



Oncology

UGT1A1 Genotyping

- Is a one-time screening test for newly diagnosed colorectal cancer patients
- Predicts potential risk for irinotecan-induced toxicity
- Provides guidance for appropriate drug dosage

Colorectal cancer, with more than 145,000 new cases diagnosed each year, is the third most common cancer and the third leading cause of cancer-related mortality in the United States. Patients with metastatic carcinoma of the colon or rectum (primary or recurring) or EGFR+ metastatic colorectal carcinoma are often treated with irinotecan (Camptosar™), as a first-line therapy in combination with other chemotherapeutic agents.

In 2005, the FDA approved the Invader® UGT1A1 Molecular Assay (Hologic®) to identify patients at risk for drug toxicity when treated with irinotecan. The assay detects molecular (DNA) variations in the UGT1A1 gene that influences a patient's ability to effectively metabolize irinotecan. Irinotecan-induced toxicity can result in both neutropenia and severe diarrhea in at-risk patients.

Test Code

UGT1A1

Specimen Requirements

5 mL (min. 3 mL) EDTA blood preferred, 5 mL (min. 3 mL) ACD blood accepted.

CPT Codes

83891, 83892 x8, 83896 x12, 83903 x4, 83912

Storage and Handling

Ship specimen ambient. If shipment delayed, store at 2-8°C for no more than seven days prior to DNA extraction, and ship with ice pack. (Do not allow the sample to be in direct contact with the ice pack)

Specimen Stability

Specimen stable 24 hours at 18-25°; 7 days at 2-8°C.

Turnaround Time

2-3 days

Related Tests

KRAS Mutation Analysis
Microsatellite Instability by IHC
CA 27-29 by chemiluminescence
CEA by chemiluminescence
p53 by IHC
EGFR1 (HER1) by IHC



StrataFLEX™

StrataFLEX is MPLN's innovative health management strategy that provides clinicians with disease-specific reflex testing options. Management of patients with colorectal cancer requires a rational approach to reduce treatment cost and provide effective therapy.

About MPLN

Since 1989, Molecular Pathology Laboratory Network, Inc. has offered an expanding selection of tests in molecular oncology, infectious diseases and human genetics to hospitals, medical laboratories and private physician groups nationwide.

Headquartered in Maryville, Tennessee, we are a fully licensed laboratory, certified by the Clinical Laboratory Improvement Amendment, and accredited by the College of American Pathologists and the states of Tennessee, Florida, New York and Maryland.

At MPLN, our philosophy is simple - we build strong professional relationships, deliver personalized service, and offer advanced diagnostic technology to support high-quality patient care.

For more information, contact your local representative or call MPLN client services at 800.932.2943.

References

1. National Cancer Institute: www.cancer.org, www.cancer.gov/cancertopics/types/colon-and-rectal
2. Third Wave Technologies: www.twt.com, www.twt.com/company/pressreleases/2005/aug_22a_2005.html
3. Food and Drug Administration: www.fda.gov, www.fda.gov/bbs/topics/NEWS/2005/NEW01220.html

Trademarks

StrataFlex is a trademark of Molecular Pathology Laboratory Network, Inc.

Invader is a registered trademark of Third Wave Technologies, Inc., a wholly-owned subsidiary of Hologic, Inc.

Camptosar is a registered trademark of Pfizer.