





New study from KMU Clearance of Hepatitis C Virus Reduces the Risk of Extra-hepatic Cancers by 70%

The latest study by Professor Ming-Lung Yu, who is also the Senior Vice President of Kaohsiung Medical University serving as the attending physician of the Division of Hepatobiliary and Pancreatic Medicine at Kaohsiung Medical University Hospital suggested that clearance of hepatitis C virus could not only significantly reduce the risk of liver cancer by nearly 80 percent, but it could also significantly reduce the risk of gastric cancer and malignant lymphoma by 67% and 73% respectively. The study was published in a leading scientific journal "American Journal of Gastroenterology" in August 2020.

Professor Ming-Lung Yu pointed out that chronic hepatitis B and chronic hepatitis C virus infection accounts for most of the occurrence of liver diseases in Taiwan. Clinical symptoms of early-stage hepatitis are not obvious, so that it would be of

critical condition when the patients start to complain of loss of appetite, jaundice and even brownish urine. Therefore, it is best for patients to undergo hepatitis B and hepatitis C screening directly.

Liver disease is one of the disease afflicting Taiwanese, and liver cancer has ranked among top two cancer deaths for 40 years. According to statistics, there are around 11,225 people diagnosed with liver cancer every year, with hepatitis B and hepatitis C responsible for 80 percent. On World Hepatitis Day, July 28th, Health Promotion Administration, Ministry of Health and Welfare, a governmental department and Taiwan Liver Research Foundation, a non-governmental organization work together with Kaohsiung Medical University in order to realize the World Health Organization's vision of "Viral Hepatitis Elimination by 2030" by advocating "Get Screening, Get Treatment, and Get a Healthy Liver" to raise Taiwanese health consciousness.



▲ Prof. Ming-Lung Yu(Left) suggested that clearance of hepatitis C virus could significantly reduce the risk of liver cancer, gastric cancer and malignant lymphoma.

KMU Researcher Identified Key Mechanisms of Body Temperature Perception, Published in "Nature"



In 2020, Chun-Hsiang Tan, the assistant professor of Kaohsiung Medical University and Professor Peter McNaughton of King's College London, UK, once again collaborated and published a paper on the mechanism for warmth sensation in the world's top journal "Nature". This study confirms the key role of TRPM2 in the detection of heat. In the future, biomedical technology may be applied to modulate the human perception of temperature, so that current scorching hottemperature can become as comfortable as a hot spring.

In 2016, Dr. Tan and Professor Peter McNaughton discovered that TRPM2 ion channel is responsible for the detection of thermal stimuli and excitation of sensory neurons. The results of the study were published in "Nature." In 2018, a Belgian research team published a study in "Nature" indicating that TRPA1 is involved in the heat sensation of sensory neurons, but the experiment did not find the heat-sensitive mechanism mediated by TRPM2 in sensory neurons. In order to find out the reasons for the difference between the results of the two studies, the latest study by Professor Peter McNaughton's team and

Dr. Tan published in "Nature" in 2020 reconfirmed the thermal sensitivity of TRPM2 in sensory neurons and found the reason that Belgian team failed to detect the heat-sensitivity of TRPM2 in sensory neurons is due to the insufficient temperature stimuli. This also confirms the positive role of mutual verification in improving scientific validity.





