



## **F-star Therapeutics Announces Positive Preclinical Antitumor Activity and Safety of FS222 Published in Clinical Cancer Research**

**Strong Evidence That Tetravalent Bispecific Antibodies Can Provide Greater Benefit to Patients than Combinations of Single Monoclonal Antibodies in Solid Tumors**

**Data Support Continued Development with IND Submission Expected in 2020**

**Cambridge, UK and Cambridge, MA, April 28, 2020** – F-star Therapeutics Ltd., a clinical-stage biopharmaceutical company focused on transforming the lives of patients with cancer through the development of innovative tetravalent bispecific (mAb<sup>2™</sup>) antibodies, today announces the publication of preclinical data on the focused, potent and safe immune response shown with FS222 in leading peer-reviewed journal *Clinical Cancer Research*. FS222 is a PD-L1 and CD137 targeting, potentially best-in-class, conditional agonist tetravalent antibody.

The preclinical data show the synergistic benefit of F-star's tetravalent mAb<sup>2</sup>, with evidence of robust CD4<sup>+</sup> and CD8<sup>+</sup> T cell activation, which outperformed combinations of monoclonal antibodies in multiple *in vitro* assays. FS222 showed no signs of liver toxicity with doses up to 30 mg/kg in a non-human primate dose-range finding study. In a mouse tumor model resistant to PD-L1 and CD137, in both mono and combination therapy, FS222 caused complete tumor eradication, concomitant with CD8<sup>+</sup> T cell activation.

FS222 targets PD-L1 (programmed death-ligand 1), the immune checkpoint protein which regulates the balance of activated T cells in the immune system and is expressed 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 CD8<sup>+</sup> T cells following activation. Currently, only a fraction of patients respond to monotherapies that block the PD-1/PD-L1 pathway, and CD137-targeting molecules have yet to demonstrate significant responses in patients without toxicity. FS222 is designed to simultaneously target the two modalities, combining PD-L1 blockade and provoking strong CD137 agonism in a safe and efficacious manner that does not rely on a combination of antibodies approach. A regulatory application to commence clinical development of FS222 is expected to be submitted later this year.

A link to the full study can be found [here](#).

**Neil Brewis, CSO of F-star, said:** *“Considering the broad expression of PD-L1 on many solid tumors, we believe FS222 has the potential to provide best-in-class benefit for patients with cancer who remain challenging to treat. By targeting CD137 agonism to areas of PD-L1 expression, predominantly found in the tumor microenvironment, FS222 has the potential to leverage a focused, potent and safe immune response, enhancing the PD-L1 blockade. These data support our view that FS222 could outperform CD137 and PD-L1 monospecific antibodies in a very safe way, providing greater benefit to patients than a combination approach against both targets in solid tumors. We look forward to*

*progressing this tetravalent bispecific antibody into the clinic, targeting tumors that are tough to treat.”*

#### **About F-star Therapeutics Ltd**

F-star is a leading clinical-stage biopharmaceutical company delivering 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 antibody (mAb<sup>2™</sup>) format, F-star is generating first- and best-in-class drug candidates with monoclonal antibody-like manufacturability. Building on the combined expertise of its world-class management team and scientific leadership, F-star is poised to deliver the next breakthrough immunotherapies for patients with cancer. For more information visit [www.f-star.com](http://www.f-star.com).

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