ZyVersa Therapeutics Announces a Publication in Frontiers in Medicine Showing Direct Inflammasome Activation in Children with Juvenile Idiopathic Arthritis

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- Juvenile idiopathic arthritis (“JIA”), a complex autoimmune inflammatory disorder, is the most common childhood chronic rheumatic disease
- This is the first report documenting inflammasome activation in the two most common types of JIA, oligo-articular (4 or fewer affected joints) and poly-articular (5 or more affected joints), both of which have been considered autoimmune rather than autoinflammatory diseases
- ZyVersa is developing Inflammasome ASC Inhibitor IC 100 for treatment of various inflammatory diseases

WESTON, Fla., May 25, 2023 (GLOBE NEWSWIRE) -- ZyVersa Therapeutics, Inc. (Nasdaq: ZVSA, or “ZyVersa”), a clinical stage specialty biopharmaceutical company developing first-in-class drugs for treatment of inflammatory and renal diseases, announces publication of an article in the peer-reviewed journal, *Frontiers in Medicine,* demonstrating a role for innate inflammasome activation in two of the most common types of JIA, oligo- and poly-articular, both of which are typically thought to be classical antigen-driven autoimmune conditions.

In the paper titled, “Inflammasome activation and formation of ASC specks in patients with juvenile idiopathic arthritis,” the authors reported the following:

- Higher numbers of ASC speck-positive monocytes were detected in peripheral blood of JIA patients compared to controls
- ASC speck-positive monocytes were detected significantly more frequently in patients with oligo-articular JIA compared to those with poly-articular JIA
- Serum IL-1β was significantly higher in patients with JIA compared to controls
- Higher numbers of ASC speck-positive monocytes were observed in JIA patients with an elevated titer of antinuclear antibodies (“ANA”)
- Il-1β production from macrophages exposed to extracellular ASC specks was enhanced in serum of JIA patients with a high titer of ANA, suggesting that autoantibodies favor a secondary inflammatory response to ASC specks by macrophages

The authors stated, “We clearly discovered direct inflammasome activity ex vivo in CD14+ CD16− monocytes of oligo- and poly-articular JIA patients.” To read the article, Click Here.

“The research published in *Frontiers in Medicine* demonstrates the role of inflammasome activation in two of the most common types of JIA, oligo- and poly-articular, which were previously thought to be classical antigen-driven autoimmune conditions. This research provides support for the broad range of conditions that are impacted by activation of the innate immune response,” commented Stephen C. Glover, ZyVersa’s Co-founder, Chairman, CEO and President. “Additionally, the data demonstrating enhanced IL-1β production from macrophages exposed to extracellular ASC specks in JIA patients with a high titer of ANA supports the potential of ASC speck inhibition in helping to control inflammation in this population.”

About Inflammasome ASC Inhibitor IC 100

IC 100 is a novel humanized IgG4 monoclonal antibody that inhibits the inflammasome adaptor protein ASC. IC 100 was designed to attenuate both initiation and perpetuation of the inflammatory response. It does so by binding to a specific region of the ASC component of multiple types of inflammasomes, including NLRP1, NLRP2, NLRP3, NLRC4, AIM2, Pyrin. Intracellularly, IC 100 binds to ASC monomers, inhibiting inflammasome formation, thereby blocking activation of IL-1β early in the inflammatory cascade. IC 100 also binds to ASC in ASC Specks, both intracellularly and extracellularly, further blocking activation of IL-1β and the perpetuation of the inflammatory response that is pathogenic in inflammatory diseases. Because active cytokines amplify adaptive immunity through various mechanisms, IC 100, by attenuating cytokine activation, also attenuates the adaptive immune response.

About ZyVersa Therapeutics, Inc.

ZyVersa (Nasdaq: ZVSA) is a clinical stage specialty biopharmaceutical company leveraging advanced, proprietary technologies to develop first-in-class drugs for patients with renal and inflammatory diseases who have significant unmet medical needs. The Company is currently advancing a therapeutic development pipeline with multiple programs built around its two proprietary technologies – Cholesterol Efflux Mediator™ VAR 200 for treatment of kidney diseases, and Inflammasome ASC Inhibitor IC 100, targeting damaging inflammation associated with numerous CNS and other inflammatory diseases. For more information, please visit www.zyversa.com.

Cautionary Statement Regarding Forward-Looking Statements

Certain statements contained in this press release regarding matters that are not historical facts, are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. These include statements regarding management's intentions, plans, beliefs, expectations, or forecasts for the future, and, therefore, you are cautioned not to place undue reliance on them. No forward-looking statement can be guaranteed, and actual results may differ materially from those projected. ZyVersa Therapeutics, Inc ("ZyVersa") uses words such as "anticipates," "believes," "plans," "expects," "projects," "future," "intends," "may," "will," "should," "could," "estimates," "predicts," "potential," "continue," "guidance," and similar expressions to identify these forward-looking statements that are intended to be covered by the safe-harbor provisions. Such forward-looking statements are based on ZyVersa's expectations and involve risks and uncertainties; consequently, actual results may differ materially from those expressed or implied in the statements due to a number of factors, including ZyVersa's plans to develop and commercialize its product candidates, the timing of initiation of ZyVersa's planned preclinical and clinical trials; the timing of the availability of data from ZyVersa's preclinical and clinical trials; the timing of any planned investigational new drug application or new drug application; ZyVersa's plans to research, develop, and commercialize its current and future product candidates; the clinical utility, potential benefits and market acceptance of ZyVersa's product candidates; ZyVersa's commercialization, marketing and manufacturing capabilities and strategy; ZyVersa's ability to protect its intellectual property position; and ZyVersa's estimates regarding future revenue, expenses, capital requirements and need for additional financing.

New factors emerge from time-to-time, and it is not possible for ZyVersa to predict all such factors, nor can ZyVersa assess the impact of each such factor on the 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. Forward-looking statements included in this press release are based on information available to ZyVersa as of the date of this press release. ZyVersa disclaims any obligation to update such forward-looking statements to reflect events or circumstances after the date of this press release, except as required by applicable law.

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