

# New Zealand researchers developing non-addictive relief for severe pain

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Professor Jamie Sleigh is among New Zealand researchers working on a new non-addictive form of pain relief and anaesthesia.

New Zealand researchers have received an \$8 million funding boost for a programme developing treatments for moderate to severe pain as an alternative to opioids.

Opioids such as morphine, codeine and ketamine are highly effective at treating pain, but are also highly addictive - killing 91 people a day in the United States.

The Medical Research Commercialisation Fund (MRCF) announced an \$8m funding injection on Wednesday to help early-stage pharmaceutical company Kea Therapeutics develop a "much needed non-opioid approach" to pain management.

Ketamine is commonly used in anaesthesia and pain relief, but can cause confusion and hallucinations. (File)

Kea Therapeutics is a spin-off of the Auckland Cancer Society Research Centre and the Faculty of Medical and Health Sciences Waikato Clinical Campus at the University of Auckland.

The number of prescriptions for pain medication in New Zealand increased from 6.15 million in 2011 to 7.18 million in 2016, [Pharmac figures obtained under the Official Information Act showed](#).

During the same period, the number of scripts for opioid painkillers rose from 1.56 million to 1.85 million.

The Kea Therapeutics compounds would be a new class of pain medications, used intravenously to treat acute pain during operations, in immediate recovery from surgery and in emergency settings.

Anaesthetist Professor Jamie Sleigh from Waikato Clinical Campus' Faculty of Medical and Health Sciences recognised the need for non-opioid pain relief alternatives.

Sleigh and medicinal chemist Distinguished Professor Bill Denny started a programme to develop a new drug which retained the positive, pain-relieving and anaesthetic qualities of ketamine, while removing its significant side effects.

Medical Research Commercialisation Fund investment manager Duncan Mackintosh said the development of non-opioid pain relief could bring "world-class" New Zealand research to the global market.

Opioids have a range of unwanted side effects and are causing a global epidemic of dependency, he said.

"[Opioids] aren't a problem in themselves but they aren't the right drug all the time - we need some alternatives.

"If we get that right we can make a real difference for patients and save some lives along the way."

The drug had been tested on rats with success, and clinical trials were expected to begin within the next 18 to 24 months.

The MRCF is the largest life sciences fund in Australasia, with \$480m (AUD) up for investment in the development and commercialisation of early-stage biomedical discoveries.

The early development of the drug was funded by the University of Auckland, Auckland UniServices Ltd and the Ministry of Business Innovation and Employment's (MBIE) Pre-Seed Accelerator Fund.