

Ostia Sciences and EXPERT[®]Biome CDMO mark major step in oral care probiotic innovation

28 May 2025 | News

Ostia Sciences partnered with EXPERT[®]Biome[™] CDMO by Lallemand for comprehensive project development support



Ostia Sciences partnered with EXPERT[®]Biome[™] CDMO by Lallemand for comprehensive project development support

Ostia Sciences Inc. and EXPERT[®]Biome[™] CDMO by Lallemand announced a significant research and development milestone. Together, they have successfully produced a new oral care probiotic through Contract Development and Manufacturing Organisation, adhering to the highest industry standards, to launch clinical trials.

Ostia Sciences is set to commence clinical trials for oral health applications, advancing the development of its groundbreaking *Streptococcus salivarius* (SALI-10) probiotic strain. Pre-clinical findings indicate that this strain produces a bacteriocin, named Salivaricin 10, the world's first phosphorylated lantibiotic. This bacteriocin will be tested in clinical trials to evaluate its ability to maintain a healthy oral microbiome, as well as its potential beneficial effects, including supporting a healthy immune response.

Dr Abdelahhad Barbour, CEO of Ostia Sciences, elaborates: "After securing full intellectual property (IP) rights, we are ready to advance our research and support the development of our SALI-10 probiotic, targeting oral and respiratory health."

Ostia Sciences partnered with EXPERT[®]Biome[™] CDMO by Lallemand for comprehensive project development support. This collaboration included lab-scale production to identify the optimal bioprocess for balancing yield and viability and scaling up to 150L to validate process scalability and robustness. These developments have been efficiently produced at an industrial scale in Lallemand's French GMP pharma plant. Formulation trials were also conducted to develop lozenges and determine the appropriate overage based on stability data.