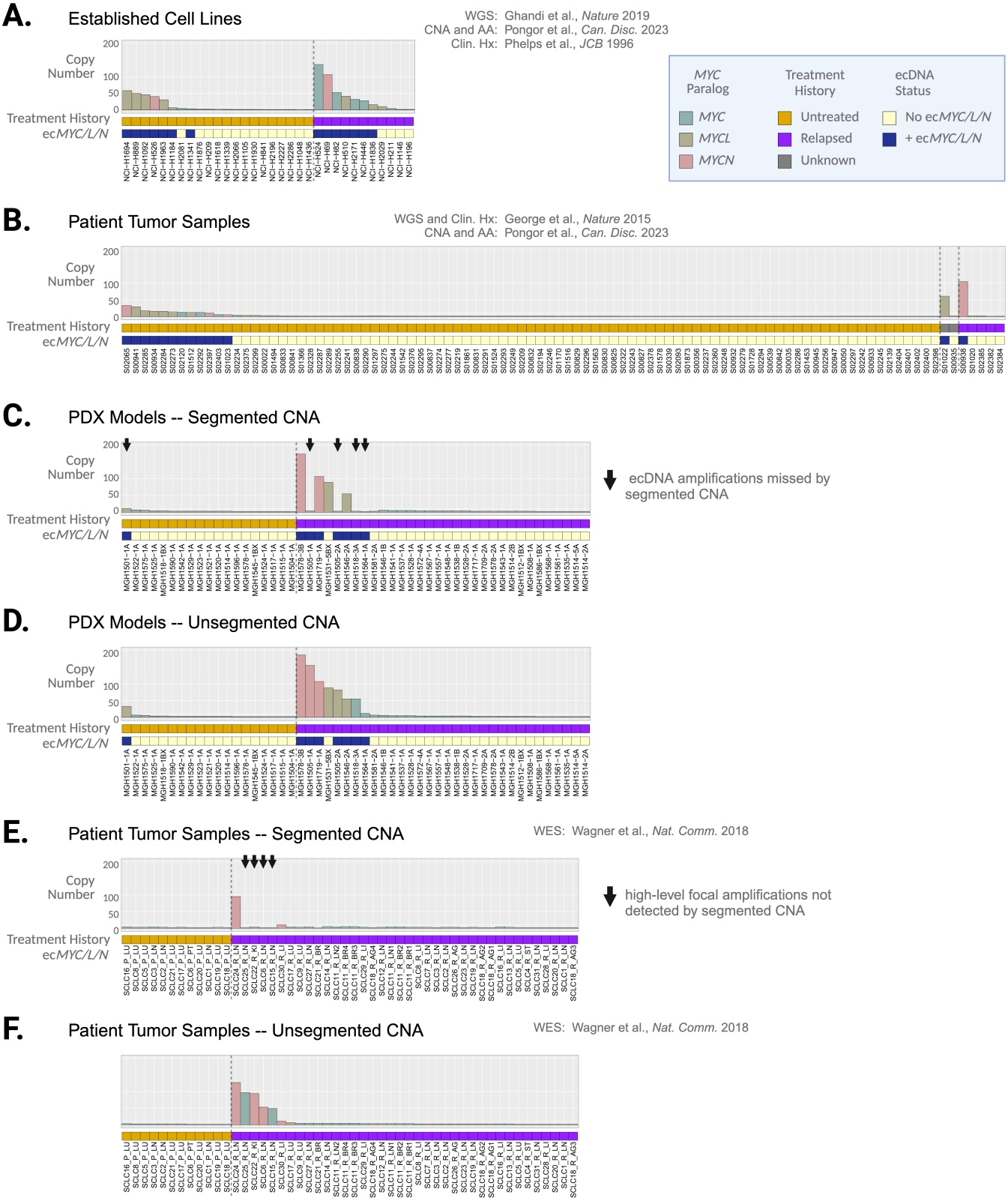
Supplementary Figure S13



Supplementary Figure S13. MYC paralog copy number and ecDNA status in SCLC cell lines, PDX models and biopsy samples derived before treatment or after relapse. (**A-D**) Maximum copy number (CN) of *MYC*, *MYCL*, or *MYCN* from WGS of SCLC cell lines, PDX models and patient tumor samples, with annotated treatment histories (untreated vs. relapsed) and ec*MYC/L/N* status derived from AmpliconArchitect (AA) reconstruction. (**A**) SCLC cell lines established at the NCI-Navy Medical Oncology Branch from 1977-1992, with treatment histories as reported in Phelps et al., 1996 (83). For this subset, WGS performed as part of the Cancer Cell Line Encyclopedia project (60). *MYC* paralog CN and AA reconstruction were reported in Pongor et al., 2023 (44). (**B**) Patient tumor samples with WGS and treatment histories as reported in George et al., 2015 (61), and *MYC* paralog CN and AA reconstruction as reported in Pongor et al., 2023 (44). (**C**) PDX models with *MYC* paralog CN estimated by segmented exon analysis misses 5/8 ec*MYC/N/L* identified by AA reconstruction. (**D**) PDX models with *MYC* paralog CN estimated by unsegmented (raw) exon analysis finds all 8 ec*MYC/N/L* amplifications, without false positives. (**E-F**) Maximum CN of *MYC*, *MYCL*, or *MYCN* in SCLC patient tumor samples, with whole exome sequencing and annotated treatment histories (untreated vs. relapsed) as reported in Wagner et al., 2018 (62). Post-relapse samples were obtained from 30 patients, with multiple biopsies from 2 patients (SCLC11 and SCLC18). For 12/30 patients, samples obtained prior to treatment were also reported. (**E**) Segmented CN analysis identified only 2 patients with relapsed samples harboring high-level *MYC* paralog amplifications (CN > 10 in SCLC24 and SCLC30). (**F**) Unsegmented CN analysis identified 4 additional patients with relapsed samples harboring *MYC* paralog amplifications with CN > 45 (SCLC25, SCLC22, SCLC6, and SCLC 15). No *MYC* paralog amplifications were detected among the untreated samples, including patient SCLC 6 for which the paired relapsed sample had *MYCN* CN = 53. (created with BioRender.com)