Team leads world-first new treatment for alcohol addictions

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QUT neuroscientist Professor Selena Bartlett. Credit: Erika Fish/QUT Marketing & Communication

Alcohol addiction causes almost 3.8 per cent of deaths worldwide but a study led by QUT researchers offers new hope in the form of a drug

already approved by the Food and Drug Administration (FDA).

Neuroscientist Professor Selena Bartlett from QUT's Institute of Health and Biomedical Innovation said the drug, pindolol, is an inexpensive approach for treating alcohol dependence once the human clinical trials are conducted.

"Drugs currently used for AUDs (alcohol use disorders) - acamprosate, naltrexone and disulfiram - have limited success - so this is a ground-breaking development with enormous potential," said Professor Bartlett who is based at the Translational Research Institute.

"In an internationally-significant breakthrough, our study showed pindolol was able to reduce ethanol/alcohol consumption, particularly in relation to binge drinking, a key behaviour observed in human alcohol dependence."

The study has been published in *Addiction Biology*, the Journal of the Society for the Study of Addiction.

Researcher Omkar Patkar said the preclinical study is the first step towards fast tracking pindolol into human clinical studies as a treatment option for AUDs.

"Pindolol is an FDA-approved beta blocker already used to treat high blood pressure and angina," said Mr Patkar.

"Data collected from our study found that pindolol diminishes ethanol intake in animal models of binge-alcohol consumption.

"More research is required but we believe the results from our study show that pindolol represents a novel, safe and ready to test treatment therapy option for managing alcohol dependence in humans."

Provided by Queensland University of Technology