



## **Omniose announces scientific collaboration with AstraZeneca to research vaccines for serious bacterial diseases**

***Collaboration provides AstraZeneca with exclusive rights to  
Omniose's proprietary bioconjugation platform to explore potential vaccines  
for a broad range of bacterial pathogens***

BOSTON and ST. LOUIS, January 5, 2024 - Omniose, a preclinical biotechnology company, today announced an exclusive collaboration agreement with AstraZeneca to research potential vaccines for bacterial pathogens in AstraZeneca's early Vaccines & Immune Therapies pipeline.

Under the terms of the agreement, AstraZeneca will have exclusive rights to Omniose's proprietary bioconjugation platform for up to three years, which allows for the development of high-quality vaccines against a range of bacterial pathogens, including multidrug-resistant "superbugs" previously intractable by other methods.

Conjugate vaccines are an effective form of immunization however, their use is limited due to the complex chemical process of attaching bacterial polysaccharides to engineered carrier proteins. Bioconjugation greatly streamlines the manufacturing process compared to chemical conjugation and may produce a higher quality vaccine.

Christian Harding, CSO & Co-founder of Omniose, added: "Our synthetic biology platform is the broadest enzyme-based bioconjugation system enabling the transfer of virtually any bacterial polysaccharide to engineered carrier proteins."

Mark Esser, Vice President, Early R&D Vaccines & Immune Therapies AstraZeneca, commented: "As serious bacterial infections become increasingly resistant to commonly-used antibiotics, the development of alternative preventative interventions is critical. As part of our ambition to provide long-lasting immunity to millions of people, we are excited to enter into this scientific collaboration with Omniose to explore the role of this novel bioconjugate platform in developing vaccines for bacterial pathogens."

Timothy Cooke, CEO of Omniose said: "AstraZeneca has deep expertise in leveraging next-generation technology to advance infectious disease research and we are proud to collaborate with them to realize the full potential of our conjugate vaccine platform."

### About Omniose

The Omniose bioconjugate vaccine platform enables the precise enzymatic attachment of virtually any bacterial polysaccharide antigen to engineered carrier proteins within a single *E. coli* cell. Bioconjugation is a much simpler process than conventional chemical conjugation methods and has the potential to produce higher quality vaccines as it retains the natural polysaccharide



structure elaborated by a bacterial pathogen. Previous enzymes used for bioconjugation thus far could only address a limited range of bacterial targets. OmniOSE is breaking through this barrier by expanding the scope of bacterial vaccines that can be developed, while leveraging the already established benefits of bioconjugation.

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