



## **Kantum Pharma highlights new research demonstrating beneficial effects of P2Y14 antagonist in Acute Kidney Injury**

- *Paper published by company's scientific founder in Journal of Clinical Investigation and findings highlighted in Nature Reviews Nephrology -*

**CAMBRIDGE, Mass., May 27, 2020** - Kantum Pharma Inc. (Kantum), a biopharmaceutical company focused on developing therapies for the prevention and treatment of damaging inflammation triggered by the innate immune system, announced today the publication of new research demonstrating the therapeutic potential of the Company's lead program for preventing and treating acute kidney injury (AKI). The paper which describes the groundbreaking research on the uridine diphosphate (UDP)-glucose/P2Y14 receptor signaling pathway in the kidney led by Kantum's scientific founder, Dr. Sylvie Breton, was published in the *Journal of Clinical Investigation*, a leading peer-reviewed translational medicine publication. In addition, the journal *Nature Reviews Nephrology* has published a Research Highlight describing the significance of Dr. Breton's team's findings.

The paper elucidates the early and central role of the P2Y14 receptor in initiating inflammation within the kidney after an insult such as ischemia or trauma. This initial innate immune response creates a self-reinforcing inflammatory cascade, often leading to AKI. The P2Y14 receptor is activated by UDP-glucose, a danger signaling molecule that is released from stressed or damaged tissues, and is then concentrated by the kidney. This research shows that the activation of P2Y14 receptors initiates the secretion of proinflammatory factors within the kidney and rapidly causes the recruitment of neutrophils and monocytes, starting the inflammatory cycle. Furthermore, the paper demonstrates the beneficial effects of administering a P2Y14 antagonist to block the effects of UDP-glucose and attenuate kidney inflammation, damage and loss of function.

Importantly, these preclinical findings were further reinforced by a striking correlation observed in ICU patients between their risk for developing AKI and the concentration of UDP-glucose found in their urine. This research provides a strong scientific rationale for Kantum's lead program, KB-1801, which is being developed initially for the prevention of Cardiac Surgery-Associated Acute Kidney Injury.

### **About Cardiac Surgery Associated Acute Kidney Injury (CSA-AKI)**

In the US, approximately 600,000 cardiac surgery procedures are completed annually. An estimated 30% of all cardiac surgery patients develop AKI. Patients experiencing CSA-AKI have a 9-fold increased risk of in-hospital mortality, and significant increased post-discharge risks related to readmission, progression to end-stage renal disease, and future mortality. It is estimated that CSA-AKI creates an incremental burden on the US healthcare system of greater than a \$7B each year.

### **About Kantum Pharma**

Kantum Pharma is a privately-held biopharmaceutical company focused on developing therapies to prevent or reduce inflammation initiated through the UDP-glucose/P2Y14 purinergic receptor signaling pathway in organs such as the kidneys, lungs and female reproductive tract. The Company's initial small molecule therapeutic program, KB-1801, has been shown preclinically to reduce renal inflammation and

has the potential to transform the treatment paradigm for AKI and delayed graft function following renal transplant. The Company is also pursuing additional programs involving lung inflammation, including cystic fibrosis.

The Company was founded based on the pioneering work of Dr. Sylvie Breton's laboratory at Massachusetts General Hospital/Harvard Medical School. Kantum Pharma's investors include Broadview Ventures and a number of private individual investors. ([www.kantumpharma.com](http://www.kantumpharma.com))

**For media and investor inquires**

Glenn Batchelder  
[glennbatchelder@gmail.com](mailto:glennbatchelder@gmail.com)  
(617) 213-6886