

Wellington Regional Genetics Laboratory Oncology Section Update Dec 2020

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New Test Now Available: Next Generation Sequencing (NGS) Cancer Hotspot Panel

Wellington Regional Genetics Laboratory (WRGL) has validated testing for the AmpliSeq for Illumina Cancer Hotspot Panel v2 which is a targeted NGS assay used to sequence ~2,800 COSMIC somatic mutations across hotspot regions of 50 genes with known associations to cancer.

The following genes are partially sequenced in this test: *ABL1, AKT1, ALK, APC, ATM, BRAF, CDH1, CDKN2A, CSF1R, CTNNB1, EGFR, ERBB2, ERBB4, EZH2, FBXW7, FGFR1, FGFR2, FGFR3, FLT3, GNA11, GNAQ, GNAS, HNF1A, HRAS, IDH1, IDH2, JAK2, JAK3, KDR, KIT, KRAS, MET, MLH1, MPL, NOTCH1, NPM1, NRAS, PDGFRA, PIK3CA, PTEN, PTPN11, RB1, RET, SMAD4, SMARCB1, SMO, SRC, STK11, TP53, VHL*

For more information about the coverage of the genes and transcripts included in this assay please see our website: <u>http://www.wellingtongenetics.co.nz/</u>

NGS testing can be performed on bone marrow, leukaemic blood and FFPE samples. For bone marrow we require 1-10ml in EDTA and for leukaemic blood 4-10ml in EDTA. If NGS is required from an FFPE sample, please provide 2-3 slides (minimum) cut at 4 microns along with an H&E slide with the area of interest circled.

Please note that the tumour burden needs to be above 30% in order to proceed.

This test is free of direct charge for the Central Region DHBs covered by the Crown Funding Agreement. The cost for other centres is \$660+GST.

New FISH probe:

We now have a Cytocell dual fusion NUP214/DEK t(6;9) translocation FISH probe available. For a full list of FISH probes available please see our <u>website</u>.

Please let us know if there are any other tests you believe would benefit your service.

Many FISH probes are commercially available and PCR or MLPA testing are also performed at WRGL. If there are any tests you require, we are happy to discuss this. Please contact Angela Brown (Section Head Oncology) <u>angela.brown@ccdhb.org.nz</u>