

肝膽胰內科團隊

余明隆教授、戴嘉言教授、莊萬龍教授、黃釧峰教授、黃志富教授、葉明倫教授

為呼應世界衛生組織要在 2030 年前消除具公共衛生威脅性的病毒性肝炎承諾,政府於 2016 年底成立國家消除 C 肝辦公室。近年來高醫肝膽胰內科團隊積極進行國內 C型肝炎診斷、轉介及治療。以國際倡議 C 肝微清除 (microelimination)為手段,針對醫療院所優化院內病患篩檢、診斷及轉介流程、對於院外率領團隊針對 C 肝高盛行區、南台灣血液透析院所、偏鄉地區、山地及離島地區以及邊緣困難治療族群(marginalized population)如監獄受刑人及精神疾患進行外展篩檢及治療。

茲就近年肝膽胰內科團隊,致力於院內及院外大規模 C 肝微清除努力及研究成果摘要如下:

院內 C 肝清除:

- 1.1 創立國內第一個 C 肝反射檢驗 (HCV reflex testing),結果顯著提高 C 肝分子生物學診斷率,此首創流程後續亦為國民健康署及健保署给付國家 C 肝篩檢依據。
- 1.2 此外針對糖尿病、慢性腎病及肝功能異常患者設立 C 肝檢驗電子提醒及掛號系統自動轉介專科治療機制。協助推動 C 肝檢驗行動工作車、住院病患 C 肝檢驗等提升院內患

者 C 肝診治量能。成果獲得國民健康署 B、C 肝篩檢推動績優獎及台灣永續行動獎最佳 行動方案銀獎。

院外 C 肝清除:

2-1 肝膽胰內科團隊針對高雄、屏東及台南 22 間血液透析單位逾 2000 位醫護人員及病患進行大規模 C 肝外展檢驗及就地治療,此為世界第一個針對 C 肝高風險極高傳染性血液透析患者的 C 肝微清除行動,成果刊登在國際頂尖期刊 Gut 並獲得 2021 及 2022 年國家品質標章。

2-2 針對南台灣 C 肝最高盛行區梓官區於 5000 位居民建立二階段就地外展及逐戶篩檢模式皆續成立常駐 C 肝外展門診,其中經歷國內 COVID-19 大流行期,外展門診未曾中斷長達 2 年,成果獲得 2020 及 2021 年國家品質標章。

2-3 擴展原鄉在地 C 肝檢查與治療 SOP,協助高雄市山地桃源區完成全台最早根除「微根除」C 肝區域。

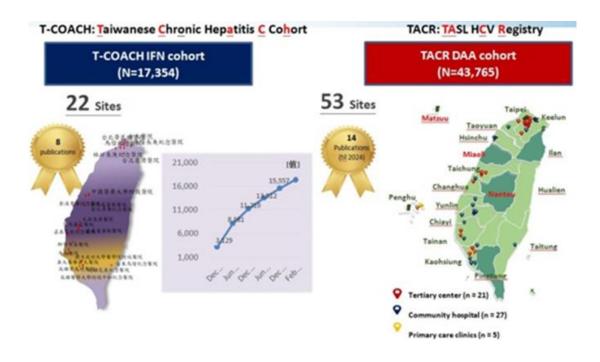
2-4 與團隊持續執行山地偏鄉的健康照護:擴展外展門診模式至屏東縣獅子鄉與泰武鄉, 推動成健 B、C 型肝炎篩檢,及確診者口服慢性 C 型肝炎用藥治療,並拓展至禮納里之 瑪家、霧台與三地門之肝炎篩檢與治療工作。

2-5 與台灣肝臟學術文教基金會與澎湖三總合作,針對 1697 位以靜脈藥物毒癮為主的 澎湖監院監獄受刑人進行 C 型肝炎檢驗及治療。

2-6 主導協助國內最大精神專科醫院玉里醫院五院區,針對以思覺失調為主逾 1500 位精神疾患病人進行大規模 C 肝篩檢,並組成外展治療團隊,於玉里大地震交通中斷期間多次往返高雄與花蓮進行全國唯一此特殊困難治療族群 C 肝微清除活動。

2-7 與無作生在用 C 對及全期 你 性組 新國間 球 與關 新國間 球 進 開 上 對 蘭 與 數 最 的 以 , 首 驗 綠 C 節 。





	論文名稱	作者	雜誌、卷、 期、頁	2023 IF	領域	排名
院內篩檢與治療	Towards a safe hospital: hepatitis C in-hospital micro-elimination program (HCV-HELP study)	Huang JF, Hsieh MY, Wei YJ, Hung JY, Huang HT, Huang CI, Yeh ML, Huang CF, Jang TY, Hsu PY, Liang PC, Dai CY, Lin ZY, Yu ML, Chuang WL.	Hepatol Int. 2022 Feb;16(1):59-67.	5.9	GASTROENTEROLOGY & HEPATOLOGY	22/143 =15.38%
	Scaling up the in-hospital hepatitis C virus care cascade in Taiwan	Huang CF, Wu PF, Yeh ML, Huang CI, Liang PC, Hsu CT, Hsu PY, Liu HY, Huang YC, Lin ZY, Chen SC, Huang JF, Dai CY, Chuang WL, Yu ML.		14.0	GASTROENTEROLOGY & HEPATOLOGY	6/143 =4.20%
	Towards a safe hospital: hepatitis C in-hospital micro-elimination program (HCV-HELP study)	Huang JF, Hsieh MY, Wei YJ, Hung JY, Huang HT, Huang CI, Yeh ML, Huang CF, Jang TY, Hsu PY, Liang PC, Dai CY, Lin ZY, Yu ML, Chuang WL.	Hepatol Int. 2022 Feb;16(1):59-67.	5.9	GASTROENTEROLOGY & HEPATOLOGY	22/143 =15.38%
洗腎患者C肝根除		Huang CF, Dai CY, Wang CW, Liang PC, Wei YJ, Tsai PC, Jang TY, Hsu PY, Jia-Jung Lee, Niu SW, Huang JC, Yeb ML, Huang CI, Hsieh MY, Lin YH, Chen SC, Chiu YW, Huang JF, Chang JM, Hwang SJ, Chuang WL, Yu ML; FORMOSA-LIKE investigators.	Jun 14;16(12):2429-	3.9	UROLOGY & NEPHROLOGY	18/126 =14.29%
洗腎患者世代追蹤	grouping healthcare system	Yu ML, Huang CF, Wei YJ, Lin WY, Lin YH, Hsu PY, Hsu CT, Liu TW, Lee JJ, Niu SW, Huang JC, Hung TS, Yeh ML, Huang CI, Liang PC, Hsieh MY, Chen SC, Huang JF, Chang JM, Chiu YW, Dai CY, Hwang SJ, Chuang WL; FORMOSA-LIKE investigators.	Gut. 2021 Dec;70(12):2349- 2358.	23.0	GASTROENTEROLOGY & HEPATOLOGY	5/143 =3.50%
	Patient-centered outreach treatment toward micro- elimination of hepatitis C virus infection in hemodialysis patients	Huang CF, Chiu YW, Yu ML.	Kidney Int. 2020 Feb;97(2):421.	14.8	UROLOGY & NEPHROLOGY	4/126 =3.17%
花蓮精神疾病患者 外展治療	Evolutionary seroepidemiology of viral hepatitis and the gap in hepatitis C care cascades among uraemic patients receiving haemodialysis in Taiwan-the Formosa-Like Group	Wei YJ, Hsu PY, Lee JJ, Niu SW, Huang JC, Hsu CT, Jang TY, Yeh ML, Huang CI, Liang PC, Lin YH, Hsieh MY, Hsieh MH, Chen SC, Dai CY, Lin ZY, Chen SC, Huang JF, Chang JM, Hwang SJ, Chuang WL, Huang CF, Chiu YW, Yu ML.	J Viral Hepat. 2021 May;28(5):719-727.	2.5	GASTROENTEROLOGY & HEPATOLOGY	71/143 =49.65%
梓官高盛行區2年家	Patient-centered and integrated outreach care for chronic hepatitis C patients with serious mental illness in Taiwan	Huang CF, Jang TY, Yu SC, Huang SC, Ho SL, Yeh ML, Wang CW, Liang PC, Wei YJ, Hsu PY, Huang CI, Hsieh MY, Lin YH, Yu SL, Wu PF, Chen YH, Chien SC, Huang JF, Dai CY, Chuang WL, Wang TJ, Yu ML.	Sci. 2024	2.7	MEDICINE, RESEARCH & EXPERIMENTAL	95/189 =50.26%
互篩檢暨常駐外展	A people-centered decentralized outreach model toward HCV micro- elimination in hyperendemic areas: COMPACT study in SARS Co-V2 pandemic	Huang CI, Liang PC, Wei YJ, Tsai PC, Hsu PY, Hsieh MY, Liu TW, Lin YH, Hsieh MH, Jang TY, Wang CW, Yang JF, Yeh ML, Huang CF, Dai CY, Chuang WL, Huang JF, Yu ML.		4.5	INFECTIOUS DISEASES	23/132 =17.42%
澎湖監獄外展治療	Outreach onsite treatment with a simplified pangenotypic direct-acting anti-viral regimen for hepatitis C virus micro- elimination in a prison	Chen CT, Lu MY, Hsieh MH, Tsai PC, Hsieh TY, Yeh ML, Huang CI, Tsai YS, Ko YM, Lin CC, Chen KY, Wei YJ, Hsu PY, Hsu CT, Jang TY, Liu TW, Liang PC, Hsieh MY, Lin ZY, Huang CF, Huang JF, Dai CY, Chuang WL, Shih YL, Yu ML.		4.3	GASTROENTEROLOGY & HEPATOLOGY	29/143 =20.28%
高盛行原鄉外展治 療	Micro-elimination of hepatitis C virus infection in	Lo CC, Lei WY, Huang YC, Hwang JJ, Lo CY, Lin CH, Cheng HS, Liao YT, Liang PC, Chiou MJ, Bair MJ, Dai CY, Yu ML.	J Microbiol Immunol Infect. 2023 Aug;56(4):680-687.	4.5	INFECTIOUS DISEASES	23/132 =17.42%
	HCV Microelimination for High-risk Special Populations	Huang CF, Chen GJ, Hung CC, Yu ML.	J Infect Dis. 2023 Sep 13;228(Suppl 3):S168-S179.	5.0	INFECTIOUS DISEASES	15/132 = 11.36%

【具體成果】

本團隊致力於肝病研究,受台灣肝臟研究學會(Taiwan Association for the Study of the Liver, TASL)委託,負責制定國內C型肝炎之治療準則及參與亞太肝臟醫學會準則制定。除臨床服務及教學外,並走入社區及偏鄉服務,實踐大學醫院社會責任。由於

上述努力,團隊及成員陸續獲得 SNQ 及個人獎項;2021-2023 年 SNQ 國家品質標章及續審標章,莊萬龍教授獲得 2018 年亞太肝臟研究學會優秀導師獎;余明隆教授獲得台灣肝臟研究學會(TASL) 2023 年度特殊貢獻獎、第 20 屆永信李天德醫藥科技獎及 2025 年亞太肝臟研究學會成就獎、2022-2023 年全球 2% 頂尖科學家;戴嘉言教授獲得 2024 年第四屆 TSAA 台灣永續行動獎、財團法人厚生基金會第 33 屆醫療奉獻獎、高雄醫師公會 112 年度高杏獎;黃志富教授獲得 2024 台灣消化醫學週科學委員會主席獎;黃釧峰教授獲得 2022 年全球前 2% 頂尖科學家、2024 亞太肝臟研究學會最佳海報獎葉明倫教授獲得 2022 年全球前 2% 頂尖科學家、2024 亞太肝臟研究學會最佳海報獎葉明倫教授獲得台灣消化醫學週研究獎。

【研究團隊】

團隊成員:余明隆、戴嘉言、莊萬龍、黃志富、黃釧峰、葉明倫

團隊簡介:

團隊研究方向為探討新穎的致癌基因在癌症上的機制探討。此外還研究了免疫細胞如何促進免疫反應的調節並影響各種疾病的進展,加深我們對腫瘤免疫相互作用的理解,並確定潛在的治療靶點,以改善治療策略。本科成立於民國七十四年八月,為全國唯一單獨成立之肝膽胰醫學專科,積極從事肝膽胰疾病教學、研究與服務工作。本科醫師,共有7位教授、3位助理教授、3位專任主治醫師、1位顧問醫師及2位特約醫師,另有加聘主治醫師4位。40年來從事肝炎及肝癌臨床及基礎研究。除積極參與國際多國多中心外,亦主導多個主持人發起臨床試驗,研究成果豐碩,團隊發表國際期刊迄今逾500篇。高醫肝膽胰內科長期致力於肝臟相關疾病研究,特別是病毒性肝炎,包括:B型、C型肝炎病毒分子生物診斷學、分子流行病學、B/C型肝炎致病機轉及臨床病程、肝臟與代謝疾病關聯、免疫遺傳學、肝炎治療療程與療效提昇與影響療效因子、長期預後等研究。特別是系列性「促進慢性C型肝炎治療療效研究」及「C型肝炎個別化治療之轉譯醫學研究」以及「C型肝炎資源導向治療之精準醫學研究」之成果。此外高醫肝膽胰內科每年均持續參與國內外研究計劃及跨國性臨床試驗,含括肝炎、肝硬化與肝癌之相關領域。相關論文每年持續發表或接受於高影響力之SCI雜誌。

未來研究計畫將由病毒性肝炎逐漸聚焦於代謝性基脂肪肝炎基礎研究、成立國內多中心臨床世代研究建立及臨床試驗,目前積極配合參與高雄醫學大學代謝及肥胖中心、代謝異常脂肪肝高教深耕計畫。另外積極參與及中晚期肝癌跨國際臨床試驗。希冀系列研究成果對全球醫藥科技發展、國民健康和國家社會能有持續且實質貢獻。

研究聯繫 Email: sharin64@gmail.com

In line with the World Health Organization's goal of eliminating viral hepatitis as a public health threat by 2030, the Taiwanese government established the National Hepatitis C Virus Elimination Office at the end of 2016. In recent years, the Hepatobiliary Division at Kaohsiung Medical University Hospital (KMUH) has actively promoted the diagnosis, referral, and treatment of Hepatitis C virus (HCV) as well as associated researches in order to accomplish the national goal in Taiwan.

Using the international strategy of "micro-elimination" of HCV, the team has improved internal hospital processes for screening, diagnosing, and referring patients. Externally, we have led initiatives targeting high-prevalence regions, dialysis centers in southern Taiwan, remote and mountainous areas, outlying islands, and marginalized populations such as prison inmates and individuals with psychiatric disorders.

The following is a summary of our efforts and research achievements in both in-hospital and outreach HCV micro-elimination projects:

In-Hospital HCV Elimination:

- 1.1 Established Taiwan's first HCV reflex testing system, significantly improving HCV molecular diagnostic rates. This pioneering approach became a reference for screening reimbursement by the National Health Insurance and Health Promotion Administration.
- 1.2 Introduced an electronic reminder and automatic referral system for HCV testing among patients with diabetes, chronic kidney disease, or abnormal liver function. Also promoted mobile HCV testing units and screening for inpatients. These efforts earned the National Health Promotion Administration's Outstanding Award for Hepatitis B and C Screening and the Taiwan Sustainability Action Silver Award for Best Action Plan.

Outreach HCV Elimination:

2-1 We conducted large-scale outreach screening and onsite treatment for over 2,000 healthcare staff and uremic patients on maintained hemodialysis in 22 dialysis centers across Kaohsiung City, Pingtung County and Tainan City. This was the world's first HCV micro-elimination campaign targeting high-risk

dialysis patients, published in the top-tier journal *Gut* and honored with the National Quality Label in 2021 and 2022.

- 2-2 We developed a two-stage community screening model in Zihguan, the area with the highest HCV prevalence in southern Taiwan, screening over 5,000 residents and maintaining permanent outreach clinics. Even during the COVID-19 pandemic, services continued uninterrupted for two years, receiving the National Quality Label in 2020 and 2021.
- 2-3 We established HCV SOPs in indigenous areas, enabling Taoyuan District in Kaohsiung to become the first mountain village with the highest HCV prevalence to achieve localized micro-elimination of HCV in Taiwan.
- 2-4 We expanded outreach clinics to remote mountain areas such as Shizi and Taiwu Townships in Pingtung County. Promoted HCV screenings, oral directly acting antiviral treatment for confirmed chronic HCV cases, and extended services to tribal villages like Majia, Wutai, and Sandimen.
- 2-5 We collaborated with the Taiwan Liver Research Foundation and Tri-Service General Hospital in Penghu to screen and treat 1,697 inmates, primarily intravenous drug users, for HCV where the anti-HCV seropositivity reached up to 34%.
- 2-6 We_led screening efforts at Yuli Hospital, Taiwan's largest psychiatric facility with five branches, screening over 1,500 patients with schizophrenia and serious mental illness. A dedicated outreach team traveled between Kaohsiung and Hualien during major earthquakes to carry out HCV microelimination—Taiwan's only program for this special marginalized population.
- 2-7 We cooperated with the health departments of Taitung and Pingtung Counties to implement Taiwan's first point-of-care (POC) finger-prick HCV testing, conducting universal screening on the islands of Xiaoliuqiu, Green Island, and Orchid Island.

Notable Achievements:

Our team has played a pivotal role in liver disease research and was entrusted by the Taiwan Association for the Study of the Liver (TASL) to develop national treatment guidelines for HCV. We also participated in APASL (Asian Pacific Association for the Study of the Liver) guideline formulation. Beyond clinical services and teaching, the team has actively engaged in community and rural service, fulfilling the social responsibility of a university hospital.

Due to these efforts, the team and its members have earned numerous accolades, including:

- SNQ National Quality Labels (2021 2023)
- Prof. Wan-Long Chuang APASL Outstanding Mentor Award (2018)
- Prof. Ming-Lung Yu TASL Special Contribution Award (2023), 20th Yung Shin Lee Tian-Teh Medical Technology Award, APASL Achievement Award (2025), Global Top 2% Scientist (2022 2023)
- Prof. Chia-Yen Dai TSAA Taiwan Sustainability Action Award (2024),
 33rd Medical Dedication Award (Welfare Foundation), Kaohsiung Medical Association Gao-Xing Award (2023)
- Prof. Jee-Fu Huang Chairman's Award, 2024 Taiwan Digestive Disease Week
- Prof. Chung-Feng Huang Global Top 2% Scientist (2021, 2022), Best Poster Award at 2024 APASL
- Prof. Ming-Lun Yeh Research Award, Taiwan Digestive Disease Week

[Research Team]

Ming-Lung Yu, Chia-Yen Dai, Wan-Long Chuang, Jee-Fu Huang, Chung-Feng Huang, Ming-Lun Yeh

[Overview]

Established in August 1985, this is the only standalone hepatobiliary and pancreatic specialty division in Taiwan. We actively engaged in education, research, and clinical service in liver, biliary, and pancreatic diseases. It includes 7 professors, 3 assistant professors, 3 full-time attending physicians, 1 consultant, 2 part-time physicians, and 4 additional attending physicians.

Over the past 40 years, the division has conducted extensive clinical and basic research on hepatitis and liver cancer. Besides participating in numerous international multicenter studies, we have initiated several investigator-led clinical trials and published over 500 papers in international journals.

Our research areas focus on hepatitis B and C molecular diagnostics, epidemiology, pathogenic mechanisms, clinical progression, associations with metabolic liver diseases, immunogenetics, treatment optimization, and long-term outcomes. We have particularly led research in HCV personalized and precision medicine as well as microelimination programs in the past three decades.

We continue to participate in domestic and international studies and trials on hepatitis, cirrhosis, and liver cancer, publishing annually in high-impact SCI journals.

Future Directions:

Our research focus will gradually shift from viral hepatitis to steatotic liver disease, with plans to establish multicenter cohorts and clinical trials. Our team is actively collaborating with KMU's Metabolism and Obesity Center and national programs on metabolic liver disease. We are also actively involved in international trials for advanced-stage liver cancer. Our efforts aim to contribute meaningfully to global biomedical development, public health, and Taiwan's societal wellbeing.

Contact Email: sharin64@gmail.com