## Abbreviated Biosketch for Proposed Members of the Guideline Development Group

| Title:            | Professor                                  |
|-------------------|--|
| First name:       | Melissa                                    |
| Last name:        | Penny                                      |
| Current position: | Unit head/Group head                       |
| Affiliation*:     | Swiss Tropical and Public Health institute |
| Country:          | Switzerland                                |

## Bio:

Melissa Penny is an Assistant Professor at Swiss Tropical and Public Health Institute (Swiss TPH), University of Basel (Switzerland) and is Unit Head of the Disease Dynamics unit at Swiss TPH. She has more than 13 years' experience in developing mathematical and computational models to provide quantitative evidence to support malaria control and elimination decisions, in particular for product development, for policy decision on new tools or for intervention mixes in geographic settings.

Her most recent research focuses on data analysis and developing mathematical models and algorithms to understand parasite, host and intervention dynamics, with the goal to inform decisions during product development through to implementation and policy recommendations. This work includes new approaches with mechanistic models to inform quantitative target product profiles for novel malaria tools. She led a multi-institute collaboration that provided evidence to WHO and other stakeholders on the likely public health impact and cost-effectiveness of the malaria vaccine RTS,S/AS01. She is a member of the WHO Malaria Vaccine Implementation Program working group, and along with other modelling groups supporting modelling and economic based evidence during malaria vaccine Pilot studies.

Prof. Penny is also a member of the Data and Modelling expert group of the Swiss National COVID-19 Science taskforce and her group is developing and applying simulation models to inform decisions on novel tools against COVID-19 in Switzerland.

Prof. Penny holds a PhD and BSc (Hons) in applied mathematics.

- \* Please choose your primary affiliation and mention others in the bio.
- \*\*\* Please briefly describe your current and recent professional positions (past five years) and education in 200 to 300 words maximum.