# Detection of Novel US Neisseria meningitidis Urethritis Clade Subtypes in Japan 

## Appendix 2



Appendix Figure 1. Gene alignments of the aniA-norB locus in Neisseria meningitidis and $N$. gonorrhoeae isolates. Strain names are on the left side. Descriptions on the right side are: Nm ( N . meningitidis) or $N$. gonorrhoeae_ isolated from IMD patient (IMD) or from STI patient (STI)_sequence type (ST)_isolated in USA or Japan. The norA (red arrows) and aniA (blue arrows) genes are indicated. Open reading frames identical to NMB1620 (open white arrows) and NMB1624 (dark gray arrows) in MC58 are shown. IMD, invasive meningococcal disease.


Appendix Figure 2. Phylogenetic analysis of the promoter region of the $f H b p$ gene in different Neisseria meningitidis isolates from Japan and the United States. Strains were isolated from patients with urethritis (blue font) or patients with invasive meningococcal disease (black font). The fHbp protein subvariants and promoter clades were grouped according to the specific criteria (32, main text). Scale bar indicates nucleotide substitutions per site.

