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: Ratan Lal Gupta
Sex: Male
Date of Birth/Age: 85 years
Disease: Moderately Differentiated Adenocarcinoma of Rectum

Specimen
Site: Rectum
Sample Type: FFPE block SB-2683/19
Date of Collection: 14-08-2019
Date of Booking: 09-08-2019

iMSI Rapid™ Assay

Result Microsatellite - High (MSI-H)

BIOMARKER FINDINGS

ACVR2A	Mutation detected
BTBD7	Mutation detected
DIDO1	Mutation detected
MRE11	Mutation detected
RYR3	Mutation detected
SEC13A	Mutation detected
SULF2	Mutation detected

INTERPRETATION

Mutations are detected in all 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

17 August 2019

Dr Gulshan Yadav, MD, Consultant Pathology Date