



Microsatellite Instability Status Report

Patient Details		Source Information		Sample Information	
Lab Number:	MP19- XXXX	Requester Ref:		Date Received:	02/01/2019
Surname:	Atient	Surgical No.:	UR19-1890	Primary Tumour Site:	Colorectal
Forename:	Pamela	Sample Type:	FFPE Block	Tumour Subtype:	Adenocarcinoma
D.O.B. (D/M/Y)	03/03/1942	Consultant:	Smith	Tissue Sample Site:	Colorectal
Gender:	Female	Hospital:	Hospital	(Whole):	21-50%
				% Tumour (Selected):	

Result

(MSI-H) MicroSatellite Instability - High

5 Unstable Markers Detected

Evidence of microsatellite instability was detected in two or more (of seven) microsatellite markers.

Comment:

A high-level of MicroSatellite Instability (MSI-H) was observed in this tumour specimen, with evidence of instability in 2 or more of 7 microsatellite repeat markers. MSI-H status is indicative of defective DNA mismatch repair (MMR) and has been also associated with increased sensitivity to immune checkpoint inhibitor (e.g. pembrolizumab) therapy in advanced solid tumours.

Approved by:

Signature:

Checked by:

Signature:

Name: Dr F. Irst

Date: 01/09/2019

Name: S. Econd

Date: 01/09/2019

Job Title:

Clinical Scientist ✓

Consultant Histopathologist

BMS (senior)

Job Title:

BMS ✓

Trainee Clinical Scientist / BMS

Molecular Biology, PhD

This assay was performed using the Biocartis Idylla platform with a single-use quantitative polymerase chain reaction (qPCR) MSI cartridge, which tests for instability at 7 monomorphic homopolymer loci in DNA extracted from tumour-only FFPE tissue sections. Data analysis is carried out by on-board software and the results scored as either MSI-Stable (MSS): 0 or 1 markers unstable, or MSI-High (MSI-H): 2-7 markers unstable. This assay is CE-IVD certified for use on colorectal cancer samples with ≥20% tumour nuclei, with an analytical sensitivity of 10% variant frequency. The 7 MSI loci are located within the following genes (chromosomal locations given in parenthesis): ACVR2A (2q22.3-q23.1); BTBD7 (14q32.12); DIDO1 (20q13.33); MRE11 (11q21); RYR3 (15q13.3-q14); SEC31A (4q21.22); SULF2 (20q13.12).