

ZyVersa Therapeutics Announces Research Published in Frontiers in Immunology Reinforcing IC 100's Rationale for Inhibiting Multiple Inflammasomes to Control Inflammation in Various Inflammatory Diseases

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- Activation of multiple inflammasome pathways contributes to pathological inflammation in neurodegenerative ("CNS")
 diseases, such as amyotrophic lateral sclerosis ("ALS")
- This study showed that NLRP3 inhibition alone was inadequate to address CNS inflammation in a mouse model of ALS
- ZyVersa is developing Inflammasome ASC Inhibitor IC 100, designed to inhibit up to 12 different inflammasomes (including NLRP3 inflammasomes) and their associated ASC specks to control damaging inflammation in CNS and non-CNS inflammatory diseases

WESTON, Fla., Sept. 12, 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 a paper in the peer-reviewed journal, *Frontiers in Immunology*, highlighting potential limitations of NLRP3 inhibition in attenuating CNS Inflammation associated with activation of multiple inflammasome pathways. This paper supports ZyVersa's rationale for targeting inflammasome ASC with IC 100 to inhibit multiple inflammasome pathways, not just NLRP3, to control inflammation in various inflammatory diseases.

In the paper titled, "Divergent functional outcomes of NLRP3 blockade downstream of multi-inflammasome activation: therapeutic implications for ALS," the authors conducted studies in various human cell lines and in an animal model of ALS. Data demonstrate that NLRP3 inhibition alone is insufficient to attenuate proinflammatory cytokine release and inflammatory cell death associated with activation of multiple inflammasome pathways. Likewise, NLRP3 inhibition alone did not ameliorate spinal cord inflammation in an ALS model.

The authors stated, "we hypothesize that strategies that impact multiple inflammasome pathways may hold more promise in CNS disorders like ALS where multiple inflammasomes are dysregulated." To read the article <u>Click Here</u>.

"The research published in *Frontiers in Immunology* reinforces the need to inhibit more than the NLRP3 inflammasome pathway to control inflammation associated with activation of multiple inflammasomes," commented Stephen C. Glover, ZyVersa's Co-founder, Chairman, CEO and President. "ZyVersa's Inflammasome ASC inhibitor IC 100 is designed to inhibit formation of multiple types of inflammasomes to attenuate initiation of the inflammatory cascade, and to inhibit ASC specks to attenuate perpetuation of damaging inflammation." To review a white paper summarizing the mechanism of action and preclinical data for IC 100, Click Here.

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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Corporate and IR Contact:

Karen Cashmere Chief Commercial Officer kcashmere@zyversa.com 786-251-9641

Media Contacts

<u>Tiberend Strategic Advisors, Inc.</u>
Casey McDonald
<u>cmcdonald@tiberend.com</u>
646-577-8520

Dave Schemelia dschemelia@tiberend.com 609-468-9325