TITLE: OncoType DX in Women and Men with ER-PR-Positive, HER2-Negative, Early Stage Breast Cancer with Lymph Node Micrometastasis: Clinical Effectiveness, Cost-Effectiveness, and Guidelines

DATE: 29 June 2016

RESEARCH QUESTIONS

1. In the adjuvant treatment setting, what is the clinical effectiveness of OncoType DX in women and men with ER-PR-positive, HER2-negative early stage breast cancer with one lymph node micrometastasis?

2. In the adjuvant treatment setting, what is the cost-effectiveness of OncoType DX in women and men with ER-PR-positive, HER2-negative early stage breast cancer with one lymph node micrometastasis?

3. What are the evidence-based guidelines regarding the use of OncoType DX in women and men with ER-PR-positive, HER2-negative early stage breast cancer with one lymph node micrometastasis?

KEY FINDINGS

One evidence-based guideline was identified regarding the use of OncoType DX in women and men with ER-PR-positive, HER2-negative early stage breast cancer with one lymph node micrometastasis.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were used to limit retrieval by publication type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between December 1, 2013 and June 27, 2016. Internet links were provided, where available.

Disclaimer: The Rapid Response Service is an information service for those involved in planning and providing health care in Canada. Rapid responses are based on a limited literature search and are not comprehensive, systematic reviews. The intent is to provide a list of sources of the best evidence on the topic that the Canadian Agency for Drugs and Technologies in Health (CADTH) could identify using all reasonable efforts within the time allowed. Rapid responses should be considered along with other types of information and health care considerations. The information included in this response is not intended to replace professional medical advice, nor should it be construed as a recommendation for or against the use of a particular health technology. Readers are also cautioned that a lack of good quality evidence does not necessarily mean a lack of effectiveness particularly in the case of new and emerging health technologies, for which little information can be found, but which may in future prove to be effective. While CADTH has taken care in the preparation of the report to ensure that its contents are accurate, complete and up to date, CADTH is not liable for any loss or damages resulting from use of the information in the report.

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SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

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<tr>
<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<td><strong>Intervention</strong></td>
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<td><strong>Comparator</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Study Designs</strong></td>
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ER = estrogen receptor; HER2 = human epidermal growth factor receptor 2; PR = progesterone receptor.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, economic evaluations, and evidence-based guidelines.

One evidence-based guideline was identified regarding the use of Oncotype DX in women and men with ER-PR-positive, HER2-negative early stage breast cancer with one lymph node micrometastasis. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, or economic analyses were identified.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Economic Evaluations
No literature identified.
Guidelines and Recommendations

   See: R2, page 4 to 5;
   R7, page 6

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Previous CADTH Reports


Non-Randomized Studies

ER-positive and HER2-negative, PR Status Not Specified in Abstract

PubMed: PM27081583

PubMed: PM25789420


PubMed: PM24386009

ER-positive

PubMed: PM25381828

Economic Evaluations – ER-positive, PR Status Not Specified in Abstract


Review Articles