



## ZyVersa Therapeutics Announces Research Published in The Journal of Clinical Investigation Reinforcing IC 100's Rationale for Inhibiting ASC Specks to Attenuate Spread of Inflammation into Surrounding Tissues

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- Patients with chronic kidney disease ("CKD") exhibit chronic systemic inflammation characterized by increased circulating levels of IL-1 $\beta$ , IL-6, and CRP.
- This study demonstrated that CKD-induced IL-1 $\beta$  activates NLRP3 inflammasomes in the heart's atria to trigger inflammation promoting the onset and progression of atrial fibrillation ("AF").
- ZyVersa is developing Inflammasome ASC Inhibitor IC 100, designed to inhibit inflammasomes and their associated extracellular ASC specks to attenuate propagation of IL-1 $\beta$  that triggers damaging inflammation and its spread to surrounding tissues.

WESTON, Fla., Sept. 22, 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 of Clinical Investigation* highlighting how inflammation in the kidneys can trigger inflammation in the heart.

In the paper titled, "Chronic kidney disease promotes atrial fibrillation via inflammasome pathway activation," the authors conducted a study in mouse models of CKD and in-vitro studies with serum from CKD patients and atrial samples from CKD and other patients undergoing open heart surgery. Data from the research indicate that CKD creates a substrate (IL-1 $\beta$ ) that activates NLRP3 inflammasomes in the heart's atria triggering damaging inflammation associated with adverse atrial remodeling and dysfunction leading to AF.

The authors stated, "Together, these findings support the idea that CKD-induced systemic inflammatory factors activate the atrial NLRP3 inflammasome thereby promoting the onset of AF. This hypothesis is supported by the fact that genetic ablation of NLRP3 protected against abnormal atrial activation, atrial fibrosis and atrial enlargement induced by CKD." To read the article, [Click Here](#).

ZyVersa is developing Inflammasome ASC Inhibitor IC 100 to inhibit multiple inflammasomes, including NLRP3, and their associated ASC specks to attenuate release and perpetuation of circulating IL-1 $\beta$  to control inflammation in various inflammatory diseases.

"The research published in *The Journal of Clinical Investigation* reinforces the importance of attenuating extracellular propagation of IL-1 $\beta$  to minimize induction and perpetuation of inflammation in surrounding tissues," 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 their associated ASC specks to reduce 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, NLRP4, AIM2, Pyrin. Intracellularly, IC 100 binds to ASC monomers, inhibiting inflammasome formation, thereby blocking activation of IL-1 $\beta$  early in the inflammatory cascade. IC 100 also binds to ASC in ASC Specks, both intracellularly and extracellularly, further blocking activation of IL-1 $\beta$  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](http://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.

This press release does not constitute an offer to sell, or the solicitation of an offer to buy, any securities.

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