Progress Towards and Commonalities in Vaccine Development Against HIV, TB, and Malaria: 
Commonalities across vaccine development efforts 

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Commonalities of HIV, TB, Malaria vaccines

End of AIDS epidemic takes comprehensive targets and action.

Modified Source: AVAC Annual Report 2017
HIV Vaccine: Discussion Points

- Protocol design in the scenario if partially effective vaccine is licensed
- Implementation issues
- Funding issue
Can the placebo be used?

May not be accepted especially in Africa as the burden is high.
Protocol design & Conduct issues- Complex

• The design may involve many arms in the presence of PrEP in combination with other preventions – large sample size/then retention issue not only enrollment

• Explore the adolescence group (15 years and above): not only because of the burden but the vaccine might work after primary series. So vaccines may have to be given as booster every 3-5 years to get the maximal effect

• Communication/education to participants, family, community

• How to make the trial close to the real scenario as many programs do not succeed much in implementation to the real world
Implementation

Use of partially effective vaccine in the presence of other Preventions seems to be the best option for now.
Expanding current levels of Dx and Rx, predicting that 29 m new infection averted by 2035,

• With 50% efficacy vaccine introduction in 2020 additional 6.3 m will be averted

49 m new infections projected between 2015-2035
However, the regimens are complex

Improvements in future vaccine efficacy trials

P5 LEAD Vaccine Products

AL, AD-MF59: P-B regimen up to 18 M

Mngadi K.

HVTN705/HPX2008

Vaccine composition and regimen

gp140 Clade C
Soluble trimeric gp140 Env protein
co-formulated with Alum
How the VACCINE is going to implement if partially efficacious

• Combination with other existing preventions is expensive, any compliance issue may occur?

• Target group: all in high burden or only to special groups?

• How to make campaign? Acceptance?, stigma?- This may be more on the ASIA PACIFIC

• Acceptance of public/doctor/community/population (general or high risk-other regions)

• Education and communications- Public Campaign

Lesson learnt from other vaccines: Dengue-seropositive/seronegative

• Influenza: Missed match, low coverage, lost trust (few years ago)
Funding??? Not for Profit Organization or Global Funder Consortium, Host Countries???

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