# ZyVerra

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# ZyVersa Therapeutics Announces a Publication in Hepatology Revealing That Alcohol-induced Extracellular ASC Specks Perpetuate Liver Inflammation and Damage in Alcoholic Hepatitis

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- Prolonged systemic inflammation contributes to poor clinical outcomes in severe alcohol-associated hepatitis ("AH") even after cessation of alcohol use
- Reported data demonstrate a central role of NLRP3 and ASC in alcohol-induced liver inflammation, and highlight the critical role of extracellular ASC specks in the propagation of systemic and liver inflammation in AH

WESTON, Fla., May 04, 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, *Hepatology*, supporting the critical role of extracellular ASC specks in propagating damaging liver inflammation in AH.

In the paper titled, "Alcohol-induced extracellular asc specks perpetuate liver inflammation and damage in alcoholic hepatitis even after alcohol cessation," the authors reported that alcohol consumption induces NLRP3 inflammasome activation in the liver, and alcohol binges additionally increase circulating extracellular ASC specks and hepatic ASC aggregates leading to perpetuation of damaging inflammation. Following are key findings reported in the paper:

- NLRP3 inflammasome activation plays an important role in the pathogenesis and clinical manifestations of AH
- Intracellular ASC specks are increased in livers of mice after chronic alcohol administration, and acute alcohol binge results in increased levels of both intracellular and extracellular ASC specks
- Extracellular ASC specks activate pro-IL-1β and perpetuate inflammation
- NLRP3 inhibition in an alcoholic liver disease mouse model decreased both intracellular and extracellular ASC specks

The authors stated, "Our work points to a central role of NLRP3 in liver-derived intracellular and extracellular ASC specks responsible for the progression of AH. Given the lack of specific treatment for AH, our data support NLRP3 as a therapeutic target in AH." To read the article, <u>Click Here</u>.

"The research published in *Hepatology* demonstrating that alcohol-induced extracellular ASC specks perpetuate liver inflammation and damage provides support for targeting inflammasome ASC with IC 100, which has been shown to disrupt the structure and function of both intra- and extracellular ASC specks," commented Stephen C. Glover, ZyVersa's Co-founder, Chairman, CEO and President.

#### 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 firstin-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<sup>TM</sup> 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 <u>www.zyversa.com</u>.

### 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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