

## David Lye Chien Boon



Director, Infectious Disease Research and Training Office, NCID  
Senior Consultant, Department of Infectious Diseases, TTSH and NCID  
Associate Professor, Yong Loo Lin School of Medicine, NUS and Lee Kong  
Chian School of Medicine, NTU

### Research Interests:

- Antimicrobial Resistance
- General and Nosocomial Infections
- Bone and Joint Infections
- HIV Medicine
- Tropical Infectious Diseases

Email: [David\\_Lye@ncid.sg](mailto:David_Lye@ncid.sg) ;  
[David\\_Lye@ttsh.com.sg](mailto:David_Lye@ttsh.com.sg)

## Biography

Associate Professor David Lye (MBBS, FRACP, FAMS, FRCP) graduated in medicine on the Dean's list from the University of Melbourne in 1996 and completed speciality training in infectious diseases in Australia in 2004. He returned to Singapore in 2005 to work at the Department of Infectious Diseases, Tan Tock Seng Hospital, where he is currently serving as a senior consultant.

He is an associate professor at Yong Loo Lin School of Medicine, National University of Singapore as well as Lee Kong Chian School of Medicine, Nanyang Technological University. At the National Centre for Infectious Diseases, A/Prof Lye is Director of the Infectious Disease Research and Training Office and leads the Singapore Infectious Disease Clinical Research Network as well as the Training and Education Office.

## Selected Publications

- Tan CW, Chia WN, Chen MIC, Hu Z, Young BE, Tan YJ, Yi Y, Lye DC, Anderson DE, Wang LF. A SARS-CoV-2 surrogate virus neutralization test (sVNT) based on antibody-mediated blockage of ACE2-spike (RBD) protein-protein interaction. *Nat Biotechnol.* 2020; 38(9):1073-1078. doi: 10.1038/s41587-020-0631-z. PMID: 32704169. <https://www.researchsquare.com/article/rs-24574/v1>.
- Young BE... Lye DC, Ng LFP. Effects of a major deletion in the SARS-CoV-2 genome on the severity of infection and the inflammatory response: an observational cohort study. *Lancet.* 2020; 396(10251):603-611. doi: 10.1016/S0140-6736(20)31757-8. PMID: 32822564. <https://pubmed.ncbi.nlm.nih.gov/32822564/>.
- Young BE, Ong SWX, Kalimuddin, Low JG, Tan SY...\_Lye DCB, Singapore 2019 Novel Coronavirus Outbreak Research Team. Epidemiologic Features and Clinical Course of Patients Infected with SARS-CoV-2 in Singapore. *JAMA.* 2020; 323(15):1488-1494. doi: 10.1001/jama.2020.3204. PMID: 32125362. <https://pubmed.ncbi.nlm.nih.gov/32125362>.
- Pung R, Chiew CJ...Lye DC, Lee VJM, Singapore 2019 Novel Coronavirus Outbreak Research Team. Investigation of Three Clusters of COVID-19 in Singapore: Implications for Surveillance and Response Measures. *Lancet.* 2020;

395(10229):1039-1046. doi: 10.1016/S0140-6736(20)30528-6. PMID: 32192580.  
<https://pubmed.ncbi.nlm.nih.gov/32192580/>.

- Tong SYC, Lye DC et al. Effect of Vancomycin or Daptomycin with vs without an Antistaphylococcal  $\beta$ -Lactam on Mortality, Bacteremia, Relapse, or Treatment Failure in Patients with MRSA Bacteremia: A Randomized Clinical Trial. *JAMA*. 2020; 323(6):527–537. doi: 10.1001/jama.2020.0103. PMID: 32044943.  
<https://www.ncbi.nlm.nih.gov/pubmed/32044943>.

## Notable Research Awards & Grants From Past 5 Years

Name of Awards & Grants	Year Obtained
NMRC Clinical Trial Grant Investigator-Initiated Trials - Late Phase Scheme for “Combination antibiotics for methicillin-resistant <i>Staphylococcus aureus</i> infections (CAMERA2)”	2015
BMRC-EDB IAF Collaborative research programme for “Extensively drug resistant Enterobacteriaceae (XDR-E)”	2016
Singapore ID Clinical Research Network (SCRN) and Healthcare-associated infection Point Prevalence Survey (HAI-PPS)	2017
NHG Bridging Centre Grant	2020
National Medical Research Council (NMRC) COVID-19 Research Fund for “A Multicenter, Adaptive, Randomized Blinded Controlled Trial of the Safety and Efficacy of Investigational Therapeutics for the Treatment of COVID-19 in Hospitalized Adults”	2020

## Translating Research Into Healthcare

- Potential COVID-19 treatment: Singapore participating in global trial of remdesivir drug. *Channel News Asia*. Published 8 April 2020.  
[https://www.youtube.com/watch?v=0vl\\_eMXMQho](https://www.youtube.com/watch?v=0vl_eMXMQho)
- Singapore in talks with remdesivir maker on registering its use for COVID-19 patients. *Channel News Asia*. Published 16 May 2020.  
<https://www.mewatch.sg/en/series/cna-2020/ep714/953787>
- Patients in Singapore with severe Covid-19 enrolled in drug trials. *The Straits Times*. Published 18 May 2020.  
<https://www.straitstimes.com/singapore/health/patients-in-spore-with-severe-covid-19-enrolled-in-drug-trials>
- Singapore's search for a cure and vaccine for Covid-19. *The Straits Times*. Published 23 May 2020.  
<https://www.straitstimes.com/singapore/health/finding-a-cure-and-vaccine-for-covid-19>
- Ebola drug remdesivir conditionally approved for COVID-19 treatment in Singapore. *Channel News Asia*. Published 10 June 2020.  
<https://www.channelnewsasia.com/news/singapore/covid-19-singapore-treatment-remdesivir-coronavirus-approve-12822854>