Key Analyses & Endpoints

Phase 1 & 2 (Between Outbreaks, or possibly during)
- **Safety**: Adverse Events
- **Immunogenicity**: Antibody Responses over time

Phase 3 (During Outbreak)
- **Primary Efficacy**: based on numbers of rings with confirmed cases (days 10-29) among vaccinated vs delayed groups
  - Exclude days 0-9 to give vaccine time to work
- **Secondary**:
  - Safety
  - Efficacy based on probable cases (not necessarily confirmed)
  - Efficacy based on death from confirmed case of filovirus
Important Principle:

To understand the effect of a vaccine, we want to compare groups of people who are vaccinated vs not

*But are the same on everything else that might affect their health*

We randomize because people who choose to get vaccinated may be different in other ways from those who don’t

Current protocol design not “blinded” – people know which ring they are in

To keep the groups the same (other than vaccination):

- Consent people *before* they know whether immediate or delayed
- Same advice to all on safety precautions to avoid infection
- Independent case ascertainment by non-trial MOH teams
Two important primary analyses for Phase 3

Per protocol analysis ("Efficacy"):  
- Include only those who received vaccine and followed up as planned  
- Strength: focus on those most likely to show effect  
- Challenge: may be unclear how to choose right people in delayed arm (for unblinded trial)

Modified* Intent to Treat (closer to "Effectiveness"):  
- Include everyone who signed consent*  
- Strength: Avoid bias  
- Challenge: including those who consented but did not get vaccinated may dilute signal

These two analyses complement each other  
- If they agree, gives confidence  
- If they do not agree, need to explore results to understand differences