



### IMI2 Ebola and other filoviral haemorrhagic fevers programme

Mark Armitage & Jorge Villacian
On behalf of EFPIA

### **Ebola+ programme overview**

#### IMI2 Ebola and other Filoviral Haemorrhagic Fevers (Ebola+) Programme

Diagnostics **Pipelines** Deployment Development Manufacturing Topic 4: Topic 5: **Future** Future topic: Future topic: Rapid Topic 2: Deployment Topic 1: Topic 3: Future topic: Antivirals topic: Rapid Future topic: diagnostic Vaccine Manufacturing Stability during and Formulations Multivalent development Immunotherapy compliance of tests diagnostic development capability for transport and for cold chain filovirus and vaccination currently tests - lona Phase İ. II. III biologicals storage repurposina vaccines regimens applicable term

Central Information Repository and Scientific and Ethical Advice



### Topic 1: Vaccine development Phases I, II, III

The progression of vaccine candidates currently in development is an urgent public health need (WHO)

- Design and implementation of Phase I, II, or III clinical development of vaccine candidates, including prime boost combinations against Ebola virus disease (Zaire), to start in early 2015
- The applicants must demonstrate the ability to roll out clinical trial vaccination programmes in EU / Africa / US, and to conduct studies in areas where Ebola virus disease is endemic
- The clinical development programme(s) need(s) to be aligned with the global effort coordinated by the WHO



### **Topic 2: Manufacturing capability**

Ebola vaccines are recombinant adenovirus or other viralbased vaccines and need to be produced in facilities meeting an appropriate biosafety level

- Scaling up currently available production techniques to the necessary scale
- Fully compliant with good manufacturing practices (GMP) and biological safety level requirements
- Generation of additional data to provide the necessary scientific, technical and regulatory justifications to seek a reclassification of current vaccine vectors



# Topic 3: Stability of vaccines during transport and storage

Maintaining very low temperature required for the stability of currently available vaccine candidates in areas targeted for vaccination is challenging

- Development of tools and technologies to allow distribution of Ebola vaccines requiring very low temperatures
- Stability testing and supporting analytical capabilities to be applied at all stages of the shipping, storage and deployment process

**Future topic:** Development of alternative formulations to improve the thermo-stability of clinically active vaccines



# Topic 4: Deployment and compliance of vaccination regimens

Ensuring vaccination coverage and adherence to potential prime-boost vaccination regimen is challenging

- Development of technologies and tools that augment vaccination coverage and adherence to the vaccination regimen
- Environmental factors that impact compliance
- Projects might look at how to exploit mobile telecommunication and use of mobile apps in West Africa



#### **Topic 5: Rapid diagnostic tests**

Rapid detection of Ebola infections is an urgent need in the current crisis and will remain important in the future

- Development of rapid diagnostics to detect EVD at acceptable costs and with high sensitivity and specificity
- Need to be able to be deployed at decentralised health care facilities under conditions with minimum laboratory infrastructures available
- Includes clinical validation in current endemic regions, registration and launch

**Future topic:** Follow-up of current topic to allow long-term surveillance (would include new tests and early development)







infodesk@imi.europa.eu

www.imi.europa.eu

@IMI\_JU