



Simultaneous Tissue and Liquid Next-generation Sequencing after First-line EGFR Tyrosine Kinase Inhibitors Resistance in Advanced Non-small Cell Lung Cancer

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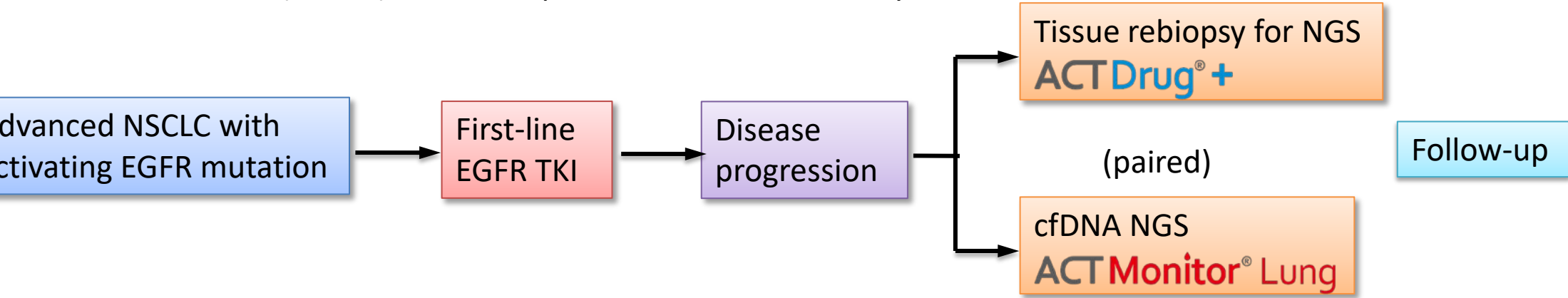
Poster #365

Background

T790M testing is recommended after resistance to first or second-generation EGFR tyrosine kinase inhibitors (TKIs). However, the role of simultaneous tissue and liquid next-generation sequencing (NGS) after first-line EGFR TKI resistance is still unclear.

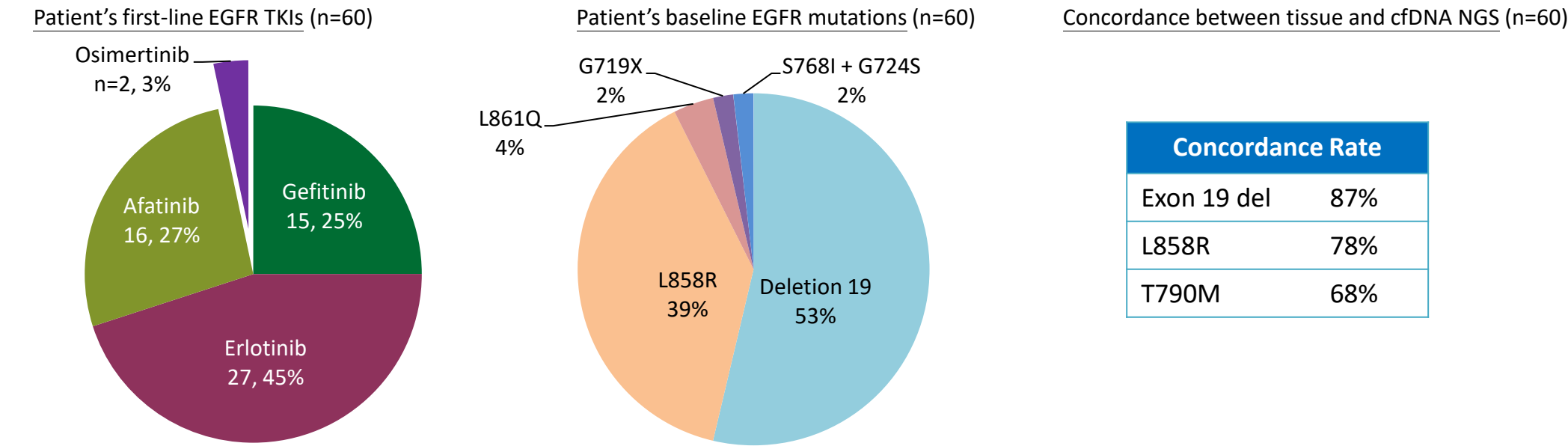
Method

We prospectively enrolled patients with resistance with first-line EGFR TKI. Paired tissue rebiopsy NGS and blood cell-free DNA (cfDNA) NGS were performed simultaneously.

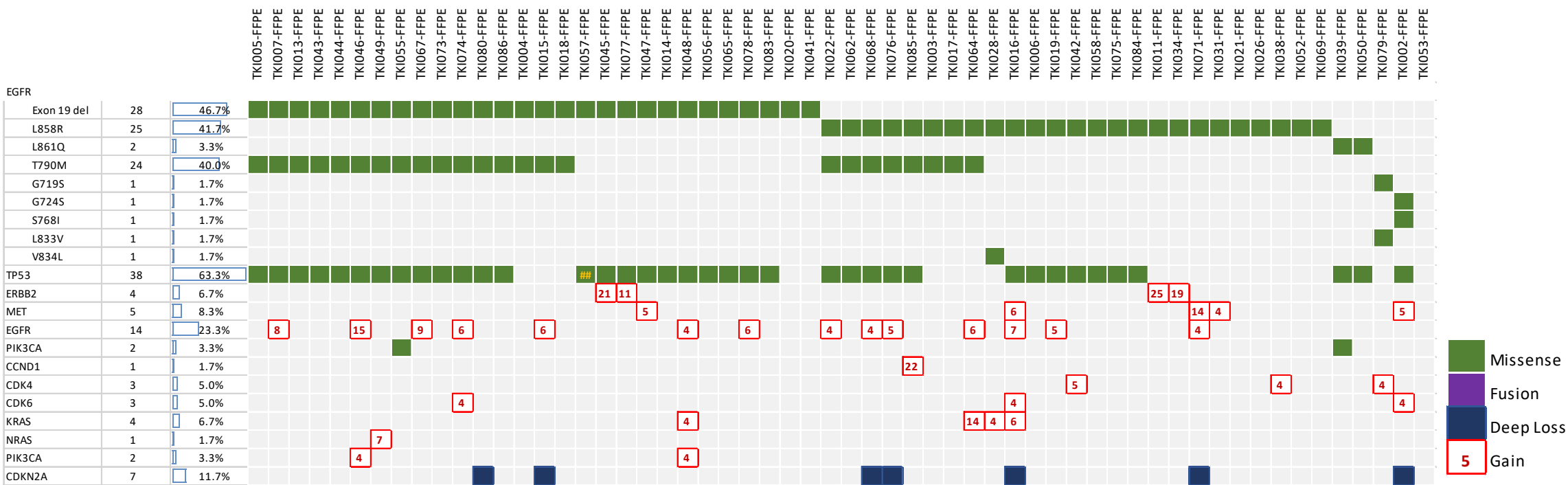


Result

86 patients were enrolled, but 26 of them did not have adequate tissue for NGS. Among the 26 patients, 5 had T790M from cfDNA. Total 60 patients had pairs of tissue and cfDNA NGS were further analyzed.



Mutation landscape of 1st or 2nd G EGFR TKI resistance patients (tissue NGS) (n=58)



Mutation landscape of 1st or 2nd G EGFR TKI resistance patients (cfDNA NGS) (n=58)

