Biomarker testing for tumor samples arriving on or after June 1, 2021:

1. **Cutaneous melanoma**
   - NGS testing will be used to test for variants in the **BRAF, NRAS, KIT, GNAQ and GNA11** genes
   - The former single gene **BRAF** V600 hotspot test will no longer be run prior to NGS testing

2. **Uveal melanoma**
   - NGS testing will be used to test for variants in the **GNAQ, GNA11, BRAF, NRAS, KIT, BAP1, EIF1AX, SF3B1, CDKN2A, CDK4, CDK6 and HRAS** genes
   - The former single gene **BRAF** V600 hotspot test will no longer be run prior to NGS testing

3. **Non-small cell lung cancer**
   - NGS testing will be used, to test for variants in the **EGFR, BRAF, MET, ALK, RET, ROS1, FGFR1, ERBB2 (Her2), CTNNB1, KRAS, PIK3CA, RB1, SMARCA4, STK11, TP53, NTRK1, NTRK2, NTRK3 and NRG1** genes
   - **PD-L1** testing by IHC will also continue to be used for all cases
   - The former single gene **EGFR** tests (Entrogen, RFLP), **ALK** IHC/FISH, and **ROS1** IHC/FISH will no longer be routinely used, as these genes and variants are detectable from the NGS panel

4. **Colorectal and small bowel cancer**
   - NGS testing will be used to test for variants in **BRAF, KRAS, NRAS, PIK3CA**
   - For colorectal cancer **MLH1** methylation will continue to be available upon request, when abnormal MLH1, PMS2 MMR results are observed

**Please note for all of the above, the turnaround time for the NGS panel is 14 days from sample receipt in the genetic lab to sign-out.**