

Figure S1. Flow chart of the study design. BM, brain metastasis; LUAD, lung adenocarcinoma; 19del, exon 19 deletion.

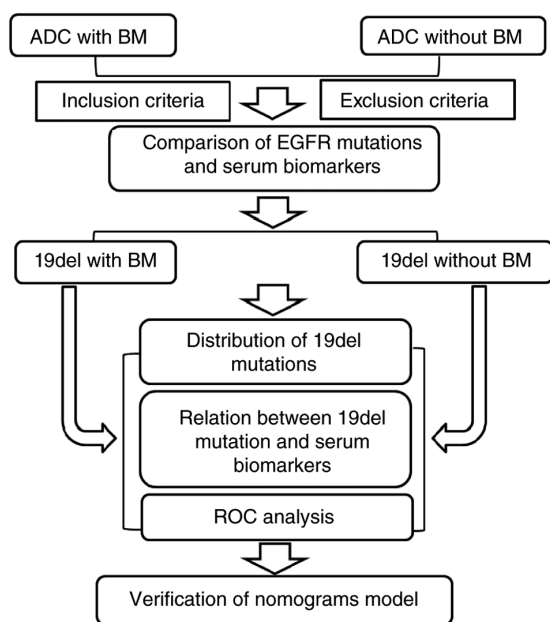


Figure S2. Lung cancer biomarker concentrations in patients with LUAD. The concentrations of (A) NSE, (B) CEA, (C) CA125, (D) CA153 and (E) CYFRA21-1 in serum from patients with LUAD with BM or non-BM were detected. Patients were classified into two groups: BM, patients with brain metastasis; non-BM, patients without brain metastasis. The data are presented as violin plots and the median is shown as a horizontal line. P-values are shown above the comparison brackets. Comparisons between groups were performed with a two-tailed Mann-Whitney U-test. NSE, neuron-specific enolase; BM, brain metastasis; CYFRA21-1, cytokeratin 19 fragment; 19del, exon 19 deletion; LUAD, lung adenocarcinoma.

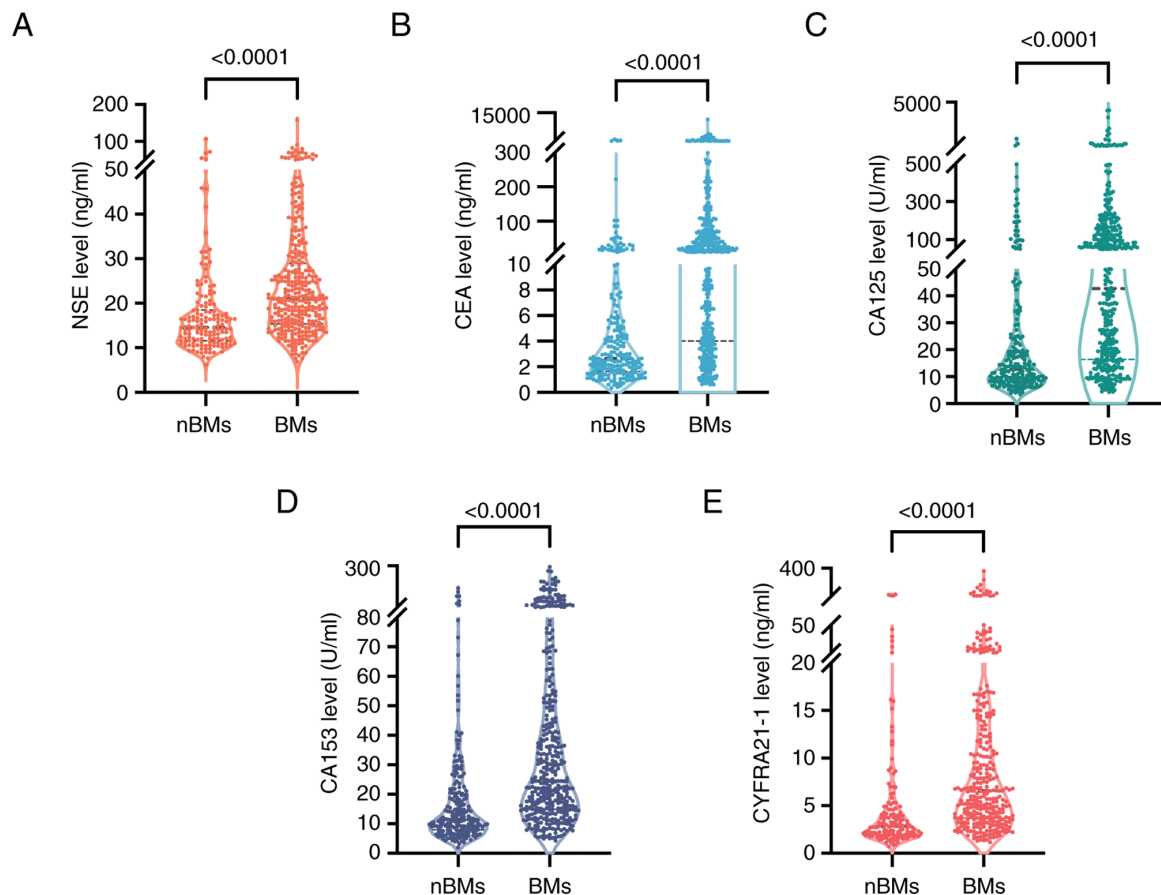


Figure S3. ROC curves of EGFR mutations combined with lung cancer biomarkers for the prediction of BM. ROC curves of serum levels of (A) NSE, (B) CEA, (C) CA125, (D) CA153 and (E) CYFRA21-1 were generated to predict the presence of BM in patients with LUAD. Three subgroups are shown: EGFR, patients with EGFR mutations; nEGFR, patients without EGFR mutations; EGFR+nEGFR, the overall cohort. ROC, receiver operating characteristic; AUC, area under the ROC curve; NSE, neuron-specific enolase; CYFRA21-1, cytokeratin 19 fragment; BM, brain metastasis; LUAD, lung adenocarcinoma.

