F-star to Disclose Targets and Preclinical Data on New Agonist Bispecific Antibody Programmes

- FS120 and FS222 mAb² (bispecific antibodies) targeting TNFRSF co-stimulatory pathways
- Developed to address current patient needs that are not well-served by checkpoint monotherapies or combinations of monotherapies
- Announcing oral and poster presentations at SITC 2018, PEGS Summit Europe and ESMO-IO

Cambridge, UK, 01 November 2018 – F-star, a clinical-stage biopharmaceutical company pioneering the development of novel bispecific antibodies that target the immune system to fight cancer, today announced that it will present preclinical data on two new proprietary bispecific antibodies at the SITC Annual Meeting, PEGS Summit Europe and the ESMO Immuno-Oncology Congress.

Checkpoint antagonists dominate the clinical landscape and yet despite encouraging progress, only a small patient population reaches a durable and clinically meaningful response. Current approaches have shown limited efficacy for poorly immunogenic tumours which harness different and often multiple escape or resistance mechanisms to attenuate the local immune response.

FS120 is a dual agonist mAb² simultaneously targeting OX40 (CD134, TNFRSF4) and CD137 (4-1BB). FS222 is an agonist/antagonist mAb² against CD137 and PD-L1 (Programmed Death-Ligand 1). Both OX40 and CD137 are co-stimulatory molecules, part of the Tumour Necrosis Factor Receptor Super Family (TNFRSF). Unlike checkpoint antagonists, engagement of OX40 or CD137 on activated T cells triggers a positive signal that enhances several cellular and effector functions, essential to the elimination of tumour cells.

Neil Brewis, CSO of F-star said “It is only recently that the full complexity of tumour heterogeneity and how this translates into the clinical setting has been appreciated. With the increase in tumour resistance to checkpoint therapies, there is an urgent need to generate new and efficacious treatment options for cancer patients. F-star’s new programmes have the potential to leverage a more targeted, potent and safer immune response, even in highly immune-suppressive tumour microenvironments.”

The data to be presented will highlight the potent anti-tumour activity of F-star’s mAb² and how each of them outperforms combinations of monospecific agents in multiple syngeneic tumour models. Furthermore, the results will describe how F-star’s bispecific format can alleviate some of the inherent limitations of an antibody-mediated TNFRSF activation, such as low efficacy or dose-dependent liver toxicity observed in current clinical trials.

Eliot Forster, CEO of F-star said “I am very excited about the presentation of these wholly owned molecules to these conferences. The data on FS120 a dual agonist mAb² and FS222 an agonist/antagonist mAb² demonstrate the versatility and power of our Modular Antibody Technology™ and its ability to address the known heterogeneity of tumour types and, especially, their
immune evasion mechanisms. With the potential to go beyond combination approaches, the two programmes are heading towards INDs in 2019, reinforcing F-star’s commitment to deliver life-changing treatments for cancer patients”.

Details of the presentations are below:

**SITC Annual Meeting – 7-11 Nov 2018 – Washington DC**

Oral presentation information:

Title: FS120 mAb², a dual agonist bispecific antibody targeting OX40 and CD137, activates T cells *in vitro* and induces potent, FcγR-independent anti-tumour activity
Session: Next Generation Bispecifics and Antibody-Like Molecules
Session date and time: 11 Nov from 08:05-10:30

Poster presentations information:

Title: FS120 mAb², a dual agonist bispecific antibody targeting OX40 and CD137, activates T cells *in vitro* and induces potent, FcγR-independent anti-tumour activity
Abstract poster number: O44
Poster hall location: Hall E
Poster hall hours: 09 Nov from 08:00 – 20:00 and 10 Nov from 08:00 – 20:30
Poster presentation hours: 10 Nov from 12:20 – 13:50 and 19:00 – 20:30

Title: A novel CD137/PD-L1 bispecific antibody modulates the tumour microenvironment by activating CD8+ T cells and results in tumour growth inhibition
Abstract poster number: P631
Poster hall location: Hall E
Poster hall hours: 09 Nov from 08:00 – 20:00 and 10 Nov from 08:00 – 20:30
Poster presentation hours: 09 Nov from 12:45 – 14:15 and 18:30 – 20:00

**PEGS Summit Europe 2018 – 12-16 Nov 2018 – Lisbon**

Oral presentation information:

Title: Agonist bispecific antibodies delivering the next Immuno-Oncology breakthrough
Session: Advancing Bispecifics and Combination Therapy to the Clinic
Presentation time: 15 Nov at 11:15

**ESMO Immuno-Oncology Congress – 13-16 Dec 2018 - Geneva**

Poster presentation information:

Title: Optimising TNFRSF Agonism and Checkpoint Blockade with a Novel CD137/PD-L1 Bispecific Antibody
Abstract: 444
Session date and time: 14-15 Dec, lunch time
For further information, please contact:

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About F-star

F-star is a clinical-stage biopharmaceutical company committed to delivering life-changing treatments to those cancer patients who are not well-served by current therapies. Through the development of a deep pipeline of mAb²™ bispecific antibodies, F-star is leading a paradigm shift in immuno-oncology which offers the potential to leapfrog current combination approaches. F-star’s disruptive mAb² antibodies deliver a more targeted, efficacious and safer anti-tumour response which is not achievable by combining monotherapies whilst preserving the simplicity and manufacturability of traditional antibodies.

F-star’s scientific and clinical expertise have been validated through strategic partnerships with leading pharma and biotech companies.

Find out more at [www.f-star.com](http://www.f-star.com). Connect with us via [LinkedIn](https://www.linkedin.com) and [Twitter](https://twitter.com)