F-star Therapeutics Shows Differentiation of FS222 in 2021 AACR Poster

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Study Confirms F-star's Bispecific Antibody Tetravalency is the Most Efficient Way to Induce Receptor Clustering and Activation

CAMBRIDGE, United Kingdom and CAMBRIDGE, Mass., April 10, 2021 (GLOBE NEWSWIRE) -- F-star Therapeutics, Inc. (NASDAQ: FSTX), a clinical-stage biopharmaceutical company dedicated to developing next generation bispecific immunotherapies to transform the lives of patients with cancer, today announces that preclinical data from FS222, a potentially best-in-class tetravalent bispecific antibody targeting both CD137 and PD-L1 will be presented in a poster at the 2021 American Academy of Cancer Research (AACR) Annual Meeting, taking place virtually from April 10-15 and May 17-21. Poster #1864, entitled 'FS222, a Tetravalent Bispecific Antibody Targeting CD137 and PD-L1, is Designed for Optimal CD137 Interactions Resulting in Potent T cell Activation Without Toxicity' will be available via on-demand viewing starting today, April 10, at 8:30 a.m. ET.

FS222 targets PD-L1, the immune checkpoint protein that regulates the balance of activated T cells in the immune system and is overexpressed on many solid tumors and CD137, a co-stimulatory molecule from the tumor necrosis factor receptor superfamily (TNFRSF), which is widely known to be upregulated on tumor-reactive $CD8^+$ T cells or "killer T cells". Currently, only a minority of patients have a long-lasting response to monotherapies that block the PD-(L)1 pathway.

Neil Brewis, Chief Scientific Officer at F-star Therapeutics, said: "We are encouraged by the results of these latest preclinical studies of FS222, our tetravalent bispecific antibody targeting PD-L1 and CD137. This work further demonstrates that FS222's tetravalent binding mechanism is the most efficient and effective format for bispecific antibodies. The early onset of activity and T cell proliferation gives us confidence that FS222 will allow for a wide range of treatment options."

FS222 was designed to be a potent human CD137/PD-L1 tetravalent conditional agonist with a unique combination of high affinity PD-L1 binding, and moderate affinity, but with high avidity, binding to CD137 on activated T cells to result in optimal receptor clustering. Previously, FS222 has been shown to exhibit a favorable safety profile in preclinical safety studies.

Tetravalent binding by FS222 demonstrated optimal activity in multiple preclinical pharmacology studies, outperforming classic heterodimeric bispecific antibodies. These data showed that there was no evidence of a hook effect, or bell-shaped dose response curve, *in vitro*, and coupled with FS222's favorable safety profile, presents a potentially broad and differentiated therapeutic window. A murine surrogate mAb ^{2} for FS222 had peripheral immunopharmacology, as shown by $CD8^+$ T cell proliferation, at high dose levels, mirroring the *in vitro* data, whereby the tetravalent FS222 surrogate mAb^2 outperforms other lower valency formats.

In January 2021, F-star announced that the first patient had been dosed in a Phase 1 clinical trial of FS222, a multicenter, open-label, first-in-human trial to evaluate the safety, tolerability, and early signs of efficacy of FS222 in adult patients diagnosed with advanced malignancies. The adaptive study design will allow for the early exploration of clinical activity of FS222 in a range of selected solid tumors that will guide future targeted clinical development.

About F-star Therapeutics, Inc.

F-star is a clinical-stage biopharmaceutical company developing tetravalent bispecific antibodies for a paradigm shift in cancer therapy. By developing medicines that seek to block tumor immune evasion, the Company's goal is to offer patients greater and more durable benefits than current immuno-oncology treatments. Through its proprietary tetravalent, bispecific natural antibody (mAb^2™) format, F-star's mission is to generate highly differentiated best-in-class drug candidates with monoclonal antibody-like manufacturability. For more information visit www.f-star.com and follow us on LinkedIn and Twitter.

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, known as the PSLRA. 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. F-star undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise, except to the extent required by law. Such forward-looking statements are based on our 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 those discussed in F-star's Annual Report on Form 10-K, as well as subsequent Quarterly Reports on Form 10-Q and other documents to be filed from time to time with the SEC. New factors emerge from time to time and it is not possible for us to predict all such factors, nor can we 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 communication are based on information available to F-star as of the date of this communication. F-star does not assume any obligation to update such forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

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