Objectives

The aim of the study was to assess
1. the lifetime incremental cost-effectiveness ratios (ICER) per quality-adjusted life-year (QALY) gained and
2. the multinomial expected value of perfect information (mEVPI) of sequential follicular lymphoma (FL) treatment in the Finnish setting.

Methods 1/4
- Model's structure and main efficacy sources

- Underlying assumptions for PF1

All patients were assumed to receive rituximab-cyclophosphamide-doxorubicin-vincristine-prednisone (RCHOP) induction

The sequences were built for the initial RCHOP-induction responders and were continued
• without (RCHOP) or
• with the first-line R-maintenance treatment (RCHOPR)

based on the PRIMA-trial1.

Methods 2/4
- Underlying assumptions for PF2

PF2: After PF1 failure, patients were assigned to receive second-line
• RCOPR/Bendamustine (B) or
• RCOPR/COP

based on the European Society for Medical Oncology (ESMO) guideline2 for FL and B-label

PF2 was estimated based on trials3-4.

Methods 3/4
- Underlying assumptions for PF2

1 Sailes et al. 2010


Writers, Affiliations, Contact, Funding

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Sequential treatment of follicular non-Hodgkin lymphoma

Methods 4/4
- Underlying assumptions for BSC and outcomes

Finally, after PF2 failure, patients were expected to receive best supportive care (BSC).\(^5,5\)

EQ-5D-based quality of life\(^6\) and 2010 payer cost estimates\(^5,7,8\) were discounted annually with 3%.

\(^5\)Soini et al. 2011, \(^6\)Pettengell et al. 2008, \(^7\)FMT 2011, \(^8\)Hujanen et al. 2008

Patients and comparators

PRIMA ITT patients\(^1\) had
- grade 1-3a FL according to NCI-WG criteria
- high tumour burden according to GELF criteria
- a complete/partial response to first-line RCHOP-induction
- the mean age 56 years and the mean BSA of 1.8m\(^2\).

Compared sequences were
a) RCHOP→RCOPR/B→BSC
b) RCHOP→RCOPR/COP→BSC
c) RCHOP→RCOPR/B→BSC
d) RCHOP→RCOPR/COP→BSC.

Results 1/2
- Baseline results

<table>
<thead>
<tr>
<th>Simulation</th>
<th>Treatment sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>a) RCHOP→RCOPR/B</td>
</tr>
<tr>
<td>(3% discounting)</td>
<td>b) RCHOP→RCOPR/COP→BSC</td>
</tr>
<tr>
<td>Mean costs (£)</td>
<td>c) RCHOP→RCOPR/B→BSC</td>
</tr>
<tr>
<td>Lowest 2.5%</td>
<td>159461</td>
</tr>
<tr>
<td>Highest 97.5%</td>
<td>170165</td>
</tr>
<tr>
<td>Mean QALY</td>
<td>8.8*</td>
</tr>
<tr>
<td>Lowest 2.5%</td>
<td>8.0</td>
</tr>
<tr>
<td>Highest 97.5%</td>
<td>9.5</td>
</tr>
<tr>
<td>EULR (KEQALY gained)</td>
<td>7382</td>
</tr>
</tbody>
</table>

Results 2/2
- Exploring parametric uncertainty

Conclusions 1/2
- Results

Sequences with first-line R-maintenance were cost-effective and the second-line B was potentially cost-effective, when included using the ESMO-criteria.

The value of information was estimated to be low-to-moderate with the willingness-to-pay exceeding €10000/QALY gained.

Conclusions 2/2
- Main limitations

Health outcomes measured during the PRIMA induction were excluded

PF2-efficacy may be uncertain; the indirect inclusion of B to the comparison

Treatment benefit trunks were set.
Sequential treatment of follicular non-Hodgkin lymphoma

Key literature

4. Rummel MJ, et al: Bendamustine plus rituximab is superior to CHOP plus rituximab as first-line treatment of patients with advanced follicular, indolent, and mantle cell lymphoma: Final results of a randomised phase III study of the StG (Studiegruppe Indolente Lymphome, Germany). Presented at the 51st American Society of Hematology Annual Meeting and Exposition; December 5-8, 2009; New Orleans, Louisiana [paddock 405]