



*****Media release*****

Hep C test discovery at Austin Health

Doctors at Austin Health have developed a new genetic test for assessing patient response to current treatment for Hepatitis C.

Using the results of a breakthrough discovery of a polymorphic gene in Switzerland and the United States, Austin Health gastroenterologist Dr Paul Froomes approached microbiologist Dr Volker Gurtler nine months ago with the task of devising a test for the gene, called rs12979860.

The significance of Dr Froomes and Dr Gurtler's work is the increase in reliability of treatment for Hepatitis C patients with the polymorphic gene. "It means patients do not need to be tested so frequently, that pathology care for patients is much more simplified, and that the cost of testing is reduced," said Dr Gurtler.

"We can use the test to better select patients to be treated versus those who should wait for newer, more effective treatment to be developed," explains Dr Froomes. "For those without a genetic polymorphism, it isn't worth having current treatment. There are new combination treatments for Hepatitis C just around the corner and we have new research studies coming out later this year, so those patients are better off going into those studies."

Dr Froomes and Dr Gurtler found that "if a patient had the polymorphism, then their response rate was much better, about 70- 80%, compared to someone who did not have the polymorphism who had a much lower response rate of 20%," explained Dr Froomes. Dr Gurtler was given the challenging task of modifying the DNA sequence specific for the mutated gene. Dr Gurtler and his pathology team at Austin Health spent 6 months developing and validating the genetic test for the gene, although as he pointed out "it's been 20 years coming".

Currently, this genetic testing for the polymorphic gene is only conducted at Austin Health.