Submission from Geoffrey Taylor [redacted]

(I am relying on this in Scope: "Specific areas of review may include, but are not limited to". So a little here on therapeutics.

About me

I am a retired professor in work health and safety, and decided to exchange information through Researchgate in a question I posed in March 2020 about use of existing drugs to tackle covid (1). I had already obtained the treatment protocol used in Wuhan early on by [redacted] and passed it to the WA health authorities.

Repurposing medicines

[redacted] (2) had produced a grid of existing drugs and existing antiviral tests of them. [redacted] in NSW Health had produced a list of potential drugs to repurpose for covid including cepharanthine, an over the counter hair restorer in Japan. At that time we had none of the purpose created antivirals for covid which started to appear two years later. The first option I raised was ranitidine bismuth citrate, aimed at influencing cell pH.
I later took part in a six continent online seminar in April 2021 to discuss deployment of ivermectin, after [redacted] 2020 Christmas review of the existing papers on it.

Suggested improvements

So this submission relates to suggested improvements in the deployment of some aspects of Australian science which arise from the experience of the last four years.

I would like to see the Australian Academy of Science play a much larger role in coordinating the scientific therapeutic response to a pandemic, especially in regard to medicines which might nip it in the bud, an essential approach for viruses. Whatever our view on ivermectin, Peru, after [redacted] paper about its successful use in early 2020, went on to have a university make it. For our part we have numerous university organic chemistry departments. (btw [redacted] was apparently the first pulmonologist to use ECMO in Peru). For Australia's part, we did not follow up with trials in Australia after the promising lab work by [redacted] (3). Also the TGA said depriving certain people with conditions other than covid of ivermectin supplies was one reason for heavily restricting its use for covid. Another was possible toxicity, although it had had extensive use in northern Australia and the UK's Chief Scientist in 2020 had allayed fears on that score over a decade ago, while the TGA had itself conducted an extensive favourable safety review not so many years ago. The trial registered in Parkville, Victoria never went ahead. [redacted] here treated 600 patients with ivermectin. We did nothing about cepharanthine despite promising in vivo animal trials in China. In relation to symptomatic treatment, I am not sure that [redacted] work in Pt Edward, South Africa recorded in the Kwazulu Medical Journal and explained online was ever taken up here. Mindful of the work of [redacted] and others on blackseed (Nigella sativa) I had just bought supplies when the first of the oral antivirals started to become available here. However given what happened to a number of medical practitioners, the one doctor from the subcontinent who had been a co-author of a trial report on Nigella would probably have been loath to speak about it here, having moved to the Australian AHPRA environment.

So for its part, the Therapeutic Goods Administration needed to go into a pandemic mode with a more activist role instead of just saying come to us with your trials and $300,000 and we'll consider your repurposed medicine. Unlike the federal Health Department centrally, the TGA head was at least willing to engage with people with a genuine interest in dealing with an evolving menace. I experienced better engagement with the EU Health Commission than with our central department. However feedback suggested a tendency on the part of some ACMS members advising the TGA on medicines to report any attempt at direct contact as harassment. The corresponding body in the US had each member explain their vote online (operationalising continuous Australian democracy is a work in progress, as evidenced by eg. a still unlegislated national cabinet). It is also suggested that any delegations by the Minister for Health or the head of that Department be published in an easy to access site giving the delegate's name. It was a real round the mulberry bush to find out whose decision an appeal could lodged against, the OAIC wasn't helpful, there are severe restrictions on the grounds of appeal to the AAT (almost as if the drug companies were the only ones who might want to appeal), and the Ombudsman didn't seem keen to engage about a TGA decision which restricted a doctor's decision to do what he or she believed was in the patient's best interests at that time. This needs to change.

Some simple things which could have been recommended from early on in the pandemic included iodine throat gargle to tackle the first symptoms of throat infection, carrageenan nasal spray readily available over the counter (based on favourable indications from hospital staff from Carvallo in Argentina), and Vitamin D supplementation if levels were low.

I also hope the documents, which federal Health now produces to assist federal biosecurity authorities to operationalise quarantine of incoming ships, have been rewritten in a usable way, and that a department like DAWE with the legislated operational responsibility is suitably staffed to carry it out, and that any problems with a pandemic response are identified in trials. The one before covid apparently didn't pick up the weak spots, or if it did, they weren't fixed. The Uncle [redacted] and all approach to incoming cruise ships seems to have been sorted out by later in the pandemic.

References:

1. https://www.researchgate.net/post/COVID-19-Are-there-any-promising-suggestions-for-interim-medications-while-a-vaccine-is-being-developed

2. Reference: Andersen, P.I.; Ianevski, A.; Lysvand, H.; Vitkauskiene, A.; Oksenych, V.; Bjoras, M.; Telling, K.; Lutsar, I.; Dumpis, U.; Irie, Y.; Tenson, T.; Kantele, A.; Kainov, D.E. Discovery and Development of Safe-in-Man Broad-Spectrum Antiviral Agents. *International Journal of Infectious Diseases*. DOI:https://doi.org/10.1016/j.ijid.2020.02.018

3. Caly L., Druce J.D., Catton M.G., Jans D.A., Wagstaff K.M. The FDA-approved drug ivermectin inhibits the replication of SARS-CoV-2 in vitro. *Antivir Res.* 2020;178(104787).