Distinct glycosylation and functional profile of typhoid vaccine-induced antibodies in a UK challenge study and Nepalese children. Stockdale *et al. doi: 10.3389/frans.2022.1005558*

Supplementary Figures and legends

SUPPLEMENTARY FIGURE 1- Raw data of relative abundance for total IgG (Vi-PS n=35, Vi-TCV n=37) and Vi-specific IgG (Vi-PS n= 15, Vi-TCV n=33) for IgG1 (A,C,E,G) and IgG2/3 (B,D,F,H) among UK participants 28 days post vaccination. Blue – Vi-PS and red – Vi-TCV vaccinees.

SUPPLEMENTARY FIGURE 2 – Vi-specific IgG1 and IgG2/3 glycan relative abundance for UK individuals diagnosed (Typhoid; dark green n=13) and not diagnosed (No Typhoid; light green n=35) with typhoid fever 28 days after ingestion of virulent *S.* Typhi bacteria (Post Challenge; PC).

SUPPLEMENTARY FIGURE 3 – Percentage difference in relative abundance between total IgG and Vi-specific IgG for UK individuals diagnosed (Typhoid; dark green n=13) and not diagnosed (No Typhoid; light green n=35) with typhoid fever 28 days after ingestion of virulent *S.* Typhi bacteria.

SUPPLEMENTARY FIGURE 4- Total IgG1 and IgG2/3 glycoslyation profiles in UK adults (n=72) and Nepalese children (n=35) before vaccination (D0).

SUPPLEMENTARY FIGURE 5 – Vi-specific IgG1 and IgG2/3 in UK adults (n=33) and Nepalese children (n=33) at 28 post vaccination with Vi-TCV

SUPPLEMENTARY FIGURE 6 - Heat map showing correlations between Antibody Dependent Neutrophil Phagocytosis (ADNP) and Vi-specific IgG1 and IgG2/3 glycosylation among UK and Nepalese individuals vaccinated with Vi-TCV for whom glycosylation data was available at D28 (n=33 UK and n=34 Nepal). The scale shows spearman rho values ranging from -1 to 1. Only significant (p<0.05) findings are coloured.

SUPPLEMENTARY FIGURE 7 - Repeatability evaluation of the LC-MS method. Technical variation of the method evaluated in the UK cohort using a cohort-independent standard (method standard) as well as a cohort-specific Ty-positive control (Positive control). Bars represent the average value of the replicates, while error-bars represent the standard deviation.

SUPPLEMENTARY FIGURE 8 - Supplementary Figure 8. Repeatability evaluation of the LC-MS method. Technical variation of the method evaluated in the Nepal cohort using a cohort-independent standard (method standard) as well as a cohort-specific Ty-positive control (Positive control). Bars represent the average value of the replicates, while error-bars represent the standard deviation.

SUPPLEMENTARY FIGURE 1

Diagram

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SUPPLEMENTARY FIGURE 2

Chart, diagram, schematic

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SUPPLEMENTARY FIGURE 3

Diagram, schematic

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SUPPLEMENTARY FIGURE 4

Chart, diagram

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SUPPLEMENTARY FIGURE 5

Chart, scatter chart

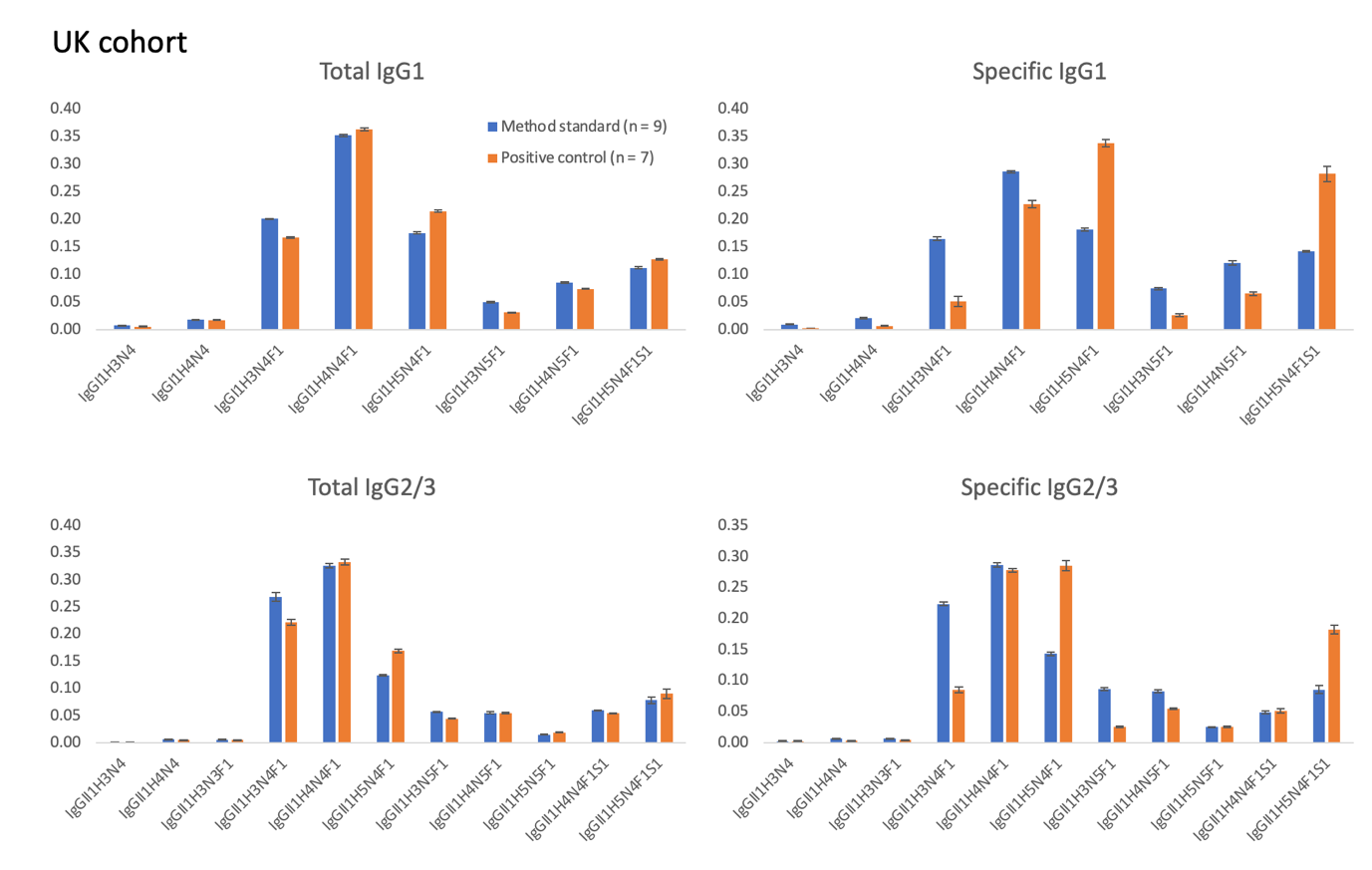
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SUPPLEMENTARY FIGURE 6

Chart, bar chart, waterfall chart

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SUPPLEMENTARY FIGURE 7



SUPPLEMENTARY FIGURE 8

A screenshot of a computer

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