

Phylogenetic analysis of influenza A(H1N1)pdm09 HA genes

22/23 vaccine strain in Japan

23/24 vaccine strain in Japan

HI reference strain

April 2023

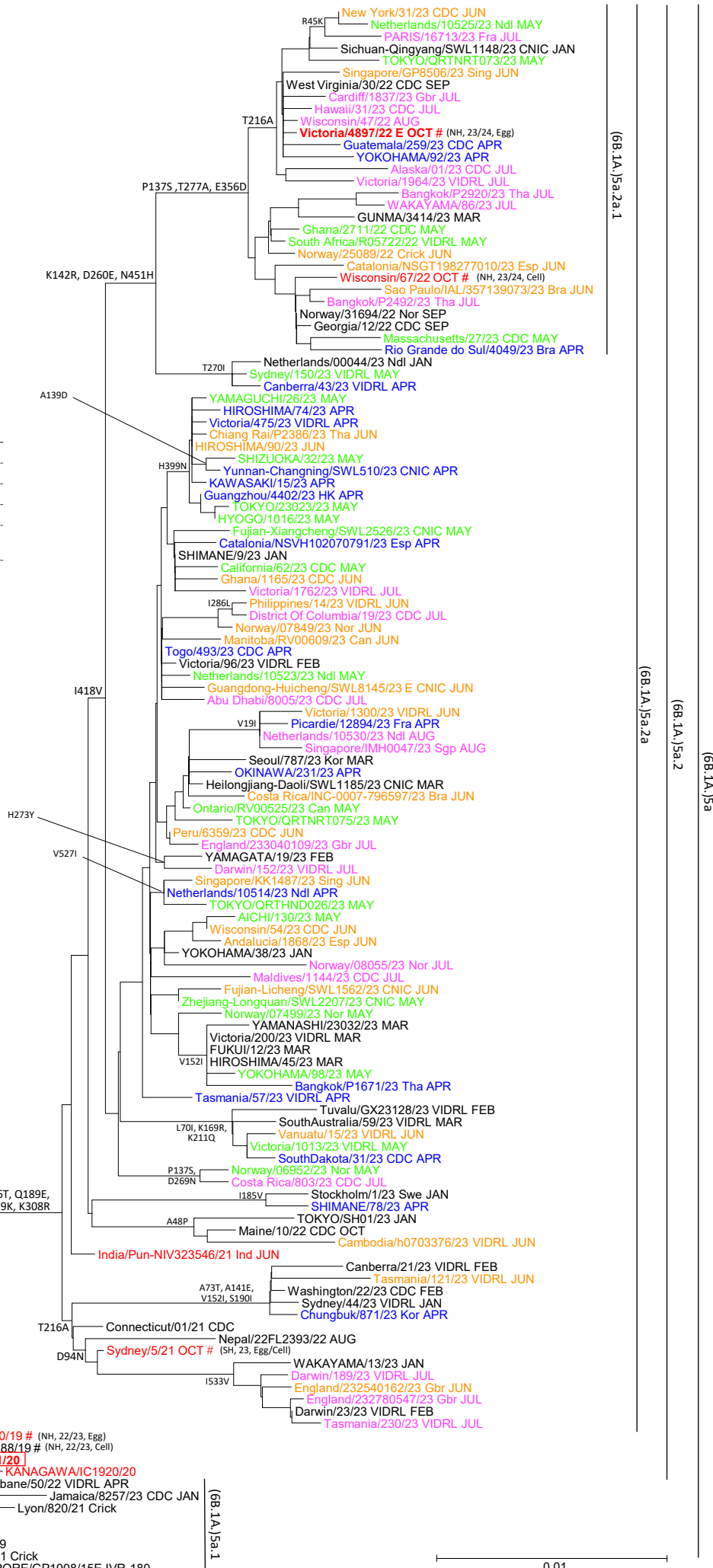
May 2023

June 2023

July and August 2023

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

clade	AA substitution
6B.1A.5a	N129D, T185I
6B.1A.5a.1	D187A, Q189E
6B.1A.5a.2	K130N, N156K, L161I, V250A, E506D
6B.1A.5a.2a	K54Q, A186T, Q189E, E224A, R259K, K308R
6B.1A.5a.2a.1	P137S, K142R, 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

0.01