

Reporting Title: mSMART Algorithmic Testing, BM**Performing Location:** Rochester**Ordering Guidance:**

This test should be ordered at diagnosis or for a known relapsing patient of multiple myeloma and when MPCDS / mSMART, Plasma Cell Proliferative Disorder, FISH, Bone Marrow is requested.

For follow-up of a plasma cell neoplasm (plasma cell proliferative disorder), order MSMRD / Myeloma Stratification and Risk-Adapted Therapy with Reflex to Minimal Residual Disease, Bone Marrow.

Necessary Information:

1. Include patient's disease state (untreated, treated, monoclonal gammopathy of undetermined significance, stable).
2. Indicate if patient is on anti-CD38 therapy.

Specimen Requirements:

Specimen Type: Redirected bone marrow

Preferred: Yellow top (ACD solution A or B)

Acceptable: Lavender top (EDTA) or green top (heparin)

Specimen Volume: 4 mL

Specimen Minimum Volume:

3 mL

Forms:

If not ordering electronically, complete, print, and send a Hematopathology/Cytogenetics Test Request (T726) with the specimen.

| Specimen Type | Temperature | Time | Special Container |
|---------------|---------------------|----------|-------------------|
| Bone Marrow | Ambient (preferred) | 72 hours | |
| | Refrigerated | 72 hours | |

Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|-----------|--|--------------|------|---------|
| CK056 | Monotypic Plasma Cells: Also used by tests: MSMRD, PCPRO | Alphanumeric | | 93362-2 |
| CK057 | Monotypic PC per Total Events Also used by tests: PCPRO, MSMRD | Alphanumeric | % | 93021-4 |
| CK058 | Monotypic Plasma Cells S-phase Also used by tests: PCPRO, MSMRD | Alphanumeric | % | 93361-4 |
| CK059 | Monotypic Plasma Cells DNA Index Also used by tests: MSMRD, PCPRO | Alphanumeric | | 93360-6 |
| CK060 | Monotypic Plasma Cells DNA Ploidy Also used by tests: MSMRD, PCPRO | Alphanumeric | | 93359-8 |
| CK061 | Polytypic PC per Total Events Also used by tests: MSMRD, PCPRO | Alphanumeric | % | 93358-0 |
| CK062 | Polytypic PC per All Plasma Cells Also used by tests: PCPRO, MSMRD | Alphanumeric | % | 93020-6 |
| CK134 | Final Diagnosis | Alphanumeric | | 22637-3 |

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

88182-Flow cytometry, cell cycle or DNA analysis
88184-Flow cytometry; first cell surface, cytoplasmic or nuclear marker
88185 x 5-Flow cytometry; additional cell surface, cytoplasmic or nuclear marker (each)
88187-Flow cytometry interpretation, 2 to 8 Markers

Reflex Tests:

| Test ID | Reporting Name | CPT Units | CPT Code | Always Performed | Orderable Separately |
|---------|-------------------------------------|-----------|----------|------------------|----------------------|
| CSMRT | MPCDS Pre-Analysis Cell Sorting, BM | | | No | No |
| MPCDS | mSMART Eval, PCPDs, FISH | | | No | Yes (Order PCPDS) |
| MPCDB | Probe, Each Additional (MPCDS) | | | No | No (Bill Only) |

Result Codes for Reflex Tests:

| Test ID | Result ID | Reporting Name | Type | Unit | LOINC® |
|---------|-----------|------------------------------|--------------|------|-----------------|
| CSMRT | 607682 | MPCDS Pre-Analysis Cell Sort | Alphanumeric | | No LOINC Needed |
| CSMRT | 607688 | Final Diagnosis | Alphanumeric | | No LOINC Needed |
| MPCDS | 606091 | mSMART Result Summary | Alphanumeric | | 62357-9 |
| MPCDS | 606092 | mSMART Evaluation | Alphanumeric | | 57802-1 |
| MPCDS | 606093 | Interpretation | Alphanumeric | | 69965-2 |
| MPCDS | 606094 | Result Table | Alphanumeric | | 93356-4 |
| MPCDS | 606095 | Result | Alphanumeric | | 62356-1 |
| MPCDS | 606096 | Reason for Referral | Alphanumeric | | 42349-1 |
| MPCDS | 606097 | Specimen | Alphanumeric | | 31208-2 |
| MPCDS | 606098 | Source | Alphanumeric | | 85298-8 |
| MPCDS | 606099 | Method | Alphanumeric | | 85069-3 |
| MPCDS | 606100 | Additional Information | Alphanumeric | | 48767-8 |
| MPCDS | 606101 | Disclaimer | Alphanumeric | | 62364-5 |
| MPCDS | 606102 | Released By | Alphanumeric | | 18771-6 |

Reference Values:**PLASMA CELL CLONALITY:**

Normal bone marrow
No monotypic clonal plasma cells detected

DNA INDEX:

Normal polytypic plasma cells
DNA index (G0/G1 cells): Diploid 0.95-1.05