

Origination Date: 11/01	Revision Date(s): 9/02, 10/02, 7/03, 7/04, 7/05, 6/06, 6/07, 6/08, 12/09, 2/11
Developed By: Medical Criteria Committee	

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Approved: Neal Mills MD. MBA **Date:** 3/15/2011

Description:

Electron Beam Computed Tomography (EBCT) is an ultra-fast CT scan, which is capable of identifying microcalcifications in the coronary arteries. The rationale for performing an EBCT is that calcium is deposited early in the formation of atherosclerotic plaques, and calcification may be useful as an early marker of the atherosclerotic process.

Criteria:

In depth studies to establish the value and indications for these tests have not been reported. Peer review literature does not substantiate the value of this test over current established technology. The American College of Cardiology/American Heart Association Consensus Document review indicates that the published literature does not clearly define which asymptomatic individuals would benefit from EBCT. The Consensus recommends that appropriately designed studies of EBCT for this purpose (of defining benefit) are strongly encouraged.

EBCT is considered to be an investigational diagnostic test and is not covered by ODS at this time.

Information to be Submitted with Pre-Authorization Request:

None. This is considered to be investigational.

Applicable CPT/HCPC Codes:

Note: list may not be all inclusive

0144T	Computed tomography, heart, without contrast material, including image post processing and quantitative evaluation of coronary calcium
0147T	Computed tomography, heart, with contrast material(s), including noncontrast images, if performed, cardiac gating and 3D image post processing; computed tomographic angiography of coronary arteries (including native and anomalous coronary arteries, coronary bypass grafts), with quantitative evaluation of coronary calcium
0149T	Computed tomography, heart, with contrast material(s), including noncontrast images, if performed, cardiac gating and 3D image post processing; cardiac structure and morphology and computed tomographic angiography of coronary arteries (including native and anomalous coronary arteries, coronary bypass grafts), with quantitative evaluation of coronary calcium
S8092	Electron beam computed tomography (also known as ultrafast CT, cine CT)

References:

- “ACC/AHA Expert Consensus Document on Electron-Beam Computed Tomography for the Diagnosis and Prognosis of Coronary Artery Disease”. 2/2000
- American College of Radiology Practice Guideline for the performance and interpretation of Cardiac Computed Tomography (CT). Effective 10/01/06. Accessed on February 22, 2011 at: http://acr.org/SecondaryMainMenuCategories/quality_safety/guidelines/dx.aspx
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- EBCT scan can point to medical options, but not early diagnosis for coronary artery disease. June 30, 2000, American Heart Association.
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- External Cardiologist Review/Opinion (11/00)
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- Hendel RC, et al. American College of Cardiology Foundation, American College of Radiology, Society of Cardiovascular Computed Tomography, Society for Cardiovascular Magnetic Resonance, American Society of Nuclear Cardiology, North American Society for Cardiac Imaging, Society for Cardiovascular Angiography and Interventions, and Society of Interventional Radiology 2006 Appropriateness Criteria for Cardiac Computed Tomography and Cardiac Magnetic Resonance Imaging: a report of the American College of Cardiology Foundation Quality Strategic Directions Committee Appropriateness Criteria Working Group, American College of Radiology, Society of Cardiovascular Computed Tomography, Society for Cardiovascular Magnetic Resonance, American Society of Nuclear Cardiology, North American Society for Cardiac Imaging, Society for Cardiovascular Angiography and Interventions, and Society of Interventional Radiology. *J Am Coll Cardiol*. 2006 Oct 3;48(7):1475-97.
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- Screening for coronary heart disease: recommendation statement. *Ann Intern Med*. 2006 Apr 6;140(7):569-72.
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