

SUPPLEMENTARY TABLES

Supplementary Table 1. Number of filtered cells and number of median genes for each cell.

Patient	Number of filtered cells	Median genes/cell
P 1	8161	1802
P 2	4727	1684
P 3	10163	1806
P 4	12521	1433
P 5	14050	1406
P 6	8226	1329
NC 1	12051	1486
NC 2	12360	1453
NC 3	10748	1587

Supplementary Table 2. The annotation of 17 cell subpopulations.

Cluster ID	Cell Annotation Type
0	myeloid cells
1	T cells, CD4+
2	T cells, CD4+
3	NK cells
4	NK cells
5	B cells
6	NK cells
7	T cells, CD8+
8	B cells
9	NK cells
10	myeloid cells
11	T cells, CD4+
12	T cells, CD4+
13	myeloid cells
14	NK cells
15	NA
16	NK cells

Supplementary Table 3. The number and proportion of each cell type for each sample.

sample ID	Active				Inactive			Normal Ctrl		
	P1	P2	P3	P4	P5	P6	NC1	NC2	NC3	
CD4+ T cells	2530	796	1354	3189	3365	2350	4548	2561	3787	
CD8+ T cells	351	95	217	625	592	259	466	127	865	
NK cells	1180	726	2525	5313	4762	2463	3897	3293	2674	
Myeloid cells	2648	1797	3533	1836	2317	1251	1408	2223	1909	
B cells	972	1100	1618	586	1760	987	736	839	895	
total cell numbers	7681	4514	9247	11549	12796	7310	11055	9043	10130	
proportion of CD4+ T cells	0.33	0.18	0.15	0.28	0.26	0.32	0.41	0.28	0.37	
proportion of CD8+ T cells	0.05	0.02	0.02	0.05	0.05	0.04	0.04	0.01	0.09	
proportion of NK cells	0.15	0.16	0.27	0.46	0.37	0.34	0.35	0.36	0.26	
proportion of myeloid cells	0.34	0.40	0.38	0.16	0.18	0.17	0.13	0.25	0.19	
proportion of B cells	0.13	0.24	0.17	0.05	0.14	0.14	0.07	0.09	0.09	

Supplementary Table 4. The clinical relevance of quantitative changes of Bregs, DCs, and monocytes in TAO.

sample ID	Active			Inactive		
	P1	P2	P3	P4	P5	P6
number of Bregs	92	10	89	137	237	108
number of monocytes	1880	1433	2703	1095	1468	750
number of DC	520	255	496	535	680	414
total cell numbers	7681	4514	9247	11549	12796	7310
proportion of Bregs	0.011978	0.002215	0.009625	0.011862	0.018521	0.0147743
proportion of monocytes	0.24476	0.317457	0.292311	0.094813	0.114723	0.1025992
proportion of DC	0.0677	0.056491	0.053639	0.046324	0.053142	0.0566347
CAS score	4	5	4	0	1	0
NOSPECS score	3	6	4	3	3	3