



Effective Health Care

Comparative Effectiveness of Imaging Techniques for Assessment of Response to Treatment in Metastatic Breast Cancer Nomination Summary Document

Results of Topic Selection Process & Next Steps

- *Comparative Effectiveness of Imaging Techniques for Assessment of Response to Treatment in Metastatic Breast Cancer* is not feasible for a full systematic review due to the limited data available at this time; however, it will be considered for a potential technical brief by the Effective Health Care (EHC) Program.
- To see a description of a technical brief, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/research-for-policymakers-researchers-and-others/>.
- If this topic is developed into a technical brief, the protocol and key questions will be drafted and posted on the EHC Program Web site. To sign up for notification when this and other EHC Program topics are posted, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/>.

Topic Description

Nominator(s): *Organization*

Nomination Summary: The nominator is interested in the comparative effectiveness of imaging techniques to assess response to treatment in metastatic breast cancer. The nomination asserts that multiple imaging modalities may be used to assess treatment response in this population. The nominator is uncertain whether a specific imaging technique is best for the metastatic breast cancer population.

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Population(s): Metastatic breast cancer patients (stage IV)

Intervention(s): Imaging techniques to assess response to treatment including, but not limited to: bone scintigraphy, CT, MRI, x-ray, ultrasound, PET/CT and FDG-PET

Comparator(s): Those listed above (i.e., compared to each other)

Outcome(s): Tumor response, changes in treatment decisions, morbidity, mortality

Key Questions from Nominator: What is the comparative effectiveness of imaging techniques for the assessment of response to treatment in metastatic breast cancer?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- Metastatic or advanced breast cancer, defined as stage IV cancer, involves the spread of cancer from the breast to other organs of the body, such as the lungs, bones, liver, or brain. Treatment options for metastatic breast cancer include hormone therapy and chemotherapy as well as radiation therapy and/or surgery for pain relief.
- Multiple imaging modalities such as bone scintigraphy, CT, MRI, x-ray, ultrasound, PET/CT and FDG-PET can be used to assess response to therapy, the results of which may affect treatment strategies and outcomes. There is uncertainty regarding which imaging technique is best to assess response to treatment. A variety of techniques may be used based on treatment strategy and location of metastases.
- There currently is limited evidence that directly compares imaging techniques. Therefore this topic was selected for a potential technical brief which could delineate potential comparisons and outcomes of interest in order inform future research in this area.