The COVID-19 pandemic numbers continue to grow, dominating and damaging the world’s economy and public health. There is immense public, governmental, commercial, and scientific pressure to find rapid solutions. Research has become politicised, and standards have fallen in the rush to publish. Over 20,000 scientific publications on COVID-19 have appeared in the first half of 2020. The intense media attention and the profusion of confusing and sometimes contradictory advice by scientists, international organisations, and governments have diminished public trust.

Exaggerated claims, and recent high-profile retractions in leading medical journals, have threatened the standing of science as a guide to responsible public health. Multilateral organizations, health ministries, regulatory agencies, health facilities, and clinicians have, in some cases, reacted precipitously, basing new treatment guidance on limited or poor-quality evidence, and limiting the import or export of health commodities, with consequences for patients and research. Black market drug sales, high prices or stock-outs on drugs needed for non-COVID-19 indications, and the use of veterinary formulations by people seeking to treat or prevent COVID-19 have had a negative impact on people around the world. In some countries, regulatory agencies have halted ongoing research, and governments have introduced barriers that are impeding context-specific and essential clinical, public health, and social science research. A climate of uncertainty has negatively affected trial recruitment and research collaborations.

More than ever, we need high quality scientific research to provide the evidence to answer pressing questions on how best to prevent the spread of COVID-19 and save lives.

We call on researchers to acknowledge the strengths and weaknesses of their research findings, and to maintain measured responses when communicating with the media despite the pressure to deliver definitive or newsworthy statements.

We call on scientific journals to balance the pressure to publish results rapidly with strong quality controls on peer review processes and publication criteria, including a commitment to the principle of data sharing as a publication requirement.

We call on governments and regulatory and normative public health agencies to avoid hasty policy reactions to newly presented scientific work for which the evidence or review has been limited, to ensure careful review and critical evaluation of the data, and to avoid U-turn policy changes that damage public confidence and may inadvertently endanger public health.

We call on the funders of COVID-19 biomedical research to require open access publication of all funded research and to encourage commitments to responsible data sharing.

We call on editors and those responding to the media to engage with journalists who have the capacity and intention to critically evaluate biomedical research evidence, and to avoid speculation and exaggeration, thereby supporting measured, balanced, trustworthy science reporting.