Supplementary Table S1 Important biomarker tests and drugs in NSCLC[a,,11–13]

Biomarkers	Testing methods	Approved drugs
Mandatory		
EGFR mutation[b] *EGFR* E*xon 20* insertion mutation	NGS, RT-PCR	Gefitinib, erlotinib, afatinib, dacomitinib, osimertinib Amivantamab
ALK rearrangements[b]	NGS, FISH, IHC	Crizotinib, alectinib, ceritinib, lorlatinib
PD-L1[b]	IHC	Pembrolizumab, avelumab, cemiplimab, atezolizumab
ROS-1 fusion	IHC (only as a screening method), NGS, FISH	Crizotinib, entrectinib
Preferable		
BRAF V600E mutation	NGS, allele-specific PCR	Dabrafenib + trametinib
MET Exon 14 skipping mutation	NGS	Capmatinib, tepotinib
MET amplification	NGS, FISH	None approved
NTRK fusion	NGS, IHC, FISH	Entrectinib
RET fusion	NGS, FISH	Pralsetinib, selpercatinib (not available in India)
Optional		
KRAS G12C mutation	NGS, PCR	Sotorasib, adagrasib
ERBB2 (HER2) mutation	NGS	Trastuzumab deruxtecan
ERBB2 (HER2) amplificationIHC 3+ overexpression	FISH, IHC	Trastuzumab deruxtecan (agnostic approval)

Abbreviations: FISH, fluorescence in situ hybridization; IHC, immunohistochemistry; NGS, next-generation sequencing; PD-L1, programmed death-ligand 1; RT-PCR, reverse transcription-polymerase chain reaction.
[a]Broad genomic profiling is recommended to detect actionable mutations, wherever feasible.
[b]In all early and advanced cases of NSCLC.

