



2026 World Conference on Lung Cancer

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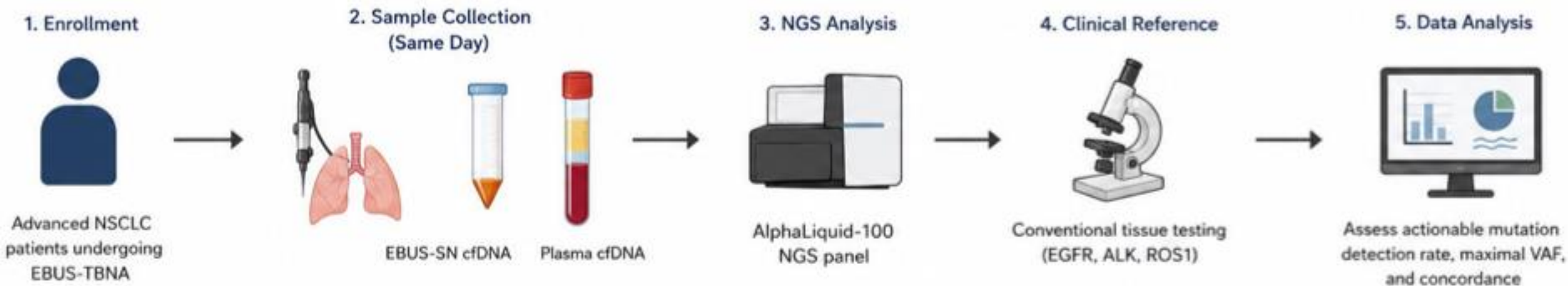
EBUS-TBNA Washing NGS Improves Detection of Actionable Mutations Compared With Plasma ctDNA and Standard Tissue Testing in Advanced NSCLC

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Material and Methods

Study Workflow

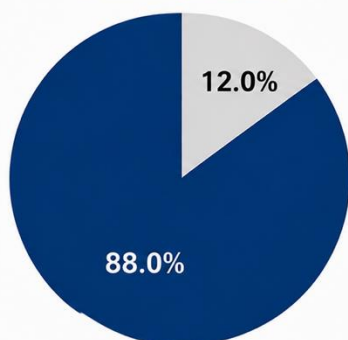


Study Summary

In this prospective observational study, patients with advanced NSCLC undergoing EBUS-TBNA were enrolled. Paired EBUS-SN cfDNA and plasma cfDNA samples were collected on the same day and analyzed using the AlphaLiquid-100 NGS panel. Conventional tissue testing (EGFR, ALK, and ROS1) served as the clinical reference. Actionable mutation detection rate, maximal variant allele frequency (VAF), and concordance between sample types were evaluated.

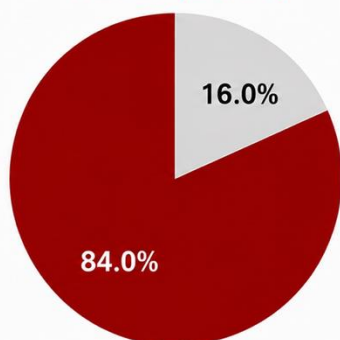
Results

EBUS-SN ctDNA
Detection Rate
88.0% (22/25)



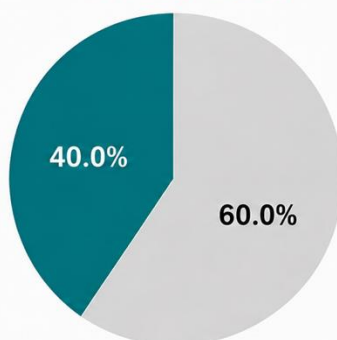
■ Mutation detected (22/25)
■ Not detected (3/25)

Plasma ctDNA
Detection Rate
84.0% (21/25)



■ Mutation detected (21/25)
■ Not detected (4/25)

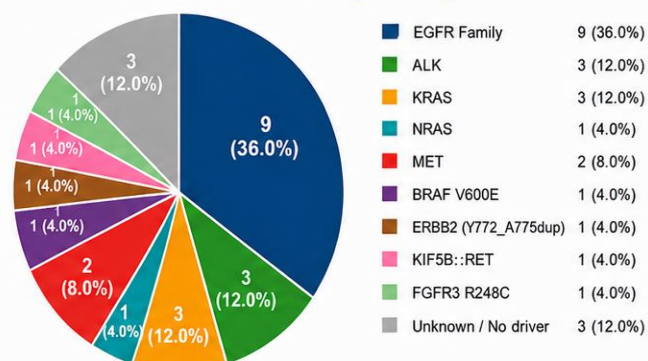
Tissue routine
Detection Rate
40.0% (10/25)



■ Mutation detected (10/25)
■ Not detected (15/25)

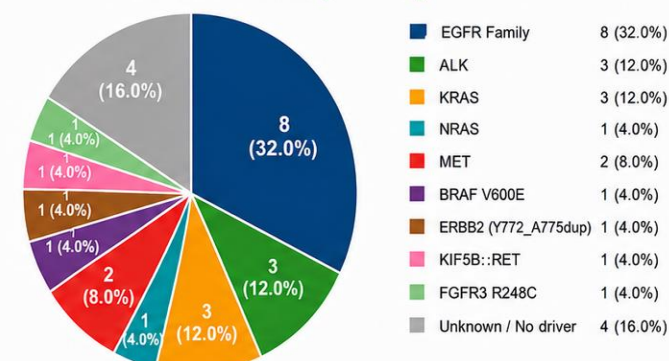
Detection rate based on 25 paired cases

EBUS-SN ctDNA (n = 25)



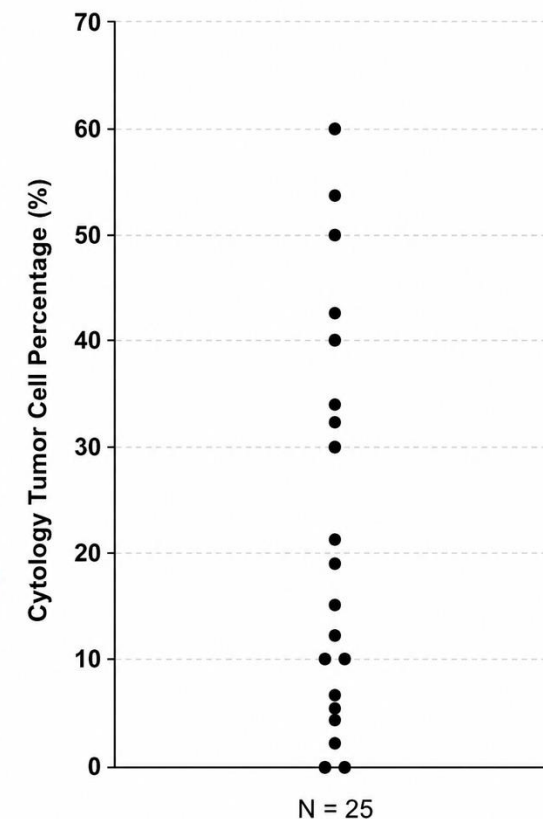
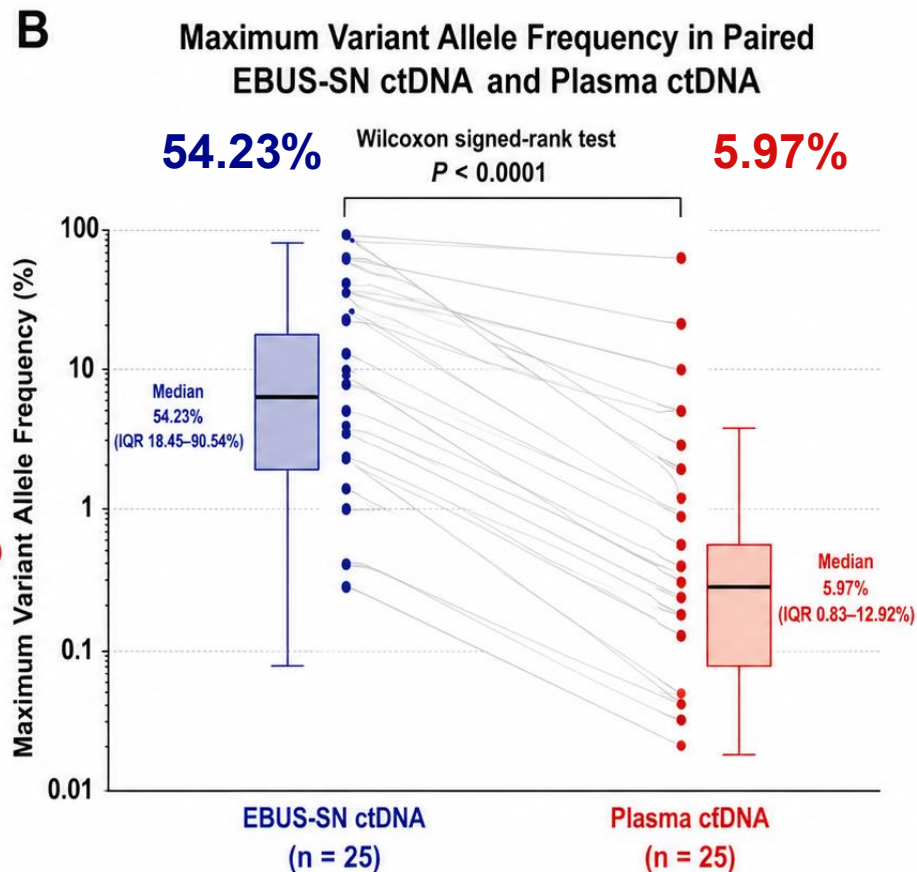
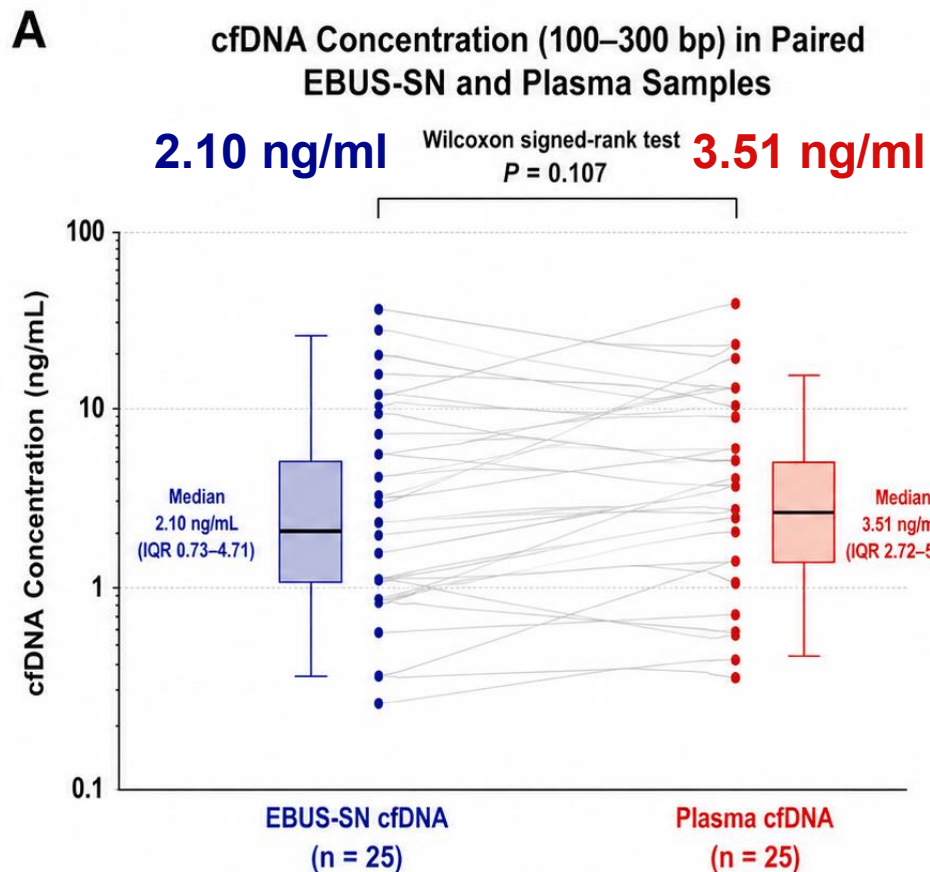
Actionable alteration detected: 22/25 (88.0%)
Unknown / No driver: 3/25 (12.0%)

Plasma ctDNA (n = 25)



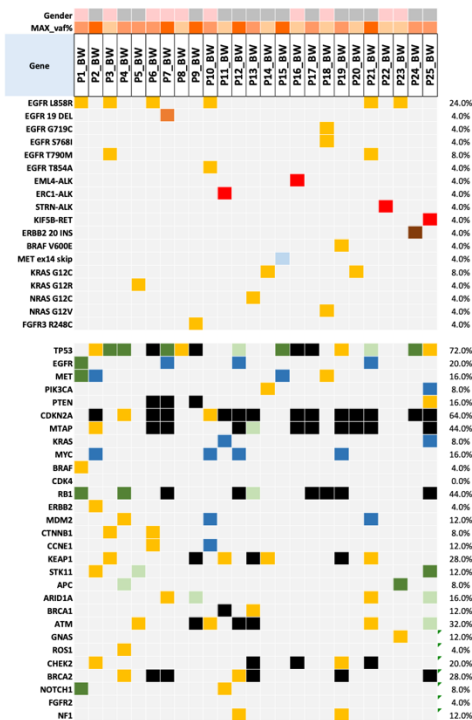
Actionable alteration detected: 21/25 (84.0%)
Unknown / No driver: 4/25 (16.0%)

Results

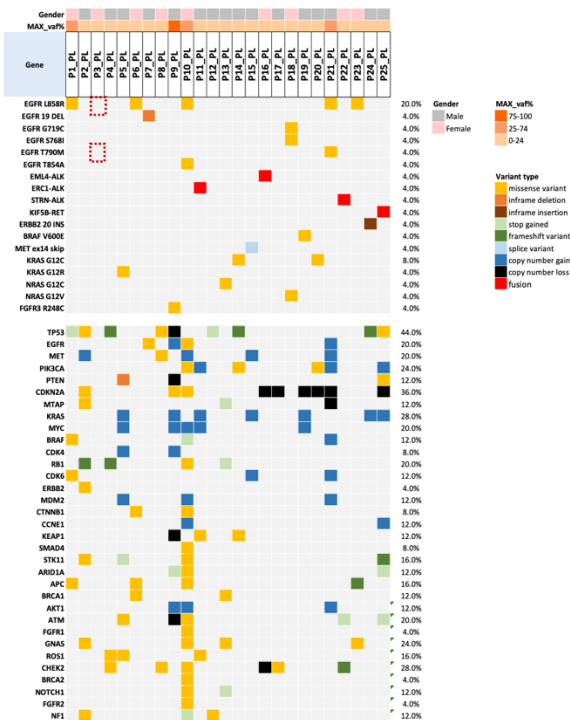


Results

A. EBUS-SN

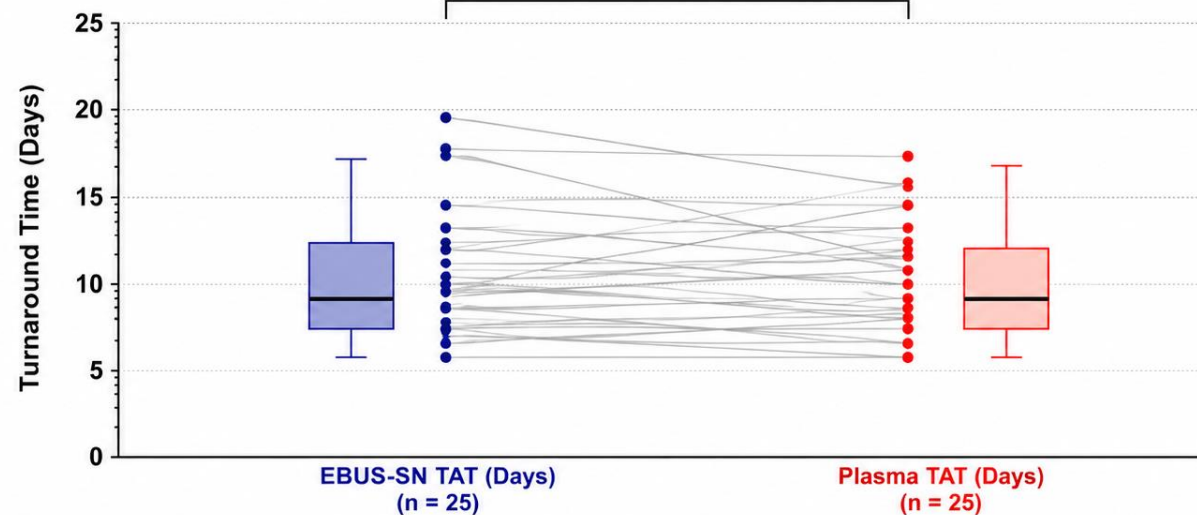


B. Plasma



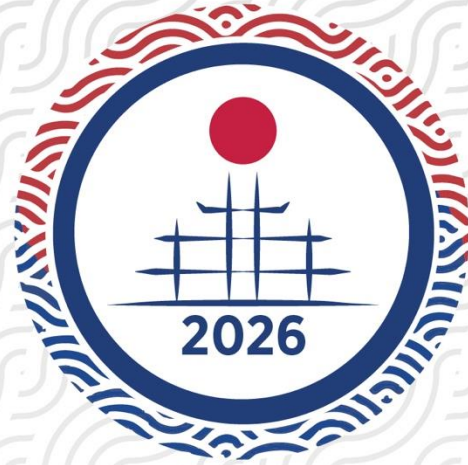
Turnaround Time (Days) in Paired EBUS-SN and Plasma Samples

Wilcoxon signed-rank test
 $P = 0.487$



Parameter	EBUS-SN TAT (Days) (n = 25)	Plasma TAT (Days) (n = 25)	P value*
Median (IQR)	9 (8–11)	9 (8–10)	0.487
Mean ± SD	9.88 ± 3.22	9.40 ± 2.40	–
Range	6 – 19	6 – 17	–

*Wilcoxon signed-rank test.



Thank You.●