

3rd International Conference and Exhibition on

Biopolymers & Bioplastics

September 12-14, 2016 San Antonio, USA

The development of nonabsorbed potassium binding polymer microparticles (patiromer) for the treatment of hyperkalemia

Bo Chen

Relypsa Inc., USA

Hyperkalemia is a potentially life-threatening condition, and patients who have chronic kidney disease, who are diabetic, or who are taking renin-angiotensin-aldosterone system inhibitors are at increased risk. Therapeutic options for hyperkalemia tend to have limited effectiveness and can be associated with serious side effects. There are no new therapeutics for more than 50 years. Patiromer (USAN, trade name Veltassa) is a novel, spherical, nonabsorbed polymer designed to bind and remove potassium, primarily in the colon, thereby decreasing serum potassium in patients with hyperkalemia. The development process and the results of preclinical studies and early phase clinical study are reported here. Overall, patiromer is a high-capacity potassium binder and the chemical and physical characteristics of patiromer can lead to good clinical efficacy, tolerability and patient acceptance. It has been approved in 2015 by FDA used for the treatment of hyperkalemia.

Biography

Bo Chen is a Principal Scientist in Relypsa focusing on microparticles as toxin binders for various diseases. After his PhD in 2006 from New York University School of Engineering, and Post-doctoral studies from University of California San Francisco in 2009, he started his Sanofi-Genzyme career in Biomaterials and Drug Delivery Division. He left as a Senior Scientist in 2014 and joined biotech company CPGJ (Shanghai) as an Associate Director, later in GrayBug Inc. He has broad experience in Antibody Drug Conjugate (ADC) and Drug Delivery. He has published more than 20 papers/patents. He has been serving as a Guest Editor of *Current Cancer Drug Targets* since 2014.

bchen2@relypsa.com

Notes: