



CHEMOSENSITIVITY ASSAYS

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Status: Current

I. DESCRIPTION

Chemosensitivity assays are designed to predict tumor response to various chemotherapies. These assays have been proposed for use by oncologists to select chemotherapy regimens for individual patients. A variety of assays have been developed that differ in their processing and in the technique used to measure sensitivity or resistance. All involve the same four basic steps: 1) isolation of cells, 2) incubation of cells with drugs, 3) assessment of cell survival, and 4) interpretation of the result. A variety of techniques have been evaluated to assess cell survival, including the DISC (differential staining cytotoxicity) assay, the thymidine incorporation assay, fluorescence (cytoprint) assays, and the MTT (methylthiazolyl-diphenyl-tetrazolium bromide) assay.

Results are reported as either drug sensitive, drug resistant, or intermediate. Drugs identified as drug sensitive are thought to be potentially effective in chemotherapy, while drugs identified as resistant are thought to be potentially ineffective chemotherapies.

II. POLICY/CRITERIA

- A. Currently the only assay covered by Priority Health for clinical use is ChemoFx[®]. ChemoFx[®] measures both resistance and sensitivity which analyzes which chemotherapies are least likely to work for an individual patient and which are most likely to work.
- B. The use of ChemoFx[®] is currently only approved for ovarian, fallopian tube and primary peritoneal cancers when intended for guidance in selection of chemotherapeutic agents for either primary or recurrent cancer.

III. MEDICAL NECESSITY REVIEW

Required Not Required Not Applicable

IV. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- ❖ HMO/EPO: *This policy applies to insured HMO/EPO plans.*
- ❖ POS: *This policy applies to insured POS plans.*



- ❖ **PPO:** *This policy applies to insured PPO plans.*
- ❖ **ASO:** *For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.*
- ❖ **INDIVIDUAL:** *For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.*
- ❖ **MEDICARE:** *Coverage is determined by the Centers for Medicare and Medicaid Services (CMS).*
- ❖ **MEDICAID:** *If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual and the Michigan Medicaid Fee Schedule, the Michigan Medicaid Provider Manual and the Michigan Medicaid Fee Schedule at: http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--00.html will govern.*
- ❖ **MICHILD:** *For MICHILD members, this policy will apply unless MICHILD certificate of coverage limits or extends coverage.*

IV. CODING INFORMATION

ICD-9 Diagnosis Codes:

These Diagnoses may support medical necessity

- 158.0 Malignant neoplasm of retroperitoneum
- 158.8 Malignant neoplasm of specified parts of peritoneum
- 158.9 Malignant neoplasm of peritoneum, unspecified
- 183.0 Malignant neoplasm of ovary
- 183.2 Malignant neoplasm of fallopian tube

CPT/HCPCS Codes:

- 89240 Unlisted miscellaneous pathology test
 - 84999 Unlisted chemistry procedure
- (Explanatory notes must accompany claims billed with unlisted codes.)*

VI. REFERENCES

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