

## David Kung Chun Chiu

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### Publications

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#### PUBLICATIONS

- **Tumor-derived erythropoietin acts as an immunosuppressive switch in cancer immunity.** *Science (New York, N.Y.)*  
Chiu, D. K., Zhang, X., Cheng, B. Y., Liu, Q., Hayashi, K., Yu, B., Lee, R., Zhang, C., An, X., Rajadas, J., Reticker-Flynn, N. E., Rankin, E. B., Engleman, et al  
2025; 388 (6745): eadr3026
- **Using mouse liver cancer models based on somatic genome editing to predict immune checkpoint inhibitor responses** *JOURNAL OF HEPATOLOGY*  
Yuen, V., Chiu, D., Law, C., Cheu, J., Chan, C., Wong, B., Goh, C., Zhang, M., Xue, H., Tse, A., Zhang, Y., Lau, H., Lee, et al  
2023; 78 (2): 376-389
- **Hepatocellular Carcinoma Cells Up-regulate PVRL1, Stabilizing PVR and Inhibiting the Cytotoxic T-Cell Response via TIGIT to Mediate Tumor Resistance to PD1 Inhibitors in Mice** *GASTROENTEROLOGY*  
Chiu, D., Yuen, V., Cheu, J., Wei, L., Ting, V., Fehlings, M., Sumatoh, H., Nardin, A., Newell, E. W., Ng, I., Yau, T., Wong, C., Wong, et al  
2020; 159 (2): 609-623
- **Hypoxia regulates the mitochondrial activity of hepatocellular carcinoma cells through HIF/HEY1/PINK1 pathway** *CELL DEATH & DISEASE*  
Chiu, D., Tse, A., Law, C., Xu, I., Lee, D., Chen, M., Lai, R., Yuen, V., Cheu, J., Ho, D., Wong, C., Zhang, H., Ng, et al  
2019; 10: 934
- **Hypoxia inducible factor HIF-1 promotes myeloid-derived suppressor cells accumulation through ENTPD2/CD39L1 in hepatocellular carcinoma** *NATURE COMMUNICATIONS*  
Chiu, D., Tse, A., Xu, I., Di Cui, J., Lai, R., Li, L., Koh, H., Tsang, F., Wei, L., Wong, C., Ng, I., Wong, C.  
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- **Hypoxia induces myeloid-derived suppressor cell recruitment to hepatocellular carcinoma through chemokine (C-C motif) ligand 26** *HEPATOLOGY*  
Chiu, D., Xu, I., Lai, R., Tse, A., Wei, L., Koh, H., Li, L., Lee, D., Lo, R., Wong, C., Ng, I., Wong, C.  
2016; 64 (3): 797-813
- **Sialylated IgG induces the transcription factor REST in alveolar macrophages to protect against lung inflammation and severe influenza disease.** *Immunity*  
Chakraborty, S., Cheng, B. Y., Edwards, D. L., Gonzalez, J. C., Chiu, D. K., Zheng, H., Scallan, C., Guo, X., Tan, G. S., Coffey, G. P., Conley, P. B., Hume, P. S., Janssen, et al  
2024
- **The acid-sensing receptor GPR65 on tumor macrophages drives tumor growth in obesity.** *Science immunology*  
Bagchi, S., Yuan, R., Huang, H. L., Zhang, W., Chiu, D. K., Kim, H., Cha, S. L., Tolentino, L., Lowitz, J., Liu, Y., Moshnikova, A., Andreev, O., Plevritis, et al  
2024; 9 (100): eadg6453
- **Matrix viscoelasticity promotes liver cancer progression in the pre-cirrhotic liver.** *Nature*  
Fan, W., Adebowale, K., Váncza, L., Li, Y., Rabbi, M. F., Kunimoto, K., Chen, D., Mozes, G., Chiu, D. K., Li, Y., Tao, J., Wei, Y., Adeniji, et al  
2024
- **Neutrophil-activating therapy for the treatment of cancer.** *Cancer cell*  
Linde, I. L., Prestwood, T. R., Qiu, J., Pilarowski, G., Linde, M. H., Zhang, X., Shen, L., Reticker-Flynn, N. E., Chiu, D. K., Sheu, L. Y., Van Deursen, S., Tolentino, L. L., Song, et al

2023

- **CFI-402257, a TTK inhibitor, effectively suppresses hepatocellular carcinoma** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Chan, C., Chiu, D., Yuen, V., Law, C., Wong, B., Thu, K., Cescon, D., Soria-Bretones, I., Cheu, J., Lee, D., Tse, A., Zhang, M., Tan, et al  
2022; 119 (32): e2119514119
- **Polo-like kinase 4 inhibitor CFI-400945 suppresses liver cancer through cell cycle perturbation and eliciting antitumor immunity** *HEPATOLOGY*  
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2022
- **Hypoxia-induced macropinocytosis represents a metabolic route for liver cancer** *NATURE COMMUNICATIONS*  
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2022; 13 (1): 954
- **The Amot/integrin protein complex transmits mechanical forces required for vascular expansion** *CELL REPORTS*  
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- **Adaptive and Constitutive Activations of Malic Enzymes Confer Liver Cancer Multilayered Protection Against Reactive Oxygen Species** *HEPATOLOGY*  
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- **Inhibition of CMTM4 Sensitizes Cholangiocarcinoma and Hepatocellular Carcinoma to T Cell-Mediated Antitumor Immunity Through PD-L1** *HEPATOLOGY COMMUNICATIONS*  
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- **Genome-wide CRISPR-Cas9 knockout library screening identified PTPMT1 in cardiolipin synthesis is crucial to survival in hypoxia in liver cancer** *CELL REPORTS*  
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2021; 34 (4): 108676
- **Adipose-derived stem cells and cancer cells fuse to generate cancer stem cell-like cells with increased tumorigenicity** *JOURNAL OF CELLULAR PHYSIOLOGY*  
Chan, Y., So, C., Yau, K., Chiu, K., Wang, X., Chan, F., Tsang, S.  
2020; 235 (10): 6794-6807
- **Induction of Oxidative Stress Through Inhibition of Thioredoxin Reductase 1 Is an Effective Therapeutic Approach for Hepatocellular Carcinoma** *HEPATOLOGY*  
Lee, D., Xu, I., Chiu, D., Leibold, J., Tse, A., Bao, M., Yuen, V., Chan, C., Lai, R., Chin, D., Chan, D., Cheung, T., Chok, et al  
2019; 69 (4): 1768-86
- **Assessment of Stabilization and Activity of the HIFs Important for Hypoxia-Induced Signalling in Cancer Cells.** *Methods in molecular biology (Clifton, N.J.)*  
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2019; 1928: 77-99
- **RNA N6-methyladenosine methyltransferase-like 3 promotes liver cancer progression through YTHDF2-dependent posttranscriptional silencing of SOCS2** *HEPATOLOGY*  
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- **Histone methyltransferase G9a promotes liver cancer development by epigenetic silencing of tumor suppressor gene RARRES3** *JOURNAL OF HEPATOLOGY*

Wei, L., Chiu, D., Tsang, F., Law, C., Cheng, C., Au, S., Lee, J., Wong, C., Ng, I., Wong, C.  
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- **Folate cycle enzyme MTHFD1L confers metabolic advantages in hepatocellular carcinoma** *JOURNAL OF CLINICAL INVESTIGATION*  
Lee, D., Xu, I., Chiu, D., Lai, R., Tse, A., Li, L., Law, C., Tsang, F., Wei, L., Chan, C., Wong, C., Ng, I., Wong, et al  
2017; 127 (5): 1856–72
- **NDUFA4L2 Fine-tunes Oxidative Stress in Hepatocellular Carcinoma** *CLINICAL CANCER RESEARCH*  
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2016; 22 (12): 3105–17
- **Transketolase counteracts oxidative stress to drive cancer development** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
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- **Switching of Pyruvate Kinase Isoform L to M2 Promotes Metabolic Reprogramming in Hepatocarcinogenesis** *PLOS ONE*  
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2014; 60 (5): 1645–58