

Accelerating Innovations into CarE – Validate Program (AICE-Validate)



Phase 2A Clinical Trial to Validate Use of Probenecid and Determine Safety, Tolerability and Dosage Levels for Opioid Withdrawal

PROJECT FAST FACTS

RECIPIENT: Dr. Tuan Trang of University of Calgary and AphioTx

AWARD: \$300,000

AWARD DATE: May 9, 2023

PROJECT DURATION: 24 months

THE PROBLEM

Over 26 million people worldwide struggle with opioid use disorder, with more than 100,000 overdose deaths occurring every year. Many people who overdose have developed opioid dependence and experience withdrawal, a major problem in the opioid crisis. Interventions that break the cycle of opioid withdrawal will help people with recovery and save lives. Current interventions for opioid withdrawal and opioid use disorder are limited, relying on very long progressive reduction in dose (opioid tapering) or opioid substitution. The major concern is that these are still opioid-based therapies associated with addiction and abuse liability.

THE SOLUTION

Research on the neurobiology of opioid addiction led to the identification of probenecid – a medication used to treat gout with an impressive safety profile – as a high-potential candidate for treating opioid withdrawal. Probenecid and the new chemical entities Dr. Trang and team have developed work in a way that is unique from existing medications; they do not cause central nervous system or respiratory depression, and withdrawal does not occur when terminating treatment. This is a breakthrough discovery that could help disrupt the cycle of opioid abuse.

PROJECT OBJECTIVES

During the term of investment, the University of Calgary will validate the use of probenecid through a pilot Phase 2A clinical trial to evaluate the acceptability, tolerability and safety of oral probenecid in patients undergoing voluntary opioid tapering by recording adverse events and compliance. If successful, the team will conduct a larger scale Phase 2B clinical trial and commercialize the product through a spin-off company, AphioTx. The goal is to provide a safe and effective non-opioid option to help people, their families and communities overcome struggles with opioid use.

ABOUT THE AICE-VALIDATE PROGRAM

AICE-Validate is an opportunity for Alberta's health-tech innovators to accelerate commercialization of digital and data-enabled health technologies through the early validation phase. If you'd like to learn more, please check out [AICE Validate on the Alberta Innovates website](#).

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