



Morphic Presents Preclinical Data from $\alpha\text{v}\beta\text{8}$ Integrin Program at the SITC Annual Meeting

November 15, 2021

$\alpha\text{v}\beta\text{8}$ inhibition demonstrates efficacy in a cancer model refractory to radiation and checkpoint inhibition

Data provide increased rationale to explore integrin inhibition as a component in combination immunotherapy to drive anti-tumor response via TGF β pathway

WALTHAM, Mass., Nov. 15, 2021 (GLOBE NEWSWIRE) -- [Morphic Therapeutic](#) (Nasdaq: MORF), a biotechnology company developing a new generation of oral integrin therapies for the treatment of serious chronic diseases, announced the presentation of new data from its $\alpha\text{v}\beta\text{8}$ integrin inhibition program at the Society for Immunotherapy of Cancer (SITC) 2021 Annual Meeting. These new preclinical data, evaluating a monoclonal antibody targeting $\alpha\text{v}\beta\text{8}$, reinforce and build upon previous findings that $\alpha\text{v}\beta\text{8}$ inhibition can drive potent anti-tumor responses in tumor models refractory to current treatment modalities. $\alpha\text{v}\beta\text{8}$ is known to mediate the activation of tumor growth factor beta (TGF β 1/3). Morphic is developing oral small molecule inhibitors of the $\alpha\text{v}\beta\text{8}$ integrin which is expressed on cell types central to immune response and is a major contributor to tolerance and suppression of anti-tumor immunity.

"These SITC data show that Morphic's $\alpha\text{v}\beta\text{8}$ inhibitors, in combination with radioimmunotherapy, significantly enhance efficacy in a syngeneic mouse preclinical model of advanced colon cancer that was non-responsive to radioimmunotherapy," commented Bruce Rogers, PhD, Chief Scientific Officer of Morphic. "These results expand our understanding of the potential treatment modalities where addition of $\alpha\text{v}\beta\text{8}$ inhibition may be beneficial in tumors refractory to standard immunotherapy approaches."

The research presented at SITC demonstrates that Morphic's $\alpha\text{v}\beta\text{8}$ inhibitor, in combination with radioimmunotherapy (RIT), drove tumor response in a syngeneic mouse model refractory to radiotherapy and immune checkpoint blockade alone and in combination. In these data, the addition of $\alpha\text{v}\beta\text{8}$ inhibitors to RIT markedly increased tumor regression ($P=0.0067$) and survival ($P<0.0001$). In the group receiving the $\alpha\text{v}\beta\text{8}$ inhibitor in combination with RIT there were 8/10 complete responders compared with 3/10 receiving RIT alone. Irradiation of cells in vitro induced $\alpha\text{v}\beta\text{8}$ expression in dendritic cells that mediate tumor tolerance providing a mechanistic basis for findings.

Title

Inhibition of Integrin $\alpha\text{v}\beta\text{8}$ in combination with low dose radiation induces antitumor effect in advanced immune checkpoint blockade refractory tumor model

Presenter

Natalia Blanco, PhD

Contributors

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The SITC poster is available on the Morphic website under the [investor tab](#).

About Morphic Therapeutic

Morphic Therapeutic is a biopharmaceutical company developing a new generation of oral integrin therapies for the treatment of serious chronic diseases, including autoimmune, cardiovascular, and metabolic diseases, fibrosis and cancer. In collaboration with AbbVie, Janssen, and Schrödinger, Morphic is advancing its pipeline and discovery activities using its proprietary MInT technology platform which leverages the Company's unique understanding of integrin structure and biology. For more information, visit www.morphictx.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains "forward-looking" statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to: the MInT Platform's ability to discover drug candidates, Morphic's plans to develop and commercialize oral small-molecule integrin therapeutics, the execution of further preclinical studies, any expectations about safety, efficacy, timing and ability to commence or complete clinical studies and to obtain regulatory approvals for Morphic's $\alpha\text{v}\beta\text{8}$ inhibitors and other candidates in development. Statements including words such as "believe," "plan," "continue," "expect," "will," "develop," "signal," "potential," or "ongoing" and statements in the future tense are forward-looking statements. These forward-looking statements involve risks and uncertainties, as well as assumptions, which, if they do not fully materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements are subject to risks and uncertainties that may cause Morphic's actual activities or results to differ significantly from those expressed in any forward-looking statement, including risks and uncertainties in this press release and other risks set forth in our filings with the Securities and Exchange Commission, including Morphic's or a partner's ability to develop, obtain regulatory approval for or commercialize any product candidate, Morphic's ability to protect intellectual property, the potential impact of the COVID-19 pandemic and the sufficiency of our cash, cash equivalents and investments to fund our operations. These forward-looking statements speak only as of the date hereof and Morphic specifically disclaims any obligation to update these forward-looking statements or reasons why actual results might differ, whether as a result of new information, future events or otherwise, except as required by law.

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