

Title: GALMALARIA

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Abstract: GALMALARIA is a translational study in collaboration with the Bill and Melinda Gates Foundation designed to assess the relative efficiency of targeting α -gal glycans to be included in future malaria vaccines, with a focus on expanding the pre-clinical data on the effects of the α -gal Abs in preventing malaria transmission. The study consists of calibrating the protective effect of α -gal-specific Ab against well-established protective Abs, recognizing *Plasmodium falciparum* circumsporozoite protein (PfCSP). The primary outcomes of this study are to determine: i) anti-infection benefit of targeting α -gal over PfCSP antigens alone or in combination and ii) transmission-blocking activity of targeting α -gal. Intermediate outputs include: i) define functionally the α -gal glycans targeted by α -gal-specific Ab, ii) compare the anti-infection effect of Ab targeting distinct α -gal glycans and iii) compare Plasmodium gametocyte killing and transmission-blocking effects of Ab targeting α -gal glycans.

References:

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