The malaria drug hydroxychloroquine is showing enormous promise in the treatment of COVID-19.

That's why The Palmer Foundation is making resources available to fund clinical trials, scale up the availability of hydroxychloroquine as soon as we can, and have enough of the drug available for all Australians, free of

## **COVID-19 Response and Action**

\* What is hydroxychloroquine?

Hydroxychloroquine is a drug that was originally developed to treat malaria. It was synthesized in 1946, approved for use in Australia for over 40 years and approved by the FDA in 1955. It is commonly used to treat lupus, rheumatoid arthritis and malaria. It is on the World Health Organisation's List of Essential Medicines.



South Korean government guidelines recommended Kaletra, an anti-retroviral HIV medication, chloroquine or hydroxychloroquine, could be used as an alternative.



rench scientists propose 'Chloroquine for the 2019 novel coronavirus SARS-CoV-2' in the International Journal of Antimicrobial Agents

The journal Clinical Infectious Diseases published an initial Chinese study report with the conclusion that 'hydroxychloroquine was found to be more potent than chloroquine to inhibit SARS-CoV-2 in vitro'



Corea Center for Disease Control and Prevention recommend the use of nydroxychloroquine in combination with an anti-HIV medication, and urged medical staff to use their best judgment when treating patients.

WHO declares pandemic status in response to COVID-19.



The UK Department of Health and Social Care added hydroxychloroquine to the list of medicines that cannot be parallel exported, in order to ensure the continuity of supply to patients in the UK.

Professor David Paterson, Director, UQ Centre for Clinical Research puts out a call to action to secure \$750,000 funding for The RBWH Foundation clinical drug trials via their Coronavirus Action Fund.



17 Mar

he Palmer Foundation donates \$1 million to the RBWH Foundation Coronavirus Action Fund.

French research team Gautret et al publish 'Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label non-randomised clinical trial in International Journal of Antimicrobial Agents. They reported significant clinical improvement & potential effectiveness in the early impairment of contagiousness.



| 23 Mar

**28 Mar** 

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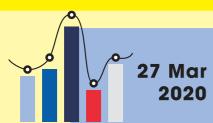
A Chinese study concluded: Despite our small number of cases, the potential of HCQ in the treatment of COVID-19 has been partially confirmed. Considering that here is no better option at present, it is a promising practice to apply HCQ to COVID-19 under reasonable management. However, large-scale clinical and basic research is still needed to clarify its specific mechanism and to continuously optimize the treatment plan.

Shortages of hydroxychloroquine are reported in the US, UK, Thailand and France. India bans the export of the drug to safeguard the health of its health workers, who take the drug as a preventative measure.



ordan's FDA authorises COVID-19 treatment with hydroxychloroquine as part of a treatment protocol under doctors' supervision.

The Palmer Foundation commits to fund the purchase of one million courses of hydroxychloroquine (30 million doses and supply free for Australians).



Sermo, a leading healthcare data collection company launched its COVID-19 Real ime Barometer to measure physician insights and experiences with COVID-19 reatment across the globe. In 3 days, over 6200 physicians were surveyed across 30 countries. Hydroxychloroquine was overall chosen as the most effective therapy amongst COVID-19 treaters from a list of 15 options.

The FDA in the U.S. issued an emergency use authorisation (EUA) for the use of hydroxychloroquine in the treatment of COVID-19.



National Community Pharmacists Association in the U.S. support the dispensation of hydroxychloroquine for COVID-19 patients under medical care.

Australia's Minister for Health, Greg Hunt announced hydroxychloroquine made available if doctors wish to use them with COVID-19 patients who are in hospital.





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The American Thoracic Society backs the use of hydroxychloroquine for the treatment of COVID-19 patients.

7 Apr

Providing a treatment of hydroxychloroquine sulfate, zinc and azithromycin early in the disease, Dr. Vladimir Zelenko has treated over 900 COVID-19 patients with a 99.99% success rate. His approach is to treat patients early so that they don't have to be put on ventilators.

8 Apr 2020

12 Apr

16 Apr

2020

2020

Sermo's second wave of global data collection from its COVID-19 Real Time Barometer reveals Hydroxychloroquine to be in the top two frontline treatments and its usage increased by a global average of 11% week over week. Reported usage in New York nearly doubled.

A clinical trial to evaluate the safety and effectiveness of hydroxychloroquine for the treatment of adults hospitalized with COVID-19 has begun, with the first participants now enrolled in Tennessee, USA.

12 French doctors file a petition calling on French Prime Minister and Minister of Health

Turkey has made significant progress in treating coronavirus patients in the

early stages of the disease with hydroxychloroquine, Turkish officials have said

to urgently make hydroxychloroquine available in all French hospital pharmacies.



Israeli Prime Minister Benjamin Netanyahu thanked India's Prime Minister Narendra Modi for rushing a five-tonne cargo of medicines, including nydroxychloroquine, to Israel.



Sen. Ron Johnson, Wisconsin representative, sent U.S. President Trump a letter from more than 750 physicians urging him to expand the use of hydroxychloroquine for coronavirus outpatients by removing federal and state restrictions limiting the drug's use to hospitals.

The United Arab Emirates has been using chloroquine and hydroxychloroquine to successfully treat COVID-19 patients amid the coronavirus outbreak, announced at their health ministry press conference.

South Dakota, USA, announces a state-wide clinical trial to treat COVID-19 patients

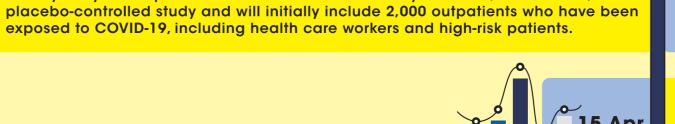
with hydroxychloroguine. Sanford Health will run the systemwide, randomized,

on exports of the anti-malarial drug.

Professor Raoult, France, unveils a follow-up study of 1061 people, estimating a



The Federal Emergency Management Agency (USA), advises they have sent out 19.1 million tablets of hydroxychloroquine from the Strategic National Stockpile; the malaria drug that some doctors have prescribed to Covid-19 patients.



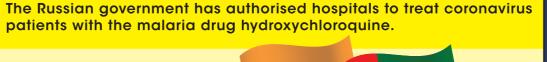
Sermo's third weekly wave of global data collection from its COVID-19 Real Time



Barometer reveals of over 4000 physicians surveyed globally, 50% had prescribed hydroxychloroquine for COVID-19 patients, and Italy and France had the highest increase in COVID treaters having prescribed hydroxychloroquine wave over wave; an increase from 50% to 83% for Italy and an increase from 20% to 50% for France.



A multi-site clinical trial, led by the University of Washington Department of Global Health/International Clinical Research Center (ICRC) collaborating with NYUGrossman School of Medicine, aims to definitively determine whether hydroxychloroquine can prevent transmission in people exposed to the virus





India sends shipment of 5.5 million pills of hydroxychloroquine to the UAE

The Palmer Foundation has acquired 32.9 million doses of hydroxychloroquine for treating Australians, free of charge.

Part of this is a significant quantity of the active pharmaceutical ingredient, which will enable the manufacture of the tablets right here in Australia.

