

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 Sandeep Batra
Medical Facility: Max Hospital
Pathologist: Not Provided

Patient Demographic

Name: Dalip Singh
Sex: Male
Date of Birth/Age: 75 years
Disease: Carcinoma Rectosigmoid

Specimen

Site: Distal Doughnut
Sample Type: FFPE block S 1244/20
Date of Collection: 28-02-2020
Date of Booking: 28-02-2020

iMSI Rapid™ Assay

Result**Microsatellite status - Stable****BIOMARKER FINDINGS**

<i>ACVR2A</i>	No mutation detected
<i>BTBD7</i>	No mutation detected
<i>DIDO1</i>	No mutation detected
<i>MRE11</i>	No mutation detected
<i>RYR3</i>	No mutation detected
<i>SEC13A</i>	No mutation detected
<i>SULF2</i>	No mutation detected

INTERPRETATION

Mutations are not detected in any 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

**February 29, 2020****Dr Gulshan Yadav, MD, Consultant Pathology**

Date

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