

**Supplementary Table 4. Univariate analysis of biomarkers identified by OPLS-DA.**

Variable	Mean ± SD healthy donors	Mean ± SD stage III	Mean ± SD stage IV	*p-value
% of CD3 <sup>+</sup> CD56 <sup>dim</sup> NKp46 <sup>+</sup> cells	67.3 ± 19.4	46.0 ± 16.9	52.6 ± 23.9	0.0019 <sup>1</sup>
MFI of NKp46 on CD3 <sup>+</sup> CD56 <sup>dim</sup> cells	1434 ± 774	796 ± 226	1438 ± 649	0.0031 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>dim</sup> NKG2D <sup>+</sup> cells	79.8 ± 12.7	95.4 ± 5.6	95.3 ± 4.9	<0.0001 <sup>2</sup>
MFI of NKG2D on CD3 <sup>+</sup> CD56 <sup>dim</sup> cells	976 ± 396	1958 ± 645	2668 ± 1286	<0.0001 <sup>2</sup>
MFI of PD-1 on CD3 <sup>+</sup> CD56 <sup>dim</sup> cells	642 ± 346	925 ± 581	1368 ± 665	<0.0001 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>dim</sup> CD57 <sup>+</sup> cells	50.0 ± 19.2	24.5 ± 10.5	52.2 ± 19.6	<0.0001 <sup>1</sup>
% of CD3 <sup>+</sup> CD56 <sup>dim</sup> CXCR2 <sup>+</sup> cells	6.8 ± 7.6	47.2 ± 20.4	44.8 ± 21.4	<0.0001 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>dim</sup> CCR2 <sup>+</sup> cells	4.5 ± 5.1	16.0 ± 12.2	5.5 ± 4.8	0.0004 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>bright</sup> NKp30 <sup>+</sup> cells	72.3 ± 14.9	89.2 ± 6.9	87.9 ± 12.1	<0.0001 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>bright</sup> NKG2C <sup>+</sup> cells	17.2 ± 8.8	28.9 ± 14.5	24.3 ± 12.7	0.0052 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>bright</sup> Tim-3 <sup>+</sup> cells	39.1 ± 17.0	52.3 ± 13.5	68.0 ± 14.5	<0.0001 <sup>2</sup>
MFI of Tim-3 on CD3 <sup>+</sup> CD56 <sup>bright</sup> cells	760 ± 264	729 ± 263	1323 ± 736	<0.0001 <sup>2</sup>
<b>% of CD3<sup>+</sup>CD56<sup>bright</sup>CCR7<sup>+</sup> cells</b>	<b>3.0 ± 4.1</b>	<b>13.2 ± 9.1</b>	<b>15.0 ± 15.6</b>	<b>&lt;0.0001<sup>2</sup></b>
MFI of NKG2D on CD3 <sup>+</sup> CD56 <sup>-</sup> cells	1343 ± 623	2377 ± 673	3448 ± 1501	<0.0001 <sup>2</sup>
% of CD3 <sup>+</sup> CD56 <sup>-</sup> DNAM-1 <sup>+</sup> cells	69.1 ± 12.0	76.8 ± 10.6	78.6 ± 8.1	0.0005 <sup>2</sup>
% of CD3 <sup>+</sup> CD4 <sup>+</sup> PD-1 <sup>+</sup> cells	18.8 ± 9.3	21.6 ± 10.8	32.5 ± 15.0	<0.0001 <sup>2</sup>
% of CD3 <sup>+</sup> CD8 <sup>+</sup> PD-1 <sup>+</sup> Tim-3 <sup>+</sup> cells	2.8 ± 2.4	3.1 ± 2.7	5.9 ± 4.0	0.0005 <sup>2</sup>
MFI of Tim-3 on CD3 <sup>+</sup> CD8 <sup>+</sup> cells	887 ± 257	615 ± 109	1143 ± 315	<0.0001 <sup>2</sup>
% of CD3 <sup>+</sup> CD8 <sup>+</sup> CD57 <sup>+</sup> cells	23.3 ± 15.3	11.4 ± 5.8	35.6 ± 20.1	<0.0001 <sup>1</sup>
% of CD3 <sup>+</sup> CD56 <sup>-</sup> CD69 <sup>+</sup> cells	1.3 ± 1.1	1.3 ± 0.6	3.5 ± 1.9	<0.0001 <sup>2</sup>
MFI of CD69 on CD3 <sup>+</sup> CD56 <sup>-</sup> cells	1237 ± 268	970 ± 165	1504 ± 466	<0.0001 <sup>2</sup>
MFI of CCR7 on CD3 <sup>+</sup> CD8 <sup>+</sup> cells	7389 ± 2439	4658 ± 1224	7964 ± 3937	0.0110 <sup>1</sup>

\*To compare healthy donors, stage III and stage IV melanoma patients, statistical analysis was performed using ANOVA followed by Bonferroni's correction for normally-distributed data (1) or Kruskal-Wallis test followed by Dunn's correction for non normally-distributed data (2).