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)

Clinician

Clinician Name: Dr Amit Verma
Medical Facility: Max Hospital
Pathologist: Not Provided

Patient Demographic

Name: Aruna Mittal
Sex: Female
Date of Birth/Age: 48 years
Disease: Endometrial Cancer

Specimen

Site: Endometrium
Sample Type: FFPE block 1173/19
Date of Collection: 27-03-2019
Date of Booking: 28-03-2019

iMSI Rapid™ Assay

Result — Microsatellite - High (MSI-H)

BIOMARKER FINDINGS

ACVR2A	Mutation detected
BTBD7	Mutation detected
DIDO1	Mutation detected
MRE11	No mutation detected
RYR3	No mutation detected
SEC13A	Mutation detected
SULF2	mutation detected

INTERPRETATION

Mutations are detected in 5 of the 7 markers

*MSS <2 of the 7 markers demonstrate instability

#MSI-H ≥2 of the 7 markers demonstrate instability

*Microsatellite stable

Microsatellite Instability-High

For valid batch 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*, *DIDO1*, *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

March 28 2019

Dr Gulshan Yadav, MD, Consultant Pathology — Date