largely unknown. However, Parkinson's disease is a neurodegenerative disease that results in reduced levels of the neurotransmitter dopamine in the striatum, a region in the brain. Dopamine is essential for movement, and low levels of dopamine in patients with Parkinson's disease are believed to result in the typical motor symptoms of the disease, including hypo- and bradykinesia, rigidity, tremor, and postural instability.

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The treatment of Parkinson's disease is currently limited to symptomatic treatments, as no therapies have proven effective in altering the course of the disease or addressing the underlying pathophysiological processes. The mainstay of treatment typically involves the daily administration of oral L-dopa, the precursor to dopamine. While L-dopa is effective in controlling motor symptoms early in the disease, progressive loss of dopaminergic neurons and chronic L-dopa therapy are believed to contribute to the "*wearing off*" of L-dopa's efficacy in the more advanced stages of the disease. Patients become increasingly less responsive to oral L-dopa therapy and require higher doses to manage their symptoms. More advanced Parkinson's disease patients often begin to experience *'on-off' motor fluctuations*, characterized by unpredictable 'OFF periods' of reduced mobility and increased rigidity and tremor. In addition, abnormal and involuntary movements known as dyskinesias may occur at higher L-dopa blood levels. Approximately 10% of patients per year develop 'on-off' motor fluctuations after starting L-dopa therapy.

As Parkinson's disease progresses, other therapies can be given in combination with L-dopa and include dopamine receptor agonists and inhibitors of enzymes related to dopamine metabolism, such as monoamine oxidase B (MAO-B) and catechol O-methyl transferase (COMT). These therapies aim to further improve overall dopaminergic function. Patient-friendly treatment options for motor fluctuations in advanced Parkinson's disease are limited. Subcutaneous injections of the dopamine agonist apomorphine are used for the acute treatment of OFF episodes. Duopa/Duodopa is an enteral suspension of L-dopa and the peripheral AADC inhibitor carbidopa that is continuously administered over the course of the day through a surgically-placed percutaneous endoscopic gastrostomy with jejunal, or PEG-J, tube to reduce fluctuations in L-dopa blood levels. Deep-Brain Stimulation, or DBS, a procedure in which electrodes are surgically placed in the basal ganglia, either in the subthalamic nucleus or internal globus pallidus, is another option in advanced Parkinson's disease. Through an impulse generator, electrical stimuli are delivered to the brain to modulate neural signals within these target regions. It remains unclear exactly how DBS improves the symptoms of Parkinson's disease. Both Duopa/Duodopa and DBS require indwelling hardware a PEG-J tube, or electrodes, leads, and impulse generator respectively.

Predecessor Product: ProSavin (OXB-101)

ProSavin, the predecessor therapy to AXO-Lenti-PD, delivered the same three genes (AADC, TH, and CH1) as AXO-Lenti-PD in the same lentiviral vector, but in a different payload configuration. AXO-Lenti-PD was the result of multifactorial experimentation to modify the payload configuration to improve endogenous dopamine production. The initial Phase 1/2 clinical trial of ProSavin was completed in 2012 and long-term follow-up is ongoing.

Nonclinical Studies for ProSavin

Nonclinical studies in non-human primate models of Parkinson's disease demonstrated that ProSavin can safely restore striatal dopamine production to approximately 50% and correct motor deficits without associated dyskinesias (p-value < 0.05). ProSavin was observed to improve Parkinson's disease symptoms and clinical disease severity in the same non-human primate model, with a durable response seen up to 12 months (p-value < 0.05 at all time points beyond week 4). One of the ProSavin treated non-human primates was continued on the study and exhibited a sustained motor improvement until the study was concluded at 44 months. Nonclinical study data did not reveal adverse reactions nor findings with potential impact on patient safety and provided pertinent data on the optimal method of delivery in the clinic. ProSavin was also observed to be well

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tolerated when co-administered with L-dopa and apomorphine, indicating that it can be used in conjunction with these commonly used Parkinson's disease medications.

Behavioral Response and Dopamine Production Following Administration of ProSavin in Non-Human Primates

In summary, these experiments were determined to demonstrate the long-term safety of therapeutic doses of ProSavin as well as significant efficacy to improve measures of movement and reduce dyskinesias in multiple animal models. These results supported the initiation of clinical trials for ProSavin.

Phase 1/2 Clinical Trial of ProSavin

ProSavin was evaluated for safety and efficacy in a Phase 1/2 study in patients with advanced Parkinson's disease by BioMedica. In this study, ProSavin was observed to be safe and well-tolerated with sustained improvements on motor function as measured by the Unified Parkinson's Disease Rating Scale, or UPDRS, Part III (motor) score in the state "OFF" levodopa medication, which we refer to as UPDRS Part III "OFF." The Phase 1/2 clinical trial was conducted at sites in the United Kingdom and France on a total of 15 patients with advanced Parkinson's disease. Three dose levels of ProSavin were assessed in four patient cohorts: dose level one (1.9×10^7 transducing units (TU); cohort 1); dose level two (4.0×10^7 TU; cohorts 2a and 2b); and dose level three (1×10^8 TU; cohort 3). Cohorts 2b and 3 underwent a modified delivery method to increase the rate of delivery of the viral vector. The primary endpoints were the number and severity of adverse events as well as the UPDRS Part III "OFF" scores at 6 months after gene therapy administration. No serious adverse events related to ProSavin or the surgical procedure were reported. Reported adverse events, or AEs, were generally mild and related to either Parkinson's disease progression or L-dopa-induced dyskinesias that were ameliorated with reduction of L-dopa administration. The most common AEs in the first 12 months were dyskinesia (n=11 subjects), "on-off" motor fluctuations (n=9), headache (n=4), and akinesia (n=3).

Across all patients, mean UPDRS Part III "OFF" scores were significantly improved at six months (33% reduction, p-value=0.0001) and 12 months (31% reduction, p-value=0.0001). Sustained improvement was seen through four years of follow-up and the long-term follow-up study is still ongoing (10 years exposure in the earliest subject). This clinical data was published in *The Lancet* in 2014.

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Mean change in UPDRS Part III "OFF" score results after 12 months from the Phase 1/2 ProSavin Trial

Second-Generation Product Candidate: AXO-Lenti-PD

AXO-Lenti-PD is a re-engineered gene therapy product candidate that was selected following multifactorial experimentation to modify the payload configuration of ProSavin to further improve dopamine production. The modifications included a different ordering of the genes, the fusion of TH and CH1 with a flexible linker, and the removal of a genetic control element between TH and AADC. We believe these changes lead to more balanced stoichiometry of gene expression and colocalization of enzymatic activity. The targeted net result is improved dopamine production in transfected cells.

Nonclinical studies for AXO-Lenti-PD

In vitro experiments with AXO-Lenti-PD demonstrated up to 10-fold increases in dopamine + L-dopa production over ProSavin. Functionally, in non-human primate models, AXO-Lenti-PD demonstrated a similar level of improvement in spontaneous locomotor activity compared to ProSavin at approximately 1/5th the dose. We believe these data demonstrate that

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AXO-Lenti-PD has greater potency compared to ProSavin in terms of dopamine production, enzymatic activity and functional improvement in animal models of Parkinson's disease.

Comparison of Catecholamine (L-dopa and Dopamine) Production Between ProSavin and AXO-Lenti-PD in Primary Human Cortical Neurons

Planned Phase 1/2 Clinical Study of AXO-Lenti-PD

We plan to initiate a Phase 1/2 clinical study of AXO-Lenti-PD in patients with advanced Parkinson's disease before the end of 2018. The planned study design consists of two parts:

- Part A is a non-randomized dose-escalation of multiple potential dose levels.
- Part B is a double-blind design with patients randomized either to an active group receiving the optimal dose as determined in Part A, or a control group receiving an imitation "sham" surgical procedure.

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The study will evaluate the safety and tolerability of AXO-Lenti-PD as well as effects on biomarkers and clinical measures of motor function, including as measured by the UPDRS Part III. Sufficient gene therapy product is currently available to initiate the planned Phase 1/2 clinical study.

Flow Diagram of Planned Phase 1/2 Clinical Trial of AXO-Lenti-PD

Nelotanserin

Overview

In October 2015, we acquired from our majority shareholder, Roivant Sciences Ltd., or RSL, the global rights to nelotanserin, a selective inverse agonist of the 5-HT_{2A} receptor. To date, we have been investigating and developing nelotanserin to address visual hallucinations and RBD in patients with LBD. In June 2017, we received Fast Track designation from the FDA for nelotanserin for the treatment of visual hallucinations in DLB.

Mechanism of Action

Nelotanserin reduces the activity of the 5-HT_{2A} receptor. The 5-HT_{2A} receptor has been linked to neuropsychiatric disturbances including visual hallucinations and sleep disturbances and the antagonism of 5-HT_{2A} receptors has been shown to improve parkinsonism. In *in vitro* studies, nelotanserin did not antagonize the dopamine D_2 receptor. Antagonism of the D_2 receptor in LBD patients can lead to severe side effects including increased parkinsonism, worsening of cognition, heavy sedation, and symptoms resembling neuroleptic malignant syndrome which can be fatal.

Nelotanserin in Lewy Body Dementia

Medical Need

LBD includes two similar conditions, DLB and Parkinson's disease dementia, or PDD. There is significant overlap in the pathology and clinical presentation of both conditions; however, the primary difference generally depends on the timing of the onset of cognitive decline relative to the onset of movement-related symptoms. LBD is a progressive neurodegenerative disorder pathologically characterized by the aggregation of alpha-synuclein and other proteins, known as Lewy bodies, in the brain, causing disruption in cognition, function and behavior. In DLB, the cognitive decline typically occurs before or within one year of the onset of movement disorder symptoms. In PDD, movement disorder symptoms typically precede cognitive decline by more than one year. The Lewy Body Dementia Association estimates that there are 1.4 million patients with LBD in the United States.

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LBD patients suffer from frequent visual hallucinations, which are often treated with off-label atypical antipsychotic medications such as quetiapine. Use of atypical antipsychotic medications, which have activity against the dopamine D_2 receptor, can lead to increased or possibly irreversible parkinsonism in LBD patients and a life-threatening side-effect resembling neuroleptic malignant syndrome. We believe that there is a need for new therapeutic options that can reduce visual hallucinations in LBD patients without risk of these severe side effects.

Parkinsonism is a core feature of LBD, which includes patients diagnosed with both PDD and DLB. Dopaminergic agents (such as L-Dopa and dopamine agonists), which are commonly used for the treatment of Parkinson's disease, can exacerbate neuropsychiatric symptoms in patients diagnosed with LBD. We believe that there is a need for new therapeutic options for LBD patients that can reduce the burden of motor symptoms without increasing the risk of neuropsychiatric side-effects.

Clinical Development

In January 2018, we reported results for a pilot Phase 2 Visual Hallucination study of nelotanserin in patients with LBD. On the primary endpoint of safety, including an assessment of symptoms as measured by the UPDRS, nelotanserin was generally well tolerated. A number of exploratory efficacy assessments were conducted, including the UPDRS Part III; the Scale for the Assessment of Positive Symptoms (SAPS); SAPS-PD; the Patient Global Impression of Change of Visual Hallucinations (PGIC-VH); and an internally developed patient diary. In a prespecified intention-to-treat analysis, nelotanserin treatment versus placebo (n=27) resulted in a 3.12 point improvement in the UPDRS Part III with a positive trend (p=0.075, unadjusted). In a prespecified analysis of the DLB patient subset (n=19), nelotanserin improved the UPDRS Part III by 4.00 points (p=0.041, unadjusted). No other statistical trends of improvement were seen on prespecified analyses of the full SAPS, SAPS-PD, PGIC-VH, or in the patient diary. We plan to make a determination of the overall development strategy for nelotanserin once the results from the Phase 2 RBD study of nelotanserin are received in the second half of 2018 and after we complete our ongoing comprehensive clinical, regulatory and commercial review in the context of any newly acquired product candidates.

Nelotanserin for REM Sleep Behavior Disorder in Lewy Body Dementia

Medical Need

RBD is a common clinical feature of LBD, and is a condition where patients lose normal sleep paralysis resulting in the physical acting out of their dreams, impacting their quality of life and endangering themselves and their bed partners. While off-label treatment of RBD with benzodiazepines is common, this class of drugs is associated with severe side effects in patients with dementia, including sedation, worsening of cognition and increased risk of falls. We believe that there is a need for new therapeutic options that can reduce the frequency of RBD without sedating patients or worsening cognition in patients with dementia.

Clinical Development

In March 2016, we initiated a four-week, double-blind, randomized, placebo-controlled Phase 2 study in patients with DLB and Parkinson's disease dementia suffering from RBD. This study will utilize objective measures of efficacy as assessed in a sleep-lab setting. Due to challenges with recruitment for this study, we elected to close enrollment prior to reaching our enrollment target. Because of this smaller than planned enrollment, the study may not qualify as pivotal. We expect to receive top-line results for this study in the second half of calendar year 2018. Patients completing the double-blind portion of this study are eligible to enroll in an open label extension study of nelotanserin.

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RVT-104

Overview

In August 2016, we and Qaam Pharmaceuticals LLC entered into an exclusive license agreement under which we in-licensed the rights to develop and commercialize RVT-104, a product candidate that combines rivastigmine, a cholinesterase inhibitor, with a peripherally acting quaternary amine muscarinic receptor antagonist. This combination could provide a means to mitigate the known peripheral side effects of cholinesterase inhibitors and may also allow higher than currently approved doses of cholinesterase inhibitors such as rivastigmine, which may improve treatment of symptoms of neurodegenerative disorders such as Alzheimer's disease and DLB.

Mechanism of Action of RVT-104

Cholinesterase inhibitors are dose-limited by their gastrointestinal tolerability profile, which limits patient adoption and compliance. Peripherally-acting muscarinic receptor antagonists in combination with cholinesterase inhibitors may reduce the gastrointestinal side effects of cholinesterase inhibitors and may also potentially allow higher than currently approved doses of cholinesterase inhibitors to be used.

RVT-104 is the combination of high-dose rivastigmine and a peripherally-acting quaternary amine muscarinic receptor antagonist. Rivastigmine has shown greater efficacy at higher-than approved doses that were not well tolerated. Unlike donepezil, which only inhibits the acetylcholinesterase enzyme, rivastigmine also inhibits the butyrylcholinesterase enzyme, which is also involved in the breakdown of acetylcholine. Thus, there is reason to believe that higher doses of rivastigmine could potentially lead to better efficacy because, in addition to blocking acetylcholinesterase, the activity of butyrylcholinesterase is also addressed.

RVT-104 in Alzheimer's Disease and Dementia with Lewy Bodies

Cholinesterase inhibitors are the standard of care in both Alzheimer's disease and DLB. Despite their widespread use, many patients cannot tolerate the cholinesterase inhibitors because of their cholinergic side effects such as nausea, vomiting and diarrhea. We believe that drugs that can mitigate these cholinergic side effects will allow more patients to receive optimal cholinesterase inhibitor therapy as well as potentially allow for dosing with higher than currently approved doses. We are exploring RVT-104, a combination of rivastigmine and a peripheral muscarinic receptor antagonist, as a potential treatment for patients with Alzheimer's disease or DLB. We anticipate making a decision about development plans for this program after an internal portfolio review in the context of any newly acquired product candidates.

Recent Developments

Oxford BioMedica License Agreement

On June 5, 2018, ASG, our wholly owned subsidiary, entered into the License agreement with BioMedica. See " Our Key Agreements Oxford BioMedica License Agreement for AXO-Lenti-PD" for more information.

Roivant Private Placement Financing

On June 5, 2018, we entered into a share purchase agreement with Roivant Sciences Ltd., or RSL, pursuant to which we agreed to issue and sell to RSL 14,285,714 common shares in a private placement, or the Private Placement, at a purchase price of $1.75 per common share, equal to the per share closing price of our common shares on The Nasdaq Global Select Market, or the Nasdaq, on June 5, 2018. The Private Placement is expected to close in July 2018, subject to satisfaction or

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waiver of customary closing conditions. As of March 31, 2018, RSL held 69.6% of our outstanding common shares.

The aggregate gross proceeds to us from the Private Placement are expected to be $25.0 million. We intend to use the net proceeds from the Private Placement to fund the clinical development of AXO-Lenti-PD, additional business development activities, as well as for working capital and other general corporate purposes.

Strengthening Management Team

On May 30, 2018, Fraser Wright, Ph.D., joined our Company as Chief Technology Officer overseeing our gene therapy initiatives. Dr. Wright is the Co-Founder and former Chief Technology Officer of Spark Therapeutics, Inc., or Spark, and has over 20 years of leadership experience in the development of novel vector-based biologic products. At Spark, he oversaw process development and clinical-stage manufacturing for LUXTURNA . Prior to Spark, he was the founding Scientific Director of the Clinical Vector Core Laboratory at The Children's Hospital of Philadelphia, where he directed clinical core staff in gene therapy investigational product development, manufacture, and quality control testing for ten first-in-human viral vector investigational products including LUXTURNA and Kymriah®. He was also previously the Director of Development and Clinical Manufacturing at Avigen.

In addition, on May 29, 2018, we announced that Gavin Corcoran, MB BCh, FACP, will join our Company on July 1, 2018 as Executive Vice President of Research and Development, and Michael Hayden, MB ChB, Ph.D., FRSC, was appointed as senior scientific advisor to our Company and chairman of our newly established scientific advisory board. Dr. Corcoran has overseen successful drug development across multiple therapeutic areas including neurology and psychiatry. He currently serves as Chief Medical Officer at Allergan plc, and previously served as Chief Medical Officer of Actavis Ltd. Dr. Hayden recently served as President of Global R&D and Chief Scientific Officer at Teva Pharmaceutical Industries Ltd., or Teva. Prior to Teva, he founded multiple biotechnology companies, including Aspreva Pharmaceuticals Corporation.

Corporate Information

We are an exempted limited company incorporated under the laws of Bermuda on October 31, 2014 under the name Roivant Neurosciences Ltd. We changed our name to Axovant Sciences Ltd. in March 2015. We have six wholly owned subsidiaries. Axovant Holdings Limited, or AHL, a direct wholly owned subsidiary of Axovant Sciences Ltd., was incorporated in England and Wales in August 2016; Axovant Sciences, Inc., or ASI, a direct wholly owned subsidiary of AHL, was incorporated in Delaware in February 2015; Axovant Sciences GmbH, or ASG, a direct wholly owned subsidiary of AHL, was organized in Switzerland in August 2016; Axovant Sciences America, a direct wholly owned subsidiary of AHL, was incorporated in Delaware in July 2017; Axovant Treasury Holdings, Inc., a direct wholly owned subsidiary of Axovant Sciences Ltd., was incorporated in Delaware in March 2018; and Axovant Treasury, Inc., a direct wholly owned subsidiary of Axovant Treasury Holdings, Inc., was incorporated in Delaware in March 2018.

Our principal office is located at Suite 1, 3rd Floor, 11-12 St. James's Square, London, United Kingdom SW1Y 4LB, and our telephone number is +44 203 318 9708. Our registered office is located in Bermuda at Clarendon House, 2 Church Street, Hamilton HM11, Bermuda, and the telephone number of our registered office is +1 (441) 824-8100. We also have business operations in Basel, Switzerland, and New York, New York. Our website is located at http://www.axovant.com. We do not incorporate by reference into this prospectus supplement and the accompanying

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prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus supplement and the accompanying prospectus.

Axovant and the Axovant logo are our trademarks. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus may also contain trademarks and trade names that are the property of their respective owners.

Relationship with Roivant Sciences Ltd., Roivant Sciences, Inc., Roivant Sciences GmbH and Axovant Sciences, Inc.

Roivant Sciences Ltd. is Our Controlling Shareholder

We were founded as a wholly owned subsidiary of RSL, a company focused on the acquisition, development and commercialization of late-stage product candidates that are non-strategic, deprioritized or under-resourced at other biopharmaceutical companies, with the intent of reducing the time and cost of the drug development process. We are a "controlled company" within the meaning of the corporate governance rules of the Nasdaq. As of May 31, 2018, RSL owned, in the aggregate, 69.6% of our outstanding common shares.

Services Agreements with Roivant Sciences, Inc. and Roivant Sciences GmbH

We and our wholly owned subsidiary, ASI, have entered into a services agreement with Roivant Sciences, Inc., or RSI, a wholly owned subsidiary of RSL, pursuant to which RSI provides us with services in relation to the identification of potential product candidates and project management of clinical trials, as well as other services related to our development, administrative and financial functions. In February 2017, in connection with the contribution and assignment of all of our intellectual property rights to ASG, we amended and restated this services agreement effective as of December 13, 2016, as a result of which ASG was added as a recipient of services from RSI. In addition, ASG also entered into a separate services agreement with Roivant Sciences GmbH, or RSG, a wholly owned subsidiary of RSL, effective as of December 13, 2016, for the provision of services by RSG to ASG in relation to the identification of potential product candidates and project management of clinical trials, as well as other services related to development, administrative and financial activities. Under the terms of both services agreements, we are obligated to pay or reimburse RSI and RSG for the costs they, or third parties acting on their behalf, incur in providing services to us, ASI or ASG, including administrative and support services as well as research and development services. In addition, we are obligated to pay to RSI and RSG at a pre-determined mark-up on the costs incurred directly by RSI and RSG in connection with any general and administrative and research and development services provided directly by RSI and RSG.

Our Key Agreements

Oxford BioMedica License Agreement for AXO-Lenti-PD

On June 5, 2018, ASG, our wholly owned subsidiary, entered into the License agreement with BioMedica. Pursuant to the License Agreement, we received from BioMedica a worldwide, exclusive, royalty-bearing, sub-licensable license under certain patents and other intellectual property controlled by BioMedica to develop and commercialize AXO-Lenti-PD and related gene therapy products, collectively referred to as the Gene Therapy Products, for all diseases and conditions. Our license includes a right of reference to regulatory materials controlled by BioMedica related to the Gene Therapy Products. We also received from BioMedica an exclusive option to obtain a worldwide license to other patents and know-how controlled by BioMedica related to certain technology processes. Under the terms of the License Agreement, we and BioMedica have each agreed to

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customary non-compete restrictions limiting our respective abilities to develop certain directly-competing gene therapy products.

Pursuant to the License Agreement, the parties will establish a clinical project team, a process development team and a scientific advisory board. The clinical project team will oversee the transition of the long-term follow-up study of ProSavin and the AXO-Lenti-PD clinical program. Additionally, BioMedica will provide us with the equivalent of up to six full-time employees to assist with the conduct of these clinical programs, and we will reimburse BioMedica for costs related to such individuals.

The process development project team will oversee certain process development services that BioMedica will perform for us with respect to the manufacture of the Gene Therapy Products. The scientific advisory board will enable BioMedica to advise with respect to certain clinical and scientific aspects of the development of the Gene Therapy Products.

We are solely responsible, at our expense, for all activities related to the development and commercialization of the Gene Therapy Products. Pursuant to the License Agreement, we are required to use commercially reasonable efforts to develop, obtain regulatory approval of, and commercialize a Gene Therapy Product in the United States and at least one major market country in Europe. In addition, we are required to meet certain diligence milestones and to include at least one U.S.-based clinical trial site in a pivotal study of a Gene Therapy Product. If we fail to meet any of these specified development milestones, we may cure such failure by paying BioMedica certain fees, which range from $0.5 million to $1.0 million.

The License Agreement provides that BioMedica will transfer its existing inventory of AXO-Lenti-PD to us, which we intend to use in our planned Phase 1/2 study. BioMedica will manufacture and supply the Gene Therapy Products to us in accordance with separate clinical and commercial supply agreements that will be negotiated by the parties. Pursuant to the License Agreement, such clinical and commercial supply agreements will contain certain key provisions as set forth in the License Agreement, including the pricing structure and our ability to transfer the technology to another manufacturer at any time following the completion of formal process characterization, process validation or Biologics License Application submission.

As partial consideration for the license, we made an upfront payment to BioMedica of $30.0 million, $5.0 million of which will be applied as a credit against the process development work and clinical supply that BioMedica will provide to us. Under the terms of the License Agreement, we could be obligated to make payments to BioMedica totaling up to $55.0 million upon the achievement of specified development milestones and $757.5 million upon the achievement of specified regulatory and sales milestones. We will also be obligated to pay BioMedica a tiered royalty from 7% to 10%, based on yearly aggregate net sales of the Gene Therapy Products, subject to specified reductions upon the occurrence of certain events as set forth in the License Agreement. These royalties are required to be paid, on a product-by-product and country-by-country basis, until the latest to occur of the expiration of the last to expire valid claim of a licensed patent covering such product in such country, the expiration of regulatory exclusivity for such product in such country, or 10 years after the first commercial sale of such product in such country.

BioMedica will continue to be responsible for the prosecution, maintenance, and enforcement of the licensed patents that relate to the Gene Therapy Products at their expense, but we have the right to take over any prosecution, maintenance, and enforcement of licensed patents that are solely and specifically related to the Gene Therapy Products if BioMedica fails to act.

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The License Agreement will expire on a product-by-product and country-by-country basis, upon the expiration of the royalty payment term described above for such product in such country. We may terminate the License Agreement at any time for any reason with prior written notice to BioMedica. Either party may terminate the License Agreement for the other party's uncured material breach of the License Agreement or insolvency.

If the License Agreement is terminated in its entirety, all rights and licenses granted to us cease and we must transfer all regulatory filings and know-how related to the Gene Therapy Products to BioMedica. BioMedica will reimburse us for the costs associated with such transfer. Upon termination of the License Agreement, we must also grant BioMedica an exclusive license under all patents that cover the Gene Therapy Products and related know-how that we or our affiliates or sublicensees control. We may sell off any existing inventory of Gene Therapy Products for a specified period after termination.

Loan and Security Agreement with Hercules Capital, Inc.

In February 2017, we and our wholly owned subsidiaries, AHL, ASG and ASI, entered into a loan and security agreement, as amended on May 24, 2017 and September 22, 2017, or the Loan Agreement, with Hercules Capital, Inc., or Hercules, under which we, AHL and ASG, as the Borrowers, borrowed an aggregate of $55.0 million. We refer to the loan facility under the Loan Agreement as the "Term Loan." ASI issued a guaranty of the Borrowers' obligations under the Loan Agreement. At the closing of the Term Loan, the Borrowers paid Hercules a facility charge of $550,000. The Term Loan bears interest at a variable per annum rate calculated for any day as the greater of either (i) the prime rate plus 6.80%, and (ii) 10.55%. The Term Loan has a scheduled maturity date of March 1, 2021. The Borrowers are obligated to make monthly payments of accrued interest under the Loan Agreement until September 1, 2018, followed by monthly installments of principal and interest through March 1, 2021. In connection with the Loan Agreement, the Borrowers and ASI, as guarantor, granted Hercules a first position lien on substantially all of their respective assets, excluding intellectual property. Prepayment of the Term Loan is subject to penalty.

The Loan Agreement includes customary affirmative and restrictive covenants and representations and warranties, including a minimum cash covenant, a covenant against the occurrence of a "change in control," financial reporting obligations, and certain limitations on the incurrence of indebtedness, liens (including a negative pledge on intellectual property and other assets), investments, distributions (including dividends), collateral, transfers, mergers or acquisitions, taxes, corporate changes, and deposit accounts. The Loan Agreement also includes customary events of default, including payment defaults, breaches of covenants following any applicable cure period, the occurrence of certain events that could reasonably be expected to have a "material adverse effect" as set forth in the Loan Agreement, cross acceleration to the debt and certain events relating to bankruptcy or insolvency. Upon the occurrence of an event of default, a default interest rate of an additional 5.0% may be applied to the outstanding principal balance, and Hercules may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

In addition, for so long as the Term Loan remains outstanding, we are required to use commercially reasonable efforts to afford Hercules the opportunity to participate in future underwritten equity offerings of our common shares up to a total of $3.0 million.

Arena Development Agreement for Nelotanserin

In October 2015, we exercised an option to acquire global rights, title, interest and obligations in and to nelotanserin from our majority shareholder, RSL. In May 2015, RSL entered into a

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development, marketing and supply agreement for nelotanserin, or the Arena Development Agreement, with Arena Pharmaceuticals, GmbH, or Arena, and we entered into a Waiver and Option Agreement with RSL. Upon the exercise of our option, we assumed RSL's rights and obligations under the Arena Development Agreement, as amended October 18, 2017. In January 2018, we were notified by Arena that it has assigned all of its rights and obligations under the Arena Development Agreement to an affiliate, 125 Royalty Inc. Under the Waiver and Option Agreement, we recorded $5.3 million as research and development expense which was 110% of any payments made to Arena by RSL, and any costs incurred by RSL in connection with the development of nelotanserin. We will be responsible for future contingent payments under the Arena Development Agreement, including up to $4.0 million in potential development milestone payments, up to $37.5 million in potential regulatory milestone payments and up to $60.0 million in potential commercial milestone payments. Under the Arena Development Agreement, we are also obligated to purchase all commercial supplies of nelotanserin from Arena for a fixed price equal to 15% of net sales of nelotanserin.

The Arena Development Agreement will remain in effect until terminated: (1) by the parties' mutual agreement; (2) for any reason by us upon 90 days' written notice to Arena; (3) by either party upon written notice for the other party's material breach or insolvency event if such party fails to cure such breach or the insolvency event is not dismissed within the specified cure period; or (4) by Arena if we or our affiliates participate in a challenge to certain Arena patents.

Emerging Growth Company Status

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, and therefore we intend to take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in this prospectus supplement and accompanying prospectus, our periodic reports and our proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of our initial public offering, which occurred in June 2015, (b) in which we have total annual gross revenue of at least $1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common shares that is held by non-affiliates exceeds $700.0 million as of the end of our second fiscal quarter, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

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THE OFFERING

Common shares offered by us	Common shares having an aggregate offering price of up to $75,000,000.
Common shares to be outstanding immediately after this offering	Assuming all $75,000,000 of our common shares are sold in this offering at an assumed offering price of $2.67 per common share, the last reported sale price of our common shares on the Nasdaq on June 21, 2018, we would have had 135,877,961 common shares outstanding as of March 31, 2018. The actual number of common shares issued will vary based on the actual public offering prices per common share in this offering, the actual number of shares sold in this offering and other terms of the offering determined at the time our common shares are sold pursuant to this prospectus supplement.
Manner of offering	"At-the-market" offering that may be made from time to time through our sales agent, Cowen and Company, LLC, or Cowen. See "Plan of Distribution" on page S-33 of this prospectus supplement.
Use of proceeds	We currently intend to use the net proceeds from this offering to support the clinical development of AXO-Lenti-PD as well as additional business development activities. The remaining proceeds, if any, will be used for working capital and other general corporate purposes. See "Use of Proceeds" on page S-21 of this prospectus supplement.
Controlled company	Roivant Sciences Ltd. beneficially owns a controlling interest in us and we are a "controlled company" under Nasdaq rules. As a controlled company, we have elected to avail ourselves of the controlled company exemption under the corporate governance requirements of Nasdaq.
Risk factors	Investing in our common shares involves significant risks. See "Risk Factors" on page S-17 of this prospectus supplement, and under similar headings in other documents incorporated by reference herein.
Nasdaq Global Select Symbol	"AXON"

The number of common shares to be outstanding immediately after this offering is based on 107,788,074 common shares outstanding as of March 31, 2018, and excludes:

- 14,085,136 common shares issuable upon the exercise of options outstanding as of March 31, 2018, with a weighted-average exercise price of $5.51 per common share; and
- 5,626,122 common shares reserved for future issuance under our 2015 Equity Incentive Plan, as amended, or the 2015 Plan, as well as any automatic increases in the number of common shares reserved for future issuance under this plan.

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Except as otherwise indicated, all information in this prospectus supplement assumes no exercise of the options described above after March 31, 2018.

Subsequent to March 31, 2018, we entered into a share purchase agreement with RSL pursuant to which we agreed to issue and sell to RSL 14,285,714 of our common shares at a purchase price of $1.75 per common share, equal to the per share closing price of our common shares on the Nasdaq on June 5, 2018. The Private Placement is expected to close in July 2018, subject to satisfaction or waiver of customary closing conditions.

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RISK FACTORS

Investing in our common shares involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our Annual Report on Form 10-K for the year ended March 31, 2018, or our Annual Report, and incorporated by reference in this prospectus supplement and the accompanying prospectus, any amendment or update thereto reflected in our subsequent filings with the Securities and Exchange Commission, or the SEC, and all of the other information in this prospectus supplement and the accompanying prospectus, including our financial statements and related notes incorporated by reference in this prospectus supplement and the accompanying prospectus. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common shares could decline and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we think are immaterial may also harm our business, operating results and financial condition and could result in a complete loss of your investment.

Risks Related to This Offering

Our management will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and our shareholders will not have the opportunity as part of their investment decision to assess whether the net proceeds are being used appropriately. You may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our failure to apply the net proceeds of this offering effectively could compromise our ability to pursue our growth strategy and we might not be able to yield a significant return, if any, on our investment of these net proceeds. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

If you purchase our common shares in this offering, you will incur immediate and substantial dilution in the net tangible book value of your common shares.

The common shares sold in this offering from time to time will be sold at various prices; however, we expect that the per common share offering prices in this offering will be substantially higher than the as adjusted net tangible book value per common share of our common shares. Therefore, if you purchase our common shares in this offering, you will pay a price per common share that substantially exceeds the book value of our tangible assets after subtracting our liabilities. Assuming that an aggregate of 28,089,887 common shares are sold at an assumed public offering price of $2.67 per common share, the last reported sale price of our common shares on the Nasdaq on June 21, 2018, for aggregate gross proceeds of $75,000,000, and after deducting estimated commissions and offering expenses payable by us, you would incur immediate dilution of $1.61 per common share, representing the difference between our as adjusted net tangible book value per common share as of March 31, 2018, and the assumed public offering price per common share. Further, the future exercise of any outstanding options to purchase our common shares will cause you to experience additional dilution. See the section titled "Dilution" for more information.

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Raising additional funds by issuing securities may cause dilution to existing shareholders, and raising funds through lending and licensing arrangements may restrict our operations or require us to relinquish proprietary rights.

We expect that significant additional capital will be needed in the future to continue our planned operations. Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, strategic alliances and license and development agreements in connection with any collaborations. We do not have any committed external source of funds. To the extent that we raise additional capital by issuing equity securities, our existing shareholders' ownership may experience substantial dilution, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common shareholder. Additional debt financing or preferred equity financing, if available, may involve agreements that include covenants further limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise develop and market ourselves.

Future sales of our common shares, or the perception that such sales may occur, could depress our share price, even if our business is doing well.

Sales of a substantial number of our common shares in the public market, or the perception by investors that our shareholders intend to sell substantial amounts of our common shares in the public market, could depress the market price of our common shares, even if our business is doing well. Such a decrease in our share price could in turn impair our ability to raise capital through the sale of additional equity securities.

All of the shares sold in this offering, as well as shares issued upon the exercise of options granted to persons other than our officers and directors, are freely transferable without restrictions or further registration under the Securities Act of 1933, as amended, or the Securities Act. As of March 31, 2018, 75,000,000 of our outstanding common shares, representing a majority of our common shares, were held by RSL. If RSL or any of our executive officers or directors were to sell our common shares, or if the market perceived that RSL or any of our executive officers or directors intend to sell our common shares, it could negatively affect our share price. Prior to RSL's corporate reorganization and recapitalization in December 2015, any decision by RSL to sell or otherwise dispose of our shares required the unanimous agreement of all of the directors of RSL, including Vivek Ramaswamy, our director and former principal executive officer. Subsequent to RSL's corporate reorganization and recapitalization in December 2015, any such decision no longer requires a unanimous vote of RSL's directors, meaning that all or a portion of the shares of our common stock held by RSL may be sold without Vivek Ramaswamy's consent. However, any such sales must still be made in compliance with the Securities Act and the rules and regulations thereunder, which could limit the number of our shares that RSL could sell in any 90-day period.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are often identified by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "will," "would" or the negative or plural of these words or similar expressions or variations, although not all forward-looking statements contain these identifying words. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in the Sections entitled "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" incorporated by reference from our Annual Report and in our subsequent Quarterly Reports on Form 10-Q, as well as any amendments thereto, filed with the SEC.

These forward-looking statements include, but are not limited to, statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things:

- the success and timing of our ongoing development and commercialization of AXO-Lenti-PD, nelotanserin and RVT-104;
- our ability to identify and in-license or acquire additional product candidates;
- our relationship with BioMedica under the License Agreement;
- the success of our interactions with international regulatory authorities;
- the anticipated start dates, durations and completion dates of our ongoing and future nonclinical studies and clinical trials;
- the anticipated designs of our future clinical studies;
- anticipated future regulatory submissions and the timing of, and our ability to, obtain and maintain regulatory approvals for our product candidates;
- the rate and degree of market acceptance and clinical utility of any approved product candidate;
- our commercialization, marketing and manufacturing capabilities and strategy;
- continued service of our key scientific or management personnel;
- our ability to obtain, maintain and enforce intellectual property rights for our product candidates;
- our anticipated future cash position;
- our estimates regarding our results of operations, financial condition, liquidity, capital requirements, prospects, growth and strategies;
- the success of competing drugs that are or may become available;
- our stated objective of becoming the leading biopharmaceutical company focused on neurology and psychiatry; and
- our expected use of proceeds from this offering.

We have based these forward-looking statements largely on our current expectations and projections about future events, including the responses we expect from the U.S. Food and Drug Administration and other regulatory authorities and financial trends that we believe may affect our financial condition, results of operations, business strategy, nonclinical studies and clinical trials and financial needs. Such forward-looking statements are subject to a number of risks, uncertainties, assumptions and other factors known and unknown that could cause

actual results and the timing of

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certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified herein, and those discussed in the section titled "Risk Factors" set forth in our Annual Report and in our other filings with the SEC incorporated by reference into this prospectus supplement and accompanying prospectus. These risks are not exhaustive. You should not rely upon forward-looking statements as predictions of future events. Furthermore, such forward-looking statements speak only as of the date of this report. 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 the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus supplement. See section titled "Where You Can Find More Information."

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

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USE OF PROCEEDS

We may issue and sell common shares having aggregate sales proceeds of up to $75,000,000 from time to time in this offering. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and net proceeds to us, if any, are not determinable at this time. There can be no assurance that, in the future, we will sell any shares under or fully utilize the sales agreement with Cowen as a source of financing.

We currently intend to use the net proceeds from this offering to support the clinical development of AXO-Lenti-PD as well as additional business development activities. The remaining proceeds, if any, will be used for working capital and other general corporate purposes. We may also use a portion of the net proceeds from this offering to acquire or invest in complementary businesses, assets, technologies or intellectual property, although we have no present commitments or agreements to do so.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of regulatory approval of our product candidates, as well as any collaborations that we may enter into with third parties, and any unforeseen cash needs.

Our management will have broad discretion in the application of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds of this offering. Pending the uses described above, we may choose to invest these net proceeds in short-term, interest bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States. The goal with respect to the investment of these net proceeds is capital preservation and liquidity so that such funds are readily available to fund our operations.

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DILUTION

If you invest in our common shares in this offering, your interest will be diluted to the extent of the difference between the public offering prices per common share in this offering and the as adjusted net tangible book value per common share immediately after this offering. Net tangible book value per common share is determined by dividing our total tangible assets less total liabilities by the number of outstanding common shares.

As of March 31, 2018, our net tangible book value was $71.3 million, or $0.66 per common share.

After giving effect to the assumed sale and issuance of 28,089,887 common shares in this offering at an assumed public offering price of $2.67 per common share, the last reported sale price of our common shares on the Nasdaq on June 21, 2018, and after deducting estimated commissions and offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2018 would have been $143.7 million, or $1.06 per common share. This represents an immediate increase in the as adjusted net tangible book value of $0.40 per common share to existing shareholders and an immediate dilution of $1.61 per common share to investors purchasing in this offering at the assumed public offering price per common share.

The following table illustrates this per common share dilution. The as adjusted information is illustrative only and will adjust based on the actual public offering prices per common share in this offering, the actual number of shares sold in this offering and other terms of the offering determined at the time our common shares are sold pursuant to this prospectus supplement. The as adjusted information assumes that all of our common shares in the aggregate amount of $75,000,000 are sold at the assumed public offering price of $2.67 per common share, the last reported sale price of our common shares on the Nasdaq on June 21, 2018. The common shares sold in this offering, if any, will be sold from time to time at various prices.

Assumed public offering price per common share		$ 2.67
Net tangible book value per common share as of March 31, 2018	$ 0.66	
Increase in net tangible book value per common share attributable to investors participating in this offering	$ 0.40	
As adjusted net tangible book value per common share after giving effect to this offering		$ 1.06
Dilution per common share to investors in this offering		$ 1.61

The table and discussion above exclude:

- 14,085,136 common shares issuable upon the exercise of options outstanding as of March 31, 2018, with a weighted-average exercise price of $5.51 per common share; and
- 5,626,122 common shares reserved for future issuance under our 2015 Equity Incentive Plan, as amended, or the 2015 Plan, as well as any automatic increases in the number of common shares reserved for future issuance under this plan.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise of the options described above after March 31, 2018. To the extent options are exercised, there may be further dilution to new investors.

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Subsequent to March 31, 2018:

- we entered into a share purchase agreement with RSL pursuant to which we agreed to issue and sell to RSL 14,285,714 common shares at a purchase price of $1.75 per common share, equal to the per share closing price of our common shares on the Nasdaq on June 5, 2018, for aggregate cash proceeds to us of $25.0 million; and
- we made an upfront cash payment to BioMedica of $30.0 million as partial consideration under the License Agreement, $5.0 million of which will be applied as a credit against the process development work and clinical supply that BioMedica will provide to us under the License Agreement.

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MATERIAL TAX CONSIDERATIONS

Bermuda Tax Considerations

At the present time, there is no Bermuda income or profits tax, withholding tax, capital gains tax, capital transfer tax, estate duty or inheritance tax payable by us or by our shareholders in respect of our common shares. We have obtained an assurance from the Minister of Finance of Bermuda under the Exempted Undertakings Tax Protection Act 1966 that, in the event that any legislation is enacted in Bermuda imposing any tax computed on profits or income, or computed on any capital asset, gain or appreciation or any tax in the nature of estate duty or inheritance tax, such tax shall not, until March 31, 2035, be applicable to us or to any of our operations or to our shares, debentures or other obligations except insofar as such tax applies to persons ordinarily resident in Bermuda or is payable by us in respect of real property owned or leased by us in Bermuda.

United Kingdom Tax Considerations

The following is a general summary of certain UK tax considerations relating to the ownership and disposal of our common shares and does not address all possible tax consequences relating to an investment in our common shares. It is based on current UK tax law and published HM Revenue & Customs, or HMRC, practice (which may not be binding on HMRC), as of the date of this prospectus supplement, both of which are subject to change, possibly with retrospective effect.

This summary is intended to address only certain UK tax consequences for holders of our common shares who are tax resident in (and only in) the United Kingdom, and in the case of individuals, domiciled in (and only in) the United Kingdom (except where expressly stated otherwise) who are the absolute beneficial owners of common shares and any dividends paid on them and who hold common shares as investments (other than in an individual savings account or a self-invested personal pension). This summary does not address the UK tax consequences which may be relevant to certain classes of holders of common shares such as traders, brokers, dealers, banks, financial institutions, insurance companies, investment companies, collective investment schemes, tax-exempt organizations, trustees, persons connected with us or a member of our group, persons holding our common shares as part of hedging or conversion transactions and holders of our common shares who have (or are deemed to have) acquired our common shares by virtue of an office or employment.

The following is intended only as a general guide and is not intended to be, nor should it be considered to be, legal or tax advice to any particular prospective subscriber for, or purchaser of, our common shares. Accordingly, prospective subscribers for, or purchasers of, our common shares who are in any doubt as to their tax position regarding the acquisition, ownership and disposition of our common shares or who are subject to tax in a jurisdiction other than the United Kingdom should consult their own tax advisers.

The Issuing Company

It is the intention of the directors to conduct the affairs of the Company so that the central management and control of the Company is exercised in the UK. As a result, the Company is expected to be treated as resident in the UK for UK tax purposes. Accordingly we expect to be subject to UK taxation on our worldwide income and gains, except where an exemption applies.

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Taxation of Dividends

Withholding Tax

Dividends paid by us to holders of our common shares will not be subject to withholding or deduction for or on account of UK tax.

Income Tax

An individual holder of our common shares who is resident for tax purposes in the United Kingdom may, depending on his or her particular circumstances, be subject to UK income tax on dividends received from us. An individual holder of our common shares who is not resident for tax purposes in the United Kingdom should not be subject to UK income tax on dividends received from us unless he or she carries on (whether solely or in partnership) any trade, profession or vocation in the United Kingdom through a branch or agency to which our common shares are attributable. There are certain exceptions for trading in the United Kingdom through independent agents, such as some brokers and investment managers.

All dividends received by a UK resident individual holder of our common shares from us or from other sources will form part of that holder's total income for income tax purposes and will constitute the top slice of that income. A nil rate of income tax will apply to the first £2,000 of taxable dividend income received by the holder of our common shares in a tax year. Income within the nil rate band will be taken into account in determining whether income in excess of the nil rate band falls within the basic rate, higher rate or additional rate tax bands. Dividend income in excess of the £2,000 tax-free allowance will (subject to the availability of any income tax personal allowance) be taxed at 7.5% to the extent that the excess amount falls within the basic rate tax band, 32.5% to the extent that the excess amount falls within the higher rate tax band and 38.1% to the extent that the excess amount falls within the additional rate tax band.

Corporation Tax

Corporate holders of our common shares which are resident for tax purposes in the United Kingdom should not be subject to UK corporation tax on any dividend received from us so long as the dividends qualify for exemption, which should be the case although certain conditions must be met (including anti-avoidance conditions). If the conditions for the exemption are not satisfied, or such holder of common shares elects for an otherwise exempt dividend to be taxable, UK corporation tax will be chargeable on the amount of any dividends (at the current rate of 19%).

Corporate holders of our common shares who are not resident in the United Kingdom will not generally be subject to UK corporation tax on dividends unless they are carrying on a trade, profession or vocation in the United Kingdom through a permanent establishment in connection with which such shares are attributable.

A holder of our common shares who is resident outside the UK may be subject to non-UK taxation on dividend income under local law.

Taxation of Capital Gains on Disposal (or Deemed Disposal) of Common Shares

UK Resident Holders of Our Common Shares

A disposal or deemed disposal of our common shares by an individual or corporate holder of such shares who is tax resident in the United Kingdom may, depending on that holder's circumstances and subject to any available exemptions or reliefs (including the annual exempt amount, currently £11,700), give rise to a chargeable gain or allowable loss for the purposes of UK taxation of chargeable gains.

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Any chargeable gain (or allowable loss) will generally be calculated by reference to the consideration received for the disposal of our common shares less the allowable cost to the holder of acquiring such common shares.

If an individual holder of our common shares who is subject to UK income tax at either the higher or the additional rate is liable to UK capital gains tax on the disposal of common shares, the current applicable rate will be 20%. For an individual UK holder who is subject to UK income tax at the basic rate and liable to UK capital gains tax on such disposal, the current applicable rate would be 10%, save to the extent that any capital gains exceed the unused basic rate tax band. In that case, the rate currently applicable to the excess would be 20%.

If a corporate holder becomes liable to UK corporation tax on the disposal of our common shares, the main rate of UK corporation tax (currently 19%) would apply. Indexation allowance is not available in respect of disposals of our common shares acquired on or after January 1, 2018 (and only covers the movement in the retail prices index up until December 31, 2017, in respect of common shares acquired prior to that date).

Non-UK Holders of Our Common Shares

Holders of our common shares who are not resident in the United Kingdom and, in the case of an individual holder of our common shares, not temporarily non-resident, should not be liable for UK capital gains tax on capital gains realized on a sale or other disposal of our common shares unless such shares are attributable to a trade, profession or vocation carried on in the United Kingdom through a branch or agency or, in the case of a corporate holder of our common shares, through a permanent establishment. Holders of our common shares who are not resident in the United Kingdom may be subject to non-UK taxation on any gain under local law.

Generally, an individual holder of our common shares who has ceased to be resident in the United Kingdom for tax purposes for a period of five years or less and who disposes of our common shares during that period may be liable on their return to the United Kingdom to UK capital gains taxation on any capital gain realized (subject to any available exemption or relief).

UK Stamp Duty and UK Stamp Duty Reserve Tax

The discussion below relates to the holders of our common shares wherever resident, however it should be noted that special rules may apply to certain persons such as market makers, brokers, dealers or intermediaries.

No UK stamp duty or UK stamp duty reserve tax, or SDRT, will be payable on the issue or transfer of, or agreement to transfer, the common shares, subject to the comments below.

UK stamp duty will in principle be payable on any instrument of transfer of common shares (where the amount or value of the consideration is more than £1,000) that is executed in the United Kingdom or that relates to any property situated, or to any matter or thing done or to be done, in the United Kingdom. No UK stamp duty should be payable on the transfer of the common shares, provided that any transfer documents are executed and retained outside the United Kingdom. Holders of common shares should be aware that, even where an instrument of transfer is in principle subject to UK stamp duty, UK stamp duty is not required to be paid unless it is necessary to rely on the instrument for legal purposes, for example to register a change of ownership by updating a share register held in the United Kingdom or in litigation in a UK court.

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Provided that common shares are not registered in any register maintained in the United Kingdom by us or on our behalf and are not paired with any shares or securities issued by a UK incorporated company, any agreement to transfer common shares will not be subject to SDRT.

The common shares are not paired with any shares or securities issued by a UK incorporated company and we currently do not intend that any register of common shares will be maintained in the United Kingdom.

U.S. Federal Income Tax Considerations

The following discussion describes the material U.S. federal income tax consequences for U.S. holders (as defined below) of the purchase, ownership and disposition of our common shares. This summary is based upon provisions of the U.S. Internal Revenue Code of 1986, as amended, which is referred to herein as the Code, applicable Treasury Regulations, administrative rulings and judicial decisions in effect as of the date hereof, any of which may subsequently be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. This summary deals only with our common shares held as capital assets for tax purposes (i.e., our common shares held for investment). This summary is general in nature, does not address all aspects of U.S. federal income taxes (such as the alternative minimum tax) and does not address state, local, estate, gift or non-U.S. tax consequences. In addition, it does not deal with all tax consequences that may be relevant to holders in light of their personal circumstances or particular situations, such as:

- holders who may be subject to special tax treatment, including dealers in securities or currencies, banks, financial institutions, regulated investment companies, real estate investment trusts, retirement plans, tax exempt entities, and certain former citizens or long-term residents of the United States, insurance companies, governmental organizations, or traders in securities that elect to use a mark-to-market method of tax accounting for their securities;
- persons holding common shares as a part of an integrated or conversion transaction or a straddle or persons deemed to sell common shares under the constructive sale provisions of the Code;
- U.S. holders whose "functional currency" is not the U.S. dollar;
- S corporations, partnerships or other entities classified as partnerships for U.S. federal income tax purposes or other pass through entities, or investors in such pass-through entities holding common shares;
- holders that own, directly, indirectly or through attribution, 10% or more of the voting power or value of our equity; and
- persons who are subject to Section 451(b) of the Code.

If an entity or arrangement treated as a partnership holds common shares, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Any such partnership and a partner in any such partnership should consult its own tax advisor regarding the U.S. federal income tax consequences applicable to it (and, as applicable, its partners) of the purchase, ownership and disposition of our ordinary shares.

We have not sought, nor will we seek, a ruling from the U.S. Internal Revenue Service, or the IRS, with respect to the matters discussed below. There can be no assurance that the IRS will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the common shares or that any such position would not be sustained.

THIS SUMMARY OF CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. YOU SHOULD CONSULT YOUR

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TAX ADVISOR WITH RESPECT TO THE APPLICATION OF U.S. FEDERAL INCOME TAX LAWS TO YOUR PARTICULAR SITUATION AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP, AND DISPOSITION OF THE COMMON SHARES ARISING UNDER U.S. FEDERAL ESTATE OR GIFT TAX RULES OR UNDER THE LAWS OF ANY STATE, LOCAL, NON-U.S. OR ANY OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

U.S. Holders

As used herein, the term "U.S. holder" means a beneficial owner of common shares that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Distributions on Common Shares

Subject to the discussion in " Passive Foreign Investment Company," the gross amount of distributions (including any foreign taxes withheld therefrom), if any, made on our common shares generally will be included in a U.S. holder's income as foreign source ordinary dividend income (and generally will constitute passive category income for foreign tax credit purposes) to the extent of our current or accumulated earnings and profits as determined for U.S. federal income tax purposes.

We believe we are resident in the United Kingdom for U.K. corporate income tax purposes and that we qualify as a resident of the United Kingdom for purposes of the United States-United Kingdom Income Tax Convention entered into force on April 25, 2001, as amended and currently in force, which is referred to herein as the U.S.-U.K. Tax Treaty, although there can be no assurance in this regard. If the U.S.-U.K. Tax Treaty is applicable or our common shares are readily tradable on an established securities market in the United States, and we are not classified as a PFIC for the taxable year in which a dividend is paid or the preceding taxable year (as discussed below under " Passive Foreign Investment Company"), dividend income will generally be "qualified dividend income" in the hands of individual U.S. holders, which is generally taxed at the lower applicable long term capital gains rates provided certain holding period and other requirements for treatment of such dividends as "qualified dividend income" are satisfied. Our common shares will generally be considered to be readily tradable on an established securities marked in the United States if they are listed on The Nasdaq Global Select Market, as we intend our common shares will be. U.S. holders should consult their own tax advisors regarding the availability of the lower rate for dividends paid with respect to our common shares. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of a U.S. holder's tax basis in the common shares and thereafter as capital gain from the sale or exchange of such common shares. Because we do not maintain complete calculations of our earnings and profits in accordance with U.S. federal income tax principles, U.S. holders should assume that any distribution by us with respect to common shares will constitute ordinary dividend income. Any dividends we pay or are deemed to pay will not be eligible for the dividend-received deductions allowed to corporations in respect of dividends received from other U.S. corporations.

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Certain U.S. holders generally may claim any foreign taxes withheld from distributions either as a deduction from gross income or as a credit against U.S. federal income tax liability. However, the foreign tax credit is subject to numerous complex limitations that must be determined and applied on an individual basis. U.S. holders should consult their own tax advisors regarding the foreign tax credit rules.

Sale or Other Taxable Disposition of Common Shares

Subject to the discussion in " Passive Foreign Investment Company," upon the sale or other taxable disposition of common shares, a U.S. holder generally will recognize U.S.-source capital gain or loss equal to the difference between (1) the amount of cash and the fair market value of all other property received upon such disposition (including the amount of any foreign taxes withheld therefrom) and (2) the U.S. holder's tax basis in the common shares. Such capital gain or loss will be long-term capital gain or loss if a U.S. holder's holding period in the common shares is more than one year at the time of the taxable disposition. Long-term capital gains recognized by certain non-corporate U.S. holders (including individuals) will generally be subject to reduced rates of U.S. federal income tax. A U.S. holder's ability to deduct capital losses may be limited.

Passive Foreign Investment Company

In general, a corporation organized outside the United States will be a passive foreign investment company, or PFIC, in any taxable year in which either (1) at least 75% of its gross income is "passive income" or (2) on average at least 50% of the value of its assets is attributable to assets that produce passive income or are held for the production of passive income. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from commodities transactions and from the sale or exchange of property that gives rise to passive income. Assets that produce or are held for the production of passive income may include cash, even if held as working capital or raised in a public offering, marketable securities and other assets that may produce passive income. In determining whether a non-U.S. corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) generally is taken into account.

Our status as a PFIC will depend on the nature and composition of our income and the nature, composition and value of our assets from time to time. The 50% passive asset test described above is generally based on the fair market value of each asset, with the value of goodwill and going concern value determined in large part by reference to the market value of our common shares, which may be volatile. We do not believe we were a PFIC in the taxable year ending March 31, 2018; however, with respect to foreseeable future taxable years, because the PFIC tests are based upon the value of our assets, including any goodwill and going concern value, and the nature and composition of our income and assets, which cannot be known at this time, we cannot predict whether we will or will not be classified as a PFIC. Even if we determine that we are not a PFIC for a taxable year, there can be no assurance that the IRS will agree with our conclusion and that the IRS would not successfully challenge our position. Our status as a PFIC is a fact intensive determination made on an annual basis after the end of each taxable year. Accordingly, no assurances can be made regarding our PFIC status in one or more subsequent years, and our U.S. counsel expresses no opinion with respect to our PFIC status in the taxable year that ended March 31, 2018 or the current taxable year ending March 31, 2019, and also expresses no opinion with respect to our predictions or past determinations regarding our PFIC status in the past or in the future. We will determine whether we were a PFIC or not for each taxable year and make such determination available to U.S. holders.

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If we are a PFIC in any taxable year during which a U.S. holder owns common shares, such U.S. holder could be liable for additional taxes and interest charges upon (1) a distribution paid during a taxable year that is greater than 125% of the average annual distributions paid in the three preceding taxable years, or, if shorter, the U.S. holder's holding period for the common shares, and (2) any gain recognized on a sale, exchange or other taxable disposition, including a pledge, of the common shares, whether or not we continue to be a PFIC. In these circumstances, the tax will be determined by allocating such distribution or gain ratably over the U.S. holder's holding period for the common shares. The amount allocated to the current taxable year (i.e., the year in which the distribution occurs or the gain is recognized) and any year prior to the first taxable year in which we are a PFIC will be taxed as ordinary income earned in the current taxable year. The amount allocated to other taxable years will be taxed at the highest marginal rates in effect for individuals or corporations, as applicable, to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax. If we are a PFIC for any year during which a U.S. holder holds the common shares, we must generally continue to be treated as a PFIC by that holder for all succeeding years during which the U.S. holder holds the common shares, unless we cease to meet the requirements for PFIC status and the U.S. holder makes a "deemed sale" election with respect to the common shares. If such election is made, the U.S. holder will be deemed to have sold the common shares it holds at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain from such deemed sale would be subject to the consequences described above. After the deemed sale election, the U.S. holder's common shares with respect to which the deemed sale election was made will not be treated as shares in a PFIC unless we subsequently again become a PFIC.

If we are a PFIC for any taxable year during which a U.S. holder holds the common shares and one of our non-United States subsidiaries is also a PFIC (i.e., a lower-tier PFIC), such U.S. holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC and would be subject to the rules described above on certain distributions by the lower-tier PFIC and a disposition of shares of the lower-tier PFIC even though such U.S. holder would not receive the proceeds of those distributions or dispositions. Each U.S. holder is advised to consult its tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

The tax consequences that would apply if we were a PFIC would be different from those described above if a timely and valid "mark-to-market" election is made by a U.S. holder for the common shares held by such U.S. holder. An electing U.S. holder generally would take into account as ordinary income each year, the excess of the fair market value of the common shares held at the end of the taxable year over the adjusted tax basis of such common shares. The U.S. holder would also take into account, as an ordinary loss each year, the excess of the adjusted tax basis of such common shares over their fair market value at the end of the taxable year, but only to the extent of the excess of amounts previously included in income over ordinary losses deducted in prior years as a result of the mark-to-market election. The U.S. holder's tax basis in the common shares would be adjusted to reflect any income or loss recognized as a result of the mark-to-market election. Any gain from a sale, exchange or other taxable disposition of the common shares in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other taxable disposition would be treated first as ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as capital loss. If, after having been a PFIC for a prior taxable year, we cease to be classified as a PFIC, the U.S. holder would not be required to take into account any latent gain or loss in the manner described above and any gain or loss recognized on the sale or exchange of the common shares would be classified as a capital gain or loss.

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A mark-to-market election is available to a U.S. holder only for "marketable stock." Generally, stock will be considered marketable stock if it is "regularly traded" on a "qualified exchange" within the meaning of applicable Treasury Regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. The common shares will be marketable stock as long as they remain listed on a qualified exchange, such as The Nasdaq Global Select Market, and are regularly traded. A mark-to-market election will not apply to the common shares for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any subsidiary that we own. Accordingly, a U.S. holder may continue to be subject to the PFIC rules with respect to any lower-tier PFICs notwithstanding the U.S. holder's mark-to-market election for the common shares.

The tax consequences that would apply if we were a PFIC would also be different from those described above if a U.S. holder were able to make a valid "qualified electing fund," or QEF, election. As we do not expect to provide U.S. holders with the information required in order to permit a QEF election, prospective investors should assume that a QEF election will not be available.

Each U.S. holder who is a shareholder of a PFIC must file an annual information report on IRS Form 8621 containing such information as the U.S. Treasury Department may require. The failure to file IRS Form 8621 could result in the imposition of penalties and the extension of the statute of limitations with respect to U.S. federal income tax.

The U.S. federal income tax rules relating to PFICs are very complex. Prospective U.S. investors are strongly urged to consult their own tax advisors with respect to the impact of these rules on the purchase, ownership and disposition of our common shares, the consequences to them of an investment in a PFIC, any elections available with respect to the common shares and the IRS information reporting obligations with respect to the purchase, ownership and disposition of the common shares.

Medicare Tax on Net Investment Income

Certain U.S. holders who are individuals, estates or trusts are subject to a 3.8% tax on all or a portion of their "net investment income," which generally includes dividends on the common shares and net gains from the disposition of the common shares. U.S. holders that are individuals, estates or trusts should consult their tax advisors regarding the applicability of the Medicare tax to them.

U.S. Information Reporting and Backup Withholding

U.S. holders of common shares may be subject to information reporting and may be subject to backup withholding on distributions on common shares or on the proceeds from a sale or other disposition of common shares paid within the United States. Payments of distributions on common shares, or the proceeds from the sale or other disposition of common shares to or through a foreign office of a broker generally will not be subject to backup withholding, although information reporting may apply to those payments in certain circumstances. Backup withholding will generally not apply, however, to a U.S. holder who:

- furnishes a correct taxpayer identification number and certifies that the U.S. holder is not subject to backup withholding on IRS Form W-9, Request for Taxpayer Identification Number and Certification (or substitute form); or
- is otherwise exempt from backup withholding.

Backup withholding is not an additional tax. Any amounts withheld from a payment to a U.S. holder under the backup withholding rules may be credited against the U.S. holder's U.S. federal

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income tax liability, and a U.S. holder may obtain a refund of any excess amounts withheld by filing the appropriate claim for refund (typically a tax return) with the IRS in a timely manner.

Foreign Asset Reporting

Certain U.S. holders who are individuals are required to report information relating to an interest in the common shares, subject to certain exceptions (including an exception for common shares held in accounts maintained by U.S. financial institutions) by filing IRS Form 8938 (Statement of Specified Foreign Financial Assets) with their federal income tax return. U.S. holders are urged to consult their tax advisors regarding their information reporting obligations, if any, with respect to their ownership and disposition of the common shares.

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PLAN OF DISTRIBUTION

We have entered into a sales agreement with Cowen under which we may issue and sell our common shares having an aggregate offering price of up to $75,000,000 from time to time through Cowen as our sales agent. Sales of our common shares, if any, under this prospectus supplement and the accompanying prospectus will be made at market prices by any method that is deemed to be an "at-the-market" offering, as defined in Rule 415 under the Securities Act, including sales made directly on the Nasdaq or any other trading market for our common shares. If authorized by us in writing, Cowen may purchase shares of our common shares as principal.

Cowen will offer our common shares subject to the terms and conditions of the sales agreement on a daily basis or as otherwise agreed upon by us and Cowen. We will designate the maximum amount of common shares to be sold through Cowen on a daily basis or otherwise determine such maximum amount together with Cowen. Subject to the terms and conditions of the sales agreement, Cowen will use its commercially reasonable efforts to sell on our behalf all of the common shares requested to be sold by us. We may instruct Cowen not to sell common shares if the sales cannot be effected at or above the price designated by us in any such instruction. Cowen or we may suspend the offering of our common shares being made through Cowen under the sales agreement upon proper notice to the other party. Cowen and we each have the right, by giving written notice as specified in the sales agreement, to terminate the sales agreement in each party's sole discretion at any time.

The aggregate compensation payable to Cowen as sales agent equals up to 3% of the gross sales price of the shares sold through it pursuant to the sales agreement. We have also agreed to reimburse Cowen up to $50,000 of Cowen's actual outside legal expenses incurred by Cowen in connection with this offering. We have also agreed to reimburse Cowen for its FINRA counsel fees in an amount up to $10,000. We estimate that the total expenses of the offering payable by us, excluding commissions payable to Cowen under the sales agreement, will be approximately $300,000.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such common shares.

Cowen will provide written confirmation to us following the close of trading on the Nasdaq on each day in which common shares are sold through it as sales agent under the sales agreement. Each confirmation will include the number of common shares sold through it as sales agent on that day, the volume weighted average price of the common shares sold, the percentage of the daily trading volume and the net proceeds to us.

Settlement for sales of common shares will occur, unless the parties agree otherwise, on the second business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will report at least quarterly the number of common shares sold through Cowen under the sales agreement, the net proceeds to us and the compensation paid by us to Cowen in connection with the sales of common shares.

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In connection with the sales of our common shares on our behalf, Cowen may be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid to Cowen may be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to provide indemnification and contribution to Cowen against certain liabilities, including liabilities under the Securities Act. As sales agent, Cowen will not engage in any transactions that stabilizes our common shares.

Our common shares are listed on the Nasdaq and trade under the symbol "AXON." The transfer agent of our common shares is American Stock Transfer & Trust Company, LLC.

Cowen and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees.

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LEGAL MATTERS

The validity of the common shares and certain other matters of Bermuda law will be passed upon for us by Conyers Dill & Pearman Limited, our special Bermuda counsel. Certain other legal matters will be passed upon for us by Cooley LLP, Palo Alto, California, and for Cowen by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended March 31, 2018, as set forth in their report, which is incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

The financial statements for the year ended March 31, 2016 incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended March 31, 2018 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC under the Securities Act. This prospectus supplement and the accompanying prospectus are part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement and any document we file with the SEC at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that site on the world wide web is http://www.sec.gov. The information on the SEC's web site is not part of this prospectus supplement or the accompanying prospectus, and any references to this web site or any other web site are inactive textual references only.

This prospectus supplement and the accompanying prospectus omit certain information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus supplement and the accompanying prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

We also maintain a website at http://www.axovant.com, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus supplement or the accompanying prospectus.

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INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement or the accompanying prospectus. Information that is incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus and you should read it with the same care that you read this prospectus supplement and the accompanying prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement and the accompanying prospectus, and will be considered to be a part of this prospectus supplement and the accompanying prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus supplement and the accompanying prospectus:

- our Annual Report on Form 10-K for the year ended March 31, 2018 filed with the SEC on June 11, 2018;
- our Current Report on Form 8-K filed with the SEC on June 6, 2018 (except for information contained therein which is furnished rather than filed); and
- the description of our common shares contained in our Registration Statement on Form 8-A filed on September 5, 2017, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference all additional documents that we file with the SEC under the terms of Section 13(a), 13(c), 14 or 15(d) of the Exchange Act that are made after the initial filing date of the registration statement of which this prospectus supplement and the accompanying prospectus is a part and the effectiveness of the registration statement, as well as between the date of this prospectus supplement and the termination of any offering of securities offered by this prospectus supplement and the accompanying prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus supplement and the accompanying prospectus, at no cost, by writing or telephoning us at the following address and number: Axovant Sciences Ltd., Attn: Investor Relations, 11 Times Square, 33rd Floor, New York, New York 10036, telephone: (631) 892-7014. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.

We make available free of charge on our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as soon as reasonably practicable after we electronically file or furnish such materials to the SEC. You may obtain a free copy of these reports on the Investor Relations section of our website, www.axovant.com.

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PROSPECTUS

$750,000,000

Common Shares
Preference Shares
Debt Securities
Warrants

From time to time, we may offer up to $750,000,000 of any combination of the securities described in this prospectus in one or more offerings. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable antidilution provisions.

This prospectus provides a general description of the securities we may offer. Each time we offer securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before you invest in any of the securities being offered.

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

Our common shares are listed on the New York Stock Exchange under the symbol "AXON." On December 29, 2016, the last reported sales price of our common shares was $12.32 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing on the New York Stock Exchange or any securities market or other exchange of the securities, if any, covered by the prospectus supplement.

We will sell these securities directly to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts or over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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 January 13, 2017.

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of $750,000,000. This prospectus provides you with a general description of the securities we may offer.

Each time we sell securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described below under the heading "Incorporation of Certain Information By Reference," before investing in any of the securities offered.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find More Information."

Consent under the Exchange Control Act 1972 (and its related regulations) has been obtained from the Bermuda Monetary Authority for the issue and transfer of our shares, warrants and other securities to and between residents and non-residents of Bermuda for exchange control purposes provided our shares remain listed on an appointed stock exchange, which includes the New York Stock Exchange. In granting such consent, neither the Bermuda Monetary Authority nor the Registrar of Companies in Bermuda accepts any responsibility for our financial soundness or the correctness of any of the statements made or opinions expressed in this prospectus or any applicable prospectus supplement.

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PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements and related notes, and the exhibits to the registration statement of which this prospectus is a part, before making your investment decision.

Unless the context indicates otherwise, as used in this prospectus, the terms "Axovant," "the Company," "we," "us" and "our" refer to Axovant Sciences Ltd. and our wholly owned subsidiaries, Axovant Sciences, Inc., Axovant Sciences GmbH and Axovant Holdings Limited. We use Axovant and the Axovant logo as trademarks in the United States and other countries. All other trademarks or trade names referred to in this prospectus are the property of their respective owners.

Our Company

We are a clinical-stage biopharmaceutical company focused on acquiring, developing and commercializing novel therapeutics for the treatment of dementia. We intend to develop a pipeline of product candidates to comprehensively address the cognitive, functional and behavioral aspects of dementia and related neurological disorders. Our vision is to become the leading company focused on the treatment of dementia by addressing all forms and aspects of this condition.

Our near-term focus is to develop our lead product candidate, intepirdine, previously referred to as RVT-101, a selective 5-HT6 receptor antagonist, for the treatment of Alzheimer's disease and dementia with Lewy bodies, or DLB, and to develop nelotanserin, our second product candidate, a potent and highly selective 5-HT2A receptor inverse agonist, for the treatment of REM behavior disorder, or RBD, in DLB patients, and visual hallucinations in patients with Lewy body dementia. In addition, we have the rights to develop RVT-103, a combination of donepezil and a peripheral muscarinic receptor antagonist, and RVT-104, a combination of rivastigmine and a peripheral muscarinic receptor antagonist, and we intend to develop these product candidates alone and in combination with intepirdine as potential treatments for patients with Alzheimer's disease or Lewy body dementia.

We were founded in October 2014 as a wholly-owned subsidiary of Roivant Sciences Ltd., or RSL, a company focused on the acquisition, development and commercialization of late-stage product candidates that are non-strategic, deprioritized or under-resourced at other biopharmaceutical companies, with the intent of reducing the time and cost of the drug development process. We have three subsidiaries. Axovant Holdings Limited, a direct wholly-owned subsidiary of Axovant Sciences Ltd., was incorporated in England and Wales in August 2016; Axovant Sciences, Inc., a direct wholly-owned subsidiary of Axovant Holdings Limited, was incorporated in Delaware in February 2015 and Axovant Sciences GmbH, a direct wholly-owned subsidiary of Axovant Holdings Limited, was organized in Switzerland in August 2016. Our operations to date have been limited to organizing and staffing our company, raising capital, acquiring our product candidates and preparing for and advancing our product candidates, intepirdine, nelotanserin, RVT-103 and RVT-104, as potential treatments for patients with Alzheimer's disease and Lewy body dementia, into clinical development.

In June 2015, we completed our initial public offering, or IPO, from which we raised proceeds of $334.5 million, net of underwriting discounts and issuance costs. We intend to use these proceeds to fund our planned clinical development programs. We are a "controlled company" within the meaning of the corporate governance rules of the New York Stock Exchange, or the NYSE. RSL owns, in the

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aggregate, approximately 75.6% of our outstanding common shares. To date, we have not generated any revenue and we recorded net losses of $80.3 million for the six months ended September 30, 2016 and $133.1 million for the year ended March 31, 2016. We have determined that we have one operating and reporting segment.

Our Product Pipeline

The following table summarizes the status of our development programs:

Compound	Clinical Indication	Development Stage	Global Commercial Rights
Intepirdine	Mild-to-Moderate Alzheimer's disease	Phase 3 *(MINDSET Study)*	Axovant
	Dementia with Lewy Bodies (DLB)	Phase 2b (HEADWAY-DLB Study)	Axovant
	Gait and Balance in Alzheimer's disease, DLB and Parkinson's disease dementia	Phase 2	Axovant
Nelotanserin	Visual Hallucinations in Lewy Body Dementia	Phase 2	Axovant
	REM Behavior Disorder (RBD) in DLB	Phase 2	Axovant
RVT-103	Alzheimer's disease	Proof of Concept Study	Axovant
RVT-104	Alzheimer's disease and DLB	Preparation for Proof of Concept Study	Axovant

Intepirdine

Overview

Our lead product candidate intepirdine is currently being developed for the treatment of mild-to-moderate Alzheimer's disease and DLB. We acquired the worldwide rights to intepirdine from Glaxo Group Limited and GlaxoSmithKline Intellectual Property Development Limited, collectively GSK, under an asset purchase agreement entered into in December 2014, or the GSK Agreement.

Mechanism of Action

Intepirdine is an orally administered potent antagonist of the 5-HT6 receptor. By antagonizing the 5-HT6 receptor, intepirdine promotes the release of key neurotransmitters including acetylcholine. These neurotransmitters are believed to be critical for alertness, memory, thought and judgment, which are the key components of cognition and function that are impaired in patients with dementia.

We believe that intepirdine's action as a 5-HT6 receptor antagonist supports its use in combination with cholinesterase inhibitors. While cholinesterase inhibitors help prevent the breakdown of acetylcholine, 5-HT6 receptor antagonists promote the release of multiple neurotransmitters including acetylcholine. Therefore, when used in combination with one another, we believe that 5-HT6 receptor antagonists and cholinesterase inhibitors may increase the concentration of acetylcholine through distinct and complementary mechanisms. 5-HT6 receptors are primarily localized to the central nervous system, or CNS, particularly in regions of the brain that modulate cognition, and may impact cognition

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and neuronal function in multiple ways. Because 5-HT6 receptor antagonists do not have activity outside the CNS, we believe they should not significantly increase levels of acetylcholine outside of the CNS, and therefore should not exacerbate the peripheral side effects that are commonly associated with cholinesterase inhibitors. Intepirdine also exhibits activity as an antagonist of the 5-HT2A receptor which may further contribute to the mechanism of action of intepirdine in Alzheimer's disease and DLB.

Intepirdine for the Treatment of Alzheimer's Disease

Medical Need

Alzheimer's disease, the most common form of dementia, is a progressive neurodegenerative disorder that results in significant impairments in cognition, function and behavior. According to the Alzheimer's Association, Alzheimer's disease affects approximately 5.3 million people in the United States. It is estimated that between 70% and 90% of Alzheimer's disease patients age 65 and older are classified as having mild-to-moderate Alzheimer's disease. No new chemical entity has been approved by the FDA for the treatment of Alzheimer's disease since 2003.

Clinical Development

We are currently developing intepirdine for use in combination with the current standard of care in Alzheimer's disease. Donepezil, a generic drug also marketed under the trade name Aricept by Eisai Co., Ltd. and Pfizer, Inc., is the most commonly used cholinesterase inhibitor and is the background medication for all patients in our ongoing Phase 3 program in Alzheimer's disease for intepirdine. Cholinesterase inhibitors are the current standard of care for the treatment of Alzheimer's disease, and the only class of drugs approved by the FDA for the treatment of patients with mild Alzheimer's disease. Based on preclinical and clinical data collected to date, we believe intepirdine, when used in combination with donepezil, works additively or synergistically to increase the concentration of acetylcholine, potentially leading to improved cognition and function in patients with Alzheimer's disease.

We believe intepirdine, if approved, has the potential to be a best-in-class 5-HT6 receptor antagonist for the treatment of Alzheimer's disease based on its safety, tolerability and efficacy results for up to 48 weeks, as observed in a 684-subject, randomized, placebo-controlled Phase 2b trial conducted by GSK. We believe this is significant, in part, because currently marketed Alzheimer's disease drugs were approved on efficacy data of 28 weeks or less. Furthermore, we believe intepirdine has a number of potentially favorable properties as a product candidate for mild-to-moderate Alzheimer's disease, including once daily dosing, a low potential for drug interactions, and an ability to be administered with or without food.

Prior to our acquisition of intepirdine in December 2014, GSK conducted 13 clinical trials for intepirdine involving over 1,250 individuals, which included healthy subjects as well as subjects with mild-to-moderate Alzheimer's disease. Since our acquisition of intepirdine, we have completed five additional studies and increased the number of individuals treated with the product candidate in completed clinical studies to more than 1,300. In GSK's Phase 2b clinical trial of 684-subjects with mild-to-moderate Alzheimer's disease, subjects who received 35 mg intepirdine in combination with donepezil achieved a 1.50 point benefit (p-value = 0.013) versus the donepezil-only group at 24 weeks following treatment initiation as measured by the Alzheimer's Disease Assessment Scale-cognitive, or ADAS-cog, subscale (pre-specified co-primary endpoint). Statistically significant improvements in cognition were also observed at 12 and 48 weeks following initiation of treatment, compared to subjects who received donepezil alone. In addition, subjects who received 35 mg intepirdine in combination with donepezil achieved a 2.00 point (p-value = 0.024) benefit versus the donepezil-only group at 24 weeks following initiation of treatment as measured by the Alzheimer's Disease Cooperative Study Activities

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of Daily Living, or ADCS-ADL scale, a commonly used scale evaluating a subject's ability to perform a list of daily activities. A patient's ADCS-ADL score is evaluated based on information obtained from that patient's caregiver. Statistically significant improvements of activities of daily living were also observed at 12 and 36 weeks following the initiation of treatment, compared to subjects who received donepezil alone.

GSK's other pre-specified co-primary endpoint in the 684-patient Phase 2b trial was Clinical Dementia Rating Sum of Boxes, or CDR-SB, a composite scale with certain components that evaluate cognition and other components that assess function, at 24 weeks following treatment. While the 35 mg intepirdine dose group achieved statistically significant improvement in the CDR-SB at 12 weeks and was numerically superior at 24 weeks and further time points, the benefits at 24 weeks and beyond were not statistically significant. We have chosen the ADAS-cog and ADCS-ADL as the co-primary endpoints for our ongoing Phase 3 trial in patients with mild-to-moderate Alzheimer's disease, the MINDSET study, which is being conducted pursuant to our Special Protocol Assessment, or SPA, agreement with the FDA.

Intepirdine was observed to be well-tolerated by subjects in all 18 clinical trials conducted to date. In the 684-subject Phase 2b adjunctive therapy study the proportion of subjects who experienced drug-related adverse events was lower in the group that received 35 mg intepirdine with donepezil than in the group that received placebo with donepezil, at 24 weeks (6% versus 9%) and 48 weeks (7% versus 13%). There were no drug-related serious adverse events in the intepirdine groups at 24 or 48 weeks. There was one drug-related serious adverse event in the placebo group at 24 weeks. Falls were reported by fewer patients in both the 35 mg intepirdine group (2%) and the 15 mg intepirdine group (2%) compared to the placebo group (6%). There were no notable differences between the intepirdine and placebo groups in vital sign changes, electrocardiogram changes or significant changes in laboratory parameters, and there was no evidence of significant liver toxicity.

In October 2015, we commenced a global, multi-center, double-blind, placebo-controlled confirmatory Phase 3 clinical study of intepirdine, which we refer to as the MINDSET study, for the treatment of patients with mild-to-moderate Alzheimer's disease. The MINDSET study is evaluating the safety, tolerability and efficacy of intepirdine over a 24-week period and compares 35 mg, once-daily oral doses of intepirdine to placebo in approximately 1,150 patients with mild-to-moderate Alzheimer's disease on a background of stable donepezil therapy. The primary endpoints of the study are improvements in scores on the ADAS-cog and the ADCS-ADL scales, which have been used as endpoints supporting regulatory approval of currently-marketed Alzheimer's disease treatments in the United States and Europe. Subjects completing the MINDSET study will be eligible to enroll in a 12-month, open-label extension in which other medications for the treatment of Alzheimer's disease, including memantine and other cholinesterase inhibitors, may be administered in combination with intepirdine. We have received an SPA from the FDA which states that the design and planned analysis of the MINDSET study adequately address the objectives necessary to support an application for marketing approval. The MINDSET study seeks to confirm results of a prior 684-subject Phase 2b adjunctive therapy study conducted by GSK. We expect to report results from our MINDSET study in calendar year 2017. If the results of the MINDSET study are favorable, we plan to seek regulatory approval and commercialize intepirdine.

Intepirdine for the Treatment of Dementia with Lewy Bodies

Medical Need

In addition to evaluating intepirdine in patients with mild-to-moderate Alzheimer's disease, we are also developing intepirdine to address other forms of dementia, such as dementia with Lewy bodies, or DLB. DLB, a subset of Lewy body dementia, is a progressive neurodegenerative disorder pathologically characterized by the aggregation of alpha-synuclein and other proteins in the brain, known as Lewy

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bodies, causing disruption in cognition, function and behavior. DLB is the second most prevalent cause of neurodegenerative dementia in elderly patients. We estimate that DLB affects approximately 1.1 million people in the United States. In addition to suffering from deficits and fluctuations in cognition, DLB patients often suffer from visual hallucinations, parkinsonism, sensitivity to neuroleptic (antipsychotic) medications and REM behavior disorder, or RBD, a condition in which patients physically act out their dreams.

DLB patients are often treated off-label with cholinesterase inhibitors. Cholinergic neurotransmission is thought to be even more dysfunctional in DLB than in Alzheimer's disease. This suggests that neurotransmitter-targeted therapies that work by increasing the inter-synaptic concentration of acetylcholine, much like intepirdine in Alzheimer's disease, may also be effective in improving cognition and function in DLB patients. While cholinesterase inhibitors are not approved by the FDA or EMA for the treatment of DLB, donepezil was approved in September 2014 in Japan for this indication. We believe that the addition of a 5-HT6 receptor antagonist, such as intepirdine, may help improve cognition in DLB patients by promoting the synaptic release of acetylcholine. In addition, intepirdine has antagonist activity against the 5-HT2A receptor, which has been implicated in the pathophysiology of visual hallucinations and other behavioral disturbances affecting patients with DLB. We believe that intepirdine has the potential to be the first drug approved by the FDA and EMA for the treatment of DLB.

Clinical Development

In the first quarter of calendar year 2016, we began a Phase 2b clinical trial of intepirdine, called the HEADWAY-DLB study, in patients with DLB. In addition to the 35 mg dose of intepirdine that is being studied in the MINDSET study, we will evaluate a 70 mg dose of intepirdine in this trial, which we believe could have greater activity against the 5-HT2A receptor to potentially address visual hallucinations and behavioral disturbances in this patient population. This decision is supported by a safety and food-effect study testing the 70 mg dose that we completed in 2015. In September 2016, we received Fast Track designation from the FDA for intepirdine for the treatment of DLB. We expect to report results from the HEADWAY-DLB trial in calendar year 2017. If the results of the HEADWAY-DLB study are favorable, we believe that it, in combination with data from our studies in Alzheimer's disease, could serve as the basis for seeking approval of intepirdine for DLB.

Intepirdine for Gait and Balance in Alzheimer's Disease, Dementia with Lewy Bodies and Parkinson's Disease Dementia

Medical Need

In addition to evaluating intepirdine in patients with mild-to-moderate Alzheimer's disease and DLB, we are also evaluating the effects of intepirdine on gait and balance in patients with Alzheimer's disease, dementia with Lewy bodies and Parkinson's disease dementia. In addition to cognitive deficits, these patients often present with a history of defined gait impairment.

Falls are a significant issue in the elderly, and 35% to 40% of community-dwelling generally healthy adults over age 65 fall each year. Falls can also impose a significant economic burden on the healthcare system in addition to the serious morbidity and mortality with which they are associated. It is estimated that the direct medical costs of falls in 2015 was over $31 billion in the United States. Patients with dementia are more prone to falls due to impaired cognition, gait and balance.

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Clinical Development

In September 2016, we initiated a double-blind, randomized, placebo-controlled Phase 2 crossover study of intepirdine to evaluate its effects on gait and balance in patients with Alzheimer's disease, DLB and Parkinson's disease dementia. We intend to enroll approximately 40 patients in this Phase 2 study and will seek to further explore the reduced rate of falls observed with intepirdine treatment in the prior 684-patient Phase 2b study in mild-to-moderate Alzheimer's disease in patients on background of stable donepezil therapy. We expect to report results from the Phase 2 gait and balance study in calendar year 2017.

Nelotanserin

Overview

In October 2015, we acquired from our parent company RSL the global rights to nelotanserin, a potent and highly selective inverse agonist of the 5-HT2A receptor. Initially, we intend to investigate and develop nelotanserin to address visual hallucinations in patients with Lewy body dementia and RBD in patients with DLB. Nelotanserin has been evaluated in eight clinical studies to date with over 800 human subjects exposed to the drug candidate and has been observed to be well tolerated, with no drug-related serious adverse events reported.

Mechanism of Action

Nelotanserin reduces the activity of the 5-HT2A receptor. The 5-HT2A receptor has been linked to neuropsychiatric disturbances including visual hallucinations and sleep disturbances. In *in vitro* studies, nelotanserin did not antagonize the dopamine D2 receptor. Antagonism of the D2 receptor in Lewy body dementia patients can lead to severe side effects including increased parkinsonism, worsening of cognition, heavy sedation, and symptoms resembling neuroleptic malignant syndrome which can be fatal.

Nelotanserin for Visual Hallucinations in Lewy Body Dementia

Medical Need

Lewy body dementia includes two similar conditions, DLB and Parkinson's disease dementia, or PDD. There is significant overlap in the pathology and clinical presentation of both conditions; however, the primary difference generally depends on the timing of the onset of cognitive decline relative to the onset of movement-related symptoms. In DLB, the cognitive decline typically occurs before or within one year of the onset of movement disorder symptoms. In PDD, movement disorder symptoms typically precede cognitive decline by more than one year. The Lewy Body Dementia Association estimates that there are 1.4 million patients with Lewy body dementia in the United States.

Lewy body dementia patients suffer from frequent visual hallucinations, which are often treated with off-label atypical antipsychotic medications such as quetiapine. Use of atypical antipsychotic medications, which have activity against the dopamine D2 receptor, can lead to increased or possibly irreversible parkinsonism in Lewy body dementia patients and a life-threatening side-effect resembling neuroleptic malignant syndrome. We believe that there is a need for new therapeutic options that can reduce visual hallucinations in Lewy body dementia patients without risk of these severe side effects.

Clinical Development

In January 2016 we initiated a double-blind, randomized, placebo-controlled, cross-over Phase 2 clinical study of nelotanserin in approximately twenty DLB and PDD patients suffering from visual hallucinations. We expect to report preliminary results from approximately ten patients in this pilot

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study in February 2017, and we expect to report full results from this study later in the first half of calendar year 2017.

Nelotanserin for REM Behavior Disorder (RBD) in Dementia with Lewy Bodies (DLB)

Medical Need

RBD is a common clinical feature of DLB, and is a condition in which patients physically act out their dreams, impacting their quality of life and endangering themselves and their bed partners. While off-label treatment of RBD with benzodiazepines is common, this class of drugs is associated with concerning side effects in patients with dementia, including sedation, worsening of cognition and increased risk of falls. We believe that there is a need for new therapeutic options that can reduce the frequency of RBD without sedating patients or worsening cognition in patients with dementia.

Clinical Development

In March 2016 we initiated a four-week double-blind, randomized, placebo-controlled Phase 2 study in patients with DLB suffering from RBD. This study will utilize objective measures of efficacy as assessed in a sleep-lab setting, and we expect to receive results in calendar year 2017.

RVT-103 and RVT-104

Overview

In August 2016, we licensed the rights to develop and, if successful, commercialize products that combine cholinesterase inhibitors with peripherally acting quaternary amine muscarinic receptor antagonists such as glycopyrrolate. These combinations could provide a means to mitigate the known peripheral side effects of cholinesterase inhibitors and may also allow higher than currently approved doses of cholinesterase inhibitors such as rivastigmine which may improve treatment of symptoms of neurodegenerative disorders such as Alzheimer's disease and Lewy body dementia.

Mechanism of Action of RVT-103 and RVT-104

Cholinesterase inhibitors are dose-limited by their gastrointestinal tolerability profile, which limits patient adoption and compliance. Muscarinic receptor antagonists in combination with cholinesterase inhibitors may reduce the gastrointestinal side effects of cholinesterase inhibitors and may also potentially allow higher than currently approved doses of cholinesterase inhibitors to be used.

RVT-103 is a combination of donepezil with a peripherally acting quaternary amine muscarinic receptor antagonist such as glycopyrrolate. Glycopyrrolate in particular is believed to have minimal-to-no CNS penetration, which is important as it may help limit peripheral cholinergic side effects, while having only a minimal impact on the cholinergic system in the brain potentially avoiding unwanted falls and confusion.

RVT-104 is the combination of high-dose rivastigmine and a peripherally acting quaternary amine muscarinic receptor antagonist such as glycopyrrolate. Rivastigmine has shown greater efficacy at higher-than approved doses that were not well tolerated. Unlike donepezil, which only inhibits the acetylcholinesterase enzyme, rivastigmine also inhibits the butylcholinesterase enzyme, which is also involved in the breakdown of acetylcholine. Thus, there is reason to believe that higher doses of rivastigmine could potentially lead to better efficacy because, in addition to blocking acetylcholinesterase, the activity of butylcholinesterase is also addressed.

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RVT-103 and RVT-104 in Alzheimer's Disease and Lewy Body Dementia

Medical Need

Cholinesterase inhibitors are the standard of care in both Alzheimer's disease and DLB. Despite their widespread use, many patients cannot tolerate the cholinesterase inhibitors because of their cholinergic side effects such as nausea, vomiting and diarrhea. We believe that drugs that can mitigate these cholinergic side effects will allow more patients to receive optimal cholinesterase inhibitor therapy.

Clinical Development

We will initially develop RVT-103, as a potential treatment for patients with Alzheimer's disease with the ultimate goal of creating a triple combination of intepirdine, a peripherally acting quaternary amine muscarinic receptor antagonist and donepezil. We are currently enrolling patients in our proof of concept study and expect to report the initial results from this clinical study in the first half of calendar year 2017. We also expect to develop RVT-104 as a potential treatment for patients with Alzheimer's disease and Lewy body dementia.

Our Key Agreements

Asset Purchase Agreement with GlaxoSmithKline for Intepirdine

In December 2014, we acquired the worldwide rights to intepirdine from GSK. Under the GSK Agreement, we made an upfront payment of $5.0 million and made an additional $5.0 million payment in June 2016. We are obligated to pay GSK $35.0 million, $25.0 million and $10.0 million upon the receipt of marketing approval of intepirdine in the United States, the European Union and Japan, respectively, as well as an additional payment of $85.0 million for the first calendar year in which we achieve global net sales of $1.2 billion for intepirdine. Under the GSK Agreement, we are also obligated to pay a fixed 12.5% royalty based on net sales of intepirdine, subject to reduction on account of expiration of patent and regulatory exclusivity or upon generic entry.

Our royalty obligations with respect to the GSK Agreement will end, on a product-by-product and country-by-country basis, on the latest of: (1) expiration of the last valid claim of the assigned patents covering the manufacture, use or composition of such product in such country; (2) expiration of regulatory exclusivity for such product in such country; or (3) 12 years from the first commercial sale of such product in such country, or if such country is one of the five major European countries listed in the GSK Agreement, then 12 years from the first commercial sale of such product in at least three such major European countries.

Our royalty payment obligations and milestone payment obligations under the GSK Agreement may be reduced by a portion of royalty payments, and in some cases other payments, made to third parties for rights to certain U.S. patents, in each case subject to a maximum reduction.

Arena Development Agreement for Nelotanserin

In October 2015, we exercised an option to acquire global rights, title, interest and obligations in and to nelotanserin from our parent company RSL. In May 2015, RSL entered into a development, marketing and supply agreement for nelotanserin with Arena Pharmaceuticals, GmbH, or Arena, and we entered into a Waiver and Option Agreement with RSL. Upon the exercise of our option, we assumed RSL's rights and obligations under the development, marketing and supply agreement with Arena, or the Arena Development Agreement. Under the Waiver and Option Agreement, we recorded $5.3 million as research and development expense which was 110% of any payments made to Arena by RSL, and any costs incurred by RSL in connection with the development of nelotanserin. We will be responsible for future contingent payments under the Arena Development Agreement, including up to

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$4.0 million in potential development milestone payments, up to $37.5 million in potential regulatory milestone payments and up to $60.0 million in potential commercial milestone payments. Under the Arena Development Agreement, we are also obligated to purchase finished drug product under a fixed price equal to 15% of net sales of nelotanserin.

The Arena Development Agreement will remain in effect until terminated: (1) by the parties' mutual agreement; (2) for any reason by us upon 90 days' written notice to Arena; (3) by either party upon written notice for the other party's material breach or insolvency event if such party fails to cure such breach or the insolvency event is not dismissed within the specified cure period; or (4) by Arena if we or our affiliates participate in a challenge to certain Arena patents.

Services Agreement with Roivant Sciences, Inc.

We and Axovant Sciences, Inc. have entered into a services agreement with Roivant Sciences, Inc., or RSI, a wholly-owned subsidiary of RSL, or the Services Agreement, pursuant to which RSI provides us with services in relation to the identification of potential product candidates, project management of clinical trials and other development activities, and certain administrative and financial functions. Under the terms of our Services Agreement with RSI, we are obligated to pay or reimburse RSI for the costs it, or third parties acting on its behalf, incurs in providing services to us, including administrative and support services as well as research and development services. In addition, we are obligated to pay to RSI at a pre-determined mark-up on the costs incurred in connection with any general and administrative and research and development services provided directly by RSI. We expect that our reliance on RSI will decrease over time as we, Axovant Sciences, Inc., and our other subsidiaries continue to hire the necessary personnel to manage the development and potential commercialization of our product candidates.

Corporate Information

We are an exempted limited company incorporated under the laws of Bermuda on October 31, 2014 under the name Roivant Neurosciences Ltd. We changed our name to Axovant Sciences Ltd. in March 2015. Our registered office is located in Bermuda at Clarendon House, 2 Church Street, Hamilton HM11, Bermuda. We also have business operations at 14 Par-La-Ville Road, Hamilton HM08, Bermuda and at Axovant Sciences GmbH, c/o OBC Suisse, Aeschenvorstadt 71, 4051 Basel. The telephone number of our registered office is +1 (441) 824-8100. Our website is located at http://www.axovant.com. We do not incorporate by reference into this prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus.

The Securities We May Offer

We may offer common shares and preference shares, various series of debt securities and warrants to purchase any of such securities, with a total aggregate offering price of up to $750,000,000 from time to time under this prospectus, together with any applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of the offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- original issue discount, if any;

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rates and times of payment of interest or dividends, if any;

redemption, conversion, exchange or sinking fund terms, if any;

conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;

ranking;

restrictive covenants, if any;

voting or other rights, if any; and

important Bermuda and United States federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

the names of those underwriters or agents;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the estimated net proceeds to us.

Common Shares. We may issue common shares from time to time. Holders of common shares have no pre-emptive, redemption, conversion or sinking fund rights. Holders of common shares are entitled to one vote per share on all matters submitted to a vote of holders of common shares, subject to the limitations described below. Unless a different majority is required by law or by our amended and restated bye-laws, resolutions to be approved by holders of common shares require approval by a simple majority of votes cast at a meeting at which a quorum is present.

Under our amended and restated bye-laws, any U.S. person, other than any excluded person, as described below, whose controlled shares, as defined below, would constitute 9.5% or more of the total voting power of our issued share capital, would have their aggregate votes reduced by our board of directors to the extent necessary such that the controlled shares of such U.S. person will constitute less than 9.5% of the voting

power of all issued and outstanding shares. These reductions will be made on an automatic basis pursuant to the procedures set forth in our bye-laws. Under these provisions, certain shareholders may have their voting rights reduced to less than one vote per share, while other shareholders may have voting rights in excess of one vote per share. Any person, including any U.S. person, whose controlled shares constituted 9.5% or more of the total voting power of our issued share capital immediately prior to our initial public offering are exempt from the foregoing voting restrictions. As a result, RSL and certain of its affiliates are exempt from these restrictions. For purposes of this paragraph, "controlled shares" means all of our shares directly, indirectly or constructively owned by any person, as determined pursuant to Sections 957 and 958 of the Internal

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Revenue Code and the Treasury Regulations promulgated thereunder. Further, our board of directors may determine that shares shall carry different voting rights as it reasonably determines, based on the advice of counsel, to be appropriate to avoid the existence of a U.S. person whose controlled shares constitute 9.5% or more of the total voting power of our issued share capital.

In addition, under our amended and restated bye-laws, shares shall not carry voting rights to the extent that our board of directors reasonably determines, based on the advice of counsel, that it is necessary to do so to avoid adverse tax, legal or regulatory consequences to us, any of our subsidiaries or any direct or indirect holder of our common shares or its affiliates, provided that our board of directors will use reasonable efforts to afford equal treatment to similarly situated shareholders to the extent possible under the circumstances.

In the event of our liquidation, dissolution or winding up, the holders of common shares are entitled to share equally and ratably in our assets, if any, remaining after the payment of all of our debts and liabilities, subject to any liquidation preference on any issued and outstanding preference shares.

Preference Shares. We may issue preference shares from time to time, in one or more series. Under Bermuda law and our amended and restated bye-laws, our board of directors has the authority, without further action by the shareholders (unless such shareholder action is required by applicable law or the rules of any stock exchange or market on which our securities are then traded), to establish preference shares in one or more series and to determine the designations, voting powers, preferences and rights of each series of the preference shares, as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series, any or all of which may be greater than the rights of the common shares. Such rights, preferences, powers and limitations, as may be established, could have the effect of discouraging an attempt to obtain control of our company. Any convertible preference shares we may issue will be convertible into our common shares or exchangeable for our other securities. Conversion may be mandatory or at the holder's option and would be at prescribed conversion rates.

If we sell any series of preference shares under this prospectus, we will fix the designations, voting powers, preferences and rights of such series of preference shares, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the Securities and Exchange Commission, or the SEC, the form of any certificate of designation that describes the terms of the series of preference shares that we are offering before the issuance of the related series of preference shares. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preference shares being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preference shares.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common shares or preference shares. Conversion may be mandatory or at the holder's option and would be at prescribed conversion rates. Upon any conversion into or exchange for our common shares, the holder of such common shares will be subject to the provisions of our amended and restated bye-laws which provide that any U.S. person, other than any excluded person, whose controlled shares would constitute 9.5% or more of the total voting power of our issued share capital, will have their aggregate votes reduced by our board of directors to the extent

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necessary such that the controlled shares of such U.S. person will constitute less than 9.5% of the voting power of all issued and outstanding shares, all as further described above under " Common Shares."

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. Forms of indentures have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

Warrants. We may issue warrants for the purchase of common shares, preference shares and/or debt securities in one or more series. We may issue warrants independently or together with common shares, preference shares and/or debt securities, and the warrants may be attached to or separate from these securities. Upon any purchase of common shares pursuant to the exercise of a warrant, the holder of such common shares will be subject to the provisions of our amended and restated bye-laws which provide that any U.S. person, other than any excluded person, whose controlled shares would constitute 9.5% or more of the total voting power of our issued share capital, will have their aggregate votes reduced by our board of directors to the extent necessary such that the controlled shares of such U.S. person will constitute less than 9.5% of the voting power of all issued and outstanding shares, all as further described above under " Common Shares."

In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental warrant agreements and forms of warrant certificates will be filed as exhibits to the registration statement or will be incorporated by reference from reports that we file with the SEC.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

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RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, before deciding whether to purchase any of the securities being registered pursuant to the registration statement of which this prospectus is a part. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these risks might cause you to lose all or part of your investment. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These are based on our management's current beliefs, expectations and assumptions about future events, conditions and results and on information currently available to us. Discussions containing these forward-looking statements may be found, among other places, in the Sections entitled "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" incorporated by reference from our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q, as well as any amendments thereto, filed with the SEC.

Any statements in this prospectus, or incorporated herein, about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and are forward-looking statements. These forward-looking statements include, but are not limited to, statements regarding:

- the success, cost and timing of our product development activities and clinical trials;
- the timing of and our ability to obtain and maintain regulatory approval of our product candidates, intepirdine, nelotanserin, RVT-103 and RVT-104;
- our ability to successfully commercialize our product candidates;
- the rate and degree of market acceptance of our product candidates, if approved;
- our estimates of our expenses, ongoing losses, future revenue, capital requirements and our needs for or ability to obtain additional financing;
- our expectations regarding uses of net proceeds;
- our ability to maintain intellectual property protection for our product candidates;
- our ability to identify and develop new product candidates;
- our ability to identify, recruit and retain key personnel;

our financial performance; and

developments and projections relating to our competitors or our industry.

In some cases, you can identify forward-looking statements by the words "may," "might," "can," "will," "to be," "could," "would," "should," "expect," "intend," "plan," "objective," "anticipate," "believe," "estimate," "predict," "project," "potential," "likely," "continue" and "ongoing," or the negative or plural of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these words. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results,

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levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements.

You should refer to the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Given these risks, uncertainties and other factors, many of which are beyond our control, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate, and you should not place undue reliance on these forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to revise any forward-looking statements to reflect events or developments occurring after the date of this prospectus, even if new information becomes available in the future.

RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERENCE SHARE DIVIDENDS

If we offer debt securities and/or preference equity securities under this prospectus, then we will, if required at that time, provide a ratio of earnings to fixed charges and/or ratio of combined fixed charges and preference dividends to earnings, respectively, in the applicable prospectus supplement for such offering.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. Except as described in any applicable prospectus supplement or in any free writing prospectuses that we may authorize to be provided to you in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered hereby to fund our clinical development programs, including the clinical development programs for intepirdine, nelotanserin, RVT-103 and RVT-104, and for working capital and other general corporate purposes. We may also use a portion of the net proceeds to invest in or acquire businesses or technologies that we believe are complementary to our own, although we have no current plans, commitments or agreements with respect to any material acquisitions as of the date of this prospectus. We will set forth in the applicable prospectus supplement or free writing prospectus our intended use for the net proceeds received from the sale of any securities sold pursuant to the prospectus supplement or free writing prospectus. Pending these uses, we intend to invest the net proceeds in a non-interest bearing account.

DESCRIPTION OF SHARE CAPITAL

The following description of our share capital and provisions of our memorandum of association and amended and restated bye-laws is a summary and is qualified entirely by reference to the applicable provisions of our memorandum of association, amended and restated bye-laws and the Bermuda Companies Act 1981, as amended, or the Companies Act. For information on how to obtain copies of our memorandum of association and amended and restated bye-laws, which are exhibits to the registration statement of which this prospectus is a part, see "Where You Can Find Additional Information."

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General

We are an exempted limited company incorporated under the laws of Bermuda. We are registered with the Registrar of Companies in Bermuda under registration number 49659. We were incorporated on October 31, 2014 under the name Roivant Neurosciences Ltd. We changed our name to Axovant Sciences Ltd. in March 2015. The objects of our business are unrestricted, and Axovant Sciences Ltd. has the capacity of a natural person. We can therefore undertake activities without restriction on our capacity.

Since our incorporation, other than a subdivision of our authorized and issued share capital and our initial public offering of common shares in June 2015, there have been no material changes to our share capital, mergers, amalgamations or consolidations of us or any of our subsidiaries, no material changes in the mode of conducting our business, and no material changes in the types of products produced or services rendered. There have been no bankruptcy, receivership or similar proceedings with respect to us or our subsidiaries.

Share Capital

Our authorized share capital consists of 1,000,000,000 common shares, $0.00001 par value per common share. As of September 30, 2016, we had 99,161,719 common shares issued and outstanding. All of our issued and outstanding common shares are fully paid. Pursuant to our amended and restated bye-laws, subject to the requirements of the New York Stock Exchange, or the NYSE, and to any resolution of the shareholders to the contrary, our board of directors is authorized to issue any of our authorized but unissued shares. There are no limitations on the right of non-Bermudians or non-residents of Bermuda to hold or vote our shares provided our common shares remain listed on an appointed stock exchange, which includes the NYSE.

Common Shares

Holders of common shares have no pre-emptive, redemption, conversion or sinking fund rights. Holders of common shares are entitled to one vote per share on all matters submitted to a vote of holders of common shares, subject to the limitations described below. Unless a different majority is required by law or by our amended and restated bye-laws, resolutions to be approved by holders of common shares require approval by a simple majority of votes cast at a meeting at which a quorum is present.

Under our amended and restated bye-laws, any U.S. person, other than any excluded person, as described below, whose controlled shares, as defined below, would constitute 9.5% or more of the total voting power of our issued share capital, would have their aggregate votes reduced by our board of directors to the extent necessary such that the controlled shares of such U.S. person will constitute less than 9.5% of the voting power of all issued and outstanding shares. These reductions will be made on an automatic basis pursuant to the procedures set forth in our bye-laws. Under these provisions, certain shareholders may have their voting rights reduced to less than one vote per share, while other shareholders may have voting rights in excess of one vote per share. Any person, including any U.S. person, whose controlled shares constituted 9.5% or more of the total voting power of our issued share capital immediately prior to our initial public offering, will be exempt from the foregoing voting restrictions. As a result, Roivant Sciences Ltd. and certain of its affiliates are exempt from these restrictions. For purposes of this paragraph, "controlled shares" means all of our shares directly, indirectly or constructively owned by any person, as determined pursuant to Sections 957 and 958 of the Internal Revenue Code and the Treasury Regulations promulgated thereunder. Further, our board of directors may determine that shares shall carry different voting rights as it reasonably determines, based on the advice of counsel, to be appropriate to avoid the existence of a U.S. person whose controlled shares constitute 9.5% or more of the total voting power of our issued share capital.

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In addition, under our amended and restated bye-laws, shares shall not carry voting rights to the extent that our board of directors reasonably determines, based on the advice of counsel, that it is necessary to do so to avoid adverse tax, legal or regulatory consequences to us, any of our subsidiaries or any direct or indirect holder of our common shares or its affiliates, provided that our board of directors will use reasonable efforts to afford equal treatment to similarly situated shareholders to the extent possible under the circumstances.

In the event of our liquidation, dissolution or winding up, the holders of common shares are entitled to share equally and ratably in our assets, if any, remaining after the payment of all of our debts and liabilities, subject to any liquidation preference on any issued and outstanding preference shares.

Preference Shares

Pursuant to Bermuda law and our amended and restated bye-laws, our board of directors may, by resolution, establish one or more series of preference shares having such number of shares, designations, dividend rates, relative voting rights, conversion or exchange rights, redemption rights, liquidation rights and other relative participation, optional or other special rights, qualifications, limitations or restrictions as may be fixed by the board of directors without any further shareholder approval. Preference shares could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preference shares may have the effect of decreasing the market price of the common shares and may adversely affect the voting power of holders of common shares and reduce the likelihood that common shareholders will receive dividend payments and payments upon liquidation.

Our board of directors will fix the designations, voting powers, preferences and rights of each series, as well as the qualifications, limitations or restrictions thereof, of the preference shares of each series that we offer under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preference shares we are offering before the issuance of that series of preference shares. This description will include:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;
- the purchase price per share;
- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preference shares on any securities exchange or market;

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whether the preference shares will be convertible into our common shares or other securities of ours, including depositary shares and warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;

whether the preference shares will be exchangeable into debt securities, and, if applicable, the exchange period, the exchange price, or how it will be calculated, and under what circumstances it may be adjusted;

voting rights, if any, of the preference shares;

preemption rights, if any;

restrictions on transfer, sale or other assignment, if any;

whether interests in the preference shares will be represented by depositary shares;

a discussion of any material or special Bermuda or United States federal income tax considerations applicable to the preference shares;

the relative ranking and preferences of the preference shares as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuances of any class or series of preference shares ranking senior to or on a parity with the series of preference shares being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preference shares.

Dividend Rights

Under Bermuda law, a company may not declare or pay dividends if there are reasonable grounds for believing that (1) the company is, or would after the payment be, unable to pay its liabilities as they become due; or (2) that the realizable value of its assets would thereby be less than its liabilities. Under our amended and restated bye-laws, each common share is entitled to dividends if, as and when dividends are declared by our board of directors, subject to any preferred dividend right of the holders of any preference shares. We do not anticipate paying cash dividends in the foreseeable future.

Variation of Rights

If at any time we have more than one class of shares, the rights attaching to any class, unless otherwise provided for by the terms of issue of the relevant class, may be varied either: (1) with the consent in writing of the holders of 75% of the issued shares of that class; or (2) with the sanction of a resolution passed by a majority of the votes cast at a general meeting of the relevant class of shareholders at which a quorum consisting of at least two persons holding or representing one-third of the issued shares of the relevant class is present. Our amended and restated bye-laws specify that the creation or issue of shares ranking equally with existing shares will not, unless expressly provided by the terms of issue of existing shares, vary the rights attached to existing shares. In addition, the creation or issue of preference shares ranking prior to common shares will not be deemed to vary the rights attached to common shares or, subject to the terms of any other class or series of preference shares, to vary the rights attached to any other class or series of preference shares.

Transfer of Shares

Our board of directors may, in its absolute discretion and without assigning any reason, refuse to register the transfer of a share on the basis that it is not fully paid. Our board of directors may also refuse to recognize an instrument of transfer of a share unless it is accompanied by the relevant share

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certificate and such other evidence of the transferor's right to make the transfer as our board of directors shall reasonably require or unless all applicable consents, authorizations and permissions of any governmental agency or body in Bermuda have been obtained or if it appears to our board of directors that certain tax, regulatory or legal consequences for us, any subsidiary of ours, holders of our common shares or their affiliates would result from the transfer. Subject to these restrictions, a holder of common shares may transfer the title to all or any of his common shares by completing a form of transfer in the form set out in our amended and restated bye-laws (or as near thereto as circumstances admit) or in such other common form as our board of directors may accept. The instrument of transfer must be signed by the transferor and transferee, although in the case of a fully paid share our board of directors may accept the instrument signed only by the transferor.

Meetings of Shareholders

Under Bermuda law, a company is required to convene at least one general meeting of shareholders each calendar year, which we refer to as the annual general meeting. However, the shareholders may by resolution waive this requirement, either for a specific year or period of time, or indefinitely. When the requirement has been so waived, any shareholder may, on notice to the company, terminate the waiver, in which case an annual general meeting must be called. We have chosen not to waive the convening of an annual general meeting.

Bermuda law provides that a special general meeting of shareholders may be called by the board of directors of a company and must be called upon the request of shareholders holding not less than 10% of the paid-up capital of the company carrying the right to vote at general meetings. Bermuda law also requires that shareholders be given at least five days' advance notice of a general meeting, but the accidental omission to give notice to any person does not invalidate the proceedings at a meeting. Our amended and restated bye-laws provide that our principal executive officer or the chairman or any two directors or any director and the secretary or board of directors may convene an annual general meeting and our principal executive officer or the chairman or any two directors or any director and the secretary or our board of directors may convene a special general meeting. Under our amended and restated bye-laws, at least 14 days' notice of an annual general meeting or ten days' notice of a special general meeting must be given to each shareholder entitled to vote at such meeting. This notice requirement is subject to the ability to hold such meetings on shorter notice if such notice is agreed: (1) in the case of an annual general meeting by all of the shareholders entitled to attend and vote at such meeting; or (2) in the case of a special general meeting by a majority in number of the shareholders entitled to attend and vote at the meeting holding not less than 95% in nominal value of the shares entitled to vote at such meeting. Subject to the rules of the NYSE, the quorum required for a general meeting of shareholders is two or more persons present in person at the start of the meeting and representing in person or by proxy in excess of 50% of all issued and outstanding common shares.

Access to Books and Records and Dissemination of Information

Members of the general public have a right to inspect the public documents of a company available at the office of the Registrar of Companies in Bermuda. These documents include a company's amended and restated memorandum of association, including its objects and powers, and certain alterations to the amended and restated memorandum of association. The shareholders have the additional right to inspect the bye-laws of the company, minutes of general meetings and the company's audited financial statements, which must be presented in the annual general meeting. The register of members of a company is also open to inspection by shareholders and by members of the general public without charge. The register of members is required to be open for inspection for not less than two hours in any business day (subject to the ability of a company to close the register of members for not more than thirty days in a year). A company is required to maintain its share register in Bermuda but may, subject to the provisions of the Companies Act establish a branch register outside

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of Bermuda. A company is required to keep at its registered office a register of directors and officers that is open for inspection for not less than two hours in any business day by members of the public without charge. Bermuda law does not, however, provide a general right for shareholders to inspect or obtain copies of any other corporate records.

Election and Removal of Directors

Our amended and restated bye-laws provide that our board of directors shall consist of such number of directors as the board of directors may determine. Our board of directors consists of seven directors and is divided into three classes that are, as nearly as possible, of equal size. Each class of directors is elected for a three-year term of office, but the terms will be staggered so that the term of only one class of directors expires at each annual general meeting. The initial terms of the Class I, Class II and Class III directors will expire in 2019, 2017 and 2018, respectively. At each succeeding annual general meeting, successors to the class of directors whose term expires at the annual general meeting will be elected for a three-year term.

A shareholder holding any percentage of the common shares in issue may propose for election as a director someone who is not an existing director or is not proposed by our board of directors. Where a director is to be elected at an annual general meeting, notice of any such proposal for election must be given not less than 90 days nor more than 120 days before the anniversary of the last annual general meeting prior to the giving of the notice or, in the event the annual general meeting is called for a date that is not less than 30 days before or after such anniversary the notice must be given not later than ten days following the earlier of the date on which notice of the annual general meeting was posted to shareholders or the date on which public disclosure of the date of the annual general meeting was made. Where a director is to be elected at a special general meeting, provided, however, that our board of directors has determined that shareholders may nominate persons for election at such special general meeting, notice of any shareholder proposal for election must be given not later than seven days following the earlier of the date on which notice of the special general meeting was posted to shareholders or the date on which public disclosure of the date of the special general meeting was made.

A director may be removed, only with cause, by the shareholders, provided notice of the shareholders meeting convened to remove the director is given to the director. The notice must contain a statement of the intention to remove the director and a summary of the facts justifying the removal and must be served on the director not less than 14 days before the meeting. The director is entitled to attend the meeting and be heard on the motion for his removal.

Proceedings of Board of Directors

Our amended and restated bye-laws provide that our business is to be managed and conducted by our board of directors. Bermuda law permits individual and corporate directors and there is no requirement in our bye-laws or Bermuda law that directors hold any of our shares. There is also no requirement in our amended and restated bye-laws or Bermuda law that our directors must retire at a certain age.

The compensation of our directors will be determined by the board of directors, and there is no requirement that a specified number or percentage of "independent" directors must approve any such determination. Our directors may also be paid all travel, hotel and other reasonable out-of-pocket expenses properly incurred by them in connection with our business or their duties as directors.

A director who discloses a direct or indirect interest in any contract or arrangement with us as required by Bermuda law will not be entitled to vote in respect of any such contract or arrangement in which he or she is interested unless the chairman of the relevant meeting of the Board of Directors determines that such director is not disqualified from voting.

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Indemnification of Directors and Officers

Section 98 of the Companies Act provides generally that a Bermuda company may indemnify its directors, officers and auditors against any liability which by virtue of any rule of law would otherwise be imposed on them in respect of any negligence, default, breach of duty or breach of trust, except in cases where such liability arises from fraud or dishonesty of which such director, officer or auditor may be guilty in relation to the company. Section 98 further provides that a Bermuda company may indemnify its directors, officers and auditors against any liability incurred by them in defending any proceedings, whether civil or criminal, in which judgment is awarded in their favor or in which they are acquitted or granted relief by the Supreme Court of Bermuda pursuant to Section 281 of the Companies Act.

Our amended and restated bye-laws provide that we shall indemnify our officers and directors in respect of their actions and omissions, except in respect of their fraud or dishonesty, and that we shall advance funds to our officers and directors for expenses incurred in their defense upon receipt of an undertaking to repay the funds if any allegation of fraud or dishonesty is proved. Our amended and restated bye-laws provide that the shareholders waive all claims or rights of action that they might have, individually or in right of the company, against any of the company's directors or officers for any act or failure to act in the performance of such director's or officer's duties, except in respect of any fraud or dishonesty of such director or officer. Section 98A of the Companies Act permits us to purchase and maintain insurance for the benefit of any officer or director in respect of any loss or liability attaching to him in respect of any negligence, default, breach of duty or breach of trust, whether or not we may otherwise indemnify such officer or director. We have purchased and maintain a directors' and officers' liability policy for such purpose.

Amendment of Memorandum of Association and Bye-laws

Bermuda law provides that the memorandum of association of a company may be amended by a resolution passed at a general meeting of shareholders. Our amended and restated bye-laws provide that no bye-law shall be rescinded, altered or amended, and no new bye-law shall be made, unless it shall have been approved by a resolution of our board of directors and by a resolution of our shareholders. Bye-laws relating to voting by poll, election of directors, classes of directors, removal of directors, indemnification and exculpation of directors and officers, changes to the memorandum of association and winding-up shall not be rescinded, altered or amended without a resolution of our board of directors including the affirmative vote of $66^{2}/_{3}\%$ of the directors then in office and a resolution of our shareholders including the affirmative vote of $66^{2}/_{3}\%$ of all votes entitled to be cast on the resolution.

Under Bermuda law, the holders of an aggregate of not less than 20% in par value of a company's issued share capital or any class thereof have the right to apply to the Supreme Court of Bermuda for an annulment of any amendment of the memorandum of association adopted by shareholders at any general meeting, other than an amendment that alters or reduces a company's share capital as provided in the Companies Act. Where such an application is made, the amendment becomes effective only to the extent that it is confirmed by the Supreme Court of Bermuda. An application for an annulment of an amendment of the memorandum of association must be made within 21 days after the date on which the resolution altering the company's memorandum of association is passed and may be made on behalf of persons entitled to make the application by one or more of their number as they may appoint in writing for the purpose. No application may be made by shareholders voting in favor of the amendment.

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Amalgamations and Mergers

The amalgamation or merger of a Bermuda company with another company or corporation (other than certain affiliated companies) requires the amalgamation or merger agreement to be approved by the company's board of directors and by its shareholders. Unless the company's bye-laws provide otherwise, the approval of 75% of the shareholders voting at such meeting is required to approve the amalgamation or merger agreement, and the quorum for such meeting must be two or more persons holding or representing more than one-third of the issued shares of the company. Our amended and restated bye-laws provide that the approval of a simple majority of shareholders voting at a meeting to approve the amalgamation or merger agreement shall be sufficient, and the quorum for such meeting shall be two or more persons present at the start of the meeting and holding or representing more than 50% of the issued voting shares.

Under Bermuda law, in the event of an amalgamation or merger of a Bermuda company with another company or corporation, a shareholder of the Bermuda company who did not vote in favor of the amalgamation or merger and who is not satisfied that fair value has been offered for such shareholder's shares may, within one month of notice of the shareholders meeting, apply to the Supreme Court of Bermuda to appraise the fair value of those shares.

Business Combinations

Although the Companies Act does not contain specific provisions regarding "business combinations" between companies organized under the laws of Bermuda and "interested shareholders," we have included these provisions in our bye-laws. Specifically, our bye-laws contain provisions which prohibit us from engaging in a business combination with an interested shareholder for a period of three years after the date of the transaction in which the person became an interested shareholder, unless, in addition to any other approval that may be required by applicable law:

- prior to the date of the transaction that resulted in the shareholder becoming an interested shareholder, our board of directors approved either the business combination or the transaction that resulted in the shareholder becoming an interested shareholder;

- upon consummation of the transaction that resulted in the shareholder becoming an interested shareholder, the interested shareholder owned at least 85% of our issued and voting shares outstanding at the time the transaction commenced; or

- after the date of the transaction that resulted in the shareholder becoming an interested shareholder, the business combination is approved by our board of directors and authorized at an annual or special meeting of shareholders by the affirmative vote of at least $66^{2}/_{3}\%$ of our issued and outstanding voting shares that are not owned by the interested shareholder.

For purposes of these provisions, a "business combination" includes recapitalizations, mergers, amalgamations, consolidations, exchanges, asset sales, leases, certain issues or transfers of shares or other securities and other transactions resulting in a financial benefit to the interested shareholder. An "interested shareholder" is any person or entity that beneficially owns 15% or more of our issued and outstanding voting shares and any person or entity affiliated with or controlling or controlled by that person or entity.

Shareholder Suits

Class actions and derivative actions are generally not available to shareholders under Bermuda law. The Bermuda courts, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong to the company where the act complained of is alleged to be beyond the corporate power of the company or illegal, or would result in the violation of the company's memorandum of association or bye-laws. Furthermore, consideration would be given by

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a Bermuda court to acts that are alleged to constitute a fraud against the minority shareholders or, for instance, where an act requires the approval of a greater percentage of the company's shareholders than that which actually approved it.

When the affairs of a company are being conducted in a manner that is oppressive or prejudicial to the interests of some part of the shareholders, one or more shareholders may apply to the Supreme Court of Bermuda, which may make such order as it sees fit, including an order regulating the conduct of the company's affairs in the future or ordering the purchase of the shares of any shareholders by other shareholders or by the company.

Our amended and restated bye-laws contain a provision by virtue of which our shareholders waive any claim or right of action that they have, both individually and on our behalf, against any director or officer in relation to any action or failure to take action by such director or officer, except in respect of any fraud or dishonesty of such director or officer. We have been advised by the SEC that in the opinion of the SEC, the operation of this provision as a waiver of the right to sue for violations of federal securities laws would likely be unenforceable in U.S. courts.

Capitalization of Profits and Reserves

Pursuant to our amended and restated bye-laws, our board of directors may (1) capitalize any part of the amount of our share premium or other reserve accounts or any amount credited to our profit and loss account or otherwise available for distribution by applying such sum in paying up unissued shares to be allotted as fully paid bonus shares pro rata (except in connection with the conversion of shares) to the shareholders; or (2) capitalize any sum standing to the credit of a reserve account or sums otherwise available for dividend or distribution by paying up in full, partly paid or nil paid shares of those shareholders who would have been entitled to such sums if they were distributed by way of dividend or distribution.

Untraced Shareholders

Our amended and restated bye-laws provide that our board of directors may forfeit any dividend or other monies payable in respect of any shares that remain unclaimed for six years from the date when such monies became due for payment. In addition, we are entitled to cease sending dividend warrants and checks by post or otherwise to a shareholder if such instruments have been returned undelivered to, or left uncashed by, such shareholder on at least two consecutive occasions or, following one such occasion, reasonable enquires have failed to establish the shareholder's new address. This entitlement ceases if the shareholder claims a dividend or cashes a dividend check or a warrant.

Certain Provisions of Bermuda Law

We have been designated by the Bermuda Monetary Authority as a non-resident for Bermuda exchange control purposes. This designation allows us to engage in transactions in currencies other than the Bermudan dollar, and there are no restrictions on our ability to transfer funds (other than funds denominated in Bermudan dollars) in and out of Bermuda or to pay dividends to U.S. residents who are holders of our common shares.

The Bermuda Monetary Authority has given its consent for the issue and free transferability of any of our shares, warrants and other securities to and between residents and non-residents of Bermuda for exchange control purposes, provided our shares remain listed on an appointed stock exchange, which includes the NYSE. Approvals or permissions given by the Bermuda Monetary Authority do not constitute a guarantee by the Bermuda Monetary Authority as to our performance or our creditworthiness. Accordingly, in giving such consent or permissions, neither the Bermuda Monetary Authority nor the Registrar of Companies in Bermuda shall be liable for the financial soundness, performance or default of our business or for the correctness of any opinions or statements expressed

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in this prospectus. Certain issues and transfers of shares involving persons deemed resident in Bermuda for exchange control purposes require the specific consent of the Bermuda Monetary Authority.

In accordance with Bermuda law, share certificates are only issued in the names of companies, partnerships or individuals. In the case of a shareholder acting in a special capacity (for example as a trustee), certificates may, at the request of the shareholder, record the capacity in which the shareholder is acting. Notwithstanding such recording of any special capacity, we are not bound to investigate or see to the execution of any such trust.

Transfer Agent and Registrar

A register of holders of the common shares will be maintained by Codan Services Limited in Bermuda, and a branch register will be maintained in the United States by American Stock Transfer & Trust Company, LLC, which also serves as transfer agent. The transfer agent's address is 6201 15th Avenue, Brooklyn, New York 11219.

The transfer agent for any series of preference shares that we may offer under this prospectus will be named and described in the prospectus supplement for that series.

Listing

Our common shares are listed on the NYSE under the trading symbol "AXON."

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summary of material provisions of the debt securities and the indentures is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

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General

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as "discount securities," which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with "original issue discount," or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in any applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;
- if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;
- the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

the denominations in which we will issue the series of debt securities, if other than denominations of $1,000 and any integral multiple thereof;

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any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;

whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities; and the depositary for such global security or securities;

if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;

if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;

additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;

additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;

additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;

additions to or changes in the provisions relating to satisfaction and discharge of the indenture;

additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;

whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;

the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;

any restrictions on transfer, sale or assignment of the debt securities of the series; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common shares or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions

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pursuant to which the number of shares of our common shares or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Upon any conversion into or exchange for our common shares, the holder of such common shares will be subject to the provisions of our amended and restated bye-laws which provide that any U.S. person, other than any excluded person, whose controlled shares would constitute 9.5% or more of the total voting power of our issued share capital, will have their aggregate votes reduced by our board of directors to the extent necessary such that the controlled shares of such U.S. person will constitute less than 9.5% of the voting power of all issued and outstanding shares, all as further described above under "Description of Share Capital Common Shares."

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;

- if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;

- if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and

- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

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The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request;
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indenture.

Modification of Indenture; Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under "Description of Debt Securities Consolidation, Merger or Sale;"
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;

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to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;

to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;

to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;

to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided above under "Description of Debt Securities General" to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;

to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or

to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

extending the fixed maturity of any debt securities of any series;

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of any debt securities; or

reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

provide for payment;

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

pay principal of and premium and interest on any debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the trustee;

compensate and indemnify the trustee; and

appoint any successor trustee.

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In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of $1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, or DTC, or another depositary named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating to any book-entry securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

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Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities will be governed by and construed in accordance with the internal laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the warrants that we may issue under this prospectus, which may consist of warrants to purchase common shares, preference shares or debt securities and may be issued in one or more series. Warrants may be issued independently or together with common shares, preference shares or debt securities offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We have filed forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, if any, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under

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this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms relating to a series of warrants being offered, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at which, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common shares or preference shares, the number of common shares or preference shares, as the case may be, purchasable upon the exercise of one warrant and the price at which, and the currency in which, these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- the terms of any rights to force the exercise of the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special Bermuda or United States federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or

in the case of warrants to purchase common shares or preference shares, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

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Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent in connection with the exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Upon any purchase of common shares pursuant to the exercise of a warrant, the holder of such common shares will be subject to the provisions of our amended and restated bye-laws which provide that any U.S. person, other than any excluded person, whose controlled shares would constitute 9.5% or more of the total voting power of our issued share capital, will have their aggregate votes reduced by our board of directors to the extent necessary such that the controlled shares of such U.S. person will constitute less than 9.5% of the voting power of all issued and outstanding shares, all as further described above under "Description of Share Capital Common Shares."

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee or depositary maintain for

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this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Global securities will be registered in the name of the depositary or its participants. Consequently, for global securities, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities that are not issued in global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depositary will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depositary will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee or third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

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For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with its participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of an indenture, or for other purposes. In such an event, we would seek approval only from the legal holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the legal holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

how it handles securities payments and notices;

whether it imposes fees or charges;

how it would handle a request for the holders' consent, if ever required;

whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;

how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and

if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under " Special Situations When A Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and legal holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued as a global security, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another

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book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations For Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only as global securities, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in the global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in the global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in the global security, nor will we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in the global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in the global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When A Global Security Will Be Terminated

In a few special situations described below, a global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own names, so that they will be direct holders. We have described the rights of holders and street name investors above.

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A global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and neither we nor any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

We may also sell equity securities covered by this registration statement in an "at the market offering" as defined in Rule 415 under the Securities Act. Such offering may be made into an existing trading market for such securities in transactions at other than a fixed price, either:

- on or through the facilities of the New York Stock Exchange or any other securities exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- to or through a market maker otherwise than on the New York Stock Exchange or such other securities exchanges or quotation or trading services.

Such at-the-market offerings, if any, may be conducted by underwriters acting as principal or agent.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of any underwriters, if any;

the purchase price of the securities and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;

any public offering price;

any discounts or concessions allowed or reallowed or paid to dealers; and

any securities exchange or market on which the securities may be listed.

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Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities related to offerings pursuant to this prospectus, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we offer, other than common shares, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters who are qualified market makers on the New York Stock Exchange may engage in passive market making transactions in the securities on the New York Stock Exchange in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive

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market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters in connection with the offering and the validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon by Conyers Dill & Pearman Limited, our special Bermuda counsel. Cooley LLP will pass upon legal matters for us regarding the validity of the debt securities and warrants under New York law.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended March 31, 2016 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission, or SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You should rely only on the information contained in this prospectus or incorporated by reference. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other document filed by us with the SEC, at the SEC's Public Reference Room at 100 F Street NE, Washington, D.C. 20549. You can also request copies of these documents by writing to the SEC and paying a fee for the copying cost. You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including Axovant. The address of the SEC website is www.sec.gov.

We maintain a website at www.axovant.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed

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separately with the SEC. The SEC file number for the documents incorporated by reference in this prospectus is 001-37418. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this document:

- our Annual Report on Form 10-K for the fiscal year ended March 31, 2016, filed with the SEC on June 6, 2016;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended March 31, 2016 from our definitive proxy statement on Schedule 14A (other than information furnished rather than filed) filed with the SEC on July 22, 2016;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended June 30 and September 30, 2016, filed with the SEC on August 15 and November 7, 2016, respectively;
- our Current Reports on Form 8-K (other than information furnished rather than filed) filed with the SEC on May 13, July 6 and August 22, 2016; and
- the description of our common shares, which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A, filed with the SEC on June 5, 2015, including any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to: Axovant Sciences Ltd., Attn: Investor Relations, 320 W. 37th Street, New York, NY 10018, telephone: (212) 634-9744.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITY

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

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$75,000,000

Common Shares

PROSPECTUS SUPPLEMENT

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June 22, 2018