

## WN-CoV UK Science teleconference, 27 January 2020

Patrick Vallance, Chris Whitty, Mark Walport, Jonathan Van Tam, Jeremy Farrar,

NR	NR	NR	NR	Jenny Harries,
NR				

### Actions (all ASAP)

#### *On vaccines and therapeutics*

- **Joint rapid call between MRC, Wellcome and DHSC/NIHR – first steps on this to be led by DHSC. This will become a broad call that covers vaccines, therapeutics, diagnostics and facilities (eg Phase 1 testing), but first part of call will be for vaccines in order to get it out at speed. Will then follow with broader call. We expect applications from Robin Shattock's group and the Oxford BSV group.**
- **DHSC to work with MHRA over developing a rapid review/approval process. Keep avenues open for all possible vaccine platforms. This should be made known to groups working in UK or elsewhere.**
- **DHSC/NIHR to lead on preparation for clinical trials of existing therapies. Can issues a call through NIHR.**
- **DHSC to take forward clinical description study, including management protocols (fluids, antibiotics, antivirals steroids etc), data collection protocols, ready (including for ICU) and any ethics approvals required to be able to apply solutions/collect samples and data rapidly. Need to agree open data and a repository.**
- **DHSC to liaise with Porton Down and diagnostic companies over potential for new diagnostic tests very early following infection.**
- **MRC to lead on plan for coordinating and activating UK small molecule drug screening capacity to start looking at a plan for screening clinical and clinic ready compounds (this needs to be informed by on-going activities in USA and elsewhere). Should liaise with companies as well as academic groups. Should involve Wellcome.**
- **NR to circulate contacts for UK centres of expertise/individual experts in coronaviruses**
- **DHSC to explore on a longer timescale whether the UK should develop manufacturing capacity for mRNA vaccines**
- **Patrick to ask GSK about their recombinant ACE 2 product.**

#### *Broader UK science contribution to international effort*

- **Wellcome and MRC to discuss potential funding needs for UK modelling community and develop plans accordingly. Need to agree open data sharing**
- **Wellcome to join up with ESRC on harnessing social science expertise**
- **DHSC/CMO to discuss developing diagnostic test for asymptomatic individuals with Porton Down, and make private companies aware**

#### *Other*

- **A SAGE meeting needed to consider risk and implications of WN-CoV reaching Africa, and what support is ODA eligible**

## Discussion

### *On vaccines and therapeutics*

- Formal request for advice on vaccine options expected imminently from DHSC SoS.
- Important not to over-estimate what is deliverable. Unlikely to be able to deliver vaccine in time for peak of epidemic (estimated at 3 months from start of outbreak) – but also need to consider potential for WN-CoV to be a sustained human infection.
- Quickest option would be mRNA-based, but technology unproven and not an area of UK strength. Worth considering investment in UK mRNA production facilities (relatively low cost, capability worth having for long term).
- UK has capability in phase 1 testing.
- UK should consider possibility of a higher level of mortality – this should be reflected in DHSC vaccine paper in draft.
- Therefore value in collaborative effort across relevant UK departments/ institutions to:
  - 1) issue rapid open call for new vaccine and other solutions, to be quickly peer reviewed – and flexible enough to embrace all vaccine pathways
  - 2) have immediate conversations with MHRA to lay nimble regulatory groundwork, including for vaccines developed elsewhere (MHRA is open to discussion)
  - 3) think about UK capability for synthesising mRNA vaccines
  - 4) explore therapeutic options, including involvement in work already underway in Wuhan
  - 5) support research in existing potential treatments, such as steroids, antibiotics and repurposing of existing antivirals – and have ethical approvals, protocols secured in good time
  - 6) guarantee/fund good data collection and sharing
  - 7) identify what plans already developed for a flu pandemic can be used for WN-CoV

### *On UK science contribution to international effort*

- Social science contribution vital (Wellcome planning a meeting).
- UK world leading on modelling.
- Also strong on diagnostics.