WHO/IVB/14.02

# Report on the Immunization and Vaccines Related Implementation Research (IVIR)

## Advisory Committee Meeting
## Geneva, 26-28 June 2013

Immunization, Vaccines and Biologicals

World Health Organization

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# Abbreviations

| | |
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| CFR | Case-fatality rate |
| CDC | Centers for Disease Control |
| DALY | Disability Adjusted Life Year |
| GMP | Global Malaria Programme |
| HBsAg | Hepatitis B serum antigen |
| HBV | Hepatitis B vaccine |
| HPV | Human papilloma virus |
| IARC | WHO International Agency for Research on Cancer |
| IVB | WHO Department of Immunization, Vaccines and Biologicals |
| IVIR-AC | Immunization and Vaccines-related Implementation Research Advisory Committee |
| IVR | Initiative for Vaccine Research |
| JTEG | Joint Technical Expert Group on Malaria Vaccines in PivotalPhase III Trials and Beyond |
| LiST | Lives Saved Tool |
| LMICs | Low and middle income countries |
| MPAC | Malaria Policy Advisory Committee |
| QUIVER | Quantitative Immunization and Vaccines related Research |
| SAGE | Strategic Advisory Group of Experts |
| Swiss TPH | Swiss Tropical and Public Health Institute |
| WHO | World Health Organization |
| WPR | WHO Western Pacific Region |

# Executive summary

- WHO is funding a project to provide new data on hepatitis B disease, vaccination and infection measures in relation to vaccine implementation levels, in order to update evidence-based vaccine recommendations. The proposal was well-received by IVIR-AC, although the committee made some suggestions that will be taken into account in a revised proposal. Two IVIR-AC members have also agreed to join the project working group.
- A malaria vaccine (RTS,S/AS01) has shown efficacy over 12 months of follow-up in a large Phase 3 trial, with full trial results expected in late 2014. Five modelling groups have used preliminary trial data to explore the impact and cost-effectiveness of malaria vaccination. IVIR-AC will provide experts on health economics and health systems to advise on these issues to ensure that they are comprehensively captured in the models. IVIR-AC is also considering providing methodological guidelines around how projected demographic changes in low and middle income countries (LMICs) -represented population mobility- should be handled in models. IVIR-AC will be available to review model findings and conclusions before they are presented to SAGE.
- A model to explore the case for investing in measles eradication has been revised to perform analyses at the country-level following feedback from IVIR-AC in 2012. However, IVIR-AC registers concern that the model does not capture within-country heterogeneities in coverage and transmission adequately. Hence, the current model may be insufficient to assess measles elimination goals. Further work that incorporates within country heterogeneity is critical to adequately assess elimination at country, regional and global levels. The modeling group agreed to build in sub-national heterogeneity in their model and will present this to the IVIR-AC subgroup on measles eradication.
- A model has been constructed to re-evaluate the burden of yellow fever in Africa, estimating 850,000-2 million infections with yellow fever virus, yielding 85,000-200,000 cases and 30,000-70,000 deaths per year. The case-fatality