TWO-DOSE 4CMENB VACCINATION IN ADOLESCENTS ELICITS
BACTERICIDAL ACTIVITY AGAINST 15 OUTBREAK-REPRESENTATIVE MENINGOCOCCAL STRAINS

A Biolchi¹, S Tomei¹, L Santini¹, R La Gaetana¹, E Mori¹, P Novy², R Rappuoli¹, R Bekkat-Berkani³*, MM Giuliani¹, M Pizza¹
¹GSK, Siena, Italy; ²GSK, Philadelphia, PA, US; ³GSK, Rockville, MD, US; *Presenting author, rafik.x.bekkat-berkani@gsk.com, +1(215)779.64.33

BACKGROUND
Neisseria meningitidis serogroup B (MenB) is the most common cause of bacterial meningitis outbreaks in many industrialized countries.¹-³

RESULTS
4CMenB vaccination elicits bactericidal antibodies against a representative panel of diverse outbreak strains from the US, UK, and France

- US: 100% of subjects achieved 4-fold rise in hSBA titer at post-vaccination versus baseline; GMTs were 3 at baseline and >119.4 post-vaccination.
- CHILE: 96% of subjects achieved 4-fold rise in hSBA titer at post-vaccination versus baseline; GMTs were 6.5 at baseline and >178.3 post-vaccination.

4CMenB, 4-component MenB vaccine; hSBA, human complement serum bactericidal antibody assay; GMT, geometric mean titer; MenB, meningococcal serogroup B; MenW, meningococcal serogroup W; UK, United Kingdom; US, United States. Error bars represent 95% confidence intervals.

CONCLUSIONS
- 4CMenB induces a functional immune response against 15 N. meningitidis outbreak strains collected from the US, UK, and France.
- The immune response to 4CMenB is comparable between adolescents from different geographical areas.
- Most strains in this panel are predicted to contain at least one 4CMenB-covered antigen, further highlighting the potential of this multi-component vaccine.
- Vaccination with 4CMenB has the capacity to confer protection against outbreaks of invasive meningococcal disease.