



## **Elpiscience Announces First Patient Dosed for Phase 1 Clinical Trial of First-in-Class Anti-CD39xTGF- $\beta$ Bispecific Antibody ES014**

**SHANGHAI & SUZHOU, China & GERMANTOWN, Md., Feb. 27, 2023** - Elpiscience Biopharmaceuticals, Inc. (“Elpiscience”), a clinical-stage biopharmaceutical company dedicated to developing life-changing immuno-oncology therapies for cancer patients worldwide, today announced that the first patient has been dosed in a Phase 1 clinical trial of ES014, a first-in-class anti-CD39xTGF- $\beta$  bispecific antibody (bsAb). The principal investigator of the study is Professor Lu Shun, Director of Oncology Department of Shanghai Chest Hospital.

ES014 simultaneously targets the CD39-adenosine and TGF- $\beta$  pathways, aiming to convert the immunosuppressive tumor microenvironment (TME) into an immune-friendly one. Adenosine and TGF- $\beta$  are two key immunosuppressive pathways within the TME. TGF- $\beta$ , frequently expressed on solid tumors, suppresses T cell activation and induces CD39 expression, the rate-limiting enzyme in the ATP-adenosine pathway. ES014 is designed to have the following functions: 1. It blocks suppressive adenosine generation through CD39 inhibition while maintaining high levels of immune-stimulatory extracellular ATP, the substrate of CD39; 2. ES014 simultaneously neutralizes TGF- $\beta$ , leading to activation of T cells and blockade of Treg differentiation while avoiding or minimizing systemic immunotoxicity.

“We are excited to have initiated the trial of this novel drug candidate. I’m proud of our highly committed team for their exceptional execution of the project. ES014 has shown strong single-agent anti-tumor efficacy in PD-1 non-responsive animal model. We look forward to seeing positive impact in cancer patients,” said Dr. Steve Chin, Chief Medical Officer of Elpiscience.

“I’m glad to lead the clinical study of ES014 in China. We have observed significant immune-promoting and tumor killing effect by ES014 in our *ex vivo* model of pleural effusion and ascites samples from patients with cancer. I am excited to move ES014 now to clinical study to investigate its safety and preliminary clinical signal in human.” shared Professor Lu.

### **About Elpiscience**

Elpiscience is a clinical-stage biopharmaceutical company dedicated to developing life-changing immuno-oncology therapies for cancer patients worldwide. The company’s innovative approach is focused on removing immunosuppressive factors in the tumor microenvironment, by targeting the adenosine pathway and myeloid checkpoints. A pipeline of novel molecules has been developed using its proprietary platforms including a powerful Bispecific Macrophage Engager (BiME<sup>®</sup>) technology that connects and activates macrophages for solid tumor killing without causing cytokine storms.

For more information, please visit [www.elpiscience.com](http://www.elpiscience.com).

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