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ACCEPTED MANUSCRIPT

Longitudinal cell-free DNA analysis in patients with small cell lung cancer reveals dynamic insights into treatment efficacy and disease relapse

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Running Title: Serial monitoring of cell free DNA in small cell lung cancer

<u>Keywords</u>: Small cell lung cancer (SCLC), cell-free tumor DNA, liquid biopsy, next generation sequencing, plasma

<u>Abbreviations</u>: SCLC: small cell lung cancer; cfDNA: cell-free DNA; AF: allele frequency; OS: overall survival; NCI: National Cancer Institute; NSCLC: non-small cell lung cancer; ES: extensive stage; LS: limited stage; NGS: next-generation sequencing; CNA: copy number alteration; SNV: single nucleotide variant; Indel: insertion/deletion.

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<u>Author contributions</u>: Designed experiments: KA, WTI, LPL, CKR, CML. Performed experiments: KA, YY, JH, LPL, CKR. Generated and analyzed data: KA, WTI, CBM, JH, LPL, CKR, CML. Provided direct patient care: LH, SY. Wrote the manuscript: KA, WTI, CML. Statistical analysis: ZZ, HC, YS. Reviewed the data and final manuscript: KA, WTI, CBM, ZZ, LH, LL, CKR, CML.

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