

| Subject: Bone Marrow MRI, (77084) | | Original Effective Date: 12/13/17 |
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| Policy Number: MCR: 651 | Revision Date(s): | |
| Review Date: 12/13/17, 12/19/18 | | |

DISCLAIMER

This Molina Clinical Review (MCR) is intended to facilitate the Utilization Management process. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (i.e., will be paid for by Molina) for a particular member. The member's benefit plan determines coverage. Each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their providers will need to consult the member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this Molina Clinical Review (MCR) document and provide the directive for all Medicare members.

DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

MRI (Magnetic Resonance Imaging) is a non- X-ray (no ionizing radiation) imaging scan that uses a strong magnetic field and radiofrequency waves to produce detailed cross sectional views of soft tissues, bones and vascular structures. These cross sectional images can be reconstructed, rotated and displayed in many different planes. A MR scan can be performed either without (non-enhanced) or with (contrast enhanced) injection of gadolinium containing contrast material into a vein.

APPROVAL SUPPORT

- ❖ For evaluation of conditions which cause marrow infiltration or replacement
 - Multiple myeloma/plasmacytoma
 - Leukemia
 - Lymphoma
 - Bone tumors
 - Sarcoidosis, Gaucher disease, Histiocytosis, Hemosiderosis, Fibrous Dysplasia, Myelofibrosis, Mastocytosis, Renal Osteodystrophy

ADDITIONAL CRITICAL INFORMATION

The above medical necessity recommendations are used to determine the best diagnostic study based on a patient's specific clinical circumstances. The recommendations were developed using



evidence based studies and current accepted clinical practices. Medical necessity will be determined using a combination of these recommendations as well as the patient's individual clinical or social circumstances.

- Tests that will not change treatment plans should not be recommended.
- Same or similar tests recently completed need a specific reason for repeat imaging.

REFERENCES USED FOR DETERMINATIONS

- 1. Dimopoulos MA, Hillengass J, Usmani S, et al. Role of Magnetic Resonance Imaging in the Management of Patients With Multiple Myeloma: A Consensus Statement. *J Clin Oncol.* 2015 Jan 20.
- 2. Rahmouni A, Montazel JL, Divine M, et al. Bone marrow with diffuse tumor infiltration in patients with lymphoproliferative diseases: dynamic gadolinium-enhanced MR imaging. *Radiology*. 2003; 229(3):710-717.
- 3. Siegel MJ. MRI of Bone Marrow. In: Kransdorf MJ, Reinhold C, Ho VB, eds. *Syllabus of the American Roentgen Ray Society (ARRS) 2006 Categorical Course. Body MRI.* ARRS; 2006:243-254.
- 4. Schmidt GP, Reiser MF, Baur-Melnyk A. Whole-body imaging of the musculoskeletal system: the value of MR imaging. *Skeletal Radiol.* 2007; 36(12):1109-1119.
- 5. Diego Jaramillo, Maria A. Bedoya, Dah-Jyuu Wang et al. Quantification of Bone Marrow Involvement in Treated Gaucher Disease: Correlation with Bone Marrow MRI; American Journal of Roentgenology. 2015; 204: 1296-1302.
- 6. Lubdha M. Shah Christopher J. Hanrahan MRI of Spinal Bone Marrow: Imaging-based Differential Diagnosis, American Journal of Roentgenology, 2011; 197: 1309-1321.

CODING INFORMATION: THE CODES LISTED IN THIS POLICY ARE FOR REFERENCE PURPOSES ONLY. LISTING OF A SERVICE OR DEVICE CODE IN THIS POLICY DOES NOT IMPLY THAT THE SERVICE DESCRIBED BY THIS CODE IS COVERED OR NON-COVERED. COVERAGE IS DETERMINED BY THE BENEFIT DOCUMENT. THIS LIST OF CODES MAY NOT BE ALL INCLUSIVE.

| | Description |
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| 77084 | Bone Marrow MRI |