

Reporting Title: mSMART with Reflex to MRD, BM**Performing Location:** Rochester**Ordering Guidance:**

This test should be ordered on patients treated for multiple myeloma to confirm remission has been achieved, as an annual follow-up of those in remission or in uncertain remission, or when MPCDS / mSMART, Plasma Cell Proliferative Disorder, FISH, Bone Marrow is desired.

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)
Specimen Volume: 4 mL

Specimen Minimum Volume:

3 mL

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: PCPRO, MSMRT	Alphanumeric		93362-2
CK057	Monotypic PC per Total Events Also used by tests: PCPRO, MSMRT	Alphanumeric	%	93021-4
CK058	Monotypic Plasma Cells S-phase Also used by tests: PCPRO, MSMRT	Alphanumeric	%	93361-4

Result ID	Reporting Name	Type	Unit	LOINC®
CK059	Monotypic Plasma Cells DNA Index Also used by tests: PCPRO, MSMRT	Alphanumeric		93360-6
CK060	Monotypic Plasma Cells DNA Ploidy Also used by tests: MSMRT, PCPRO	Alphanumeric		93359-8
CK061	Polytypic PC per Total Events Also used by tests: PCPRO, MSMRT	Alphanumeric	%	93358-0
CK062	Polytypic PC per All Plasma Cells Also used by tests: MSMRT, PCPRO	Alphanumeric	%	93020-6
616032	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)
MRDMR	Multiple Myeloma MRD by Flow, BM			No	Yes (Order MRDMM)

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
MRDMR	CK146	% Minimal Residual Disease (MRD)	Alphanumeric	%	93021-4
MRDMR	CK147	% Normal Plasma Cells (of total PC)	Alphanumeric	%	93020-6
MRDMR	CK148	Non-Aggregate Events	Unknown		38257-2
MRDMR	CK149	Total Plasma Cell Events	Unknown		93019-8
MRDMR	CK150	Poly PC Events	Unknown		93018-0
MRDMR	CK151	Abnormal PC Events	Unknown		93017-2
MRDMR	615796	% B-cell Precursors	Unknown	%	101131-1
MRDMR	615797	% Mast Cells	Unknown	%	101130-3
MRDMR	616082	Validated Assay Sensitivity	Alphanumeric	x10 ⁽⁻⁵⁾	101129-5
MRDMR	616083	Lower Limit of Quantitation (LLOQ)	Alphanumeric	x10 ⁽⁻⁶⁾	87706-8
MRDMR	615798	Patient / Sample Theoretical LOQ	Alphanumeric	x10 ⁽⁻⁶⁾	101128-7
MRDMR	614590	Final Diagnosis	Alphanumeric		74226-2

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