

WHO GDG Clinical practice guideline on corticosteroids for COVID-19

Bios 7 July 2020





Dr Thomas Agoritsas is a hospital-based internist and health research methodologist, working as Senior Physician, Division of General Internal Medicine, University Hospitals of Geneva, He is also Assistant Professor of Medicine at the University of Geneva, and part-time Assistant Professor at McMaster University, Canada. He has been intensively engaged in frontline clinical work in the COVID-19 outbreak in Switzerland, and chairs a taskforce of evidence appraisal and clinical guidance for COVID-19 at the University Hospitals of Geneva. His academic activities focus on evidence synthesis, appraisal, guideline methodology, dissemination, access and use at the point of care, to enhance evidence-based practice and shared decision-making. He is Chief Medical Officer of the MAGIC Evidence Ecosystem Foundation – a non-profit organization developing digitally structured guidelines, evidence summaries and decision aids to clinicians and patients (magigproject.org). He co-steers the BMJ Rapid Recommendations, an international collaboration with the British Medical Journal to accelerate evidence into practice through trustworthy recommendations. He is an active member of the GRADE Working Group (Grading of Recommendations Assessment, Development and Evaluation), and the Living Evidence Network Steering Group, which coordinates the efforts of over 200 members, including Cochrane and non-Cochrane researchers, policy-makers and guideline developers.



Dr John Adabie Appiah is Senior Specialist Paediatric Critical Care, and Head of the Paediatric Intensive Care Unit of the Komfo Anokye Teaching Hospital, Ghana. He is Adjunct Lecturer at the Department of Child Health of the Kwame Nkrumah University of Science and Technology and the current President of the Paediatric Society of Ghana. He cares for the critically ill and seriously injured and children with lifethreatening conditions. His special interests are in sepsis and quality improvement in the care of seriously ill children, resuscitation, ventilation and management of sepsis in resource-limited countries. He has been instrumental in the introduction and wider utilization of non-invasive ventilation (CPAP) in newborns and infants with respiratory distress in Ghana.



Dr Yaseen Arabi is Chairman, Intensive Care Department, Medical Director Respiratory Services, Professor King Saud Bin Abdulaziz University for Health Sciences, King Abdullah International Medical Research Center, Kingdom of Saudi Arabia. Dr Arabi obtained his internal medicine training at Wayne State University, Detroit, MI, USA, and pulmonary and critical care training at the University of Wisconsin, Madison, WI, USA. He is currently the principal investigator/co-investigator on several multicentre randomized controlled trials. He has received several international awards for his involvement in clinical trials. He has conducted several studies on MERS and is the principal investigator on the MIRACLE Trial, which evaluates lopinavir/ritonavir and interferon beta 1b in MERS.



Professor Lucille Blumberg is Deputy Director at the National Institute for Communicable Diseases (NICD), of the National Health Laboratory Service, and founding Head of the Division of Public Health Surveillance and Response, South Africa. She is currently Medical Consultant to the Division for Outbreak Preparedness and Response (including the Travel Medicine Unit) and the Centre for Emerging, Zoonotic and Parasitic Diseases, where her major focus is on malaria, rabies and zoonotic diseases, and travel-related infections. She has worked on a number of outbreaks, including rabies, avian influenza, cholera, typhoid and the Lujo virus. She is a medical graduate of the University of the Witwatersrand, an Associate Professor in the Department of Medical Microbiology at the University of Stellenbosch, and Lecturer in the Faculty of Veterinary Medicine, University of Pretoria. She has specialist qualifications in clinical microbiology, travel medicine and infectious diseases. In 2010, she established the laboratory surveillance programme for the 2010 FIFA World Cup in South Africa and set up the Mass Gatherings Unit at the NICD, which became part of the WHO Mass Gatherings global network. She has been an advisor on the prevention, detection and response to communicable disease risks to a number of African countries hosting large international sporting events. She is a member of the South African expert advisory groups on rabies and malaria; and of the advisory groups to the WHO on yellow fever risks in travellers (Chairperson); the R&D Blueprint for research in diagnostics, vaccines and therapeutics for epidemic-prone (mainly zoonotic) diseases; and the 2018 WHO rabies guidelines for prevention of rabies in humans.



Dr Carolyn S Calfee is Professor of Medicine and Anesthesia at the University of California San Francisco (UCSF), where she attends in the intensive care units. Her primary academic focus is the pathogenesis and treatment of acute respiratory distress syndrome (ARDS). Current research projects include: molecular subphenotypes of ARDS and precision medicine in critical care; the role of environmental exposures, including smoking, air pollution and novel tobacco products, in susceptibility to lung injury; and novel treatments for ARDS. During the COVID-19 pandemic, she has been the UCSF clinical lead and steering committee member for the NIAID-funded Immunophenotyping Assessment in a COVID-19 Cohort (IMPACC) study and is one of the lead PIs for the I-SPY COVID Trial, a Phase-2 platform clinical trial of novel treatments for COVID-19 associated ARDS.



Dr Bin Cao is Vice-President of the China-Japan Friendship Hospital; Director of the Department of Pulmonary and Critical Care Medicine, China-Japan Friendship Hospital; Vice-President of the Institute of Respiratory Medicine, Chinese Academy of Medical Sciences; Professor of Capital Medical University; and Professor of Tsinghua University-Peking University Joint Center for Life Sciences. He is the President-elect of the Chinese Thoracic Society; Deputy Director of the Respiratory and Infectious Disease branch of the Chinese Society of Respiratory Disease; Associate Editor of the Clinical Respiratory Journal; and committee member on the Antiviral Group of the International Society of Influenza and other Respiratory Virus Diseases. He received the Distinguished Respiratory Academic Contribution Award in 2018, the National Award for Science and Technology Progress (Grand Prize) in 2017, the Yangtze River Distinguished Professor of the Ministry of Education in 2015 and the Wu JiePing-Paul Janssen Medical-Pharmaceutical Award in 2014. His research fields include epidemiology, clinical characteristics and treatment of viral pneumonia; molecular and cellular basis of the pathogenesis of influenza and COVID-19; diagnosis, treatment strategies and drug resistance. He has published 124 original peer-reviewed articles and reviews in the *Lancet* and the *NEJM*, among others. Dr Cao has been intensively engaged in frontline clinical work in Wuhan since the COVID-19 outbreak and in drafting the first and second editions of the COVID-19 diagnosis and treatment guideline of China. He reported clinical characteristics of COVID-19 (Huang C et al. Lancet, 2020. PMID: 31986264) and risk factors for severe disease (Zhou F et al. Lancet, 2020. PMID: 32171076). He is also leading antiviral clinical trials in China, including for remdesivir (Yeming W et al. Lancet, 2020) and lopinacirritonavir (Cao B et al. NEJM, 2020. PMID: 32187464).



Professor Maurizio Cecconi is an anaesthesiologist and intensive care specialist and Chair of the Department of Anesthesia and Intensive Care Units at Humanitas Research Hospital, Milan, Italy. He is Professor of Anesthesia and Intensive Care and Vice-President of the MEDTEC School at Humanitas University, Milan. Previous to his current appointments, he worked for 14 years as an NHS Consultant at St George's Hospital, London, UK. His research focus is on improving outcomes in perioperative care, as well data science and the physiology of shock, acute respiratory failure and sepsis. He is the President-elect of the European Society of Intensive Care Medicine and part of the Executive Committee of the Surviving Sepsis Campaign.



Professor Graham Cooke is NIHR Research Professor of Infectious Diseases at Imperial College London. Although currently focused on COVID-19, his main work concentrates on precision medicine for management of infectious diseases, particularly for viral hepatitis and acute infection. From 2011–2019, he led the clinical workstream for the Medical Research Council (MRC) Stratified Medicine Consortium (STOPHCV). He was chief investigator on the STOPHCV-1 trial and currently has clinical studies running in the UK and Viet Nam, in collaboration with the MRC Clinical Trials Unit. He is active in promoting access to medicine and is Chair of the WHO Committee on the Selection and Use of Essential Medicines, responsible for updating and maintaining the WHO Essential Medicines List (EML). He led the Commission on Accelerating the Elimination of Viral Hepatitis and, in 2019, was appointed to the Expert Groups in HIV and hepatitis (the latter as convenor) for the Infected Blood Inquiry.



Dr Jake Dunning is Head of Emerging Infections and Zoonoses at Public Health England (PHE). His clinical infectious diseases practice is at the Royal Free Hospital, London. His clinical and laboratory research interests include influenza, respiratory and enteric viral diseases, emerging and zoonotic infections, and contact and airborne high-consequence infectious diseases, including Ebola virus disease, avian influenza, MERS and monkeypox. He conducts research on the clinical characterization and mechanisms of disease, as well as clinical trials of experimental treatments, at PHE and the University of Oxford, Imperial College London and University College London. Since January 2020, he has been part of PHE's National Incident Management Team for COVID-19 and contributes to national and international guidance. He is an active researcher within the International Severe Acute Respiratory and Emerging Infection Consortium.



Dr Heike Geduld is Associate Professor and Head of the Division of Emergency Medicine at Stellenbosch University in Cape Town, South Africa. She is President of the College of Emergency Medicine of South Africa and Immediate Past President of the African Federation for Emergency Medicine.



Dr Rumina Hasan is Consultant Clinical Microbiologist and Professor in the Department of Pathology and Laboratory Medicine at the Aga Khan University, Karachi, Pakistan, and Honorary Professor in the Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, UK. Her areas of interest include tuberculosis and antimicrobial resistance. She has served as Vice-Chair of the Global Laboratory Initiative (2012–2014) and member of the New Diagnostic Working Group (2011–2014). She is currently the Chairperson of the WHO Eastern Mediterranean Regional Green Light Committee. She also serves on the WHO Strategic Technical Advisory Group on Antimicrobial Resistance.



Dr Manai Hela is an emergency doctor at the Emergency Medical Service Tunis, Tunisia, with a number of years of solid practice experience. Since 2016, she has co-led the simulation unit within the Emergency Medical Service Tunis and teaches medical students and residents at the Faculty of Medicine, Tunis. She has been involved in several research projects and international workshops in the field of emergency medicine.



Professor David S Hui is Chairman of the Department of Medicine and Therapeutics and Stanley Ho Professor of Respiratory Medicine and Director of the Stanley Ho Centre for Emerging Infectious Diseases, Chinese University of Hong Kong, Hong Kong SAR, China. Since 2004, he has frequently served as an advisor to WHO on the clinical management of emerging severe acute respiratory infections.



Seema Kanda, Patient Partner, Niagara Region of Ontario, Canada, completed a dental assisting programme at Niagara College, Ontario, and her BA at McMaster University. Her vocation to care, combined with her father's serious heart condition, made Seema realize the importance of patient understanding and participation in the medical decision-making process. She was one of the first in her workplace to contract COVID-19, which triggered rapid changes to work practices. Seema and her immediate family all suffered to various degrees with COVID-19. Her brother required mechanical ventilation for 6 weeks and was one of a few, locally, to survive. He continues to recover at home, receiving various therapies. Seema is now using her personal experience of COVID-19 to become an active patient partner in the decision-making process regarding treatment options. Seema believes through sharing patient experiences and making constructive suggestions patient care protocols can be improved and is taking the opportunity to contribute as a voice for COVID-19 patients.



Dr Leticia Kawano-Dourado is a respiratory medicine physician and clinical researcher at the Research Institute, Hospital do Coração (HCor), São Paulo, Brazil. She is also an associate researcher of the Pulmonary Division (LIM09) at the University of São Paulo. Her research focuses on non-invasive support for acute respiratory failure, interstitial lung diseases and, more recently, COVID-19. She is a member of the COALITION COVID-19 Brazil, a collaborative research partnership among large hospitals in Brazil, supported by the Ministry of Health, created to accelerate the field of COVID-19 research. The COALITION COVID-19 Brazil is conducting several randomized controlled trials on COVID-19 repurposing: hydroxychloroquine and azithromycin (NCT04322123); dexamethasone (NCT04327401); anticoagulation (NCT04394377); tocilizumab (NCT04403685) and also investigating the long-term consequences of COVID-19 on quality of life, functionality and depression/anxiety (NCT04376658).



Professor Yae-Jean Kim is a paediatric infectious diseases specialist and Professor of the Department of Pediatrics, Sungkyunkwan University School of Medicine, Samsung Medical Center, Seoul, Republic of Korea. She is a board member of the Korean Society of Infectious Diseases, the Korean Society of Pediatric Infectious Diseases, and the Asia Pacific Society for Immunodeficiencies. She is also the co-lead for the Asian Network for Surveillance of Resistant Pathogens (ANSORP) Pediatric Group. Her area of special interest is respiratory viral infection and infection in high-risk patients. She is the co-author of a chapter on coronaviruses in Feigin and Cherry's *Textbook of Pediatric Infectious Diseases* (8th edition, 2018). Since 2015, having experienced the MERS outbreak in the Republic of Korea, she has been a frequent advisor on coronavirus infection to WHO and international societies.



Professor Niranjan Kissoon, BC Children's Hospital and UBC Global Child Health, Department of Paediatrics and Emergency Medicine, University of British Columbia (UBC), Vancouver, Canada, is Past President of the World Federation of Pediatric Intensive and Critical Care Societies; and Professor, Pediatric and Surgery at UBC. He is Vice-Chair of the Global Alliance for Sepsis, Co-Chair World Sepsis Day, and Vice-Chair of the International Pediatric Sepsis Initiative and the Pediatric Surviving Sepsis Campaign Guideline Committee.



Dr Arthur Kwizera is Senior Lecturer in Anaesthesia and Intensive Care at Makerere University College of Health Sciences and a staff intensivist at the Mulago National Referral Hospital ICU, Uganda. After completing his specialist anaesthesia and intensive care training in Uganda, he received further training from the University of British Columbia in Canada and an interventional pulmonology fellowship in Venice, Italy. He is part of international collaborations looking at acute care in resourcelimited settings with particular emphasis on respiratory failure sepsis management and anaesthesia/intensive care education. He is a member of the Surviving Sepsis Campaign Guidelines Taskforce. His research work is centred on epidemiology, pathophysiology and management of acute organ dysfunction and corresponding life support interventions in lowresource settings. He is a Cambridge THRiVE PhD fellow with a focus on acute lung disease, especially acute respiratory failure and acute respiratory distress syndrome, and on novel, low-cost strategies to manage acute respiratory failure in the low-resource African acute care settings.



Dr Jon Henrik Laake is a specialist in cardiothoracic anaesthesiology and intensive care medicine and Senior Consultant at the Division of Critical Care and Emergencies, Rikshospitalet Medical Centre, Oslo University Hospital, Oslo, Norway. He is Deputy Chair of the Norwegian Society of Anaesthesiology and Chair of the Acute Respiratory Failure Taskforce of the Scandinavian Society of Anaesthesiology and Intensive Care Medicine. He has held several positions in Scandinavian and European anaesthesia and intensive care societies. He has led or participated in several guideline panels, including Scandinavian guidelines for the management of acute respiratory distress sydrome. His research focus is acute respiratory failure and sepsis, and general critical care medicine.



Dr Francois Lamontagne is a critical care specialist – clinician-scientist at the Université de Sherbrooke, Canada, where he founded the Unité de recherche clinique et épidémiologique (URCE), a methods centre in support of investigator-initiated clinical research conducted at the Centre de recherche du CHUS. Dr Lamontagne has received peer-reviewed funds from the Canadian Institutes of Health Research and the Fonds de Recherche du Québec – Santé (FRQS). He specializes in clinical trials of resuscitation interventions such as the 65 Trial (minimization of vasopressor use - PMID 32049269) and the ongoing LOVIT Trial (intravenous vitamin C - PMID 31915072; NCT03680274). Having contributed clinically and academically to the response to Ebola outbreaks in West Africa and the Democratic Republic of Congo, he developed an expertise in global health and outbreak preparedness research, which he applies to the current COVID-19 pandemic (PMID 32215641). He is a member of the International Steering Committee of the REMAP-CAP Trial, a large adaptive platform trial designed to study emerging pandemics, co-Scientific Director of the CIHR-funded Canadian Sepsis Network, and co-Director of the Réseau québécois COVID-19 et pandémies, recently funded by the FRQS.



Professor Leo Yee Sin is the Executive Director of the National Centre for Infectious Diseases, Singapore. As an adult infectious disease specialist, Professor Leo has led her team through multiple outbreaks in Singapore. These include Nipah in 1999, SARS in 2003, the pandemic influenza in 2009, Zika in 2016 and multiple surges of dengue. She successfully managed Singapore's first imported case of the Monkeypox in May 2019. Her current priority is now in the fight against COVID-19. Professor Leo has published more than 200 scientific papers. Her experience and expertise in outbreak management is frequently called upon as advisor and conference speaker at national, regional and international level. Apart from her clinical and administrative duties, she is also heavily involved in research and teaching. Her research interests include dengue, influenza, emerging infections, HIV and COVID-19. She has won many awards among which is the most prestigious Public Service Star, in recognition of her outstanding battle against SARS. Other awards include the Excellence Star Award 2005, Red Ribbon Award 2014 and National Healthcare Group Distinguished Senior Clinician Award 2016.



Dr Flavia Machado is Head of the Intensive Care Section of Anesthesiology, Pain and Intensive Care Department at the Federal University of São Paulo, Brazil. Dr Machado is the CEO of the Latin America Sepsis Institute (LASI), an organization devoted to the quality improvement process, multicentre studies in the field of sepsis, and awareness campaigns. She is a member of the Executive Board of the Global Sepsis Alliance. She has contributed to the 2012 and 2016 Surviving Sepsis Campaign International Guidelines, and is now Head of the Hemodynamic Group on the 2020 Board. She is a member of the Executive Committee and Chair of the Scientific Committee of the Brazilian Research in Intensive Care Network (BRICNET). She is founder member of the Latin America Intensive Care Network (LIVEN) and of the International Sepsis Forum (ISF) Council since 2014.



Dr Nida Qadir is an Assistant Professor of Medicine in the Division of Pulmonary and Critical Care Medicine at the David Geffen School of Medicine, UCLA, USA. As the co-director of the division's Disaster and Pandemic Response Team, she spearheaded the creation of clinical guidelines for the management of COVID-19 patients at UCLA Health, and led the development of the institution's critical care surge plan. Her professional interests include critical care outcomes-based research, ICU recovery, and simulation in medical education. Her current research focuses on acute respiratory distress syndrome, shock and post-intensive care syndrome. She serves on the critical care editorial board for *CHEST*, the journal of the American College of Chest Physicians, and has served as faculty for numerous regional and international critical care simulation courses.



Professor Rohit Sarin is Principal Consultant of the National Institute of Tuberculosis and Respiratory Diseases, and Technical Advisor for the National Tuberculosis Elimination Program, for the Government of India. He is a fellow of the National College of Chest Physicians; executive member of the Tuberculosis Association of India; and member of the Delhi Tuberculosis Association, Association of Bronchology, and Indian Medical Association. Widely published at national and international level, he has received several awards, including, the national Dr PV Benjamin Memorial Oration Award given by the TB Association of Telangana, Hyderabad, 2019; the international Karel Styblo Public Health Prize, 2017; and the Dr PK Sen Gold Medal – the highest award given by the TB Association of India, 2012.



Dr Yinzhong Shen is Chief Physician, Associate Professor of Shanghai Public Health Clinical Center, Fudan University, and a member of the Standing Committee for Tropical and Parasitic Diseases branch of the Chinese Medical Association. With experience of working at WHO headquarters in 2014 and 2016, he was invited by the WHO Western Pacific Region to share China's experience of COVID-19 clinical management with Pacific Island countries. His work focuses on clinical management and research in the field of infectious diseases.



