BioSpectrum
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ASIA EDITION

“With three FDA-approved bispecifics across liquid and solid tumours, this feels like a turning point”

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Chinese startup EpimAb Biotherapeutics is dedicated to generating novel bi-specific antibody therapeutics based on its proprietary FIT-Ig (Fabs-In-Tandem) platform. The firm has recently raised $120 million in series C funding and plans to go public in 2022.

In an email interaction with *BioSpectrum*, EpimAb’s Founder and CEO, Dr Chengbin Wu tells us more about the company and the niche field of bispecific antibody therapeutics.

Edited Excerpts:

What is a bispecific antibody? What are the advantages and limitations in comparison to other treatment methods?

A bispecific antibody combines the functions of two parental antibodies into a single molecule. With these two functions, it can do more than just binding to antigens as monoclonal antibodies do because bispecifics force these two antigens into proximity which opens up new possibilities for therapy. Scientists have discovered multiple different technologies to generate bispecific antibodies with different structures. EpimAb’s FIT-Ig platform is unique because our bispecifics fully retain the

biological function of the parental antibodies they are engineered from without the need to significantly modify the basic structural elements of antibodies fundamental to the biological and biophysical properties of antibodies.

For which applications are bispecific antibody therapeutics approved?

Bispecifics are emerging in the antibody field as a promising approach in various disease areas. The FDA has approved three bispecifics for commercial use and there are over 150 bispecific and multispecific programmes in clinical trials. Depending on the target mechanism, bispecific antibodies can be applied to a variety of therapeutic areas, and the most developed areas are oncology and inflammation. Three of our clinical bispecific programmes are in development for the treatment of cancer. We are evaluating additional indications as we expand our pipeline.

Having just completed a series C funding, how will these newly acquired funds be allocated?

The Series C financing will be used to fund the ongoing clinical development of EMB-01, EMB-02 and EMB-06, and to expand our pipeline of novel bispecific antibodies and other biologics.

What is the future of bispecific antibody therapeutics?

The evolution of bispecific antibodies could be similar to that of monoclonal bodies where it took decades of research before monoclonal antibodies finally hit the mainstream and became an indispensable part of our treatment paradigm. The current environment feels like a similar turning point for bispecifics, where, after decades of research, we now have three FDA-approved bispecifics across liquid and solid tumours. Also, MNCs and the investment community are rushing to gain a foothold in this treatment modality. Intriguingly, bispecific antibodies could have the potential to open up avenues for other therapeutic approaches. For example, by making non-internalising receptors become internal receptors and targeting two tumour antigens, bispecifics could open up new target areas for antibody-drug conjugates (ADCs) and increase their selectivity. Synergistic combination therapies like these could also open new therapeutic windows in immuno-oncology.

What is your process in selecting the right compound, as well as the right partner?

Broadly speaking, we look for innovation and follow science and the data. Additionally, we look for partners and compounds that work well with our FIT-Ig platform and/or align with our long term plans for our pipeline.

Any other thing that you would like to add?

Our proprietary bispecific antibody technology platform, FIT-Ig, produces unique and innovative product candidates in oncology and potentially other indications. We have three clinical-stage bispecific antibodies developed from this platform and anticipate adding additional novel programmes to our pipeline.

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