

## Supplementary Material

**S1 Table.** List of mandatory genes required for the test panels to be used in clinical practice in Korea.

<b>Cancer type</b>	<b>Mandatory genes</b>
Stomach cancer, lung cancer, colorectal cancer, breast cancer, ovarian cancer, melanoma, gastrointestinal stromal tumor, malignant brain tumor, neuroblastoma, cancer of unknown primary origin	<i>HER2, EGFR, ALK, KRAS, NRAS, BRAF, BRCA1, BRCA2, KIT, PDGFRA, IDH1, IDH2, MYC, MYCN</i>
Plasmacytoma	<i>NRAS, KRAS, TP53</i>
Acute myeloid leukemia	<i>CEBPA, FLT3, JAK2, KIT, NPM1, RUNX1, TP53, IDH1, IDH2</i>
Acute lymphoblastic leukemia	<i>TP53, RB1, JAK2, NRAS, IKZF1</i>
Myelodysplastic syndrome, myeloproliferative disease	<i>ASXL1, CALR, CSF3R, DNMT3A, JAK2, MPL, RUNX1, SETBP1, SF3B1, SRSF2, TET2</i>
Malignant lymphoma	<i>MYD88, BRAF, TP53</i>

In order to use next-generation sequencing test in clinics these mandatory genes should be included in the target gene.