Teleconference of the R&D Blueprint SAG  
January 10, 2020  
Friday 13:00-13:55 GVA time  

Pneumonia of unknown etiology in Wuhan China  

Chairperson: Jeremy Farrar  
SAG members attendees – L. Blumberg, J. Farrar, B. Halloran, Y. Jee, M. Koopmans, S. Messori, C. Roth, J. Whitworth  

Agenda items  
1. Overview of emerging data on disease epidemiology  
2. Identification of research priorities and a collaborative process to offer support -if requested- to the national authorities in China and elsewhere.  
3. What is known and what the potential research priorities should be regarding:  
   o Diagnostics – individual, population sero-surveys and sequence  
   o Therapeutic candidates  
   o Vaccine candidates  
   o Data, Sharing, Information Flow  
4. Next steps including considerations of potential spread scenarios vis a vis research priorities  

Overview of the epidemiological situation and measures implemented to date  
1. On 31 December 2019, the WHO China Country Office was informed of cases of pneumonia of unknown etiology (unknown cause) detected in Wuhan City, Hubei Province of China. As of 3 January 2020, a total of 59 patients with pneumonia of unknown etiology have been reported to WHO by the national authorities in China with onset of disease between 12 December to 29 December 2019.  
2. Of the 59 cases reported, 7 were reported as severely ill, while the remaining 33 patients are in stable condition. No death has been reported.  
3. As of today, there is limited evidence of human to human transmission and it seems that the majority of cases are directly linked to the seafood market. 163 close contacts are being closely monitored.  
   • Chinese authorities have made a preliminary determination of a novel (or new) betacoronavirus, identified in a hospitalized person with pneumonia in Wuhan.  
   • Chinese investigators conducted gene sequencing of the virus and electron microscopy, using an isolate from one positive patient sample, and have communicated that the new coronavirus has a 50-70% homology with SARS virus. Preliminary identification of a novel virus in a short period of time is a notable achievement and demonstrates China’s increased capacity to manage new outbreaks.
4. Chinese authorities have confirmed 15 cases tested positive with the novel coronavirus using a fit-for-purpose PCR assay.
5. The concerned wholesale market (selling bats, frogs, snakes, game-food animals, ...) in Wuhan was closed on 1 January 2020 for environmental sanitation and disinfection.
6. Regarding optimized clinical care, the network of clinicians has held teleconferences and agreed that the SPRING SARI tools can be offered to China and neighboring countries to promote an standardized approach for clinical data collection and analysis.
7. WHO is engaged with the Chinese authorities and have communicated the importance of reporting of the epidemiological situation, evidence regarding human to human transmission risk and sequencing data.
8. WHO advises against the application of any travel or trade restrictions on China based on the information currently available.
9. WHO has activated the Incident Management System at the 3 levels of the organization. In addition, in coordination with the Regional Offices has alerted the neighboring countries and others potentially at risk.
10. WHO continues to monitor the situation closely and, together with its partners, is ready to provide technical support to China to investigate and respond to this outbreak. WHO does not recommend any specific measures for travelers.
11. WHO is in contact with the WHO Regional and China office, through the activation of the IMST, and with Chinese authorities at the highest level to obtain more information on the viral sequence as well as on the PCR related data, which are critical to design a regional surveillance strategy.

**SUMMARY OF THE DELIBERATIONS**

**Case investigation and clinical management**
- WHO has made available some preliminary guidance on the web. The coronavirus website is live ([here](https://example.com)) and that it has been populated/cross-linked with the WPRO site, the travel and trade guidance, an updated Q&A and includes our interim technical documents. Two technical documents are live (the DCP-nCoV and the readiness checklist). The other 4 guidance docs will be added this evening as we get the weblinks from repository:
  - Surveillance case definitions for human infection with novel coronavirus;
  - Interim guidance on laboratory testing of human cases suspected of nCoV infection;
  - Infection Prevention and Control during health care when novel coronavirus (nCoV) infection is suspected;
  - Guidance on risk communication and community engagement and initial response;
  - Two clinical characterization protocols exist: SPRINT SARI and ISARIC protocols have been shared with Chinese collaborators for standardized collection of SARI.
  - An ad hoc clinical network was activated and current guidance will be adjusted as additional information becomes available, if pertinent.

**Diagnostics**
- The SAG noted that diagnostic tools are critical to enhance our understanding of the basic epidemiology of the outbreak, and notably the origin and extent of the outbreak.
• In the absence of known sequence, pan-coronavirus assays could be developed and used, under a research protocol, and include travelers to neighboring countries who fulfill the suspected case definition and/or hospital emergency rooms with people likely to have history of travel from the Wuhan province, especially in the context of the upcoming Chinese new year’s eve.
• A surveillance strategy should include animal testing component when relevant.
• A teleconference of those who could contribute to the development and standardization of Dxs tools was proposed.

Experimental Therapeutics and Vaccines
• WHO proposed to update a pipeline of investigational therapeutics and vaccines against coronaviruses that could be granted access to under research protocol and will make it available to the scientific community[1].
• WHO also indicated that there are plans to adjust existing evidence-based framework to transparently select therapeutics and vaccines to move forward to evaluation and to provide a prioritization list of candidates to evaluate therapeutics and vaccines that could be relevant to this novel coronavirus.
• WHO will also convene trial and content experts to adjust the trial designs for both vaccines and therapeutics assessment.

Next steps and recommendations

The SAG welcomed efforts to use standardized approaches for case investigation and clinical characterization.

The SAG recommended that the WHO R&D Blueprint and M. Koopmans from the SAG to follow-up organizing an small expert group to follow on recommendations for testing approaches for countries at-risk of disease transmission given realistic epidemiological scenarios. Any other SAG member is welcome to join.

The WHO R&D Blueprint to convene its working group experts groups and proceed with the implementation of the actions proposed above

WHO will update the SAG members when relevant and SAG members were invited to provide information to the WHO Secretariat when relevant.

[1] During the GCM call after the SAG call, CEPI offered support with the preparation of the pipeline of vaccines