Yet another reason why the EGFR mutation was undetected by NGS could be that the patient was on Gefitinib for two months prior to performing the comprehensive molecular analysis. Studies have shown a complete disappearance of mutant EGFR ctDNA after administration of anti-EGFR TKI therapy.

Pembrolizumab was previously approved as first line therapy in mNSCLC with >50% PDL1 positivity and second line therapy in patients who had progressed on platinum-based chemotherapy with >1% PDL1 positivity. Recently FDA has extended the approval for use of Pembrolizumab as first line therapy in combination with chemotherapy regardless of PDL1 status. The patient was PD-L1 positive (20% positivity). However, immunotherapy was not administered due to financial constraint.

In the present scenario, the patient is being treated with Crizotinib and has demonstrated a good response so far. This implies that ALK mutation could have been the more dominant mutation that was responsible for driving tumor growth.

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