

Supplementary Table S1. Compound α/β -thalassemia genotypes among young individuals of marriageable age in Guangdong Province

Genotype	Cases	Frequency (%)	Genotype	Cases	Frequency (%)
--SEA/ $\alpha\alpha$, $\beta^{CD41-42}/\beta^N$	173	18.60	$-\alpha^{3.7}/\alpha\alpha$, β^{-29}/β^N	2	0.22
--SEA/ $\alpha\alpha$, $\beta^{IVS-II-654}/\beta^N$	120	12.90	$-\alpha^{3.7}/-\alpha^{4.2}$, $\beta^{CD41-42}/\beta^N$	2	0.22
$-\alpha^{3.7}/\alpha\alpha$, $\beta^{CD41-42}/\beta^N$	102	10.97	$-\alpha^{4.2}/\alpha\alpha$, β^{CD26}/β^N	2	0.22
--SEA/ $\alpha\alpha$, β^{28}/β^N	69	7.42	--SEA/ $-\alpha^{3.7}$, β^{CD17}/β^N	2	0.22
$-\alpha^{3.7}/\alpha\alpha$, $\beta^{IVS-II-654}/\beta^N$	61	6.56	--SEA/ $-\alpha^{3.7}$, $\beta^{IVS-II-654}/\beta^N$	2	0.22
$-\alpha^{4.2}/\alpha\alpha$, $\beta^{CD41-42}/\beta^N$	44	4.73	$\alpha\alpha^{QS}/\alpha\alpha$, β^{28}/β^N	2	0.22
--SEA/ $\alpha\alpha$, β^{CD17}/β^N	43	4.62	$\alpha\alpha^{QS}/\alpha\alpha$, $\beta^{CD71-72}/\beta^N$	2	0.22
$-\alpha^{3.7}/\alpha\alpha$, β^{28}/β^N	36	3.87	--SEA/ $\alpha\alpha$, β^{CD43}/β^N	2	0.22
$\alpha\alpha^{WS}/\alpha\alpha$, $\beta^{CD41-42}/\beta^N$	36	3.87	$-\alpha^{3.7}/\alpha\alpha$, $\beta^{IVS-I-1}/\beta^N$	1	0.11
$-\alpha^{3.7}/\alpha\alpha$, β^{CD17}/β^N	25	2.69	$-\alpha^{3.7}/\alpha\alpha$, β^{27-28}/β^N	1	0.11
$-\alpha^{4.2}/\alpha\alpha$, $\beta^{IVS-II-654}/\beta^N$	22	2.37	$-\alpha^{3.7}/\alpha\alpha$, β^{CAP}/β^N	1	0.11
$\alpha\alpha^{WS}/\alpha\alpha$, $\beta^{IVS-II-654}/\beta^N$	21	2.26	$-\alpha^{3.7}/\alpha\alpha^{CS}$, β^{28}/β^N	1	0.11
--SEA/ $\alpha\alpha$, $\beta^{CD71-72}/\beta^N$	14	1.51	$-\alpha^{3.7}/\alpha\alpha^{CS}$, $\beta^{CD41-42}/\beta^N$	1	0.11
$-\alpha^{4.2}/\alpha\alpha$, β^{28}/β^N	13	1.40	$-\alpha^{3.7}/\alpha\alpha^{WS}$, β^{28}/β^N	1	0.11
--SEA/ $\alpha\alpha$, β^{CD26}/β^N	10	1.08	$-\alpha^{4.2}/\alpha\alpha$, β^{CD113}/β^N	1	0.11
$\alpha\alpha^{WS}/\alpha\alpha$, β^{28}/β^N	10	1.08	$-\alpha^{4.2}/\alpha\alpha$, β^{27-28}/β^N	1	0.11
$-\alpha^{4.2}/\alpha\alpha$, β^{CD17}/β^N	9	0.97	$-\alpha^{4.2}/\alpha\alpha$, β^{29}/β^N	1	0.11
$\alpha\alpha^{CS}/\alpha\alpha$, $\beta^{CD41-42}/\beta^N$	7	0.75	$\alpha^{4.2}/-\alpha^{4.2}$, β^{28}/β^N	1	0.11
$\alpha\alpha^{CS}/\alpha\alpha$, $\beta^{IVS-II-654}/\beta^N$	7	0.75	$-\alpha^{4.2}/\alpha\alpha^{CS}$, $\beta^{CD41-42}/\beta^N$	1	0.11
--SEA/ $\alpha\alpha$, $\beta^{IVS-I-1}/\beta^N$	7	0.75	$-\alpha^{4.2}/\alpha\alpha^{WS}$, $\beta^{IVS-II-654}/\beta^N$	1	0.11
$\alpha\alpha^{WS}/\alpha\alpha$, β^{CD17}/β^N	7	0.75	$\alpha\alpha^{CS}/\alpha\alpha$, $\beta^{CD14-15}/\beta^N$	1	0.11
$-\alpha^{3.7}/\alpha\alpha$, $\beta^{CD71-72}/\beta^N$	6	0.65	$\alpha\alpha^{CS}/\alpha\alpha$, β^{27-28}/β^N	1	0.11
$-\alpha^{3.7}/\alpha\alpha$, β^{CD26}/β^N	6	0.65	$\alpha\alpha^{CS}/\alpha\alpha$, β^{29}/β^N	1	0.11
--SEA/ $\alpha\alpha$, β^{29}/β^N	6	0.65	--SEA/ $-\alpha^{3.7}$, $\beta^{CD71-72}/\beta^N$	1	0.11
$-\alpha^{3.7}/\alpha\alpha$, β^{CD43}/β^N	4	0.43	--SEA/ $-\alpha^{4.2}$, β^{CD17}/β^N	1	0.11
--SEA/ $-\alpha^{3.7}$, $\beta^{CD41-42}/\beta^N$	4	0.43	--SEA/ $-\alpha^{4.2}$, β^{28}/β^N	1	0.11
$\alpha\alpha^{QS}/\alpha\alpha$, β^{CD17}/β^N	4	0.43	--SEA/ $\alpha\alpha^{WS}$, β^{28}/β^N	1	0.11
$-\alpha^{4.2}/\alpha\alpha$, $\beta^{CD71-72}/\beta^N$	3	0.32	--SEA/ $\alpha\alpha^{WS}$, $\beta^{CD41-42}/\beta^N$	1	0.11
$\alpha\alpha^{CS}/\alpha\alpha$, β^{CD17}/β^N	3	0.32	$\alpha\alpha^{QS}/\alpha\alpha^{WS}$, $\beta^{CD41-42}/\beta^N$	1	0.11
$\alpha\alpha^{CS}/\alpha\alpha$, β^{28}/β^N	3	0.32	--SEA/ $\alpha\alpha$, β^{CAP}/β^N	1	0.11
$\alpha\alpha^{CS}/\alpha\alpha$, $\beta^{CD71-72}/\beta^N$	3	0.32	$\alpha\alpha^{WS}/\alpha\alpha$, $\beta^{IVS-I-1}/\beta^N$	1	0.11
$\alpha\alpha^{QS}/\alpha\alpha$, $\beta^{CD41-42}/\beta^N$	3	0.32	$\alpha\alpha^{WS}/\alpha\alpha$, β^{CD26}/β^N	1	0.11
$\alpha\alpha^{QS}/\alpha\alpha$, $\beta^{IVS-II-654}/\beta^N$	3	0.32	$\alpha\alpha^{WS}/\alpha\alpha^{WS}$, $\beta^{CD41-42}/\beta^N$	1	0.11
--SEA/ $\alpha\alpha$, β^{27-28}/β^N	3	0.32	Total	930	100

Note. Data are presented as numbers or percentages.