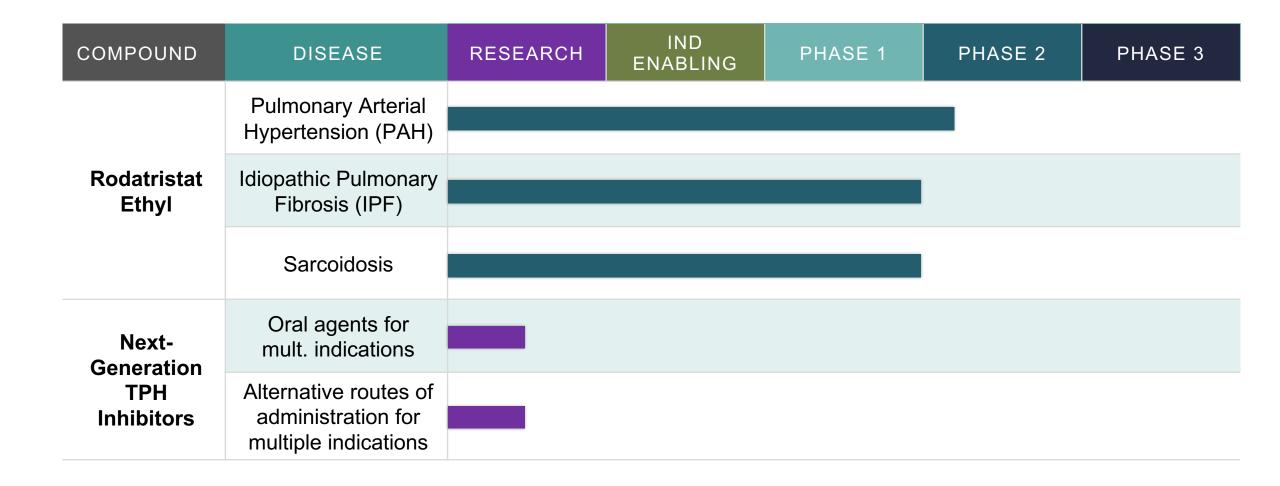


### **Executive Summary**

- Founded in 2018 as a Roivant spin-out to capitalize on the tryptophan hydroxylase inhibitor (TPH) platform
- TPH inhibitors block the body's peripheral production of serotonin, lowering circulating serotonin levels in diseases characterized by excessive production of the hormone including pulmonary arterial hypertension, certain types of cancer, GI disorders, fibrosis, and inflammation
- Lead molecule is **rodatristat ethyl\***, preparing for Phase 2 development in **pulmonary arterial hypertension** (PAH) as an add-on therapy to currently prescribed medicines
  - In PAH, potential to halt or reverse remodeling of pulmonary vasculature
- Rodatristat represents a novel MOA from others already approved for PAH
- PAH Phase 2 start planned for Q2 2019 recently gained alignment with FDA on program
- Additional indications for rodatristat include idiopathic pulmonary fibrosis and sarcoidosis
- Commercial potential is high in PAH for use in combination with existing agents
- Orphan disease designation in place with IP protection through at least 2034
- With strong development team in place and financing from Roivant available, potential for in-licensing complementary platforms / programs with a focus on **rare respiratory diseases**

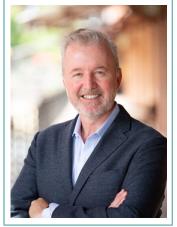


### Pipeline





#### **Altavant Executive Team**



Bill Symonds, PharmD Chief Executive Officer











Lyn Baranowski Chief Operating Officer









Larry Keller, MD VP, Clinical Development











Jim Bishop VP, Strategic Development & Business Operations











**Steve Wring** VP, Research & **Development** 





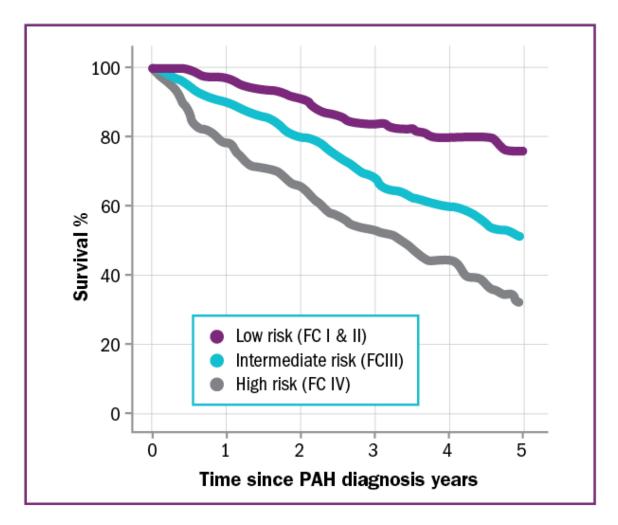






## Significant Unmet Need Exists in PAH With 5 Year Mortality Rates of Greater than 40%

- PAH is a rare, progressive disorder characterized by vasoconstriction, cellular proliferation, and remodeling in the small pulmonary arteries
- These changes lead to high arterial pressure, right heart strain, and ultimately, right heart failure and death
- The 14 approved agents used to treat PAH mainly help alleviate symptoms, primarily via vasodilation, and none reverse the disease process
- Consequently, long term survival remains poor:
   40% at 5 years for the highest risk patients
   (WHO FC IV)



Adapted from Hoeper et al., Eur Respir J, 2017. Thenappan et al., BMJ, 2018

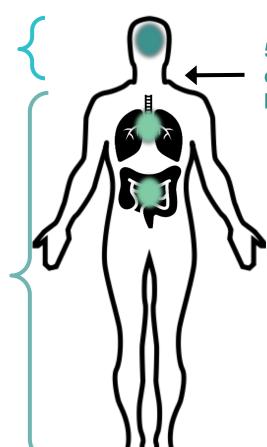


### Serotonin (5-HT) Biology

### Two Separate 5-HT Systems: Central & Peripheral

cns:5-HT is a neurotransmitter produced by TPH2

**Periphery:** 5-HT is an autocoid produced by TPH1



5-HT does not cross the blood-brain barrier

A peripherally-restricted TPH inhibitor is not expected to affect 5-HT levels in the CNS

**Peripheral 5-HT** 

~95% of the body's 5-HT is made in the GI tract







Serotonin is then released systemically where it is either metabolized or taken up by platelets

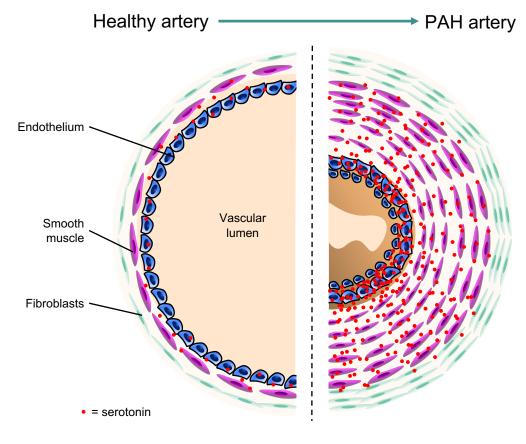
5-HT is associated with GI disorders, fibrosis, inflammation, and pulmonary arterial hypertension





# Serotonin Induces Proliferation and Vasoconstriction, Leading to Development of Pulmonary Arterial Hypertension

#### Strong evidence that serotonin plays an important role in the development of PAH



**Pulmonary Arteriole** 

Serotonin (5-HT) is made by the pulmonary endothelium and platelets via TPH1



5-HT acts on pulmonary artery smooth muscle cells to stimulate proliferation and constriction of the pulmonary arterioles

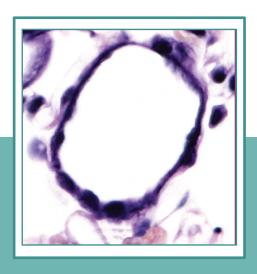


Elevation of pulmonary vascular resistance leads to increased workload for the right ventricle and ultimately RV failure

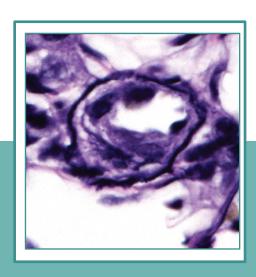
MacLean, Pulm Circ, 2018



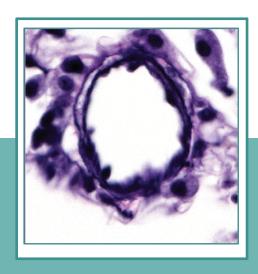
# Preclinical Studies Demonstrate Potential for Reversal of PAH Vascular Remodeling



Healthy pulmonary artery in rat



Pulmonary artery in rat with PAH



Pulmonary artery in rat treated with rodatristat

Source: Internal 4 week monocrotaline injection study



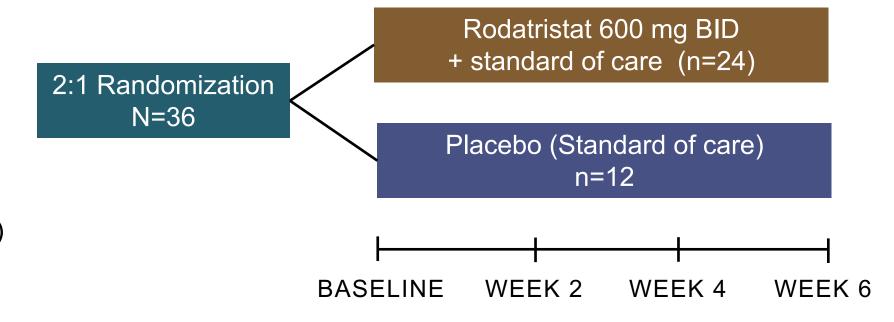
## Phase 2a POC Study: Short-Term Assessment of Target Engagement and Disease Biomarkers

### Primary Endpoint: Safety and tolerability

### **Secondary Endpoints:**

Target engagement via serotonin-related biomarkers (5-HT, 5-HIAA)

## Other Endpoints: NT-proBNP, 6MWD

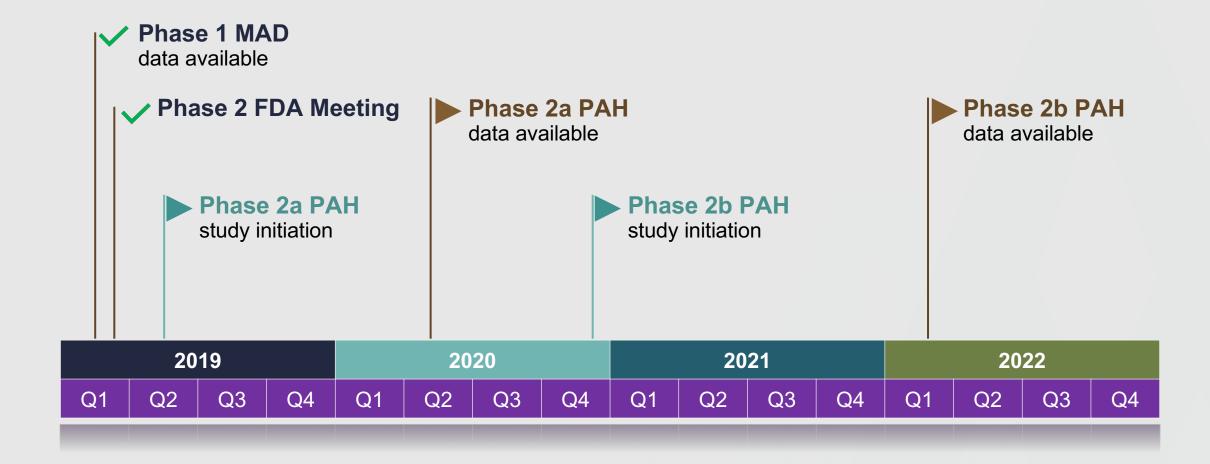


#### **Standard of Care:**

Patients must be receiving 1-2 approved oral PAH medications for >12 wks



### **Upcoming Corporate Milestones**







### **THANK YOU**