AB032. S7-3. Introduction of Taiwan Liver Cancer Network

Shiu-Feng Huang¹, Il-Chi Chang², Pei-Jer Chen³, Chi-Ling Chen³, Tseng-Chang Yen⁴, Yun-Fan Liaw²

¹Institute of Molecular and Genomic Medicine, National Health Research Institutes, Miaoli, Taiwan; ²Liver Research Unit, Chang Gung Memorial Hospital Linko Branch, Chang-Gung University, Taoyuan, Taiwan; ³Graduate Institute of Clinical Medicine, National Taiwan University College of Medicine, Taipei, Taiwan; ⁴Department of Applied Mathematics and Institute of Statistics, National Chung-Hsing University, Taichung, Taiwan

Correspondence to: Shiu-Feng Huang. Institute of Molecular and Genomic Medicine, National Health Research Institutes, Miaoli, Taiwan. Email: sfhuang@nhri.org.tw.

Abstract: Liver cancers and lung cancer are the 2 leading cancer deaths in Taiwan. Thus, these 2 cancers are the most important cancers in Taiwan, and both have been chosen as the main target diseases by National Research Program for Genomic Medicine. For Liver cancers, only the early stage patients (<20%) who could receive surgical resection can have long survivals. There is still no good drug for long survival. The recent advances in genomics and proteomics led to discoveries of numerous promising new biomarkers in cancer research. The availability of large number, high quality cancer tissues to validate those biomarkers has become a major bottleneck for cancer researchers in Taiwan. To solve this bottleneck, NRPGM has supported the establishment of a liver cancer research network since 2005 [Taiwan Liver Cancer Network (TLCN)], which coordinated 5 major medical centers in northern, central, and southern parts of Taiwan (NTUH, CGMH-Linko, Taichung VGH, CGMH-Kaohsiung, Kaohsiung VGH) to recruit liver cancer patients with regional representativeness. All participating centers followed a common protocol to collect liver cancer specimens as well as the patients’ clinical, pathological and epidemiological information. All samples and data are saved in the National Health Research Institutes Biobank with good management. Currently, we already recruited 9,344 patients with liver tumors, received 146 applications and sent out 66,548 biospecimens to the applicants by the end of Dec 2018. Our users have published 74 papers, and 15 of them in journals with an impact factor >10. Since TLCN has become NHRI Biobank, which is supported by Government fund and has been approved by the Ministry of Health and Welfare, it can accept the application not only from the scientists, but also the industries directly. The final goal of this project is to improve the treatment and survival of liver cancer patients in Taiwan through successful researches in the liver carcinogenetic mechanism, prevention, screening, early detection and therapies.

Keywords: Biobank; hepatocellular carcinoma (HCC); cholangiocarcinoma; network; liver cancer