

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 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:	Alphanumeric		93362-2
CK057	Monotypic PC per Total Events	Alphanumeric	%	93021-4
CK058	Monotypic Plasma Cells S-phase	Alphanumeric	%	93361-4
CK059	Monotypic Plasma Cells DNA Index	Alphanumeric		93360-6
CK060	Monotypic Plasma Cells DNA Ploidy	Alphanumeric		93359-8
CK061	Polytypic PC per Total Events	Alphanumeric	%	93358-0
CK062	Polytypic PC per All Plasma Cells	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	Available Separately
MPCDB	Probe, Each Additional (MPCDS)	1	88271	No	No, (Bill Only)
CSMRT	MPCDS Pre-Analysis Cell Sorting, BM	1	88184	No	No
MPCDS	mSMART Eval, PCPDs, FISH	1	88271	No	Yes, (Order PCPDS)
MRDMR	Multiple Myeloma MRD by Flow, BM	1	88184	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

Test Definition: MSMRD

Myeloma Stratification and Risk-Adapted
Therapy with Reflex to Minimal Residual
Disease, Bone Marrow

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 monocytic clonal plasma cells detected

DNA INDEX:

Normal polytypic plasma cells

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