

Chia Po Ying

Head of NCID Research Office Consultant, Department of Infectious Diseases, TTSH and NCID Assistant Professor, Lee Kong Chian School of Medicine, NTU Deputy Lead, PREPARE Regional Network Co-operative, NCID

Research Interests:

- Dengue and emerging infectious diseases
- Antimicrobial Resistance
- General Infectious Diseases
- HIV Medicine

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Research Profile:

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Biography

Dr Chia Po Ying is currently an Infectious Disease consultant at the National Centre for Infectious Diseases and Tan Tock Seng Hospital and Assistant Professor with Lee Kong Chian School of Medicine (LKCMedicine), Nanyang Technological University (NTU). She obtained her PhD in the pathogenesis of adult dengue from LKCMedicine (NTU), Master of Medicine (Internal Medicine) from Yong Loo Lin School of Medicine (YLLSOM) National University of Singapore (NUS), and MBBS from YLLSOM NUS. She is also a member of the Royal College of Physicians of the United Kingdom and has completed her clinical specialty training in Infectious Diseases.

Dr Chia's research work has been supported by grants from the National Medical Research Council (NMRC) Research Training Fellowship and the NHG-NTU Clinician Scientist Fellowship. She has a keen interest in dengue fever, emerging and re-emerging infectious diseases, as well as antimicrobial resistance.

Selected Publications

Chia PY, Ong SWX, Chiew CJ, Ang LW, Chavatte JM, Mak TM, Cui L, Kalimuddin S, Chia WN, Tan CW, Chai LYA, Tan SY, Zheng S, Lin RTP, Wang L, Leo YS, Lee VJ, Lye DC, Young BE. Virological and serological kinetics of SARS-CoV-2 Delta variant vaccine breakthrough infections: a multicentre cohort study. Clin Microbiol Infect. 2022 Apr;28(4):612.e1-612.e7. doi: 10.1016/j.cmi.2021.11.010

https://www.sciencedirect.com/science/article/pii/S1198743X21006388

Chia PY, Htun HL, Leo YS, Lye DC. Safety of temporary interruption of antiplatelet therapy in dengue fever with thrombocytopenia. J Infect. 2021 Feb;82(2):270-275. doi: 10.1016/j.jinf.2020.10.038. Epub 2020 Nov 30. PMID: 33271172. https://www.journalofinfection.com/article/S0163-4453(20)30730-1/fulltext

Chia PY, Teo A, Yeo TW. Association of Neutrophil Mediators With Dengue Disease Severity and Cardiac Impairment in Adults. J Infect Dis. 2022 Nov 28;226(11):1974-1984. doi: 10.1093/infdis/jiac383. PMID: 36208158.
https://academic.oup.com/jid/article-abstract/226/11/1974/6706606?redirectedFrom=fulltext&login=false

- Archuleta S, Chia PY, Wei Y, Syed-Omar SF, Low JG, Oh HM, Fisher D, Ponnampalavanar SSL, Wijaya L, Kamarulzaman A, Lum LCS, Tambyah PA, Leo YS, Lye DC. Predictors and Clinical Outcomes of Poor Platelet Recovery in Adult Dengue With Thrombocytopenia: A Multicenter, Prospective Study. Clin Infect Dis. 2020 Jul 11;71(2):383-389. doi: 10.1093/cid/ciz850. PMID: 31626692 https://academic.oup.com/cid/article-lookup/doi/10.1093/cid/ciz850
- Teo A, Chia PY, Yeo TW. Performance of soluble suppressor of tumorigenicity-2 as a prognostic marker for severe dengue in adults. J Infect. 2023 Oct 12:S0163-4453(23)00534-0. doi: 10.1016/j.jinf.2023.10.003. Epub ahead of print. PMID: 37838254. https://www.journalofinfection.com/article/S0163-4453(23)00534-0/fulltext
- Teo A, Le CTT, Tan T, Chia PY, Yeo TW. Febrile Phase Soluble Urokinase Plasminogen Activator Receptor and Olfactomedin 4 as Prognostic Biomarkers for Severe Dengue in Adults. Clin Infect Dis. 2024 Mar 20;78(3):788-796. doi: 10.1093/cid/ciad637.
 Febrile Phase Soluble Urokinase Plasminogen Activator Receptor and Olfactomedin 4 as Prognostic Biomarkers for Severe Dengue in Adults | Clinical Infectious Diseases | Oxford Academic (oup.com)
- Chua CLL, Morales RF, Chia PY, Yeo TW, Teo A. Neutrophils an understudied bystander in dengue? Trends Microbiol. 2024 Nov;32(11):1132-1142. doi: 10.1016/j.tim.2024.04.011. Epub 2024 May 14.

https://doi.org/10.1016/j.tim.2024.04.011

Xu B, Tewari P, Thein TL, Sin LY, Lye DCB, Chia PY, Lim JT. Intravenous fluid therapy in hospitalized adult dengue patients without shock: Impact on subsequent severe dengue and potential adverse effects. J Med Virol. 2024 Jun;96(6):e29726. doi: 10.1002/jmv.29726. https://doi.org/10.1002/jmv.29726

- Wee LE, Lim JT, Tan JYJ, Malek MIBA, Chiew C, Ng LC, Chia PY, Leo YS, Lye DCB, Tan KB. Dengue versus COVID-19: comparing the incidence of cardiovascular, neuropsychiatric and autoimmune complications. J Travel Med. 2024 Jul 7;31(5):taae081. doi: 10.1093/jtm/taae081. https://doi.org/10.1093/jtm/taae081
- Chew YR, Tay JY, Kyaw WM, Chia PY, Ng DHL. Subclinical disease among people with culture-confirmed pulmonary tuberculosis in Singapore a retrospective study. Int J Infect Dis. 2025 Apr;153:107768. doi: 10.1016/j.ijid.2024.107768. Epub 2024 Dec 24. PMID: 39725208. https://doi.org/10.1016/j.ijid.2024.107768

Notable Research/Innovation Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
MOH Health Innovation (MHI) Fund	
A cross-sectional survey of suspected dengue patients in	
Singapore to collect and analyse skin odours, and to test a sensor	2024
device, for potential diagnostic use. (Short Title = Dengue	
Biomarker Study for POC diagnosis) - with Arctech	
NCID CATALYST GRANT FY2024	
Examine the longevity of immunity against Dengue viruses in	2024
Singapore	
TRipartite Programme in Infectious Diseases Research for New	
Discoveries and TreatmENT (TRIDENT)	
	2024
Unraveling Early Immune Dynamics in Dengue Infection An Index	
Driven Cluster Cohort Study	

Translating Research/Innovation Into Healthcare

2024:

- Dengue cases on the up in Singapore; patients say the illness can be dreadful. Published on 11 Apr 2024.
 - https://www.straitstimes.com/singapore/health/dengue-cases-on-the-up-in-singapore-patients-say-the-illness-can-be-dreadful
- Commentary: What will it take to eliminate dengue deaths in Singapore? Published on 30 Sep 2024.
 - https://www.channelnewsasia.com/commentary/singapore-dengue-cases-deaths-outbreaks-why-difficult-eliminate-4639026

2023:

- The Straits Times: Heart-failure kit to be adapted to identify severe dengue cases. Published on 27 Dec 2023.
 - https://www.straitstimes.com/singapore/heart-failure-kit-to-be-adapted-to-identify-severe-dengue-cases.
- CNA explains: Why is Singapore at risk of a surge in dengue cases? Published on 08 Sep 2023. https://www.channelnewsasia.com/singapore/dengue-clusters-surge-aedes-mosquito-toa-payoh-3753571