HXB2 Position	Seq Feature	No. of Cases (V vs. P)	VE(%)(95% CI)	Two-sided	P-value	FWER P-value	rential VI Q-value
Position 130	PNG Present	(Incidence per 100 PYRs) 67 (1.6) vs. 66 (1.6)	-0.3 (-41.0, 28.6)	P-value 0.98	0.87	P-value 1	0.97
133	PNG Absent PNG Present	52 (1.3) vs. 49 (1.2) 30 (0.7) vs. 37 (0.9)	-4.9 (-55.0, 29.0)	0.81	0.24	1	0.86
135	PNG Present	89 (2.2) vs. 78 (1.9) 24 (0.6) vs. 18 (0.4)	-31.6 (-142.5, 28.6)	0.44	0.37	1	0.86
136	PNG Absent	95 (2.3) vs. 97 (2.4)	3.1 (–28.5, 27.0)	0.82	0.9	1	0.97
137	PNG Present PNG Absent	13 (0.3) vs. 12 (0.3) 106 (2.6) vs. 103 (2.6)	-7.1 (-134.7, 51.1)	0.86 0.9	0.17	1	0.86
138	PNG Present PNG Absent	27 (0.7) vs. 18 (0.4) 92 (2.3) vs. 97 (2.4)	-47.9 (-168.5, 18.6) 6.2 (-24.8, 29.5)	0.2 0.66	0.27	1	0.86
	PNG Present PNG Absent	20 (0.5) vs. 26 (0.6) 99 (2.4) vs. 89 (2.2)	23.7 (-36.6, 57.4) -9.9 (-46.3, 17.5)	0.36 0.52			
139	PNG Present PNG Absent	20 (0.5) vs. 36 (0.9) 99 (2.4) vs. 79 (2)	45.0 (5.0, 68.1) -23.8 (-66.4, 7.9)	0.032 0.16	0.01	0.46	0.58
140	PNG Present	28 (0.7) vs. 16 (0.4) 91 (2.2) vs. 99 (2.5)	-73.0 (-219.7, 6.4) 9.1 (-20.8, 31.6)	0.08 0.51	0.062	0.99	0.86
141	PNG Present	20 (0.5) vs. 15 (0.4)	−31.7 (−157.2, 32.6) ←	0.42	0.42	1	0.87
142	PNG Absent PNG Present	99 (2.4) vs. 100 (2.5) 15 (0.4) vs. 12 (0.3)	2.1 (-29.2, 25.9) -23.1 (-163.1, 42.4)	0.88	0.6	1	0.94
143	PNG Absent PNG Present	104 (2.6) vs. 103 (2.6) 13 (0.3) vs. 21 (0.5)	0.1 (-31.1, 24.0)	0.99	0.11	1	0.86
144	PNG Absent	106 (2.6) vs. 94 (2.3)	-11.5 (-47.1, 15.6) 	0.44	0.57	1	0.94
145	PNG Present PNG Absent	13 (0.3) vs. 10 (0.2) 106 (2.6) vs. 105 (2.6)	-28.7 (-193.5, 43.6)	0.55	0.21	1	0.86
46	PNG Present PNG Absent	14 (0.3) vs. 8 (0.2) 105 (2.6) vs. 107 (2.7)	-72.6 (-311.3, 27.6) 3.0 (-27.0, 25.9)	0.22 0.83	0.75	1	0.94
47	PNG Present PNG Absent	9 (0.2) vs. 10 (0.2) 110 (2.7) vs. 105 (2.6)	11.3 (-118.2, 64.0) -3.6 (-35.4, 20.7)	0.79 0.8	0.6	1	0.94
	PNG Present PNG Absent	11 (0.3) vs. 13 (0.3) 108 (2.6) vs. 102 (2.5)	16.2 (-87.0, 62.5) -4.7 (-37.2, 20.2)	0.67 0.74			
148	PNG Present PNG Absent	12 (0.3) vs. 13 (0.3) 107 (2.6) vs. 102 (2.5)	8.4 (-100.7, 58.2) -3.7 (-36.0, 21.0)	0.83 0.8	0.76	1	0.94
149	PNG Present	8 (0.2) vs. 7 (0.2) 111 (2.7) vs. 108 (2.7)	-12.9 (-211.3, 59.1) -1.6 (-32.4, 22.0)	0.81 0.91	0.84	1	0.97
160	PNG Present	108 (2.6) vs. 102 (2.5)	-4.7 (-37.2, 20.1) -1	0.74	0.6	1	0.94
85	PNG Absent PNG Present	11 (0.3) vs. 13 (0.3) 7 (0.2) vs. 10 (0.2)	16.4 (-86.7, 62.5) 3 0.7 (-82.1, 73.6)	0.66	0.41	1	0.87
85I	PNG Absent PNG Present	112 (2.7) vs. 105 (2.6) 7 (0.2) vs. 8 (0.2)	-5.4 (-37.6, 19.2)	0.7	0.74	1	0.94
185m	PNG Absent	112 (2.7) vs. 107 (2.7)	-3.4 (-34.8, 20.6)	0.8	0.21	1	0.86
185n	PNG Present PNG Absent	10 (0.2) vs. 5 (0.1) 109 (2.7) vs. 110 (2.7)	-97.5 (-477.9, 32.5) 	0.21 0.88	0.68	1	0.94
1850	PNG Present PNG Absent	10 (0.2) vs. 8 (0.2) 109 (2.7) vs. 107 (2.7)	-23.5 (-213.0, 51.2)	0.66 0.96	0.77	1	0.94
	PNG Present PNG Absent	16 (0.4) vs. 14 (0.3) 103 (2.5) vs. 101 (2.5)	-12.9 (-131.3, 44.9)	0.74 0.95			
185p	PNG Present PNG Absent	9 (0.2) vs. 9 (0.2) 110 (2.7) vs. 106 (2.6)	1.4 (-148.3, 60.9) -2.6 (-34.0, 21.4)	0.98 0.85	0.94	1	0.97
185q	PNG Present	14 (0.3) vs. 11 (0.3) 105 (2.6) vs. 104 (2.6)	-25.9 (-177.3, 42.8) • • • • • • • • • • • • • • • • • • •	0.57 0.99	0.59	1	0.94
186	PNG Present	16 (0.4) vs. 26 (0.6)	39.1 (–13.4, 67.4)	0.12	0.07	1	0.86
187	PNG Absent PNG Present	103 (2.5) vs. 89 (2.2) 51 (1.3) vs. 47 (1.2)	-14.4 (-51.9, 13.9)	0.35	0.76	1	0.94
188	PNG Absent PNG Present	68 (1.7) vs. 68 (1.7) 17 (0.4) vs. 10 (0.2)	1.1 (-38.4, 29.4)	0.95	0.18	1	0.86
276	PNG Absent	102 (2.5) vs. 105 (2.6)	4.0 (-26.1, 26.9)	0.77	0.74	1	0.94
295	PNG Present PNG Absent	112 (2.7) vs. 107 (2.7) 7 (0.2) vs. 8 (0.2)	-3.5 (-34.9, 20.6) 13.4 (-138.8, 68.6)	0.8 0.78	0.98	1	0.98
332	PNG Present PNG Absent	34 (0.8) vs. 33 (0.8) 85 (2.1) vs. 82 (2)	-2.0 (-64.7, 36.8) -2.4 (-38.7, 24.4)	0.93 0.88	0.58	1	0.94
	PNG Present PNG Absent	82 (2) vs. 83 (2.1) 37 (0.9) vs. 32 (0.8)	2.4 (-32.5, 28.0) -14.4 (-83.6, 28.7)	0.88 0.58	0.72		0.94
386	PNG Present PNG Absent	107 (2.6) vs. 105 (2.6) 12 (0.3) vs. 10 (0.2)	-0.8 (-31.9, 23.0) -18.3 (-173.8, 48.9)	0.96 0.69		1	
392	PNG Present PNG Absent	86 (2.1) vs. 75 (1.9) 33 (0.8) vs. 40 (1)	-13.3 (-54.5, 16.9)	0.43 0.39	0.25	1	0.86
394	PNG Present	12 (0.3) vs. 16 (0.4) 107 (2.6) vs. 99 (2.5)	25.7 (-57.0, 64.9) -6.8 (-40.4, 18.7)	0.44	0.37	1	0.86
400	PNG Present	15 (0.4) vs. 10 (0.2)	-48.0 (-229.5, 33.5) <	0.34	0.34	1	0.86
101	PNG Absent PNG Present	104 (2.6) vs. 105 (2.6) 20 (0.5) vs. 14 (0.3)	2.1 (-28.4, 25.3) ————————————————————————————————————	0.88	0.32	1	0.86
402	PNG Present	99 (2.4) vs. 101 (2.5) 10 (0.2) vs. 13 (0.3)	3.1 (-27.9, 26.5) 24.1 (-73.0, 66.7)	0.83	0.46	1	0.89
103	PNG Absent	109 (2.7) vs. 102 (2.5)	-5.7 (−38.4, 19.3) ← ■	0.69	0.44	1	0.89
104	PNG Present PNG Absent	9 (0.2) vs. 12 (0.3) 110 (2.7) vs. 103 (2.6)	25.6 (-76.5, 68.7) -5.5 (-38.1, 19.3)	0.5 0.69	0.36	1	0.86
105	PNG Present PNG Absent	16 (0.4) vs. 11 (0.3) 103 (2.5) vs. 104 (2.6)	-43.6 (-209.3, 33.4) 2.1 (-28.6, 25.4)	0.36 0.88	0.62	1	0.94
	PNG Present PNG Absent	16 (0.4) vs. 13 (0.3) 103 (2.5) vs. 102 (2.5)	-21.7 (-152.9, 41.5) 41. 50 41.50 	0.6 0.99			
106	PNG Present PNG Absent	30 (0.7) vs. 23 (0.6) 89 (2.2) vs. 92 (2.3)	-28.8 (-121.8, 25.2) 	0.36 0.77	0.34	1	0.86
107	PNG Present	16 (0.4) vs. 15 (0.4) 103 (2.5) vs. 100 (2.5)	-5.3 (-113.0, 47.9) -1.8 (-34.1, 22.7)	0.89 0.9	0.93	1	0.97
108	PNG Present	13 (0.3) vs. 16 (0.4)	19.6 (-67.2, 61.3)	0.56	0.49	1	0.91
109	PNG Absent PNG Present	106 (2.6) vs. 99 (2.5) 19 (0.5) vs. 17 (0.4)	-5.8 (-39.2, 19.5) -10.5 (-112.6, 42.5)	0.68	0.8	1	0.96
10	PNG Absent PNG Present	100 (2.5) vs. 98 (2.4) 16 (0.4) vs. 14 (0.3)	-0.9 (-33.3, 23.7) -13.2 (-131.8, 44.8) -	0.95	0.77	1	0.94
111	PNG Absent	103 (2.5) vs. 101 (2.5)	-0.8 (-32.6, 23.4)	0.95	0.88	1	0.97
113	PNG Present PNG Absent	55 (1.3) vs. 52 (1.3) 64 (1.6) vs. 63 (1.6)	-4.6 (-52.8, 28.4) -0.4 (-42.2, 29.1)	0.82	0.89	1	0.97
160	PNG Present PNG Absent	26 (0.6) vs. 26 (0.6) 93 (2.3) vs. 89 (2.2)	1.2 (-70.1, 42.7) -3.3 (-38.2, 22.7)	0.96 0.83	0.63	1	0.94
161	PNG Present PNG Absent	16 (0.4) vs. 18 (0.4) 103 (2.5) vs. 97 (2.4)	12.3 (-72.0, 55.3) -5.0 (-38.6, 20.4)	0.7 0.73	0.13		0.86
	PNG Present PNG Absent	35 (0.9) vs. 24 (0.6) 84 (2.1) vs. 91 (2.3)	-44.4 (-142.8, 14.1) 	0.17 0.54		1	
162	PNG Present PNG Absent	32 (0.8) vs. 35 (0.9) 87 (2.1) vs. 80 (2)	9.6 (-46.0, 44.0) -7.5 (-45.7, 20.6)	0.68 0.64	0.55	1	0.94
163	PNG Present	26 (0.6) vs. 22 (0.5)	−16.6 (−105.7, 33.9) ←	0.6	0.61	1	0.94
164	PNG Absent PNG Present	93 (2.3) vs. 93 (2.3) 12 (0.3) vs. 15 (0.4)	1.1 (-31.8, 25.8)	0.94	0.48	1	0.91
164a	PNG Present	107 (2.6) vs. 100 (2.5) 15 (0.4) vs. 14 (0.3)	-5.8 (-38.9, 19.5)	0.69	0.92	1	0.97
164b	PNG Absent	104 (2.6) vs. 101 (2.5)	-1.8 (-33.9, 22.6) -1	0.9	0.17	1	0.86
465	PNG Present PNG Absent	5 (0.1) vs. 10 (0.2) 114 (2.8) vs. 105 (2.6)	50.6 (-44.6, 83.1) -7.3 (-39.9, 17.7)	0.2	0.33	1	0.86
	PNG Present	18 (0.4) vs. 23 (0.6) 101 (2.5) vs. 92 (2.3)	22.7 (-43.2, 58.3) -8.6 (-44.0, 18.2)	0.41 0.57			