Kidney disease directly affects 14% of the population of the United States, not only significantly reducing quality of life but also accounting for 18% of the Medicare/Medicaid budget. Despite the far reaching social and economic impact of kidney disease, there are still no approved disease-modifying drugs to treat it.

Immune-mediated inflammatory diseases, many of which are associated with pain, progressive disability, and inability to work, affect over 23 million Americans. Direct health care costs are in the range of $100 billion. Although great strides have been made in the treatment of inflammatory diseases with availability of biologics, they are not always effective long-term, and multiple and serious complications are common.

ZyVersa is hoping to make a difference in treating these devastating diseases with their forward-thinking approaches. Originally named Variant Pharmaceuticals, the innovative firm has made great strides in its young life. Since its formation just under five years ago, ZyVersa is gaining recognition for its novel approaches to fulfilling unmet medical needs, in the $60+ billion anti-inflammatory drug market and the $13+ billion renal drug market.

ZyVersa is led by a highly experienced and passionate team with extensive experience in all disciplines of the biopharmaceutical industry. The company has two novel, wholly owned product platforms – one focused on mediating cholesterol efflux and the other focused on mediating the innate immune response. Each platform has potential to develop and commercialize products for numerous indications.

Here we look more closely about why these platforms represent potential breakthroughs in modern medicine.

**VAR 200**

**VAR 200** is a first-in-class cholesterol efflux mediator for the treatment of an orphan kidney disease known as FSGS (Focal Segmental Glomerulosclerosis.) FSGS presents a range of symptoms including fluid retention and swelling, high blood pressure, high cholesterol, and progressive loss of protein in the urine, which commonly leads to kidney failure and need for dialysis or kidney transplant.

Preclinical data demonstrate that VAR 200 significantly reduces loss of protein in the urine, with potential to delay progression to renal failure and the need for dialysis and kidney transplant. In addition to FSGS, VAR 200 has potential to treat other chronic kidney diseases, such as diabetic kidney disease and Alport Syndrome.

ZyVersa’s anti-inflammatory program also takes a novel approach to the treatment of chronic inflammatory diseases by targeting the innate immune system.

**IC 100**

**IC 100** is an inflammasome inhibitor targeting the adaptor ASC component. Preclinical data indicate that **IC 100** blocks initiation of the inflammatory cascade and prevents perpetuation of damaging chronic inflammation.

What makes **IC 100** so unique from other industry approaches to inflammation? By targeting adaptor ASC, **IC 100**
inhibits multiple types of inflammasomes. Other products in development, which target the sensor molecule component of inflammasomes, only inhibit one type of inflammasome, such as NLRP3. As numerous inflammatory diseases are associated with activation of more than one type of inflammasome, IC 100 has potential to target a broad range of inflammatory diseases.

ZYVersa is initially targeting inflammatory conditions such as, lupus nephritis, diabetic kidney disease, NASH (non-alcoholic steatohepatitis), and multiple sclerosis, but there is potential to treat a wide range of other serious inflammatory diseases such as Alzheimer’s Disease, atherosclerosis, and Parkinson’s Disease.

ZYVersa’s focus on inflammasomes comes at a prudent time. Inflammation is a hot topic within the pharmaceutical industry, and IC 100’s unique mechanism of action is gaining interest.

Like VAR 200, IC 100 has been developed by leading experts at the University of Miami. By joining forces with the University, ZYVersa has obtained an exclusive worldwide license for the technology and will be taking the product into clinical trials within the next eighteen months.

ZYVersa’s CEO, Stephen C Glover, is an expert in the biopharmaceutical industry, with more than thirty years’ experience. During his early career he worked at Amgen and Roche, focusing on renal diseases and inflammatory diseases respectively.

He has always kept a keen eye on these areas, noticing the lack of progress and dedicating the latter part of his career to developing unique treatments that can be effectively commercialized. In addition to his expertise and knowledge, Stephen is a highly regarded businessman with a clear entrepreneurial spirit and aptitude for forging successful partnerships. Through his work with the University of Miami’s Innovation Group, Stephen licensed proprietary technology for both of the company’s current product platforms.

Speaking to Stephen, it’s clear that although ZYVersa has the potential to penetrate two very lucrative therapeutic areas, at the heart of the company lies a dedication to helping people live better, healthier lives. He and his team are focused on developing therapies that are highly effective and fulfill significant unmet needs for those affected by devastating chronic kidney and inflammatory diseases.

To find out more about the ZYVersa and its innovative technologies, visit https://www.zyversa.com/