

## Society responds to new roadmap for identifying COVID-19 treatments

<u>A new review</u>, publishing in the *British Journal of Pharmacology*, from a team of researchers representing the International Union of Basic and Clinical Pharmacology (IUPHAR), identifies opportunities for drug discovery in the treatment of COVID-19.

Professor Clive Page, President-Elect of the British Pharmacological Society, said: "An important part of the current therapeutic strategy to identify a safe and effective treatment for COVID-19 infection (caused by the novel SARS-CoV-2 virus) is to test whether existing anti-viral drugs can be repurposed for use in the treatment of this disease".

"In their important paper, the team representing IUPHAR (International Union of Basic and Clinical Pharmacology) rightly point to two key targets - proteins on the surface of our cells, to which SARS-CoV-2 binds allowing it entry – ACE2 and TMPRSS2 as potential targets to reduce infection". They provide evidence that a number of existing drugs, either those that have regulatory approval, or that are in clinical trials for other indications, interact with these targets. Such drugs, and those which help regulate the immune response and subsequent complications arising from infection with SARS-CoV-2, may be able to be 'repurposed' for the treatment of COVID-19. We already have some safety information with many of these drugs, so it should take less time to get these to patients if they are shown to work. Though of course, using pharmacological principles to establish a safe and effective dose for COVID-19 will be critical. To this end it is encouraging that there are a number of networks (e.g. <u>ACCORD</u>, <u>NIHR</u> and the new government Therapeutics Taskforce) now established to identify and evaluate drugs that may be of value in treating patients with COVID-19 with some of these drugs now entering clinical evaluation in this disease

"The paper goes further, identifying novel potential targets that are unique to this virus. Starting with repurposed medicines is clearly the right thing to do, but the authors also rightly point to investment in drug discovery as part of their 'multi-pronged' approach. In addition to looking for a drug 'now', investing in a coordinated approach to drug discovery could help future-proof against later waves of the virus - and set a global drug discovery response in motion for dealing with potential drug resistance and future pandemics."



