

# BREAST SPECIFIC GAMMA IMAGING (BSGI)

Effective Date: August 27, 2019 Review Dates: 8/09, 8/10, 8/11, 8/12, 8/13, 8/14, 8/15,

8/16, 8/17, 8/18, 8/19, 8/20, 8/21, 8/22, 8/23

Date Of Origin: August 12, 2009 Status: Current

#### I. POLICY/CRITERIA

- A. Breast Specific Gamma Imaging (BSGI) is considered experimental and investigational as an adjunct to mammography for imaging of breast tissue, for the detection of axillary metastases, staging the axillary lymph nodes in members with breast cancer, and to assess response to adjuvant chemotherapy in members with breast cancer and for all other indications because its effectiveness has not been established.
- B. BSGI may be covered when part of an Institutional Review Board (IRB) approved clinical trial designed to assess its clinical utility for individuals with initial abnormal screening mammograms compared with other commonly used secondary screening techniques. Individual medical director review required.

### II. MEDICAL NECESSITY REVIEW

☐ Required	Not Required	Not Applicable
------------	--------------	----------------

#### III. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- **❖** HMO/EPO: This policy applies to insured HMO/EPO plans.
- **POS:** This policy applies to insured **POS** plans.
- \* PPO: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- ASO: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- \* INDIVIDUAL: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- \* MEDICARE: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.



# Breast Specific Gamma Imaging (BSGI)

\* MEDICAID/HEALTHY MICHIGAN PLAN: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: <a href="http://www.michigan.gov/mdch/0,1607,7-132-2945\_42542\_42543\_42546\_42551-159815--,00.html">http://www.michigan.gov/mdch/0,1607,7-132-2945\_42542\_42543\_42546\_42551-159815--,00.html</a>. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: <a href="http://www.michigan.gov/mdch/0,1607,7-132-2945\_5100-87572--,00.html">http://www.michigan.gov/mdch/0,1607,7-132-2945\_5100-87572--,00.html</a>, the Michigan Medicaid Provider Manual, will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

#### IV. DESCRIPTION

Breast-specific gamma imaging (BSGI) was developed as a confirmatory test used after mammography and a clinical breast exam. This technique detects abnormal breast tissue based on uptake of technetium-99m sestamibi, a radioactive agent that emits gamma rays and that tends to accumulate in cancerous breast tissue. BSGI is typically performed on an outpatient basis by a nuclear medicine technician with results interpreted by a radiologist or physician specializing in nuclear medicine.

Results of the available studies do not provide conclusive evidence that BSGI can be relied on rather than biopsy in women who have suspicious breast lesions. Studies that compared the sensitivity of BSGI with other techniques showed no statistically significant differences in the sensitivity of BSGI, mammography, ultrasonography, and MRI. Although further studies may indicate that BSGI has greater sensitivity than ultrasonography and MRI, BSGI has the disadvantage that it requires radiation exposure. In addition, unlike biopsy, BSGI does not provide a definitive diagnosis. Further studies are needed to determine the clinical role of BSGI versus MRI and ultrasonography as adjuncts to mammography and clinical breast exams as well as to validate the impact of BSGI on patient survival.

#### V. CODING INFORMATION

#### **ICD-10 Codes** that are <u>not covered</u>:

C50.011 - C50.929	Malignant neoplasm of breast	
D05.00 - D05.92	Lobular carcinoma in situ of breast	
R92.0 - R92.8	Abnormal and inconclusive findings on diagnostic imaging of	
	breast	
Z12.31	Encounter for screening mammogram for malignant neoplasm of	
	breast	
Z12.39	Encounter for other screening for malignant neoplasm of breast	
Z40.01	Encounter for prophylactic removal of breast	
Z80.3	Family history of malignant neoplasm of breast	
Z85.3	Personal history of malignant neoplasm of breast	



# Breast Specific Gamma Imaging (BSGI)

#### **CPT/HCPCS Codes:**

Not covered for any indication

S8080 Scintimammography (radioimmunoscintigraphy of the breast), unilateral, including supply of radiopharmaceutical

Not covered for the diagnoses listed above

78800 Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); limited area

78801 Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); multiple areas

#### VI. REFERENCES

- 1. Brem RF, Fishman M, Rapelyea JA. Detection of ductal carcinoma in situ with mammography, breast specific gamma imaging, and magnetic resonance imaging: a comparative study. Acad Radiol. 2007;14(8):945-950.
- 2. Brem RF, Floerke AC, Rapelyea JA, et al. Breast-specific gamma imaging as an adjunct imaging modality for the diagnosis of breast cancer. Radiology. 2008;247(3):651-657.
- 3. Brem RF, Petrovitch I, Rapelyea JA, et al. Breast-specific gamma imaging with 99mTc-Sestamibi and magnetic resonance imaging in the diagnosis of breast cancer--a comparative study. Breast J. 2007;13(5):465-469.
- 4. Brem RF, Rapelyea JA, Zisman G, et al. Occult breast cancer: scintimammography with high-resolution breast-specific gamma camera in women at high risk for breast cancer. Radiology. 2005;237(1):274-280. Epub 2005 Aug 26.
- 5. Brem RF, Schoonjans JM, Kieper DA, et al. High-resolution scintimammography: a pilot study. J Nucl Med. 2002;43(7):909-915.
- 6. Civelek AC, Patel P, Ozalp E, Brem RF. Tc-99m sestamibi uptake in the chest mimicking a malignant lesion of the breast. Breast. 2006;15(1):111-114.
- 7. Connolly LP, Drubach LA, Ted Treves S. Applications of nuclear medicine in pediatric oncology. Clin Nucl Med. 2002;27(2):117-125.
- 8. Hayes Technology Assessment Health Technology Brief: Breast Specific Gamma Imaging May 5, 2009 and Annual updates through July 2014.
- 9. Hindie E, de LV, Melliere D, et al. Parathyroid gland radionuclide scanning -- methods and indications. Joint Bone Spine. 2002;69(1):28-36.
- 10. Leung JW. New modalities in breast imaging: Digital mammography, positron emission tomography, and sestamibi scintimammography. Radiol Clin North Am. 2002;40(3):467-482.
- 11. Liberman M, Sampalis F, Mulder DS, Sampalis JS. Breast cancer diagnosis by scintimammography: A meta-analysis and review of the literature. Breast Cancer Res Treat. 2003;80(1):115-126.
- 12. National Academy of Sciences, Institute of Medicine, Committee on the Early Detection of Breast Cancer. Mammography and Beyond: Developing



# Breast Specific Gamma Imaging (BSGI)

- Technologies for the Early Detection of Breast Cancer. Washington, DC: National Academy Press; 2001.
- 13. Ontario Ministry of Health and Long-Term Care, Medical Advisory Secretariat. Scintimammography. Health Technology Scientific Literature Review. Toronto, ON: Ontario Ministry of Health and Long-Term Care; February 2003; 1-35. Available at: http://www.health.gov.on.ca/english/providers/program/mas/archive.html. Accessed August 4, 2004.
- 14. O'Connor MK, Phillips SW, Hruska CB, et al. Molecular breast imaging: Advantages and limitations of a scintimammographic technique in patients with small breast tumors. Breast J. 2007;13(1):3-11.
- 15. Ontario Ministry of Health and Long-Term Care, Medical Advisory Secretariat (MAS). Scintimammography as an adjunctive breast imaging technology. Integrated Health Technology Literature Review. Toronto, ON: MAS; 2007.
- 16. Zhou M, Johnson N, Blanchard D, et al. Real-world application of breast-specific gamma imaging, initial experience at a community breast center and its potential impact on clinical care. Am J Surg. 2008;195(5):631-635.

#### **AMA CPT Copyright Statement:**

All Current Procedure Terminology (CPT) codes, descriptions, and other data are copyrighted by the American Medical Association.

This document is for informational purposes only. It is not an authorization, certification, explanation of benefits, or contract. Receipt of benefits is subject to satisfaction of all terms and conditions of coverage. Eligibility and benefit coverage are determined in accordance with the terms of the member's plan in effect as of the date services are rendered. Priority Health's medical policies are developed with the assistance of medical professionals and are based upon a review of published and unpublished information including, but not limited to, current medical literature, guidelines published by public health and health research agencies, and community medical practices in the treatment and diagnosis of disease. Because medical practice, information, and technology are constantly changing, Priority Health reserves the right to review and update its medical policies at its discretion.

Priority Health's medical policies are intended to serve as a resource to the plan. They are not intended to limit the plan's ability to interpret plan language as deemed appropriate. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment they choose to provide.

The name "Priority Health" and the term "plan" mean Priority Health, Priority Health Managed Benefits, Inc., Priority Health Insurance Company and Priority Health Government Programs, Inc.