

**Long-term immunity against yellow fever in children vaccinated during infancy:
a longitudinal observational study**

Domingo and coll., The Lancet Infectious Diseases

We studied two groups of healthy children, one from Ghana (n=436) and one from Mali (n=587). The two groups of children were subsets of cohorts assembled for the MenAfriVac meningococcal vaccine trials as referenced below. The children were concomitantly vaccinated against yellow fever and measles around age 9 months (range: 8–12 months). The Ghanaian children received the YF-17DD yellow fever vaccine strain (Bio-Manguinhos/Fiocruz, Rio de Janeiro, Brazil) in 2009–2010, while Malian children were vaccinated with the YF-17D-213 strain (Chumakov Institute of Poliomyelitis and Viral Encephalitis of the Russian Academy of Sciences, Moscow, Russia) in 2012.

We determined the titres of neutralizing antibodies to yellow fever virus by a microneutralization assay. We converted titres into standardized antibody concentrations in IU/ml with reference to the First International Standard for yellow fever vaccine (WHO International Standard, NISBC 99/616).

The data for the Mali and Ghana children are in two separate tables saved as comma-delimited text files:

Yellow_fever_nAb_Mali.csv
Yellow_fever_nAb_Ghana.csv

Data fields**1. Study**

Source study for the serum samples and prior metadata.

Value: Protocol number of the relevant MenAfriVac vaccine trial, as follows:

PsA-TT-007 Reference: clinical trial registration PACTR201110000328305 (Mali).
PERS-007 Reference: clinical trial registration ISRCTN37623829 (Mali).
PsA-TT-004 Reference: clinical trial registration ISRCTN82484612 (Ghana).
Pers-004 Reference: clinical trial registration ISRCTN10763234 (Ghana).

2. SubjId

Unique (anonymous) identifier for the study subject.

Source: present study.

Example: 60013.

3a. VisitId (Ghana only)

Time point of sample collection.

Source: MenAfriVac vaccine trials.

Values:

4 Day zero (baseline) sample.
11 2.3 years after vaccination.
1 6 years after vaccination.

3b. DtofCol

Date of sample collection (Year-Month-Day).

Source: MenAfriVac vaccine trials.

Example: 2012-01-13.

4. DtofVac

Date of vaccination against yellow fever (Year-Month-Day).

Source: MenAfriVac vaccine trials.

Example: 2009-08-21.

5. Age

Age of the study subject at sample collection.

Source: MenAfriVac vaccine trials.

Integer. Unit: months.

6. Sex

Sex of the study subject.

Source: MenAfriVac vaccine trials.

Value: Male or Female.

7. DaysElapsed

Time elapsed since vaccination.

Source: present study, based on date records from the MenAfriVac studies.

Integer. Unit: days.

8. DtofAssay

Date of the yellow fever seroneutralization assay (Year-Month-Day).

Source: present study.

Example: 2018-05-24.

9. Titre

Reciprocal titre in the yellow fever seroneutralization assay.

Source: present study.

Integer; a value of zero denotes a negative sample i.e. a sample producing no assay read-out at the lowest dilution (1:4).

10. Std.Concentr

Standardized concentration of neutralizing antibodies to yellow fever virus.

Source: present study.

Numeric; a value of zero denotes a negative sample i.e. a sample producing no assay read-out at the lowest dilution (1:4).

Unit: IU/ml

Version 1.0.1

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