WHO R&D Roadmap Rift Valley Fever
RVF vaccines Target Product Profile

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On behalf of the RVF Research Roadmap Steering Group
Overview

The trio of vaccines in the RVF Vaccine TPP

- Human vaccine for reactive/emergency use
- Human vaccine for long term protection for high risk people
- An animal vaccine for prevention of transmission

Discussion points

Human vaccines

The TPP specifies targets for optimal vaccines and minimally acceptable vaccines. WHO Pre-qualification is required for use in low & middle income countries. Single dose regimens are preferred. Vaccines should be suitable for a wide population, including pregnant women if feasible. Safety & reactogenicity must be adequate for benefits to significantly outweigh risks. Optimal efficacy >90%, minimal efficacy >70%. TPP describes stability, formulation and posology requirements.
Vaccines for outbreak use

To be used to protect people in an ongoing outbreak with other control measures
Live attenuated vaccines are not suitable if reassortment is possible
Protection against all likely strains of RVF
Aimed especially at people handling raw meat or consuming milk
Max 2 doses, ideally less than 3 weeks apart
Rapid onset of immunity <2 weeks; max 3 weeks
Vaccines for long term protection

Aimed at slaughterhouse workers, herders, farmers & vets & persons handling or disposing of animal remains

Broadly similar to reactive vaccines, but long lasting protection with/without boosts
Veterinary vaccines

Ruminants vaccine - suitable for administration to ruminants to disrupt the RVFV transmission cycle and to prevent infection of humans resulting from handling of animal materials, both to be administered prophylactically and during outbreaks

Needle free vaccination preferable
DIVA compliant
Single, max 2 dose regimen
Possibility of assortment is not acceptable
Meets OIE qualification standards
RVF vaccines TPP

Human Vaccines
• Develop and license single dose RVFV vaccine suitable for reactive use in outbreak settings with rapid onset of immunity.
• Develop and license vaccine for long term protection of persons at high ongoing risk

  • Vaccines that are procured by United Nations agencies and for financing by other agencies, including Gavi, the Vaccine Alliance, require WHO Prequalification. The WHO prequalification (PQ) process acts as an international assurance of quality, safety, efficacy and suitability for low and middle-income country immunization programs.

Veterinary vaccine
• Ruminants vaccine - Develop and license a vaccine suitable for administration to ruminants to disrupt the RVFV transmission cycle and to prevent infection of humans resulting from handling of animal materials, both to be administered prophylactically and during outbreaks.

  • Manufacturing and production of animal vaccines should meet the minimum standard requirements recommended by the World Organization for Animal Health (OIE)
Discussion points

Shared development of vaccine concepts for humans & animals?

Triggers for human reactive vaccination
• Animal outbreak detected?
• First human cases?

How far would anima vaccination obviate need for human vaccines
• Which is the priority?
• Who would pay for animal vaccines?
THANK YOU

from Bird 2009