Successful AZD9291 Therapy Based on NEOliquid Detection of Circulating T790M in a Liquid Biopsy Sample

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BACKGROUND:

• An invasive procedure that might carry risk for patients
• Costly and time consuming
• Cannot monitor changes over time
• Might not be a true representation of tumor heterogeneity
• Allows monitoring of genomic changes occurring due to selection pressure
• May allow to capture the entire heterogeneity of the tumor

TECHNOLOGY:

Proprietary NEOliquid Assay:

Spectrum of Genomic Alterations Detected by NEOliquid:

- Mutations
- Gene Fusions
- Somatic Copy Number Alterations
- Deletions
- Translocation

CASE:

A 53 year old non-smoker, with metastatic lung adenocarcinoma and an EGFR exon 19 deletion diagnosed in 2012. Patient has been treated with several TKIs, chemotherapy, neurosurgery and brain surgery.1

- No therapeutically relevant alterations detected in tumor rebiopsies
- NEOliquid assay detected the resistance mutation EGFR T790M
- Patient was successfully treated with AZD9291 inhibitor

Decrease in tumor volume correlates with decrease in allele frequency of the EGFR T790M mutation in plasma

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