



## **Data Published in *Frontiers in Molecular Neuroscience* Demonstrate That ZyVersa's Inflammasome ASC Inhibitor, IC 100, Is Effective in Reducing Brain Inflammation in a Preclinical Model of Aging**

August 22, 2022

*Age-related chronic inflammation induced by activation of NLRP1 inflammasomes is implicated in development and progression of neurodegenerative diseases such as Alzheimer's and Parkinson's diseases*

*IC 100 research was conducted at the University of Miami Miller School of Medicine by acclaimed experts in immunology, and leaders at the forefront of inflammasome research*

*IC 100, a novel monoclonal antibody inflammasome ASC inhibitor, targets multiple types of inflammasomes, including NLRP1, to block initiation and perpetuation of damaging chronic inflammation*

WESTON, Fla. and BRIDGEWATER, N.J., Aug. 22, 2022 /PRNewswire/ -- ZyVersa Therapeutics, Inc. ("ZyVersa"), a clinical stage specialty biopharmaceutical company developing first-in-class drugs for treatment of inflammatory and renal diseases, and Larkspur Health Acquisition Corp. (NASDAQ: LSPR or "Larkspur"), a blank-check special purpose acquisition company, are pleased to announce that data published in *Frontiers in Molecular Neuroscience* demonstrate that ZyVersa's inflammasome ASC inhibitor, IC 100, is effective in reducing inflammation in the brains of aged mice. Age-related chronic inflammation is implicated in development and progression of neurodegenerative diseases, such as Alzheimer's and Parkinson's diseases. The research was conducted by renowned scientists from the University of Miami Miller School of Medicine, Dr. Juan Pablo de Rivero Vaccari and Dr. Robert W. Keane.



ZyVersa's Inflammasome ASC Inhibitor, IC 100, Reduced Brain Inflammation in a Preclinical Model of Aging.

"Inflammasome-mediated inflammation leads to devastating neurodegenerative diseases of aging that affect millions of people (e.g., Alzheimer's and Parkinson's disease), yet there are no effective treatments for these conditions," stated Dr. Juan Pablo de Rivero Vaccari, Associate Professor, Department of Neurological Surgery and The Miami Project to Cure Paralysis, and Distinguished Faculty Member of the Center for Cognitive Neuroscience and Aging at the University of Miami Miller School of Medicine. "Our research indicates that inflammasome ASC inhibition with a mAb we developed, IC 100, shows potential as a treatment option. Our data demonstrate that NLRP1, ASC, and caspase-1 form a multiprotein inflammasome complex in the cortex of aged mice leading to activation of IL-1 $\beta$  and formation of ASC specks. IC 100 administration reduced levels of NLRP1, ASC, caspase-1, activated IL-1 $\beta$ , and ASC specks to levels comparable to those seen in young mice."

"Our research also provides new evidence for a second inflammasome pathway contributing to age-related inflammation (a non-canonical pathway)," indicated Dr. Robert W. Keane, Professor, Physiology and Biophysics, Neurological Surgery and Microbiology, and Immunology, University of Miami Miller School of Medicine. "We demonstrated that NLRP1, ASC, and caspase-8 formed a non-canonical inflammasome in the brain of aged mice, leading to activation of caspase-1 and IL-1 $\beta$ . This non-canonical inflammasome was also inhibited by IC 100, demonstrating potential for IC 100 to control age-related neuroinflammation by inhibiting both canonical and non-canonical inflammasome activation, strengthening its potential as a treatment option."

To review the publication, [Click Here](#).

### **About IC 100**

IC 100 is a novel humanized IgG4 monoclonal antibody that inhibits the inflammasome adaptor protein ASC. IC 100 attenuates 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, and 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 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, attenuates the adaptive immune

response as well.

### **About ZyVersa Therapeutics, Inc.**

ZyVersa is a clinical stage specialty biopharmaceutical company leveraging advanced, proprietary technologies to develop first-in-class drugs. Our focus is on patients with inflammatory or renal diseases who have significant unmet medical needs. Our development pipeline includes a novel inflammasome ASC inhibitor with potential to treat multiple CNS and other inflammatory diseases. It also includes phase 2a-ready VAR 200, a cholesterol efflux mediator for treatment of rare kidney disease, focal segmental glomerulosclerosis. VAR 200 has potential to treat other kidney diseases, such as Alport Syndrome and Diabetic Kidney Disease. For more information, please visit [www.zyversa.com](http://www.zyversa.com).

### **About Larkspur Health Acquisition Corp.**

Larkspur is a Special Purpose Acquisition Company formed to identify a biopharmaceutical company that can develop and thrive as a newly formed public company and benefit from Larkspur's operational expertise and a significant infusion of capital. Each of Larkspur's management team and board of directors have been former management and executive leadership of private and public biopharmaceutical companies and have over 50+ years of aggregate investment and operational experiences. The team strongly believes in the growth opportunities in the biotechnology industry. They are experienced operators who seek to partner with top innovators and thinkers in the biopharmaceutical field. As operators, their entrepreneurial approach enables support for management teams in making impactful decisions with an eye toward growth and operational excellence. For more information, please visit [www.lsprhealth.com](http://www.lsprhealth.com).

### **Forward Looking Statements**

This press release contains certain forward-looking statements within the meaning of the federal securities laws with respect to certain product candidates that will be the subject of a proposed transaction between Larkspur and ZyVersa. All statements other than statements of historical facts contained in this press release, including statements regarding Larkspur or ZyVersa's future results of operations and financial position, the amount of cash expected to be available to ZyVersa after the closing and giving effect to any redemptions by Larkspur's stockholders, ZyVersa's business strategy, prospective product candidates, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations, future results of current and anticipated product candidates, and expected use of proceeds, are forward-looking statements. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to, the following risks relating to the proposed transaction: the occurrence of any event, change or other circumstances that could give rise to the termination of the Business Combination Agreement; the risk that the transaction may not be completed in a timely manner or at all, which may adversely affect the price of Larkspur's securities; the occurrence of any event, change or other circumstances that could give rise to the termination of the Merger Agreement; the inability to complete the Transactions, including due to failure to obtain approval of the shareholders of Larkspur or other conditions to closing in the Merger Agreement; the inability to obtain or maintain the listing of Larkspur's common stock on NASDAQ following the Transactions; the risk that the Transactions disrupt current plans and operations of ZyVersa as a result of the announcement and consummation of the Transactions; the ability to recognize the anticipated benefits of the Transactions, which may be affected by, among other things, competition, the ability of the combined company to grow and manage growth economically and hire and retain key employees; the risks that ZyVersa's product candidates in development fail clinical trials or are not approved by the U.S. Food and Drug Administration or other applicable authorities; costs related to the Transactions; changes in applicable laws or regulations; the possibility that Larkspur or ZyVersa may be adversely affected by other economic, business, and/or competitive factors; and other risks and uncertainties to be identified in the proxy statement/prospectus (when available) relating to the Transactions, including those under "Risk Factors" therein, and in other filings with the SEC made by Larkspur. Moreover, ZyVersa operates in a very competitive and rapidly changing environment. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond Larkspur's and ZyVersa's control, you should not rely on these forward-looking statements as predictions of future events. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and except as required by law. Larkspur and ZyVersa assume no obligation and do not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Neither Larkspur nor ZyVersa gives any assurance that either Larkspur or ZyVersa or the combined company will achieve its expectations.

### **Important Information for Investors and Stockholders and Where to Find It**

Larkspur intends to file a registration statement on Form S-4 that will include a proxy statement with respect to the stockholder meeting of Larkspur and a prospectus with respect to securities of the combined company. After the registration statement is declared effective by the SEC, the proxy statement/prospectus will be sent to all Larkspur and ZyVersa stockholders. Larkspur will also file other documents regarding the proposed business combination with the SEC. BEFORE MAKING ANY VOTING DECISION, INVESTORS AND SECURITIES HOLDERS OF LARKSPUR AND ZYVERSA ARE URGED TO READ THE PROXY STATEMENT/PROSPECTUS AND ALL OTHER RELEVANT DOCUMENTS FILED OR THAT WILL BE FILED WITH THE SEC IN CONNECTION WITH THE PROPOSED BUSINESS COMBINATION AS THEY BECOME AVAILABLE SINCE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED BUSINESS COMBINATION AND THE PARTIES TO THE PROPOSED BUSINESS COMBINATION.

Investors and securities holders will be able to obtain free copies of the proxy statement/prospectus and all other relevant documents filed or that will be filed with the SEC by Larkspur through the website maintained by the SEC at <https://sec.gov/>. In addition, the documents filed by Larkspur may be obtained free of charge from Larkspur's website at [www.lsprhealth.com](http://www.lsprhealth.com) or by written request to [info@lsprhealth.com](mailto:info@lsprhealth.com).

### **Participants in the Solicitation**

Larkspur, ZyVersa, and their respective directors and executive officers may be deemed to be participants in the solicitation of proxies from Larkspur's stockholders in connection with the proposed transaction. Information about Larkspur's directors and executive officers and their ownership of Larkspur's securities is set forth in Larkspur's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC, as modified or supplemented by any Form 3 or Form 4 filed with the SEC since the date of such filing. Other information regarding the interests of the participants in the proxy solicitation will be included in the proxy statement/prospectus pertaining to the proposed Transactions when it becomes available.

### **No Offer or Solicitation**

This release shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. No offer of securities shall be made except by means of a prospectus.

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