Image: Denteric

ENABLING TRANSLATION OF AN IMMUNOTHERAPY AGAINST *PORPHYROMONAS GINGIVALIS*

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BIOLOGICS AND VACCINES

Denteric is a clinical-stage biotech company developing therapies for *Porphyromonas gingivalis* (Pg) related diseases, with an initial focus on an immunotherapy to protect against periodontitis, a severe gum disease caused by Pg. This infection can lead to tooth loss and has been linked to Alzheimer's, atherosclerosis, and diabetes. Denteric's first-in-class therapeutic immunotherapy aims to provide an alternative to standard treatments like scaling and root planning by reducing inflammation and preventing tissue damage caused by Pg.

Prior to the TIA award, Denteric was already in discussions with the National Biologics Facility (NBF) to develop critical analytical methods for testing of their lead immunotherapy. This included establishment of standard physico-chemical analyses, but also developing quantitative methods for identity, purity and potency that they couldn't source from the market to meet their timelines and / or quality requirements. Once the award was made the project with NBF was able to rapidly deploy which was a key enabler for Denteric who required analytics testing as a requisite for initiating their first-in-human clinical trial.

Through this project, Denteric have successfully leveraged collaborative partnerships with both NBF and two commercial contract manufacturing organisations (CMOs). This reflects the real-world supply-chain complexity faced by many Australian researchers and SMEs in developing innovation from the lab to clinical applications. But it also showcases the considerable value that TIA-supported research infrastructure can provide to fill missing gaps along this translation pipeline.

TIA's support has been instrumental in enabling Denteric to initiate their first-in-human clinical trials. Moving forward, Denteric plans to continue the collaboration with NBF for stability studies and have already leveraged the assay package to support method-transfer to another CMO for planned clinical trials of their immunotherapy.

> "Denteric is grateful to TIA for having received the NCRIS funding through the Pipeline Accelerator scheme. Being able to access the expertise of scientists at NBF has enabled our manufacturing program to advance without having to engage the necessary expertise internally. This has helped to save us both time and money and reach the clinic quicker"
> **Larisa Chisholm, COO Denteric**

Impact:

TRL 1 | TRL 2 | TRL 3 | TRL 4 | **TRL 5** | **TRL 6** | TRL 7 | TRL 8 | TRL 9