

Figure S1. The Kaplan–Meier survival analysis. Survival curves of overall survival (a) and progression-free survival (b) of patients for immunological analysis (n=18).

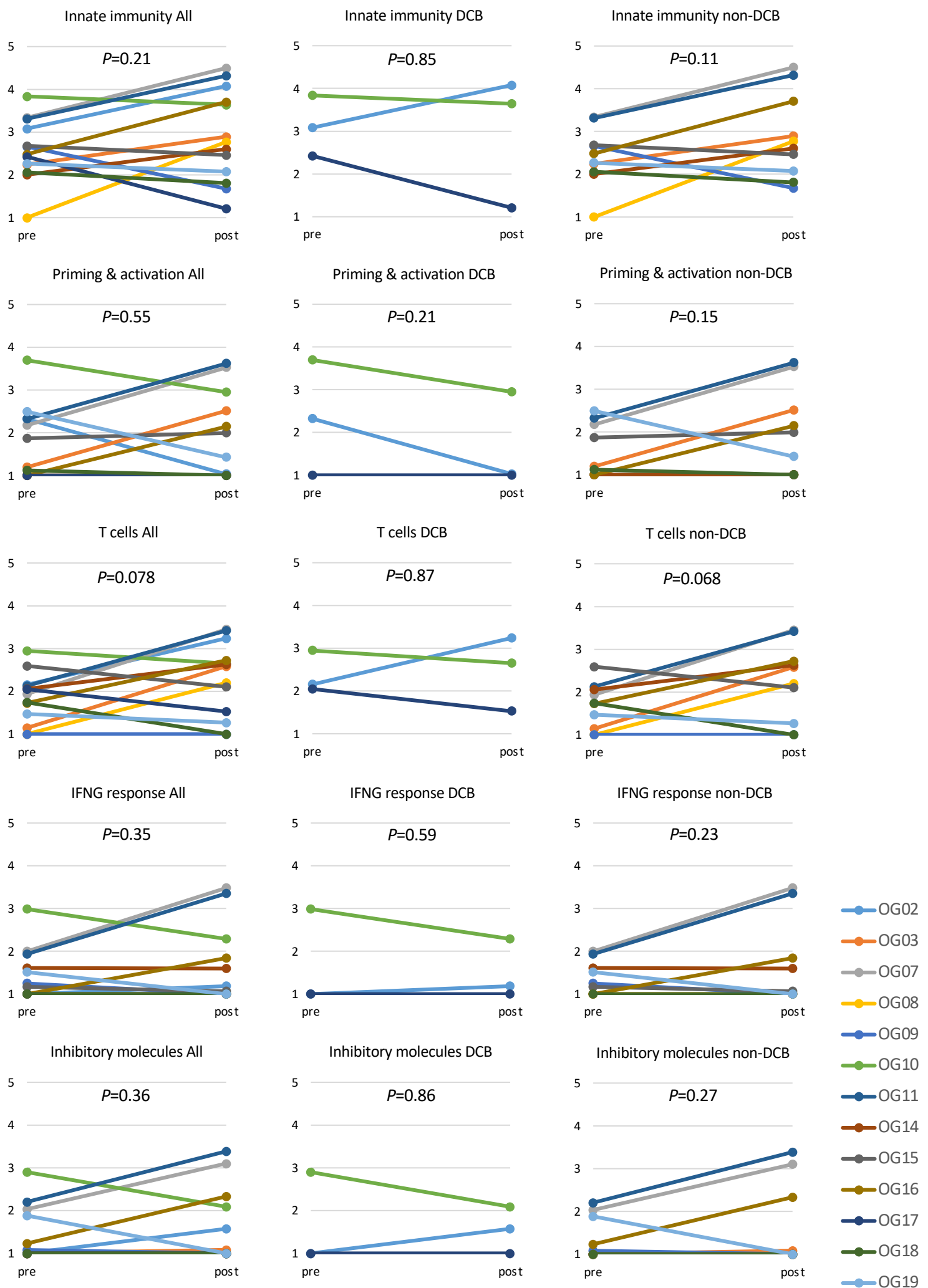


Figure S2-1. The comparison of immunogram scores between pre-treatment (pre) and early-on-treatment (post) in immunological cases (All), durable clinical benefit (DCB) and non-DCB patients.

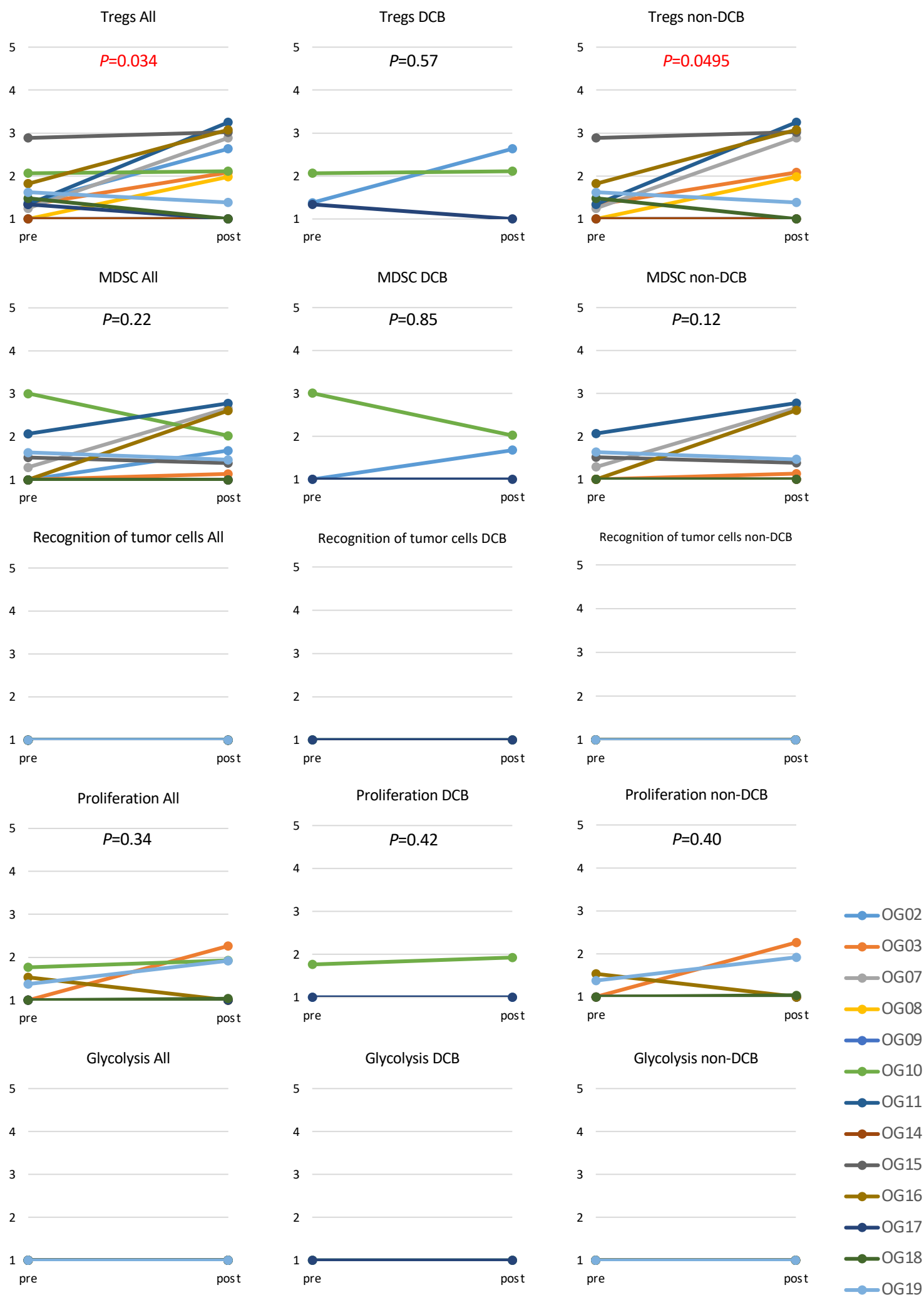


Figure S2-2. The comparison of immunogram scores between pre-treatment (pre) and early-on-treatment (post) in immunological cases (All), durable clinical benefit (DCB) and non-DCB patients.

# pre-treatment

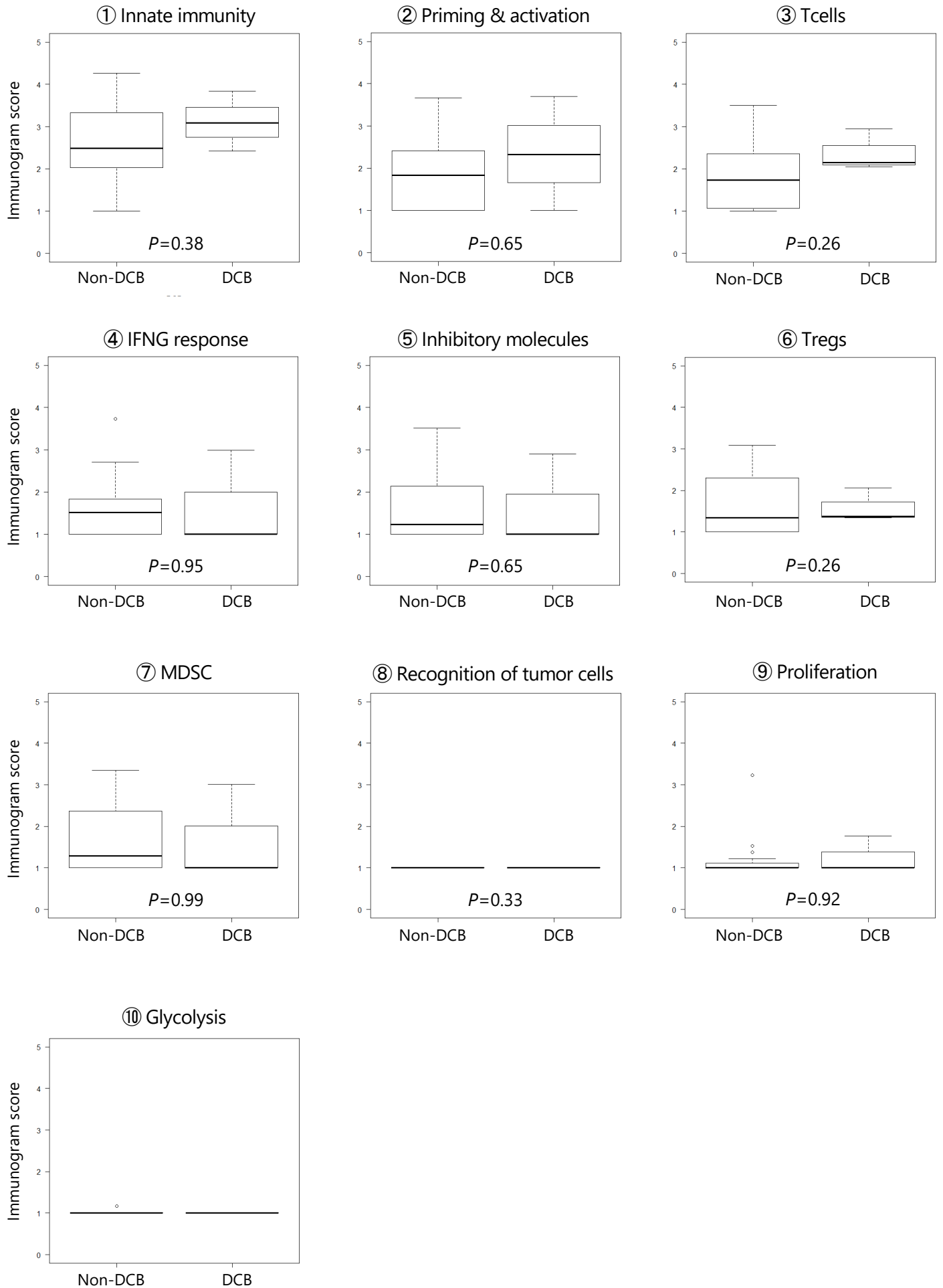


Figure S3. The comparison of immunogram scores of pre-treatment tumors between durable clinical benefit (DCB) and non-DCB patients.

# early-on-treatment

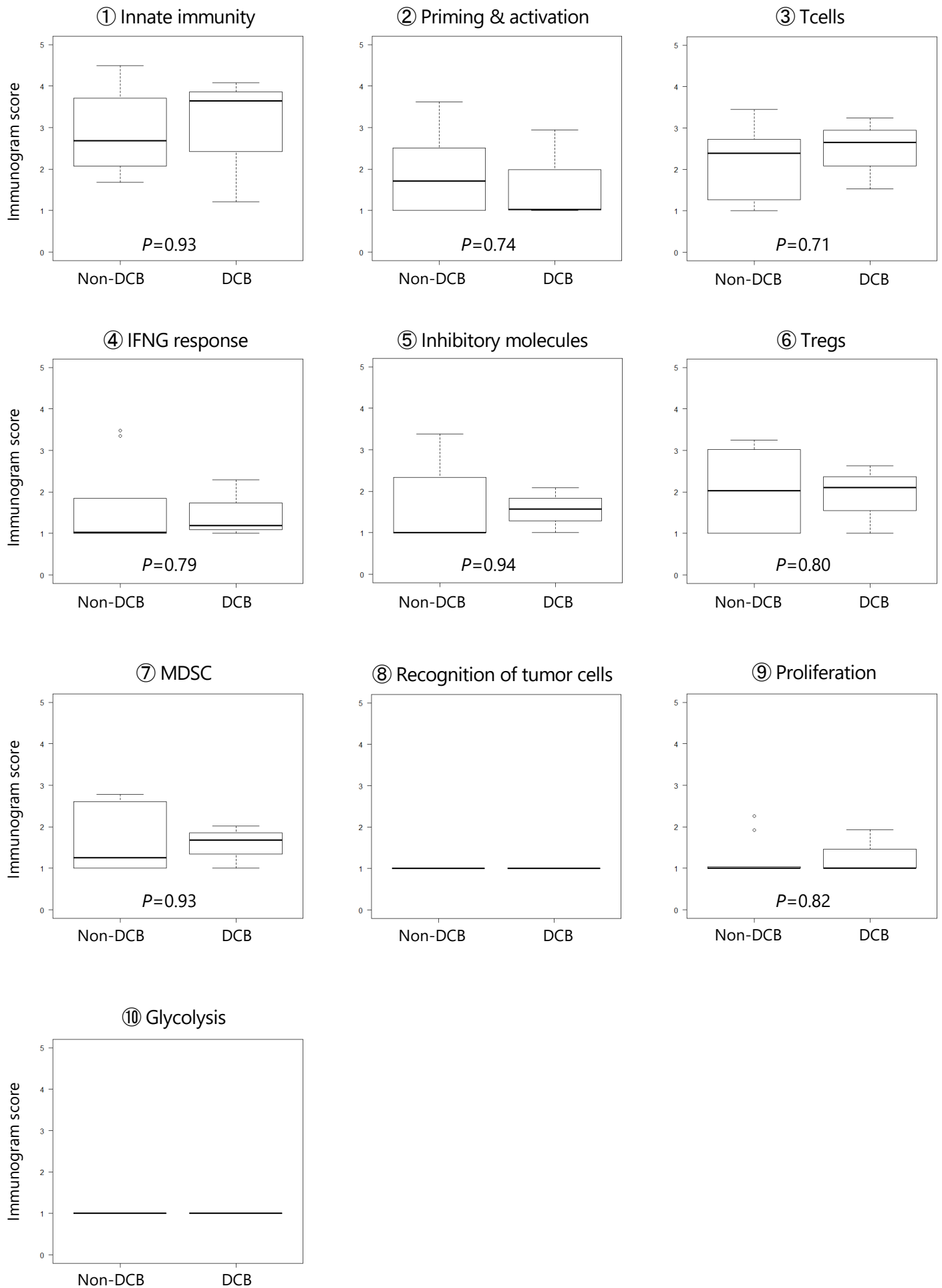


Figure S4. The comparison of immunogram scores of early-on-treatment tumors between durable clinical benefit (DCB) and non-DCB patients.

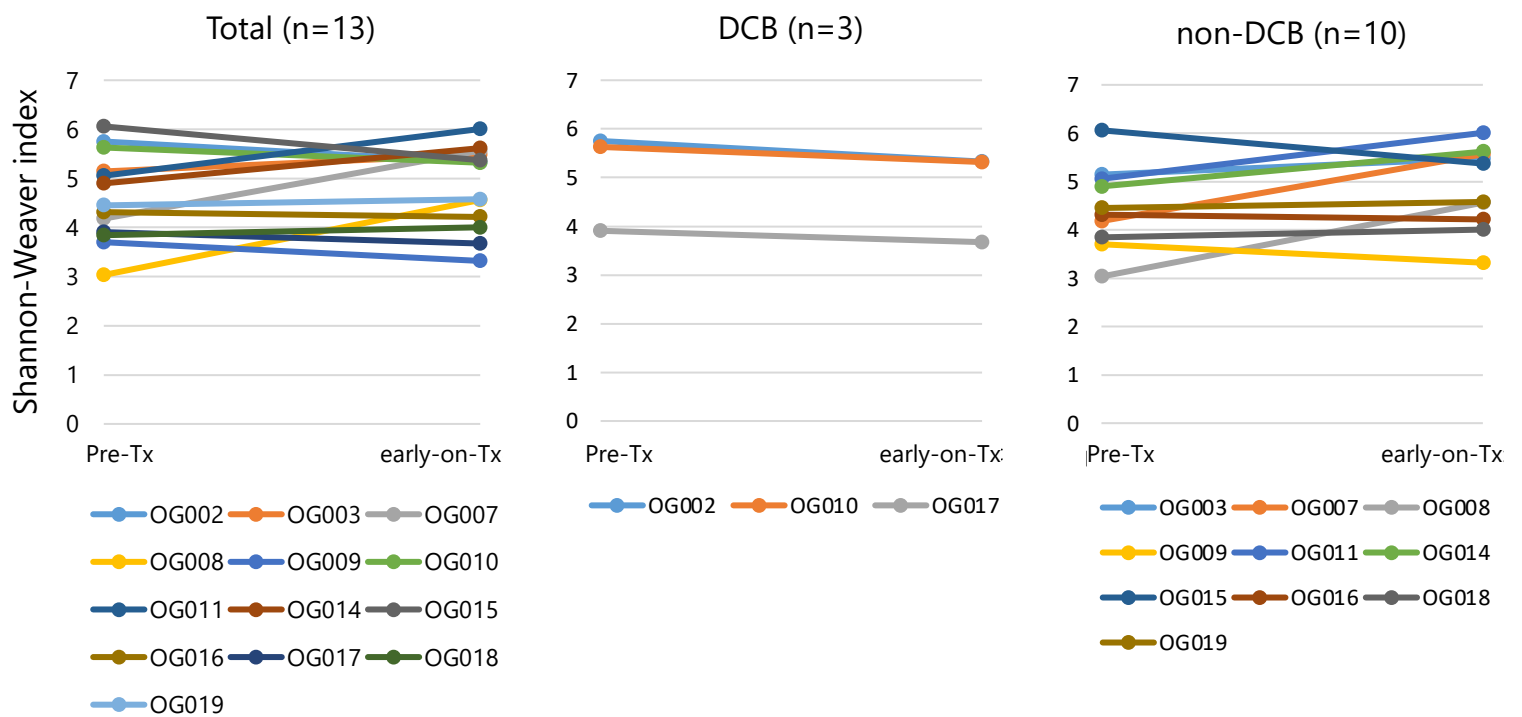


Figure S5. Comparison of TCR $\beta$  repertoire diversity between pre-treatment (Pre-Tx) and early-on-treatment (early-on-Tx) tumors. The Shannon-Weaver indices were used to compare the diversity of TCR $\beta$  repertoires in 13 patients for whom pre-treatment and early-on-treatment paired samples were available.