

CASE 033

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PATIENT INFORMATION

TA 68-year-old male, non-smoker presented with stage IV metastatic lung adenocarcinoma with malignant pleural effusion. Biopsy specimen was sent for *EGFR* mutation analysis by RT-PCR and *ALK* screening by IHC (D5-F3 clone).

The patient was positive for both, *EGFR* del19 and *ALK*. Based on the patients molecular results, the patient was treated with Gefitinib (250mg OD) for 2 months but was non-responsive and showed disease progression.

Since dual *ALK* and *EGFR* positivity is a rare occurrence in lung adenocarcinoma, and the patient was non-responsive to Gefitinib, an NGS based test was prescribed in order to resolve the discrepancy. Re-biopsy was done in order to get sufficient tissue for NGS analysis, however the tumor content was <10% and the test could not be performed due to insufficient DNA content. Blood-based NGS panel was subsequently prescribed.