

*Statement of George Fareed, M.D. for Senate Hearing, November 19, 2020*

*I have a background in virology from a research standpoint from work at the NIAID (NIH) and as a Professor performing research at Harvard Medical School (after I graduated from Harvard Medical School in 1970 I became a professor there) and at UCLA School of Medicine. I have had **30 Years of Clinical experience**, treating HIV and other infectious diseases as well as practicing primary care medicine.*

- I have experience treating **COVID patients both in the flu stage as outpatients**, but also as hospitalized inpatients, even in the ICU*
- Like everything else in medicine, the goal is to treat early-- COVID patients are **difficult to treat when they get very sick***
- The Imperial Valley where I work became the COVID epicenter for California in June and July.*

*Since early March both in my Brawley clinic and Dr. Brian Tyson's The All Valley Urgent Care Clinic in El Centro (where I also work), over 25,000 fearful people were screened, over two thousand four hundred were COVID-19 positive and we treated successfully many hundreds of the high risk and symptomatic ones.*

*· We have always used a **triple HCQ cocktail**: HCQ (3200 mg over 5 days), azithromycin or doxycycline and **especially zinc**, which is often left out in the studies. The cocktail is best given early **within the first 5 to 7 days** while the patient is in the flu stage ( I have had success treating even as late as 14 days when patients have been sent home untreated from the ER). The timing of the drug is when the virus is in the **period of maximal replication in the upper respiratory tract** My goal is to prevent hospitalization which was achieved by reevaluating high risk patients every 2-3 days. I blend in corticosteroids and prolong the HCQ treatment for 5 to 30 more days if symptoms warrant but they generally do not. I use it especially in **high risk individuals** (over 60 or with co-morbidities and anyone with moderate to severe flu symptoms)---the healthy do not need the treatment.*

*I used this regimen to successfully treat 31 elderly nursing home residents in an outbreak in June and 29 recovered fully.*

- *The drug works mechanistically through multiple actions: the **ionophore HCQ (the "gun") and zinc ("the bullet")**, HCQ blocks the sigma 1 receptor and has several other direct antiviral effects---the antibiotic also has anti-viral effect and potentiates the action of the HCQ and zinc. As additional anti-covid agents become available they can be added to this regimen to enhance its efficacy. I am routinely now combining Ivermectin in a **quadruple HCQ/IVM cocktail** with excellent results since Ivermectin is safe and has a different anti-covid action. Monoclonal antibodies from Regeneron and Lilly will be suitable also when readily available.*
- *The results are consistently good, often dramatic, with improvement within 48 hours*
- *I have seen very few hospitalizations, and only a few deaths in patients that were sick to begin with and received the medication late while hospitalized.*
- ***I have not seen a single negative cardiac event and few other side effects, despite what we hear in the media***

***My experience is in-line with all the studies regarding early use of the HCQ cocktail***

***LET ME BE CLEAR: THIS IS ONLY ABOUT THE SCIENCE----THE SCIENCE OF VIRAL REPLICATION, THE SCIENCE OF THE STAGES OF COVID, AND THE SCIENCE WHY EARLY TREATMENT WORKS.***

- *AND THE SCIENCE TELLS US THAT EARLY treatment would be an effective strategy to use on a national level, which motivated me and a few of my colleagues to write a letter to the President, a letter to my congressman, a letter to California health department, an Open Letter to Dr. Fauci, and a National Plan for COVID-19.*

*This is not about an opinion of an "expert"- this is about science and data.*

- *As we describe in the National Plan, this approach would be **the solution to the pandemic**---protect the vulnerable, and if high risk individuals get sick, there is a solution for them with early treatment with the antiviral cocktail.*

*If early treatment was available, people would be much more confident going back to work and sending their kids back to school.*