

### 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 Archit Pandit  
 Medical Facility: Max Hospital  
 Pathologist: Not Provided

### Patient Demographic

Name: Ajab Singh  
 Sex: Male  
 Date of Birth/Age: 71 years  
 Disease: Carcinoma lower esophagus

### Specimen

Site: Lower esophagus, punch biopsy  
 Sample Type: FFPE block B - 5513/19  
 Date of Collection: 06-12-2019  
 Date of Booking: 05-12-2019

# iMSI Rapid™ Assay

## Result

## Microsatellite status - Stable

### BIOMARKER FINDINGS

|        |                      |
|--------|----------------------|
| ACVR2A | No mutation detected |
| BTBD7  | No mutation detected |
| DIDO1  | No mutation detected |
| MRE11  | No mutation detected |
| RYR3   | No mutation detected |
| SEC13A | No mutation detected |
| SULF2  | 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



December 06, 2019

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Date