Second teleconference on vaccine clinical trials design for Guinea, Liberia, and Sierra Leone

25 November 2014

**Presenters:** Drs Alydiane (Guinea); Higgs (NIH); Kargbo (Sierra Leone); Kennedy (Liberia); Kiselev (Russian Federation); Konde (Guinea); Roettingen (Norway); Roman (GSK); Thoelen (Johnson & Johnson)

**Introduction**

On 25 November 2014, a teleconference was held as follow-up to the first teleconference, on 28 October 2014, where initial plans for Phase III in Liberia and Sierra Leone were presented. The specific purpose of this teleconference was to:

- provide an update on plans for Phase II clinical trials of the GSK vaccine in non-Ebola affected countries
- provide an update on plans for Phase III efficacy trials in Liberia, Guinea, and Sierra Leone.

A document describing the proposed Phase III Ebola vaccines studies in Conakry, Guinea, was sent in advance by the Guinea consortium to the participants.

**GSK**

An update on Phase II was provided: GSK is proposing to recruit 3 000 subjects across Cameroon, Ghana, Mali, and Nigeria. The study will be run by Quintiles, a Contract Research Organization (CRO). The protocols, including a specific paediatric (600 subjects; 12-16, 6-9 and 1-5 year old cohorts) component will be finalized soon. Women known to be pregnant will be excluded, but data will be collected on those subsequently found to be pregnant. HIV-positive subjects will be included in the main protocol, if they are clinically well.

GSK is finalizing all the necessary documents for submission in the respective Phase II countries. The full package will be presented at the Joint Review meeting to be held on 15-16 December in Geneva. During this meeting, countries in which Phase II trials will be implemented will conduct a joint review of documentation for the clinical trial and hopefully decide about authorization for the trial at the end of the meeting. The meeting will gather representatives from the National Regulatory Authorities (NRA) and National Ethics Committees from Cameroon, Ghana, Mali, and Nigeria, as well as representatives from the NRAs of the three Ebola-affected countries.

GSK will decide on the dose-level for the Phase II trial after review of the data from the Phase I trials in Lausanne, Mali, the United Kingdom, and the United States. The Phase III is planned to start in January.

**Liberia: Dr Kennedy/US NIH**

There has been much progress on the protocol development and the US technical team is currently in Liberia to do site assessments and to meet with the local team to review the protocol. The Ministry of Health and Social Welfare established a group to share feedback and best practices on vaccines trials’ protocols. The US and Liberian team identified key sites at Montserrat and Margibi to start the trial. Teams are also working on social mobilization and community engagement plans.

In December 2014-January 2015, the final version of the protocol will be submitted to both Liberian and US Institutional Review Boards. It is planned that the trial will have three arms: ChAd3-ZEBOV, VSV-ZEBOV, and Placebo control.

**Sierra Leone: Dr Kargbo/US Centers for Disease Control and Prevention**

The US Centers for Disease Control and Prevention (CDC) works closely with the Sierra Leone Ministry of Health, and in particular with Dr Samai. They are currently visiting the selected districts to communicate the plan. CDC currently works on:

- logistic issues with Médecins Sans Frontières (MSF)
- understanding the social perception of trials
- coordination of communication activities.
A 2-day workshop was held on 7 November, gathering partners and country representatives to work through the protocol, which is now at the final stage of preparation and will be submitted to the Sierra Leonean authorities and CDC by the end of next week.

The plan is to vaccinate high-risk groups including health care workers (sample size around 5 000). This sample will give power for the detection of 50% vaccine effectiveness. The questions on whether to test one or two vaccines and whether to use of a booster are still on the table. CDC plans a randomization by time with 18-weeks vaccines rolling period.

**Guinea: Dr Konde/Dr Alydiane/Dr Roettingen**

The protocol shared by invitation to the teleconference was prepared by a large consortium of countries (Canada, France, Guinea, Germany, Norway, and the United States), MSF, and WHO. It proposes two trial strategies for implementation in Guinea:

- a ring vaccination study. Villages of confirmed Ebola cases will be vaccinated either immediately or after > 21 days and
- a frontline workers vaccination study, with historical controls only.

The question of whether to use one or two vaccines is still under discussion. Prime-boost vaccination might be considered for the frontline workers component. Implementation issues are being reviewed. Teams consider starting the study in January 2015 and the first vaccinations in February.

**Dr Kiselev/Russian Federation**

The clinical trial of two vaccine candidates (Ad and DeltaNS1-influenza vectors) will start in January 2015.

**Dr Thoelen/Johnson & Johnson**

The company plans to start Phase I by the end of December in the United Kingdom and the United States, and to implement Phase I trials in Kenya, Tanzania, and Uganda in February.

**Dr Tom Monath/NewLink Genetics**

NewLink Genetics has signed a partnership agreement with Merck to help drive development of VSV-ZEBOV Ebola vaccine. Vaccine for Phase III is being formulated at a $3 \times 10^6$ dose-level, at risk for the company, but a higher dose level ($10^8$) is also available.

**The next teleconference will be held on 18 December 2014.**