



**Fig. S3. Circulating B-cell subsets and immunoglobulins in patients with moderate-to-severe psoriasis before (pre) and upon (post) successful therapy.** (A) Total B cells (%). (B) B cell subpopulations (%). (C) Serum IgM, IgG and IgA levels (mg/dl or IU/l). \* $p \leq 0.05$ , \*\* $p \leq 0.01$ .

Determination of B-cell subsets upon successful treatment (at least 75% reduction of pretreatment Psoriasis Area and Severity Index (PASI)) revealed a clear shift towards the conditions found in healthy individuals. B cells in total increased (pre  $5.5 \pm 4.8\%$  vs. post  $8.4 \pm 4.3\%$ ,  $p = 0.0078$ ) while trB clearly decreased (pre  $5.6 \pm 3.1\%$  vs. post  $3.6 \pm 2.4\%$ ,  $p = 0.0158$ ). NM levels (pre  $52.5 \pm 13.7\%$  vs. post  $56.6 \pm 14.8\%$ ,  $p = 0.48$ ) and M did not change (pre  $27.1 \pm 9.2\%$  vs. post  $27.9 \pm 11.7\%$ ,  $p = 0.800$ ). Total plasma cells (PC) were found to be moderately elevated before treatment (pre  $0.082 \pm 0.100\%$  vs. post  $0.055 \pm 0.040\%$ ,  $p = 0.150$ ). In-depth analysis showed that short-lived plasmablasts (PB) decreased significantly (pre  $30.4 \pm 22.0\%$  vs. post  $17.0 \pm 12.3\%$ ,  $p = 0.006$ ) while long-lived PC rose moderately (pre  $34.5 \pm 15.9\%$  vs. post  $39.2 \pm 14.4\%$ ,  $p = 0.30$ ). Interestingly, IgA levels (pre  $674.7 \pm 355.0$  mg/dl vs. post  $674.3 \pm 363.0$  mg/dl,  $p = 0.997$ ) and also IgG (pre  $1,443 \pm 381.4$  mg/dl vs. post  $1,670 \pm 779.2$  mg/dl,  $p = 0.230$ ) and IgM levels (pre  $167.7 \pm 62.6$  mg/dl vs. post  $180.7 \pm 110.1$  mg/dl,  $p = 0.680$ ) remained unchanged upon successful treatment.