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COMPANION DIAGNOSTICS AND CANCER BIOMARKERS

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COMPANION DIAGNOSTICS AND CANCER BIOMARKERS
About the Cover

The ALK/MET inhibitor crizotinib has already shown efficacy in ALK-driven non-small cell lung cancer patients, but the treatment is not curative with rapid acquisition of resistance, which is partly attributable to the gatekeeper-residue mutation L1196M of ALK. Computational modeling suggested that ASP3026, a novel small molecule ALK inhibitor, is well docked with both wild-type and L1196M ALK, and fits more deeply within the ATP-binding pocket of the L1196M form, with the larger side-chain of methionine compared to leucine, than crizotinib. This might explain why ASP3026 showed more potent efficacy against the L1196M mutant within the therapeutic margin compared with crizotinib. For details, see article by Mori and colleagues, on page 329.