


HXB2 Position	Seq Feature	No. of Cases (V vs. P) (Incidence per 100 PYRs)	VE(%) (95% CI)		Two-sided P-value	Two-sided Differential VE		
						P-value	FWER P-value	Q-value
198	S	21 (0.5) vs. 29 (0.7)	28.4 (−25.6, 59.2)		0.24	0.16	1	0.65
	Not S	98 (2.4) vs. 86 (2.1)	−12.6 (−50.5, 15.7)		0.42			
198	T	95 (2.3) vs. 78 (1.9)	−20.4 (−62.4, 10.8)		0.22	0.038	0.97	0.48
	Not T	24 (0.6) vs. 37 (0.9)	35.9 (−7.2, 61.6)		0.09			
200	A	22 (0.5) vs. 17 (0.4)	−28.1 (−141.3, 31.9)		0.44	0.45	1	0.87
	Not A	97 (2.4) vs. 98 (2.4)	2.2 (−29.5, 26.1)		0.88			
200	T	79 (1.9) vs. 91 (2.3)	14.2 (−16.0, 36.5)		0.32	0.03	0.93	0.43
	Not T	40 (1) vs. 24 (0.6)	−64.8 (−173.4, 0.6)		0.053			
200	V	13 (0.3) vs. 3 (0.1)	−328.6 (−Inf, −22.1)		0.023	0.02	0.83	0.36
	Not V	106 (2.6) vs. 112 (2.8)	6.4 (−22.0, 28.3)		0.62			
201	I	90 (2.2) vs. 76 (1.9)	−17.1 (−58.9, 13.7)		0.31	0.11	1	0.65
	Not I	29 (0.7) vs. 39 (1)	26.5 (−18.8, 54.6)		0.21			
201	V	18 (0.4) vs. 27 (0.7)	34.2 (−19.6, 63.7)		0.17	0.11	1	0.65
	Not V	101 (2.5) vs. 88 (2.2)	−13.5 (−51.0, 14.7)		0.39			
202	A	9 (0.2) vs. 6 (0.1)	−48.3 (−316.6, 47.2)		0.45	0.47	1	0.88
	Not A	110 (2.7) vs. 109 (2.7)	0.2 (−30.0, 23.4)		0.99			
202	K	6 (0.1) vs. 7 (0.2)	15.1 (−152.7, 71.5)		0.77	0.73	1	0.95
	Not K	113 (2.8) vs. 108 (2.7)	−3.4 (−34.6, 20.6)		0.8			
202	T	101 (2.5) vs. 101 (2.5)	1.2 (−30.2, 25.0)		0.93	0.51	1	0.92
	Not T	18 (0.4) vs. 14 (0.3)	−27.3 (−156.0, 36.7)		0.5			
274	S	111 (2.7) vs. 108 (2.7)	−1.6 (−32.4, 22.0)		0.91	0.84	1	0.96
	Not S	8 (0.2) vs. 7 (0.2)	−13.1 (−212.0, 59.0)		0.81			
275	E	100 (2.5) vs. 90 (2.2)	−9.8 (−46.0, 17.4)		0.52	0.26	1	0.79
	Not E	19 (0.5) vs. 25 (0.6)	24.8 (−36.5, 58.6)		0.35			
275	K	14 (0.3) vs. 20 (0.5)	30.7 (−37.1, 65.0)		0.29	0.22	1	0.74
	Not K	105 (2.6) vs. 95 (2.4)	−9.3 (−44.2, 17.2)		0.53			
277	I	29 (0.7) vs. 8 (0.2)	−258.4 (−683.9, −63.8)		0.0014	< 0.001	0.034	0.036*
	Not I	90 (2.2) vs. 107 (2.7)	16.8 (−10.1, 37.2)		0.2			
277	L	85 (2.1) vs. 100 (2.5)	16.0 (−12.2, 37.1)		0.24	0.0043	0.26	0.14*
	Not L	34 (0.8) vs. 15 (0.4)	−124.1 (−311.4, −22.1)		0.0092			
278	S	10 (0.2) vs. 14 (0.3)	29.4 (−59.0, 68.6)		0.4	0.34	1	0.82
	Not S	109 (2.7) vs. 101 (2.5)	−6.7 (−39.9, 18.6)		0.64			
278	T	103 (2.5) vs. 95 (2.4)	−7.2 (−41.6, 18.9)		0.63	0.4	1	0.85
	Not T	16 (0.4) vs. 20 (0.5)	20.9 (−52.7, 59.0)		0.48			
279	D	71 (1.7) vs. 65 (1.6)	−7.9 (−51.1, 22.9)		0.66	0.63	1	0.94
	Not D	48 (1.2) vs. 50 (1.2)	5.1 (−41.1, 36.1)		0.8			
279	N	43 (1.1) vs. 44 (1.1)	3.4 (−47.1, 36.5)		0.87	0.74	1	0.95
	Not N	76 (1.9) vs. 71 (1.8)	−5.8 (−46.2, 23.4)		0.73			
281	A	67 (1.6) vs. 64 (1.6)	−3.5 (−45.7, 26.5)		0.85	0.92	1	0.96
	Not A	52 (1.3) vs. 51 (1.3)	−0.8 (−48.4, 31.5)		0.97			
281	T	23 (0.6) vs. 22 (0.5)	−3.4 (−85.5, 42.4)		0.91	0.97	1	0.98
	Not T	96 (2.4) vs. 93 (2.3)	−2.0 (−35.7, 23.3)		0.89			
281	V	22 (0.5) vs. 18 (0.4)	−21.0 (−125.6, 35.1)		0.55	0.57	1	0.93
	Not V	97 (2.4) vs. 97 (2.4)	1.2 (−31.0, 25.4)		0.94			
283	I	16 (0.4) vs. 17 (0.4)	7.2 (−83.7, 53.1)		0.83	0.77	1	0.95
	Not I	103 (2.5) vs. 98 (2.4)	−3.9 (−37.1, 21.2)		0.78			
283	T	96 (2.4) vs. 96 (2.4)	1.1 (−31.2, 25.5)		0.94	0.58	1	0.93
	Not T	23 (0.6) vs. 19 (0.5)	−19.5 (−119.3, 34.9)		0.57			
365	A	12 (0.3) vs. 13 (0.3)	8.7 (−100.2, 58.3)		0.82	0.76	1	0.95
	Not A	107 (2.6) vs. 102 (2.5)	−3.7 (−36.0, 20.9)		0.79			
365	S	101 (2.5) vs. 92 (2.3)	−8.5 (−44.0, 18.2)		0.57	0.33	1	0.82
	Not S	18 (0.4) vs. 23 (0.6)	22.7 (−43.3, 58.3)		0.41			
371	I	94 (2.3) vs. 90 (2.2)	−3.3 (−37.9, 22.6)		0.83	0.89	1	0.96
	Not I	25 (0.6) vs. 25 (0.6)	1.3 (−71.7, 43.3)		0.96			
371	V	25 (0.6) vs. 25 (0.6)	1.3 (−71.7, 43.3)		0.96	0.89	1	0.96
	Not V	94 (2.3) vs. 90 (2.2)	−3.3 (−37.9, 22.6)		0.83			
372	T	104 (2.6) vs. 104 (2.6)	1.1 (−29.7, 24.7)		0.93	0.46	1	0.88
	Not T	15 (0.4) vs. 11 (0.3)	−34.9 (−193.7, 38.0)		0.45			
373	M	8 (0.2) vs. 6 (0.1)	−31.9 (−280.1, 54.2)		0.61	0.63	1	0.94
	Not M	111 (2.7) vs. 109 (2.7)	−0.7 (−31.1, 22.7)		0.96			
373	T	106 (2.6) vs. 104 (2.6)	−0.8 (−32.1, 23.1)		0.96	0.73	1	0.95
	Not T	13 (0.3) vs. 11 (0.3)	−16.9 (−160.9, 47.6)		0.7			
421	K	111 (2.7) vs. 109 (2.7)	−0.7 (−31.2, 22.7)		0.96	0.63	1	0.94
	Not K	8 (0.2) vs. 6 (0.1)	−31.5 (−279.0, 54.4)		0.61			
421	R	8 (0.2) vs. 6 (0.1)	−31.5 (−279.0, 54.4)		0.61	0.63	1	0.94
	Not R	111 (2.7) vs. 109 (2.7)	−0.7 (−31.2, 22.7)		0.96			
423	F	21 (0.5) vs. 11 (0.3)	−88.8 (−291.7, 8.9)		0.088	0.076	1	0.65
	Not F	98 (2.4) vs. 104 (2.6)	6.9 (−22.7, 29.3)		0.61			
423	I	96 (2.4) vs. 101 (2.5)	6.1 (−24.2, 29.0)		0.66	0.14	1	0.65
	Not I	23 (0.6) vs. 14 (0.3)	−62.7 (−216.1, 16.3)		0.15			
426	L	7 (0.2) vs. 10 (0.2)	31.0 (−81.3, 73.7)		0.45	0.41	1	0.85
	Not L	112 (2.7) vs. 105 (2.6)	−5.5 (−37.7, 19.2)		0.69			
426	M	109 (2.7) vs. 104 (2.6)	−3.6 (−35.6, 20.8)		0.8	0.76	1	0.95
	Not M	10 (0.2) vs. 11 (0.3)	10.2 (−111.4, 61.9)		0.81			
429	E	27 (0.7) vs. 44 (1.1)	39.3 (2.0, 62.4)		0.041	0.01	0.55	0.23
	Not E	92 (2.3) vs. 71 (1.8)	−28.1 (−74.5, 6.0)		0.12			
429	G	50 (1.2) vs. 50 (1.2)	1.1 (−46.3, 33.2)		0.95	0.82	1	0.96
	Not G	69 (1.7) vs. 65 (1.6)	−4.9 (−47.3, 25.2)		0.78			
429	K	18 (0.4) vs. 7 (0.2)	−154.0 (−508.2, −6.1)		0.036	0.03	0.93	0.43
	Not K	101 (2.5) vs. 108 (2.7)	7.5 (−21.3, 29.5)		0.57			
429	R	14 (0.3) vs. 8 (0.2)	−72.8 (−312.0, 27.5)		0.22	0.21	1	0.72
	Not R	105 (2.6) vs. 107 (2.						