

**Supplemental Table 1: Demographic information for each subject.** Peripheral blood mononuclear cells (PBMCs) were previously obtained from 5 healthy individuals (S1-S5) and sequenced using single-cell barcoding in emulsion<sup>18,19</sup>. The original PBMC samples from S1 and S3, as well as new samples from additional healthy individuals (S6,S7), were sequenced using a commercially available single-cell system (10x Genomics)<sup>17</sup>. In all, we obtain 70,108 and 26,946 unique TCR pairs from CD4<sup>+</sup> CD8<sup>+</sup> T cells, respectively. Demographic information, as well as HLA types, are provided as available<sup>19</sup>.

	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	Subject 7	Total
<b>Age (Gender)</b>	65 (Female)	69 (Male)	34 (Male)	33 (Female)	37 (Male)	-	-	-
<b>Platform(s)</b>	Abvitro + 10x	Abvitro	Abvitro + 10x	Abvitro	Abvitro	10x	10x	
<b>Unique CD4 pairs</b>	11,435+316	9,961	20,296+46	4,310	17,251	772	5,721	70,108
<b>Unique CD8 pairs</b>	4,649+27	2,007	2,652+33	7,049	6,658	101	3,770	26,946
<b>HLA-A</b>	24:02/24:02	03:01/26:01	68:01/68:02	02:01/02:01	-	-	-	
<b>HLA-B</b>	18:01/44:02	40:01/51:01	35:01/48:01	51:01/51:01	-	-	-	
<b>HLA-C</b>	05:01/07:01	01:02/03:04	04:01/08:01	01:02/14:02	-	-	-	
<b>HLA-DPA1</b>	01:03/01:03	01:03/02:01	01:03/01:03	01:03/01:03	-	-	-	
<b>HLA-DPB1</b>	04:02/20:01	04:01/14:01	04:01/04:02	04:01/04:01	-	-	-	
<b>HLA-DQA1</b>	01:01/05:05	01:01/03:02	01:02/03:01	01:02/03:03	-	-	-	
<b>HLA-DQB1</b>	03:01/05:01	03:03/05:01	03:02/05:02	03:02/06:02	-	-	-	
<b>HLA-DRB1</b>	01:01/11:01	01:01/05:01	04:04/16:01	04:01/15:01	-	-	-	
<b>HLA-DRB3/4/5</b>	3*02:02/Absent	3*01:01/Absent	4*01:03/5*02:02	01:03/01:01	-	-	-	