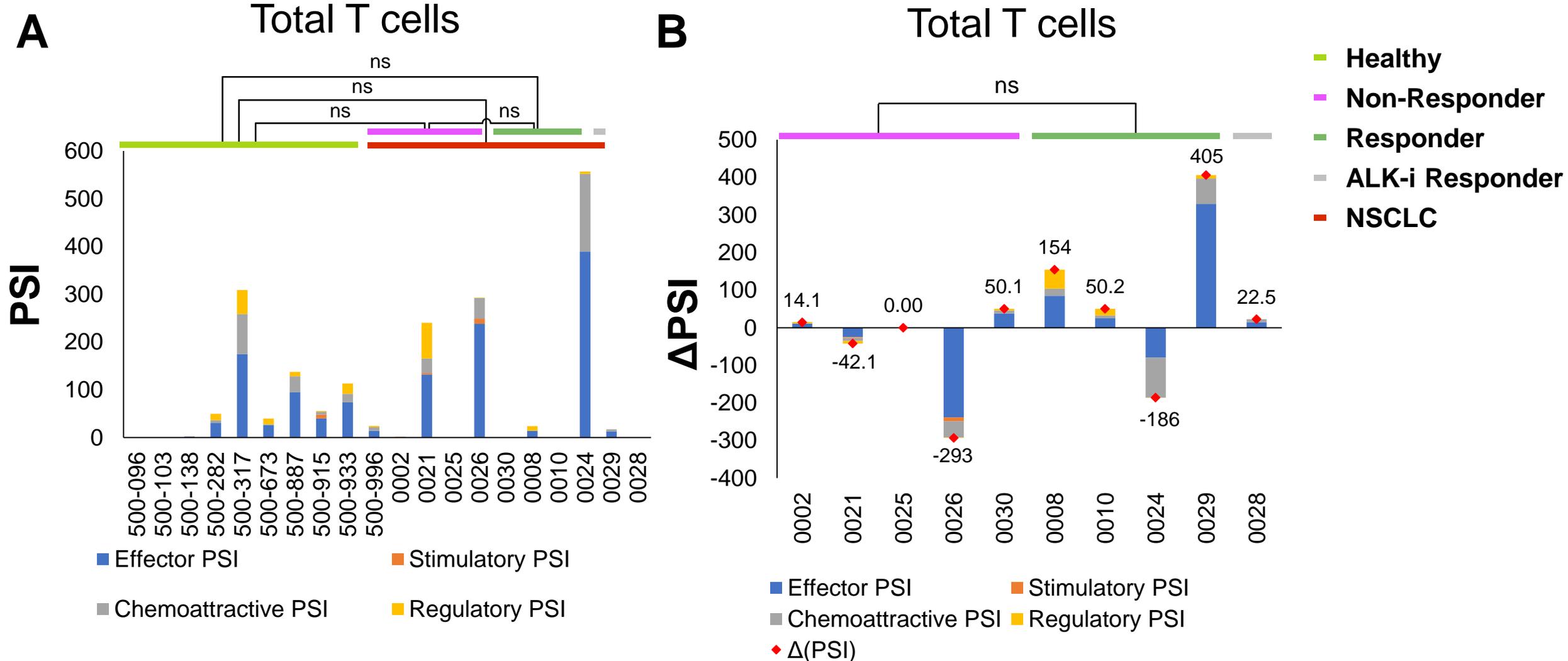


**Lim et al., Supplementary Figure S1. (A)** Polyfunctional strength index (PSI) comparison of healthy donors and baseline untreated NSCLC patients. The PSI between the healthy donors and the baseline untreated NSCLC patient group was compared for CD4+ and CD8+ T cells combined (Healthy vs. Responder,  $p=0.59$ ; Healthy vs. NSCLC,  $p=0.56$ ; Healthy vs. Non-Responder,  $p=0.69$ ). Statistical analysis was performed with a Wilcoxon-ranked test. *ALK*; anaplastic lymphoma kinase; PSI, polyfunctional strength index; ns, not significant. **(B)** Comparing the changes in polyfunctional strength index ( $\Delta$ PSI) after two cycles of ICI treatment in responders vs. non-responders. The changes in PSI ( $\Delta$ PSI) between responders and non-responders were compared for CD4+ and CD8+ T cells combined ( $p=0.191$ ).  $\Delta$ PSI, change in polyfunctional strength index; *ALK*, anaplastic lymphoma kinase; ns, not significant.



**Lim et al., Supplementary Figure S2.** Kaplan-Meier clinical survival outcomes analysis of PSI changes in ICI-treated NSCLC. CD8+ T-cells analysis. **(A)** PFS: Progression-free survival.  $p=0.34$ . **(B)** OS: Overall survival.  $p=0.37$ .

