



## **Centauri Therapeutics publishes proof-of-concept data demonstrating activity of a novel bifunctional immunotherapy against Gram-negative bacterial infections**

- *Paper presents the first pre-clinical application of endogenous antibody recruitment to address multi-drug resistant Gram-negative infections*
- *Novel bifunctional molecule based on Alphamer platform demonstrated direct, broad-spectrum antibacterial activity in vitro and in vivo, with enhanced immune activation through anti- $\alpha$ Gal antibody recruitment*

**Alderley Park, Cheshire, UK, 10 June 2025:** Centauri Therapeutics Limited ([Centauri](#)), an immunotherapy company with a unique and proprietary platform technology applicable across a wide range of therapeutic indications, today announced the publication of a peer-reviewed study in [The Journal of Immunology](#)<sup>1</sup>. The paper presents proof-of-concept data for CTX-09, an early molecule built on the Company's proprietary Alphamer® platform. In the study, CTX-09 demonstrated strong immune-mediated efficacy via recruitment of anti- $\alpha$ Gal antibodies against multi-drug resistant (MDR) Gram-negative bacterial strains, in both *in vitro* and *in vivo* models, providing foundational proof-of-concept data for the Alphamer platform.

Current treatment options for Gram-negative bacterial infections are limited, and recent studies of new antibiotic agents do not demonstrate the required efficacy to meet clinical needs. Combined with the increasing prevalence of MDR strains, there is an urgent need for new treatment strategies to target Gram-negative infections, particularly in clinically vulnerable patient groups.

Published in *The Journal of Immunology*, the study describes the design of CTX-09, a bifunctional molecule comprising an antimicrobial targeting domain linked to an effector sugar moiety. The molecule leverages Centauri's Alphamer immunotherapy platform, harnessing the effector sugar to mediate immune activations via recruitment of anti- $\alpha$ Gal antibodies, the most abundant naturally occurring antibody in humans.

In the study, CTX-09 demonstrated *in vitro* activity against a broad range of Gram-negative bacteria, including MDR strains, and achieved immune-mediated bacterial clearance of >99.9% at sub-therapeutic doses *in vivo*, indicating potential for lowering effective dosing requirements. Data from the study provides clear validation for a novel anti-microbial immune therapeutic drug with a dual mechanism of action; intrinsic broad-spectrum bactericidal activity and immune-mediated clearance.

**Dr Jennifer Schneider, CEO, Centauri Therapeutics, said:** *"Centauri's Alphamer platform has been uniquely developed as a powerful immune therapy that harnesses and empowers the body's own naturally occurring antibodies to fight disease. This publication reinforces our continued confidence in the platform, which forms the basis of our therapeutic pipeline, demonstrating clear evidence of efficacy in vivo. Thank you to our amazing team for their continued dedication in pursuit of this goal, and to our partners and investors for their ongoing support."*

**Dr Helen Bright, CSO, Centauri Therapeutics, said:** *“This latest publication from our talented team of scientists at Centauri provides clear, foundational proof-of-concept data demonstrating the potential our innovative Alphamer platform to transform treatment options, in even clinically vulnerable patient groups. CTX-09 was an early molecule based on this platform, providing concept validation for a novel, dual mechanism of action anti-microbial immune therapeutic drug. We’re pleased to be able to showcase this data and are confident we will continue to build on these positive results as our lead candidate ABX-01 progresses towards Phase I clinical trials.”*

- 1) Hairsine, B. *et al.* (2025) ‘Harnessing endogenous anti-glycan antibodies using a novel, bifunctional immunotherapy to treat gram-negative bacterial infections’, *The Journal of Immunology*, 00, pp. 1–13. doi:10.1093/jimmun/vkaf055.

*Research reported in this press release is co-funded by the UK’s innovation agency, Innovate UK (grant number 103857) and Combating Antibiotic-Resistant Bacteria Biopharmaceutical Accelerator (CARB-X). CARB-X funding for this research is supported by federal funds from the US Department of Health and Human Services (HHS); Administration for Strategic Preparedness and Response; Biomedical Advanced Research and Development Authority; under agreement number 75A50122C00028, and by awards from Wellcome (WT224842), and Germany’s Federal Ministry of Education and Research (BMBF). The content of this paper is solely the responsibility of the authors and does not necessarily represent the official views of any CARB-X funders.*

**ENDS**

#### **Notes to Editors**



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**About Centauri Therapeutics [www.centauritherapeutics.com](http://www.centauritherapeutics.com)**

Centauri Therapeutics is an immunotherapy company, with a unique and proprietary platform technology applicable across a wide range of therapeutic indications. The Company's initial focus is on infectious diseases, driven by an urgent unmet need for anti-infectives to treat the most vulnerable and at-risk patients. Centauri also has strong initial proof-of-concept data in oncology.

Centauri's Alphamer® platform has a unique mechanism of action, utilising an antibody recruiting molecule to harness the body's natural immune response, and redirect antibodies to target diseases.

Based at Alderley Park, Cheshire UK, Centauri's investors include Animatrix Founders LLP, Boehringer Ingelheim Venture Fund, Evotec SE, Novo Holdings REPAIR Impact Fund, and Wren Capital LLP. The Company's anti-infective platform also receives financial and scientific support from CARB-X and PACE.

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