

Immunome Provides Research & Development Update on Lead Oncology Candidate Targeting IL-38

*Profiling of IL-38 mRNA in over 60 cancer types revealed notably high frequency (60-80%) of IL-38 expression in select solid tumor sub-types of high unmet clinical need
Collaboration with Fox Chase Cancer Center to directly confirm IL-38 protein expression in patients
Anticipated IND filing in 2H 2022*

May 23, 2022 08:00 AM Eastern Daylight Time

EXTON, Pa.--(BUSINESS WIRE)--Immunome, Inc. (Nasdaq: IMNM), a biopharmaceutical company that utilizes its human memory B cell platform to discover and develop first-in-class antibody therapeutics, today announced updates to the ongoing development of its lead oncology program, IMM-ONC-01, a novel immuno-oncology agent that inhibits IL-38, an immunosuppressive cytokine.

Preclinical research conducted by Immunome, and literature evidence^{1,2}, suggests IL-38 dampens natural anti-tumor immune response. In animal testing, blocking IL-38 activity using Immunome's antibody produced an anti-tumor effect.

To help guide clinical development of IMM-ONC-01, Immunome conducted an extensive expression profile assessment of IL-38 mRNA using a proprietary commercial database of over 60 cancer sub-types established by Tempus Labs. The analysis identified high frequency of IL-38 mRNA expression in several cancers, notably in Gastroesophageal Squamous Carcinoma (>80%), Head and Neck Squamous Carcinoma (>60%) and Skin Squamous and Basal Cell Carcinoma (>70%). The Company plans to share results from the study at an upcoming oncobiology conference.

"We are hopeful that IMM-ONC-01 could provide a new treatment option for people with cancers with high unmet need and may also be synergistic when combined with PD-1 inhibitors," said Purnanand Sarma, PhD, President and CEO of Immunome. "The results of this important assessment will allow us to better identify the patient populations most likely to respond to treatment with IMM-ONC-01 and streamline overall clinical development. We are on track to file an IND later in 2022 and will work as quickly as possible to advance this potentially differentiating therapy for the patients who are waiting."

To support the next steps in the development of IMM-ONC-01, Immunome is collaborating with Fox Chase Cancer Center to directly measure IL-38 protein in patient tumors to confirm its prevalence in specific cancer types. The Company will pursue additional partnerships as necessary to use this information and further refine its clinical development plan.

"We look forward to working closely with Immunome's team to investigate the role of IL-38 in head and neck cancer, supporting the emphasis of our NIH-funded Specialized Program in Research Excellence project on this cancer," said Erica Golemis, PhD, professor and W.W. Smith Chair in Cancer Research at Fox Chase Cancer Center. "If the results are confirmed in patient samples for head and neck and other hard-to-treat cancers, it would not only allow Immunome to efficiently advance a potential new treatment, but also expand our understanding of the processes that drive IL-38 expressing cancers."

IL-38 is increasingly being regarded as a key cytokine in inflammation and cancer research.^{1,2} Preclinical research has confirmed that blocking IL-38 function with an antibody could restore immune response and allow the body to fight tumors. IL-38 was originally identified as a novel target through Immunome's technology platform, which can capture thousands of patient-derived memory B cells and convert them into stable hybridomas. The growing recognition of IL-38's role in cancer and other diseases suggests that Immunome's platform has potential to identify other highly relevant targets that are yet undiscovered in oncology and inflammatory disease.

About IMM-ONC-01

IMM-ONC-01 is a first-in-class antibody therapeutic targeting IL-38, an innate immune checkpoint that is a member of the IL-1 family of cytokines. When expressed, IL-38 reduces immune cell infiltration of the tumor microenvironment. Immunome's preclinical research has confirmed that the use of IMM-ONC-01 to block expression of IL-38 boosts anti-tumor immunity and could serve as an effective treatment for cancers that have a high expression of IL-38, including Gastroesophageal Squamous Carcinoma, Head and Neck Squamous Carcinoma and Skin Squamous and Basal Cell Carcinoma. Immunome intends to submit an IND for IMM-ONC-01 in the second half of 2022.

About Immunome

Immunome is a biopharmaceutical company that utilizes its proprietary human memory B cell platform to discover and develop first-in-class antibody therapeutics that are designed to change the way diseases are treated. The company's initial focus is developing therapeutics to treat oncology and infectious diseases, including COVID-19. Immunome's proprietary discovery engine identifies novel therapeutic antibodies and their targets by leveraging the highly educated components of the immune system, memory B cells, from patients whose bodies have learned to fight off their disease. For more information, please visit www.immunome.com or follow Immunome on [Twitter](#) and [LinkedIn](#).

Forward-Looking Statements

This press release includes certain disclosures that contain "forward-looking statements" intended to qualify for the "safe harbor" from liability established by the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, express or implied statements regarding Immunome's beliefs and expectations regarding the advancement of its IMM-ONC-01 program, anticipated timing to file an IND related to IMM-ONC-01 and the potential of Immunome's platform to identify relevant targets in oncology and inflammatory disease. Forward-looking statements may be identified by the words "anticipate," "believe," "estimate," "expect," "intend," "plan," "project," "suggest," "may," "will," "could," "should," "seek," "potential" and similar expressions. Forward-looking statements are based on Immunome's current expectations and are subject to inherent uncertainties, risks and assumptions that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, those risks and uncertainties associated with: the impact of the COVID-19 pandemic on Immunome's business, operations, strategy, goals and anticipated milestones; the fact that research and development data are subject to differing interpretations and assessments, including during the peer review/publication process, in the scientific community generally, and by regulatory authorities; whether the data will be published in a scientific journal and, if so, when and with what modifications; Immunome's ability to execute on its strategy, including with respect to its R&D efforts, IND submissions and other regulatory filings, timing of these filings and the timing and nature of governmental authority feedback regarding the same, initiation and completion of any clinical studies, confirmatory testing and other anticipated milestones as and when anticipated; the effectiveness of Immunome's product candidates, including the possibility that further preclinical data and any clinical trial data may be inconsistent with the data used for advancing the product candidates and that further variants of concern could emerge; Immunome's ability to fund operations; Immunome's reliance on vendors; the competitive landscape; and the additional risks and uncertainties set forth more fully under the caption "Risk Factors" in Immunome's Annual Report on Form 10-K filed with the United States Securities and Exchange Commission (SEC) on March 25, 2021, and elsewhere in Immunome's 10-Q filings and other filings and reports with the SEC. Forward-looking statements contained in this announcement are made as of this date, and Immunome undertakes no duty to publicly update or revise any forward looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable law. In this press release, we may discuss our current and potential future product candidates that have not yet undergone clinical trials or been approved for marketing by the U.S. Food and Drug Administration or other governmental authority, including expectations about their therapeutic potential and benefits thereof. No representation is made as to the safety or effectiveness of these current or potential future product candidates for the use for which such product candidates are being studied.

REFERENCES

1. Diaz-Barreiro, A., Huard, A., & Palmer, G. (2022). Multifaceted roles of IL-38 in inflammation and cancer. *Cytokine*, 151, 155808.
<https://doi.org/10.1016/j.cyto.2022.155808>
2. de Graaf, D.M., Teufel, L.U., Joosten, L.A.B., and Dinarello, C.A. (2022). Interleukin-38 in Health and Disease. *Cytokine* 152, 155824.
<https://doi.org/10.1016/j.cyto.2022.155824>.

Contacts

Immunome Contact

Corleen Roche

Chief Financial Officer

Immunome, Inc.

investors@immunome.com

Investor Contact

Laurence Watts

Managing Director

Gilmartin, LLC

laurence@gilmartinir.com

Media Contact

Gwen Schanker

Account Supervisor

LifeSci Communications

gschanker@lifescicomms.com