ACCELLERATED PROCESS DEVELOPMENT AND STOCKPILE FOR MERS, LASSA AND NIPAH VIRAL VACCINES

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CEPI (the Coalition for Epidemic Preparedness Innovation) was launched in January 2017. The global need for CEPI emerged after the devastating Ebola crisis in 2014/15 that caused over 11,000 deaths and had an economic impact of at least \$2.8 billion in the worst-affected countries alone1. The collective response to Ebola had fallen short, and it was evident we needed a better system to produce proven vaccines against known epidemic threats. A year ago at Davos, the governments of India and Norway and Guinea; the Bill & Melinda Gates Foundation, Wellcome and the World Economic Forum backed the creation of CEPI, an innovative partnership of public, private, philanthropic and civil society organizations, to provide a global insurance policy to defend against future epidemics. Through a call for proposal to vaccine developers, CEPI launched a portfolio of projects covering the development of MERS. Lassa and Nipah viral vaccines, based on WHO blueprint list of pathogens and in addition, a number of platform technologies are currently evaluated for the development of rapid response against unknown pathogens. In this paper, we introduce the CEPI process development, the vaccine technologies and stockpile strategies for MERS, Lassa and Nipah candidates in the CEPI portfolio. The cell lines, process and scale up portfolio strategies will be reviewed for emergency settings vs conventional vaccine process development. The emergency stockpile development strategy will be presented in this paper. In addition, we also highlight the critical areas of dialogue with regulatory authorities for the enhancement of use of experimental vaccine candidates in emergency settings for efficacy trials.

¹ http://www.worldbank.org/en/topic/macroeconomics/publication/2014-2015-west-africa-ebola-crisis-impact-update