## FUTURE PANDEMIC PREPAREDNESS: RECOMMENDATIONS TO ENABLE THE USE OF ANTIVIRALS IN THE UK IN A FUTURE RESPIRATORY PANDEMIC

## Issue

- 1. As the Antivirals and Therapeutics Taskforce (ATTF) comes to an end in 2023, we are handing over pieces of work that we expect to endure past March 2023 to longer term owners across DHSC and government.
- 2. During the lifespan of the Taskforce, the ATTF has created a policy report: '*Future Pandemic Preparedness: Recommendations to enable the use of antivirals in the UK in a future respiratory pandemic*' (Annex A).
- The ATTF is looking to establish an owner to take forward the Future Pandemic Preparedness policy report and its 10 recommendations for implementation from 2023 onwards.

## Action required

4. Board members are asked to **agree** that the ten recommendations are considered alongside the Clinical Countermeasures review prioritisation exercise (see **PIPP-1122-H**).

## Content

- 5. The Antivirals and Therapeutics Taskforce's Future Pandemic Preparedness policy report outlines the evidence gathered to support the role of antivirals in a future respiratory pandemic.
- 6. In a future pandemic, antivirals could play a vital role in 'holding the fort', that is, essential for widespread deployment and treatment in the early phases whilst vaccines are being developed as a potential alternative to non-pharmaceutical interventions, such as lockdowns.
- 7. There will also be a key role for antivirals in targeted deployment to reduce hospitalisation and deaths in vulnerable populations, in those who are immunocompromised and so cannot receive vaccines, and in areas where vaccines cannot be developed. In addition, there may also be a role of antivirals for prophylaxis. This is because prophylaxis could be essential for slowing the rate of transmission in groups at higher risk of exposure to the virus, such as healthcare workers, and thus would further help to 'hold the fort'. Antivirals destroy and inhibit the growth of a viral pathogen and can be used in a home or community setting very soon after infection to slow progression of a virus and prevent hospitalisations and death.
- 8. The scope of this paper has been limited to the role of *antivirals* in a future pandemic scenario caused by a *respiratory pathogen*.
- 9. The report is divided into two key themes: Research and Development, and Supply Resilience, and contains 10 recommendations.
- 10. On 16<sup>th</sup> May 2022, we met with the Minister to present the progress of the work, and get his steer on the recommendations. The Minister welcomed the recommendations and asked for further work, centring on:
  - i. Costing the recommendations;
  - ii. The cost of "do nothing" i.e. how much did the pandemic cost, and

- iii. A retrospective piece of analysis on *"if these recommendations had been in place at the beginning of the COVID-19 pandemic, how could the outcome have been different in terms of cost."*
- 11. The ATTF have scoped the approach to costing recommendations 1 and 2 of this report, to be annexed in a later version. The ATTF attempted to scope work on 10ii, and 10iii, but were unable to find a group across government conducting this work. Scoping the cost of the pandemic is a broad recommendation which spans much more widely for the ATTF, and this recommendation, alongside a retrospective analysis should be taken into consideration for coordinated future pandemic preparedness work across HMG.
- 12. The recommendations are to:
  - 1. Develop an R&D infrastructure that **supports the exploration of the broadspectrum efficacy** of existing compounds.
  - 2. Build a **library of prototype antivirals** that can be safely expedited through phase II/III clinical trials at the onset of a novel pathogen.
  - 3. Increase investment in **diagnostic development capacity** in tandem to facilitate the day-1 deployment of broad-spectrum AVs to the most clinically vulnerable, and the deployment of pathogen-specific compounds to targeted cohorts.
  - 4. Invest in and maintain a **warm-base of clinical trial capacity** that can be used to assess broad-spectrum AVs in non-pandemic time and can be rapidly scaled-up to support recommendation 2.
  - 5. Additionally, the UK should continue to **collaborate in multilateral fora** on therapeutic research, to ensure we are a leading voice, and to reduce domestic duplication.
  - 6. Support the UK Health Security Team in DHSC with the exploration and assessment of **if there are specific antiviral products that should be stockpiled** for Future Pandemic Preparedness.
  - 7. Explore the feasibility of adopting a variety of market incentive mechanisms, including Advance Purchase Agreements and commercial levers, to ensure supply of antivirals in the next pandemic.
  - 8. Explore **incentive schemes to strengthen and maintain manufacturing capacity** that could support the manufacturing of future antivirals, including work with OLS on subsequent versions of the 'Life Sciences Innovative Manufacturing Fund'.
  - 9. Explore the possibility of **securing specific funding for flexible manufacturing capacity** specifically for Future Pandemic Preparedness with OLS as well as x-WH and HMT. Ensuring flexibility will mean that capacity could be shifted to produce broad spectrum and pathogen specific antivirals during a pandemic if needed.
  - 10. The government should conduct further analysis on the cost of the pandemic, and then conduct a retrospective exercise into "what could have been different in terms of spend if these recommendations had been in place at the start of the COVID19 pandemic", as discussed with Ministers on 16/05/2022.

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DHSC, Antivirals and Therapeutics Taskforce, 24th October 2022