

WHO R&D Blueprint COVID-19 Animal Models

Summary of progress made by the WHO COVID-19 modelling ad hoc Expert working Group

Covering period 27FEB-15MAR 2020

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Participants

More than 80 participants globally are actively contributing to the Expert Group.

Chairs of the R&D Blueprint Cross-Reactivity expert group

William Dowling, Simon Funnell and César Muñoz-Fontela

WHO Secretariat

Pierre-Stéphane Gsell, Ximena Riveros

Background

In response to the current COVID-19 pandemic, the WHO Blueprint team established several an ad hoc Expert working Groups including one focused on COVID-19 disease modelling (COM). The goal of the disease modelling group is to advance the development of COVID-19 medical countermeasures (vaccines, therapeutics and/or drugs). This is being achieved by providing a platform to share data to help reduce duplication of effort and to accelerate learning by sharing outcomes in a secure and confidential workspace. In addition, the principles of reduction, refinement and replacement are being addressed by this international effort. The group is co-chaired by Drs. William Dowling (CEPI), Simon Funnell (PHE) and César Muñoz-Fontela (BNITM) who are seconded to WHO for this task.

Progress to date

As of 15th March 2020, the group includes 92 experts representing 15 countries and 60 research, regulatory or funding entities. The group currently meets weekly to share updates on live studies and to discuss two main issues;

- 1. What can we do now to provide regulator confidence to proceed with Phase 1 vaccine studies?
- 2. How can we assist in accelerating the identification and use of therapeutics as soon as possible?



Outcomes to date

In the first three weeks, this working group has shared live oral presentations from 8 entities and the details of 14 institutes' experimental studies or scheduled studies with 60 entities. Several institutions have amended their upcoming plans as a direct result of discussions with the WHO COM ad hoc group.

The group discussions have, to date, been focused on the establishment of a suitable large animal model and various options for small animal studies. To date, the majority of human cases of COVID-19 result in mild to moderate disease with only a small percentage of mortality (elderly with underlying health conditions).