A NEW ERA IN MSI TESTING IDYLLATM MSI TEST





INTRODUCING IDYLLA™ MSI TEST FAST AND ACCURATE INFORMATION ON MSI STATUS



Fully-automated molecular testing platform



Directly from 1 FFPE tissue section



7 novel tumor-specific biomarkers



No need for paired normal tissue samples



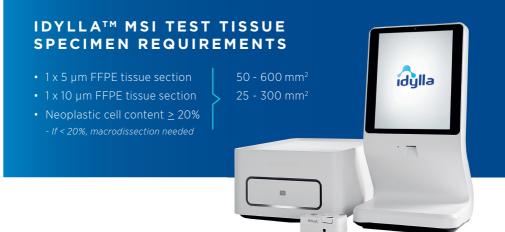
150 minutes assay turnaround-time



Unbiased result reporting



2 minutes hands-on-time



A NEW SET OF BIOMARKERS

The Idylla™ MSI Test has been developed using a new set of short homopolymers located in the ACVR2A, BTBD7, DIDO1, MRE11, RYR3, SEC31A & SULF2 genes. These biomarkers are tumorspecific, show a high frequency in colorectal and endometrial cancers and are stable across different ethnicities ensuring excellent specificity of the test. In addition, these tumor-specific biomarkers do not require the analysis of paired normal tissue samples associated with traditional MSI/MMR testing, improving operational efficiency.

IDYLLA™ MSI TEST - EXCELLENT PERFORMANCE

Idylla™ MSI Test shows high concordance with lower failure rates compared to standard methods.¹



Study	# Samples	Reference method	Concordance	Failure rate Idylla™ vs. Reference method
Clinical Performance Study	330	Promega MSI Immunohistochemistry	99.7% (322/323) 97.5% (310/318)	0.9% vs 5.5% 0.6% vs 3.0%

MSI BACKGROUND

Microsatellite instability (MSI) is defined as a length variation of DNA repeat regions found in microsatellites or homopolymers.

MSI is caused by deficiency of the DNA mismatch repair system (dMMR) resulting in a distinct accumulation of insertions and deletions in microsatellite and homopolymeric regions.²



MSI can be sporadic or hereditary. MSI-high (MSI-H) is detected in approximately 15% of all colorectal cancers; 3% are associated with Lynch syndrome (LS), the other 12% have sporadic disease.³



Clinical trials and pathophysiological studies indicate a wide distribution of MSI-H across tumor types.⁴ In addition to CRC, high incidences are observed in endometrial cancer (20-30%), and gastric cancer (15-20%).⁵



Guidelines recommend assessing the MSI status for all patients with colorectal or endometrial carcinomas for screening for Lynch syndrome as well as for prognostic stratification and immunotherapy.⁶⁻⁹



Research studies have shown that MSI-H patients respond favorably to immune checkpoint inhibitors^{10,11}, and checkpoint blockade therapy has recently been incorporated into clinical care for colorectal cancers.^{7,8}

The Idylla™ MSI Test is only validated for the detection of MSI status in colorectal cancer.

THE IDYLLA™ ADVANTAGE



The fully automated Idylla™ MSI Test provides fast and accurate information on MSI status. 112-14



Idylla™ MSI Test shows high concordance of more than 97% and lower failure rates compared to standard methods.¹



No need for paired normal tissue sample.

"We are delighted with the performance of the Idylla" MSI Test providing high quality results from minimal amount of tissue. The ease of use allows even laboratories with minimal histopathology experience to perform MSI testing in-house."



Cancer Molecular Diagnostics, St. James's Hospital, Dublin, Ireland



REFERENCES

- (1) Clinical Performance Study showed 99,7% concordance for MSI testing vs Promega (unpublished data)
- (2) Aaltonen, L. A. et al. (1993) Clues to the pathogenesis of familial colorectal cancer. Science 260, 812-816.
- (3) Dudley JC et al. (2016) Microsatellite instability as a biomarker for PD-1 blockade. Clin Cancer Res. 22(4):813-820.
- Cortes-Ciriano I et al. (2017) A molecular portrait of microsatellite instability across multiple cancers. Nat Commun. 8:15180. (4)
- Sigurdis Haraldsdottir (2017) Microsatellite instability testing using next-generation sequencing data and therapy (5)implications. JCO Precision Oncology 1, 1-4.
- (6) Van Cutsem et al. (2016) ESMO Consensus Guidelines for the management of patients with mCRC. Annals of Oncology 27, 1386.
- (7) NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Colon Cancer V.2.2018. Accessed July 25, 2018. To view the most recent and complete version of the guidelines, go online to NCCN.org.
- (8) NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Rectal Cancer V.2.2018. Accessed July 25, 2018. To view the most recent and complete version of the guidelines, go online to NCCN.org.
- (9) NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Uterine Neoplasms V.2.2018. Accessed July 25, 2018. To view the most recent and complete version of the guidelines, go online to NCCN.org.
- (10) Le DT et al. (2015) PD-1 blockade in tumors with mismatch-repair deficiency. N Engl J Med. 372:2509-2520.
- (11) Le DT et al. (2017) Mismatch repair deficiency predicts response of solid tumors to PD-1 blockade. Science 357:409-413.
- (12) De Craene et al. (2018) Detection of microsatellite instability (MSI) in colorectal cancer samples with a novel set of highly sensitive markers by means of the Idylla MSI Test prototype. Journal of Clinical Oncology 36:15_suppl, e15639. Data obtained with prototype cartridge.
- (13) De Craene et al. (2017) Detection of microsatellite instability (MSI) with a novel panel of biomarkers in gastric cancer samples. Annals of Oncology 28 (suppl 5): v209-v268. Data obtained with pre-final biomarker panel containing the 7 final biomarkers and several additional biomarkers that were not retained in the final product.
- (14) Maertens et al. (2017) Detection of microsatellite instability (MSI) with the Idylla™ MSI Test in colorectal cancer samples. Annals of Oncology 28 (suppl 5): v22-v42.

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