Phylogenetic analysis of influenza B Victoria lineage HA genes

23/24 vaccine strain in Japan

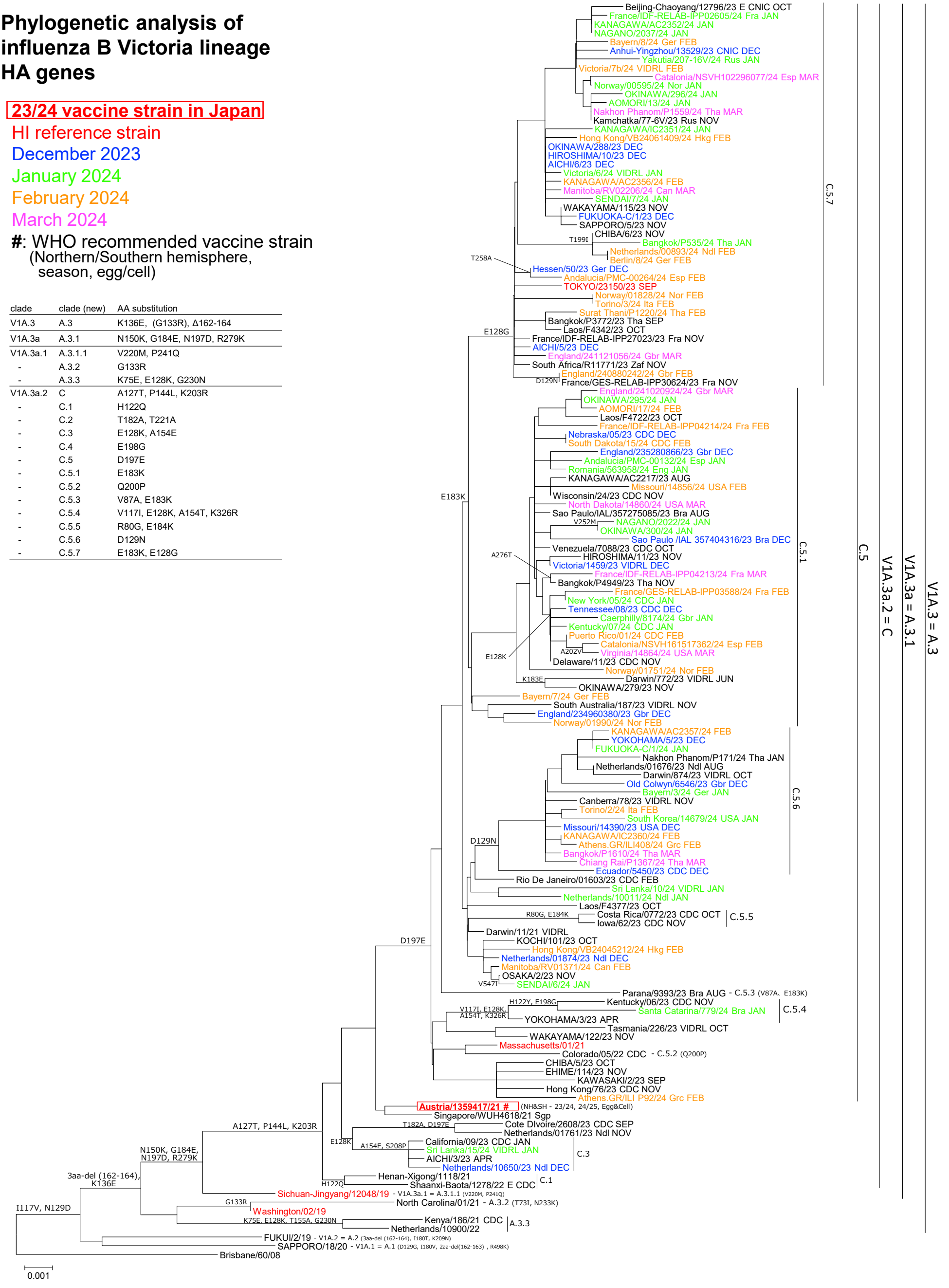
HI reference strain

December 2023

January 2024

February 2024

March 2024

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

clade	clade (new)	AA substitution
V1A.3	A.3	K136E, (G133R), Δ162-164
V1A.3a	A.3.1	N150K, G184E, N197D, R279K
V1A.3a.1	A.3.1.1	V220M, P241Q
-	A.3.2	G133R
-	A.3.3	K75E, E128K, G230N
V1A.3a.2	C	A127T, P144L, K203R
-	C.1	H122Q
-	C.2	T182A, T221A
-	C.3	E128K, A154E
-	C.4	E198G
-	C.5	D197E
-	C.5.1	E183K
-	C.5.2	Q200P
-	C.5.3	V87A, E183K
-	C.5.4	V117I, E128K, A154T, K326R
-	C.5.5	R80G, E184K
-	C.5.6	D129N
-	C.5.7	E183K, E128G