

Success and limitation of equine influenza vaccination: the first incursion in a decade of a Florida Clade 1 equine influenza virus that shakes protection despite high vaccine coverage.
 Stéphanie Fougerolle *et al.* Vaccines.

Supplementary Table S2: HA amino acid alignment.

	1	10	20	30	40	50	60	70	80	90	100
A/eq/Ohio/1/2003	SQNPISGNNTATLCLGHHAVANGTLVKTISDDQIEVTNATELVQSI SMGKICNNSYRILDGRNCTLIDAMLGDPHCDAFYENWDLFIERSSAFNSNCPYP										
A/eq/South Africa/4/2003	.....									
A/eq/East Lothian/1/2018	.....ND.....					P.....					KD.....
A/eq/Santiago/TT3A/2018	.....ND.....					P.....					KD.....
A/eq/Concepcion/RO6C/2018	.....ND.....					P.....					KD.....
A/eq/Paris/1/2018	.....ND.....					P.....					KD.....
A/eq/Pas-de-Calais/1/2018	.....ND.....					P.....					KD.....
A/eq/Ardennes/1/2018	.....ND.....					P.....					KD.....
A/eq/Calvados/1/2019	.....ND.....					P.....					KD.....
A/eq/Orne/1/2019	.....ND.....					P.....					KD.....
	101	110	120	130	140	150	160	170	180	190	200
A/eq/Ohio/1/2003	DIPDYASLRISIVASSGTLEFTAEGFTWTGVTQNGRSGACKRGSADSF S R L N W L T K S G S S Y P T L N V T M P N N K N F D K L Y I W G I H H P S S N Q E Q T K L Y I Q E S G										
A/eq/South Africa/4/2003	.....									
A/eq/East Lothian/1/2018	.....N.....				S.....						T.....
A/eq/Santiago/TT3A/2018	.....N.....				S.....						T.....
A/eq/Concepcion/RO6C/2018	.....N.....				S.....						T.....
A/eq/Paris/1/2018	.....N.....				S.....			I.....			T.....
A/eq/Pas-de-Calais/1/2018	.....N.....				S.....			I.....			T.....
A/eq/Ardennes/1/2018	.....N.....				S.....			I.....			T.....
A/eq/Calvados/1/2019	.....N.....				S.....			I.....			T.....
A/eq/Orne/1/2019	.....N.....				S.....			I.....			T.....
	201	210	220	230	240	250	260	270	280	290	300
A/eq/Ohio/1/2003	RVTVSTKRSQQTIIIPNIGSRPWVRGQSGRISIIYWTIVKPGDILMINSNGNLVAPRGYFKLKTGKSSVMRSDVPIDICVSECITPNGSISNDKPFQNVNKV										
A/eq/South Africa/4/2003	.....									
A/eq/East Lothian/1/2018	.....I.....										
A/eq/Santiago/TT3A/2018	.....I.....										
A/eq/Concepcion/RO6C/2018	.....I.....										
A/eq/Paris/1/2018	.....I.....										
A/eq/Pas-de-Calais/1/2018	.....I.....										
A/eq/Ardennes/1/2018	.....I.....										
A/eq/Calvados/1/2019	.....I.....										
A/eq/Orne/1/2019	.....I.....										
	301	310	320	330	340	350	360	370	380	390	400
A/eq/Ohio/1/2003	TYGKCPKYIRQNTLKLATGMRNVPEKQIRGIFGAIAGFIENGWEGMVDGWYGFYQNSEGTGQAADLKSTQAAIDQINGKLN RV I E R T N E K F H Q I E K E F S										
A/eq/South Africa/4/2003	-----										
A/eq/East Lothian/1/2018	.....									
A/eq/Santiago/TT3A/2018	.....									
A/eq/Concepcion/RO6C/2018	.....									
A/eq/Paris/1/2018	.....T.....										
A/eq/Pas-de-Calais/1/2018	.....T.....										
A/eq/Ardennes/1/2018	.....T.....										
A/eq/Calvados/1/2019	.....T.....										
A/eq/Orne/1/2019	.....T.....										
	401	410	420	430	440	450	460	470	480	490	500
A/eq/Ohio/1/2003	EVEGRIQDLEKYVEDTKIDLWSYNAELLVALENQHTIDLTD A E M N K L F E K T R R Q L R E N A E D M G G G C F K I Y H K C D N A C I G S I R N G T Y D H Y I Y R D E A L N N R F										
A/eq/South Africa/4/2003	-----										
A/eq/East Lothian/1/2018	.....R..L.....N.....										
A/eq/Santiago/TT3A/2018	.....G..L.....N.....										
A/eq/Concepcion/RO6C/2018	.....R..L.....N.....										
A/eq/Paris/1/2018	.....R..L.....N.....										
A/eq/Pas-de-Calais/1/2018	.....R..L.....N.....										
A/eq/Ardennes/1/2018	.....R..L.....N.....										
A/eq/Calvados/1/2019	.....R..L.....N.....										
A/eq/Orne/1/2019	.....R..L.....N.....										
	501	510	520	530	540	550					
A/eq/Ohio/1/2003	QIKGVELKSGYKDWILWISFAISCFLICVLLGFIMWACQKGNIRCNICI										
A/eq/South Africa/4/2003	-----										
A/eq/East Lothian/1/2018	.....									
A/eq/Santiago/TT3A/2018	.....									
A/eq/Concepcion/RO6C/2018	.....									
A/eq/Paris/1/2018	.....									
A/eq/Pas-de-Calais/1/2018	.....									
A/eq/Ardennes/1/2018	.....									
A/eq/Calvados/1/2019	.....									
A/eq/Orne/1/2019	.....									