

Filovirus roadmap and key knowledge gaps focused on Marburg virus

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WHO R&D Blueprint

A WHO-Strategic Research Agenda for Filovirus

Research and Monitoring (WHO-AFIRM)

WHO-AFIRM Strategy Roadmap 2021-2031

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https://cdn.who.int/media/docs/default-source/blue-print/afirm-roadmap_2021_2031



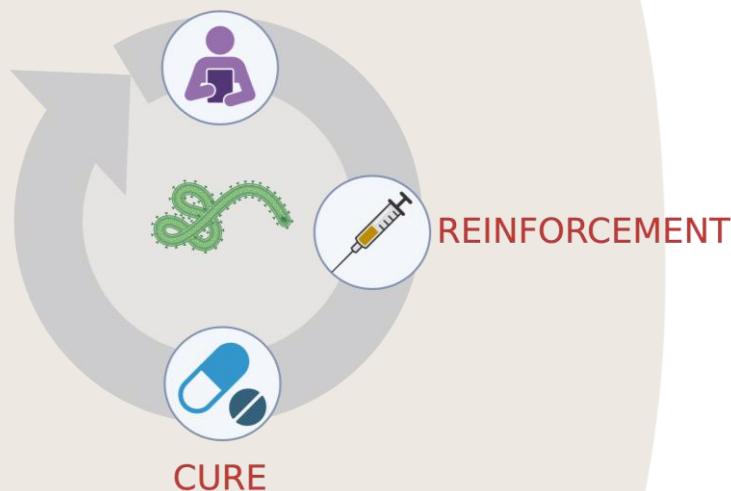
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AFIRM

ANTICIPATION



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Key knowledge gaps

- 1- Lack of MCM for MARV and SUDV
- 2- Poorly characterized filoviruses (Tai forest virus, Lloviu virus, Bombali virus)
- 3- Mechanisms of virus persistence, implications for public health
- 4- Virus ecology, wildlife surveillance and prediction tools
- 5- Integrated social science research on sociocultural and behavioral factors pertaining to the development and deployment of socially acceptable Ebola/Marburg MCMs. Strategies for designing socially acceptable field research are also needed.



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ANTICIPATION

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1- Strategic goals



- 1- To enhance coordination on research across endemic countries by establishing a WHO-coordinated multi-country research network (e. g. sharing of **ecological and genomic data**)
- 2- To strengthen efforts to develop and evaluate **additional diagnostics tools**, including filovirus rapid tests, and to expand research related to genomic sequencing.
- 3- To stimulate research into novel diagnostic approaches, including **prognostic biomarkers**
- 4- To strengthen laboratory infrastructure and capacity to enable rapid evaluation of diagnostic specimens
- 5- To strengthen community engagement: carcass surveillance, survivor networks, serosurveillance, grassroots campaigns.



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REINFORCEMENT

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1- Strategic goals



- 1- To establish a platform trial design for vaccines against Marburg and Sudan virus
- 2- To setup a WHO-coordinated consortium including regulators, developers and members of academia to accelerate the development of filovirus vaccines (WHO-MARVAC)
- 3- To foster the exploration of different vaccine platforms that incorporate different targets with the goal of developing **multivalent vaccines**.
- 4- To compile data on the duration of protective immunity after vaccination with EBOV vaccines and identify the correlates of protection involved to facilitate faster evaluation of promising vaccine candidates against other filoviruses.



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CURE



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1- Strategic goals

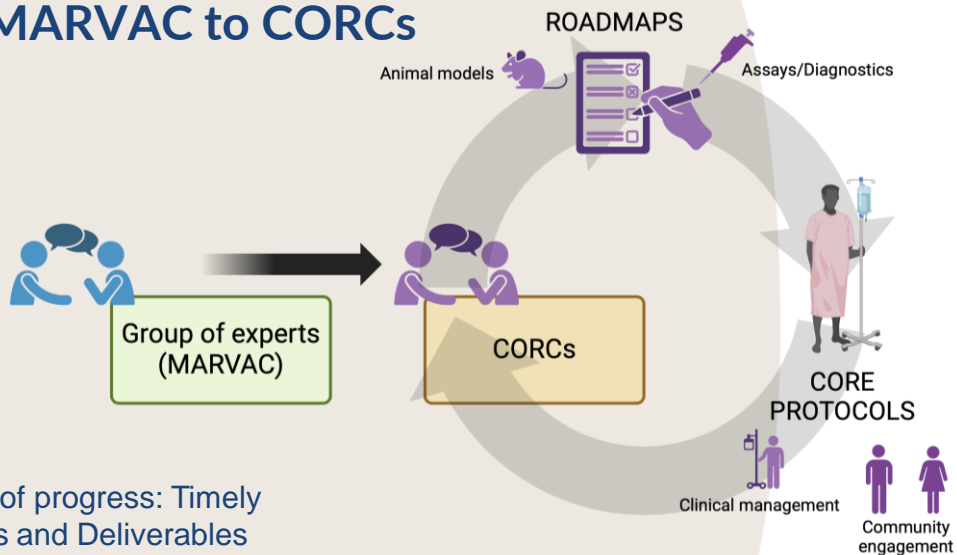
- 1- To establish a common, publicly available reference protocol for the treatment of filovirus diseases.
- 2- To accelerate the development and testing of filovirus **post-exposure therapies**
- 3- To obtain, compile and compare data on the safety, efficacy and tolerability of currently available therapeutics and evaluate the benefit of combinations thereof.
- 4- To create tools and networks to enable **better surveillance of survivors** including regular sampling and assessment of blood, semen etc. where possible in order to facilitate the early detection of sequelae.
- 5- To evaluate laboratory-measured molecular biomarkers that can predict clinical outcomes and that can inform on the efficacy of therapeutic interventions.
- 6- To foster research on immunotherapies that can be used as post-exposure therapies and that are capable of eliminating viral sequelae.
- 7- To develop guidelines and establish rigorous procedures for supportive care taking into account the economic capacity of the affected countries.



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From MARVAC to CORCs

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Evaluation of progress: Timely
Milestones and Deliverables



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Thank you

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