

Epidemiological study

Summary of yesterday

	CT		imp	
	med	av	med	av
General LF epidemiology:				
· Accurate and recent estimates of incidence of LF based on a geographically comprehensive area, by age and gender	1.0	1	1	1
· Precise estimates on (acute) LF disease severity (incl pathogenicity), by age and gender, and among pregnant women	2.0	1.25	1	1.25
· Precise estimates on LF long term disease outcomes, complications	2.0	1.5	1.5	1.5
· Precise estimates of the time intervals in natural disease history/progression of LF	2.5	1.75	2	1.75
· Pre-existing immunity, by age, gender and geography	1.0	1	1	1
LASV Clade specific epidemiology				
· Geographic and temporal spread	1.0	1.5	1.5	1.5
· Incidence by LASV clade	1.0	1.5	1.5	1.5
· Estimating any potential association between disease severity (incl complications and sequelae) and LASV clade	1.0	1.25	1	1.25
· Estimates of clade-specific seroprevalence by geography	2.0	2	2	2
· Other:				
Transmission and spatial epidemiology				
· Transmission/attack rate and secondary attack rate (5-7%?)	1.5	1.75	2	1.75
· Transmission: a) exposure to rodents/area endemic for Lassa; b) contact with Lassa cases	2.0	1.75	2	1.75
· Serial interval (12 days?)	2.0	2.5	3	2.5
· Role of geographical clusters	2.0	2.25	2	2.25
Referral practices and health systems seeking behaviour	1.0	1.25	1	1.25

Aims

- To conduct an epidemiological study that will enable a Phase 3 placebo-controlled individual-randomised LF vaccine trial to be designed
- To conduct an epidemiological study to facilitate decisions regarding introduction of vaccination should a safe and effective vaccine be developed.

Objectives

- Primary objectives
 - Age- and sex-specific incidence of LF in a number of well-defined geographical areas
 - Age- and sex-specific seroprevalence in the same well-defined geographical areas
- Secondary objectives
 - Identification of risk groups
 - Formal definition of a case of LF including range of severity
 - Identification of risk factors, and social and ecological drivers of incidence
 - Documenting knowledge, behaviour and attitudes towards LF and LF vaccine in communities and health care workers
- Other points of note
 - Studies should have standardised methodologies with regards primary objectives
 - A range of other studies are needed, including studies on severity, clades, phylogeography, etc. These do not have to be conducted in every site, however.
 - Ensure that data can be used for other studies, such as to help improve diagnostics