

Chia Po Ying



Head of NCID Research Office
Consultant, Department of Infectious Diseases, TTSH and NCID

Research Interests:

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

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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 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](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](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 \(oup.com\)](https://academic.oup.com/cid/advance-article-abstract/doi/10.1093/cid/ciad637/7611111)
- 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>

Notable Research Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
NMRC Research Training Fellowship (RTF) The Role of the Endothelial Glycocalyx, Mast cells and Vascular Nitric Oxide in the Pathogenesis of Dengue	2018
NHG-LKCMedicine Clinician Scientist Fellowship (CSF)	2018
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 device, for potential diagnostic use. (Short Title = Dengue Biomarker Study for POC diagnosis) - with Arctech	2024
NCID CATALYST GRANT FY2024 Examine the longevity of immunity against Dengue viruses in Singapore	2024
TRipartite Programme in Infectious Diseases Research for New Discoveries and Treatment (TRIDENT) Unraveling Early Immune Dynamics in Dengue Infection An Index Driven Cluster Cohort Study	2024

Translating Research 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:

- CAN 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>