TITLE: Extracorporeal Photopheresis for Sezary Syndrome or Mycosis Fungoides: Clinical and Cost-Effectiveness

DATE: 30 September 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of extracorporeal photopheresis (ECP) for the management of Sezary Syndrome or Mycosis fungoides?

2. What is the cost-effectiveness of ECP for the management of Sezary Syndrome or Mycosis fungoides?

KEY FINDINGS

One systematic review, four non-randomized studies, and one economic evaluation were identified regarding extracorporeal photopheresis for the management of Sezary Syndrome or Mycosis fungoides.

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 applied to limit the retrieval by study type. The search was limited to English language documents published between Jan 1, 2010 and Sep 18, 2015. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
SELECTION CRITERIA

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

Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Patients with Sezary Syndrome or Mycosis fungoides (types of cutaneous T-cell lymphoma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Extracorporeal photopheresis</td>
</tr>
<tr>
<td>Comparator</td>
<td>Standard of care</td>
</tr>
<tr>
<td></td>
<td>No comparator</td>
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<tr>
<td>Outcomes</td>
<td>Clinical effectiveness; Cost-effectiveness; Change in clinical outcomes</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations</td>
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</tbody>
</table>

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, and economic evaluations.

One systematic review, four non-randomized studies, and one economic evaluation were identified regarding extracorporeal photopheresis for the management of Sezary Syndrome or Mycosis fungoides. No relevant health technology assessments or randomized controlled trials were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One systematic review\(^1\) evaluated interventions for Mycosis fungoides and found that none of the interventions they examined, including extracorporeal photopheresis (ECP), significantly increased disease-free intervals or overall survival. One non-randomized study\(^4\) examined the use of ECP for early-stage Mycosis fungoides. The overall response rate for ECP alone was 42% in this study.\(^4\) Two studies evaluated ECP as a part of a combined treatment for Mycosis fungoides and Sezary syndrome.\(^2,3\) Sixty-five percent of patients responded to ECP and the treatment effect was maintained for more than two years in 38.5% of patients.\(^2\) The second study demonstrated similar response rates and reported that the treatment was generally well tolerated by patients.\(^3\) One study\(^5\) combined treatment with ECP, interferon-alpha, photochemotherapy, and topical corticosteroids for the management of Sezary syndrome. The overall response rate to the combination therapy was 42% in this study.\(^5\)

The National Health Service of Scotland\(^6\) undertook an economic analysis of treatments for Sezary syndrome and found that ECP was more effective and less costly than the current standard treatment.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Economic Evaluations
APPENDIX – FURTHER INFORMATION:

Review Articles


