

**Supplemental Table S1.** Allele Frequencies of HLA-A in Patients with ICI-T1DM

Allele	ICI-T1DM (n=14)			ICI-controls (n=26) <sup>a</sup>			Controls (n=587,057) <sup>b</sup>	ICI-T1DM vs. ICI-controls	ICI-controls vs. controls
	Number	F, %	P value <sup>c</sup>	Number	F, %	P value <sup>c</sup>	F, %	P value <sup>c</sup>	P value <sup>c</sup>
A*02:01	3	21.4	NS	2	7.7	NS	11.22	NS	NS
A*02:06	2	14.3	NS	2	7.7	NS	9.44	NS	NS
A*02:07	0	0.0	NS	4	15.4	NS	3.25	NS	NS
A*11:01	1	7.1	NS	0	0.0	NS	8.91	NS	NS
A*11:02	1	7.1	NS	0	0.0	NS	0.16	NS	NS
A*24:02	2	14.3	NS	9	34.6	NS	36.26	NS	NS
A*26:01	1	7.1	NS	2	7.7	NS	7.61	NS	NS
A*26:02	1	7.1	NS	0	0.0	NS	1.86	NS	NS
A*26:03	0	0.0	NS	3	11.5	NS	2.51	NS	NS
A*31:01	2	14.3	NS	1	3.8	NS	8.63	NS	NS
A*33:03	1	7.1	NS	3	11.5	NS	7.38	NS	NS
Others	0	0.0	NS	0	0.0	NS	2.77	NS	NS
Total	14	100.0		26	100.00		100.00		

Alleles with frequencies more than 1.0% in controls were included to the analysis (totally, 11 alleles).

HLA-A, human leukocyte antigen A; ICI-T1DM, immune-checkpoint inhibitor-induced type 1 diabetes mellitus; F, frequency of the allele; NS, not significant.

<sup>a</sup>ICI-controls, patients without any immune-related adverse events with ICI treatment [7]; <sup>b</sup>Control subjects: Japanese Society for Histocompatibility and Immunogenetics (<http://jshi.umin.ac.jp/standardization/file/JSJI-hyokiallele-2021list.pdf>) (JSJI2021) [16]; <sup>c</sup>The association of haplotype frequencies with each disease was analyzed using Fisher's exact test with 2×2 contingency tables.