

# Phylogenetic analysis of influenza A(H1N1)pdm09 HA genes

## 22/23 vaccine strain in Japan

HI reference strain

January 2023

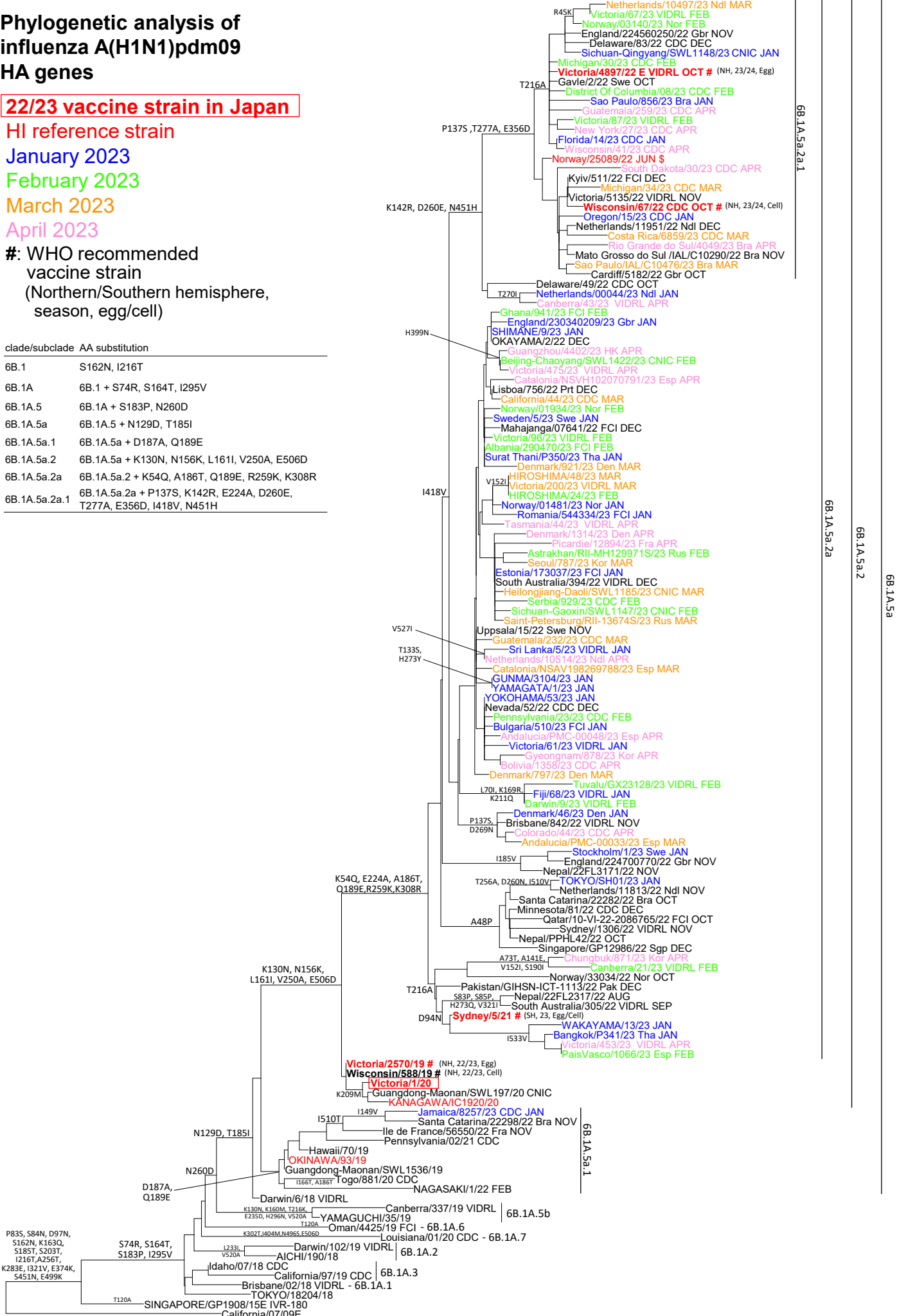
February 2023

March 2023

April 2023

#: WHO recommended vaccine strain (Northern/Southern hemisphere, season, egg/cell)

clade/subclade	AA substitution
6B.1	S162N, I216T
6B.1A	6B.1 + S74R, S164T, I295V
6B.1A.5	6B.1A + S183P, N260D
6B.1A.5a	6B.1A.5 + N129D, T185I
6B.1A.5a.1	6B.1A.5a + D187A, Q189E
6B.1A.5a.2	6B.1A.5a + K130N, N156K, L161I, V250A, E506D
6B.1A.5a.2a	6B.1A.5a.2 + K54Q, A186T, Q189E, R259K, K308R
6B.1A.5a.2a.1	6B.1A.5a.2a + P137S, K142R, E224A, D260E, T277A, E356D, I418V, N451H



6B.1A.5a.2a.1

6B.1A.5a.2a

6B.1A.5a.2

6B.1A.5a

6B.1A.5a.1

6B.1A.5b

6B.1A.6

6B.1A.7

6B.1A.2

6B.1A.3

6B.1A.1