

Test Description

MSI testing is used for Hereditary Cancer screening (Hereditary Non-Polyposis Colorectal Cancer -HNPCC or Lynch syndrome); As a biomarker (Prognostic and predictive biomarker for the response of Immunotherapy)

Patient Demographic

Name: Poonam Khanna Sex: Female Date of Birth/Age: 55 years Disease: Endometroid Adenocarcinoma

| PATIENT | REPORT DATE | BOOKING ID |
|---------------|-------------|--------------|
| Poonam Khanna | 16 May 2019 | 011905150264 |

Clinician

Clinician Name: Dr Archit Pandit Medical Facility: Max Hospital Pathologist: Not Provided

Specimen

Site: Endomyometrium Sample Type: FFPE block SB 1476/19 Date of Collection: 15-05-2019 Date of Booking: 15-05-2019

iMSI Rapid[™] Assay

Result

Microsatellite status - Stable

INTERPRETATION

BIOMARKER FINDINGS

| ACVR2A | No mutation detected | |
|--------|----------------------|--|
| BTBD7 | No mutation detected | |
| DID01 | Mutation detected | |
| MRE11 | No mutation detected | |
| RYR3 | No mutation detected | |
| SEC13A | No mutation detected | |
| SULF2 | No mutation detected | |

| n detected in <i>DID01</i> , 1 of the 7 | | |
|--|--|--|
| <2 of the 7 markers demonstrate instability | | |
| $^{\#}$ MSI-H ≥2 of the 7 markers demonstrate instability | | |
| *Microsatellite stable | | |
| # Microsatellite Instability-High | | |
| h test results specific controls are being run with every batch. | | |
| | | |

METHODOLOGY Multiplex detection of seven mononucleotide repeats using molecular beacon probe-based polymerase chain reaction followed by high resolution melt-curve analysis. The assay uses seven novel biomarkers *ACVR2A*, *BTBD7*, *DID01*, *MRE11*, *RYR3*, *SEC31A* and *SULF2* as this set of biomarkers is stable over different cancer types and ethnicities and show high performance than other known assays like *Bethesda Panel*. This test is carried out on Idylla platform using the MSI/1.0 Cartridge based kit which is CE IVD approved.

 REFERENCES
 Zhao et al. (2014) eLife 3: e02725, 1-26.

 De Craene B. et al. (2018) ASCO Abstract #e15639.
 Zhao et al. (2018) ASCO Abstract #e15654

May 16, 2019

Dr Gulshan Yadav, MD, Consultant Pathology

Date