# MedStar Health, Inc. POLICY AND PROCEDURE MANUAL

Policy Number: MP.127.MH Last Review Date: 05/27/2021 Effective Date: 08/01/2021

## MP.127.MH – Magnetic Resonance Spectroscopy

This policy applies to the following lines of business:

- ✓ MedStar Employee (Select)
- ✓ MedStar CareFirst PPO

MedStar Health considers **Magnetic Resonance Spectroscopy (MRS)** is considered medically necessary for **any** of the following indications:

- 1. Grading of primary glial neoplasm, particularly high-grade versus low-grade glioma
- 2. Differentiation between recurrent tumor and treatment related changes, or radiation injury, and other non-tumor brain tissue changes.
- 3. Differentiation of residual brain tumor from radiation necrosis or from other non-tumor inflammatory processes
- 4. Evaluation of brain abscesses and Central Nervous System infections (encephalitis, etc).

#### Limitations

- 1. Any other use of MRS not defined in the indications section above is not covered and considered Experimental and Investigational.
- 2. Some indications not covered include but are not limited to:
  - A. Prostate Cancer
  - B. Multiple Sclerosis
  - C. Epilepsy
  - D. Dementia (e.g. Alzheimer's disease and Parkinson's disease)
  - E. Degenerative diseases
  - F. Cerebrovascular injury
  - G. Psychiatric disorders
  - H. Parkinson's Disease

## Background

The Centers for Medicare and Medicaid Services (CMS) define Magnetic Resonance Spectroscopy (MRS) is an application of magnetic resonance imaging (MRI). It is a non-invasive diagnostic test that uses strong magnetic fields to measure and analyze the chemical composition of human tissues, especially the presence of tumors.

The American College of Radiology (ACR) states that MRS is a proven and useful method for the evaluation, assessment of severity, therapeutic planning, post-therapeutic monitoring, and follow-up of diseases of the brain and other regions of the



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body. The ACR strongly encourages to correlate the MRS findings with clinical history, physical examination, laboratory results, and diagnostic imaging studies.

#### Codes:

CPT Codes / HCPCS Codes / ICD-10 Codes		
er		

#### References

- American Association of Neurological Surgeons: Astrocytoma tumors, Posted August 2005.
   <a href="http://www.aans.org/Patient%20Information/Conditions%20and%20Treatments/Astrocytoma%20Tumors.aspx">http://www.aans.org/Patient%20Information/Conditions%20and%20Treatments/Astrocytoma%20Tumors.aspx</a>
- American College of Radiology, American Society of Neuroradiology, Society of Pediatric Radiology: ACR-ASNR-SPR Practice Guideline for the Performance and Interpretation of Magnetic Resonance Spectroscopy of the Central Nervous System, Revised 2013. (Resolution #7). <a href="https://www.acr.org/-/media/ACR/Files/Practice-Parameters/MR-Spectroscopy.pdf">https://www.acr.org/-/media/ACR/Files/Practice-Parameters/MR-Spectroscopy.pdf</a>
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  - http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2944924/pdf/nihms235171.pdf
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