



RAPID COLORECTAL CANCER VARIANT SCREEN

Patient Details		Source Information		Sample Information	
Lab Number:	MP19- XXXX	Requester Ref:	-	Date Received:	02/01/2019
Surname:	Atient	Surgical No.:	H111/18 B1	Primary Tumour Site:	Colorectal
Forename:	Percival	Sample Type:	FFPE Block	Tumour Subtype:	Adenocarcinoma
D.O.B. (D/M/Y)	13/08/1949	Consultant:	Smith	Tissue Sample Site:	Liver
Gender:	Male	Hospital:	Random Hospital	(Whole):	21-50%
				% Tumour (Selected):	

Results

KRAS:

Detected DNA Change(s): None

Detected Protein Change(s): None

NRAS:

Detected DNA Change(s): None

Detected Protein Change(s): None

BRAF:

Detected DNA Change(s): c.1799T>A or c.1799_1800delinsAA or c.1799_1800delinsAT or c.1799_1800delinsAC

Detected Protein Change(s): p.(Val600Glu) or p.(Val600Asp)

Comment:

There is evidence of BRAF Codon 600 mutation in this sample. Although in most current guidelines, the use of anti-EGFR antibody therapy in colorectal cancer is indicated solely upon KRAS/NRAS status, there is an increasing weight of literature suggesting that BRAF mutated tumours are also unlikely to benefit from this treatment. We suggest that this case is reviewed at an appropriate MDT meeting.

Approved by:

Signature:

Name: Dr F. Irst

Date: 03/02/2019

Job Title:

Clinical Scientist ✓

Consultant Histopathologist

BMS (senior)

Checked by:

Signature:

Name: S. Econd

Date: 03/02/2019

Job Title:

BMS ✓

Trainee Clinical Scientist / BMS

Molecular Biology, PhD

This assay was performed on a Biocartis Idylla system using the "KRAS Mutation Test" kit with reflex to the "NRAS-BRAF Mutation Test" kit if no mutation is detected in KRAS. This assay is CE-IVD certified for use on primary colorectal cancer samples with >10% tumour content, with an analytical sensitivity of approximately 5% variant frequency in FFPE samples. It can detect the following mutations; BRAF: p.Val600Glu (c.1799T>A or c.1799_1800delinsAA), p.Val600Asp (c.1799_1800delinsAT or c.1799_1800delinsAC), p.Val600Lys (c.1798_1799delinsAA), and p.Val600Arg (c.1798_1799delinsAG). KRAS: p.Gly12Ala (c.35G>C), p.Gly12Cys (c.34G>T), p.Gly12Asp (c.35G>A), p.Gly12Arg (c.34G>C), p.Gly12Ser (c.34G>A), p.Gly12Val (c.35G>T), p.Gly13Asp (c.38G>A), p.Ala59Glu (c.176C>A), p.Ala59Gly (c.176C>G), p.Ala59Thr (c.175G>A), p.Gln61His (c.183A>C or c.183A>T), p.Gln61Lys (c.181C>A or c.180_181delinsAA), p.Gln61Leu (c.182A>T), p.Gln61Arg (c.182A>G), p.Lys117Asn (c.351A>C or c.351A>T), p.Ala146Pro (c.436G>C), p.Ala146Thr (c.436G>A), and p.Ala146Val (c.437C>T). NRAS: p.Gly12Ala (c.35G>C), p.Gly12Arg (c.34G>C), p.Gly12Asp (c.35G>A), p.Gly12Ser (c.34G>A), p.Gly12Val (c.35G>T), p.Gly13Asp (c.38G>A), p.Gly13Arg (c.37G>C), p.Gly13Val (c.38G>T), p.Ala59Thr (c.175G>A), p.Gln61His (c.183A>C or c.183A>T), p.Gln61Lys (c.181C>A or c.180_181delinsAA), p.Gln61Leu (c.182A>T)), p.Gln61Arg (c.182A>G)), p.Lys117Asn (c.351A>C or c.351A>T), p.Ala146Thr (c.436G>A), and p.Ala146Val (c.437C>T). All DNA and Protein changes are given with respect to KRAS sequence NM_004985.4, NRAS sequence NM_002524.3, and BRAF sequence NM_004333.4.