

## Appendix 1 HS2-lung-assay panel setup

Point mutations and small deletions/insertions are detectable in all 50 genes included in the panel. Fusion calling is possible for genes marked with (%), except *NTRK3* where only *ETV6-NTRK3* fusions calling possible: *ALK* (%), *APC*, *AR*, *ARID1A*, *ATM*, *ATR*, *BRAF*, *BRCA1*, *BRCA2*, *CDK4*, *CDK6*, *CDKN2A*, *CDKN2B*, *CTNNB1*, *DDR2*, *DPYD*, *EGFR*, *ERBB2*, *ESR1*, *FGFR1*(%), *FGFR2* (%), *FGFR3* (%), *FGFR4* (%), *HRAS*, *IDH1*, *IDH2*, *KEAP1*, *KIT*, *KRAS*, *MAP2K1*, *MAP2K3*, *MDM2*, *MET*, *MTOR*, *NFE2L2*, *NRAS*, *NRG1* (%), *NTRK1* (%), *NTRK2* (%), *NTRK3* (%), *PDGFRA*, *PGR*, *PIK3CA*, *POLE*, *PTEN*, *RBI*, *RET* (%), *ROS1* (%), *STK11*, *TP53*.