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Ferric Gluconate Yields Cost-Savings in Hemodialysis Patients with High Ferritin and Low TSAT: Results from the DRIVE Studies

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1Department of Health Policy, Jefferson Medical College, Philadelphia, PA, USA; 2Department of Medicine, Nephrology Division, NYU School of Medicine and NY VA Medical Center, New York, NY, USA; 3Department of Medicine, Renal Division, Washington University School of Medicine, St. Louis, MO, USA and 4Department of Medicine, Harvard Medical School, Boston, MA, USA.

Abstract

This study was funded through a research grant from Watson Laboratories, Inc.

Methods

- A decision-analytic model was conducted following a traditional framework.
- Costs were measured at the cost per unit of the increase observed in the ESRD models for the SFGC and epoetin groups, and 10 patients using the monte-carlo technique.
- The model was calibrated to the literature via 10% of SFGC and epoetin costs to the average of Medicare reimbursement rates.
- Adverse event probabilities were based on the percent of patients hospitalized for a SAE in each group. The average national reimbursement for each SAE in each group in the absence of a serious adverse event (SAE).
- This model used the perspective of a Medicare payer because that program bears a majority of the cost.
- Probabilistic Sensitivity Analysis: The 95% confidence interval includes the origin, so we cannot say with certainty that SFGC and epoetin dominates epoetin alone.

Results

- The 95% confidence interval includes the origin, so we cannot say with certainty that SFGC and epoetin dominates epoetin alone.

Discussion

- This study was funded through a research grant from Watson Laboratories, Inc.
- A decision-analytic model was conducted following a traditional framework.
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Conclusions

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![Figure 1: Decision Tree Framework](Image)

![Figure 2: Results of Decision Tree after Roll Back Calculation](Image)

![Figure 3: Results of the Probabilistic Sensitivity Analysis](Image)

Table 1: Assigned DRG codes and estimated costs

<table>
<thead>
<tr>
<th>DRG Code</th>
<th>Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>436.81</td>
<td>Other Circulatory System O.R. Procedures</td>
<td>$4,365.81</td>
</tr>
<tr>
<td>436.82</td>
<td>Other Interventions and Procedures - Other</td>
<td>$3,554.73</td>
</tr>
<tr>
<td>436.83</td>
<td>Other Non-Operative Procedures - Other</td>
<td>$3,236.93</td>
</tr>
</tbody>
</table>

Table 2: Value pairs for each model input: base case and sensitivity analysis

<table>
<thead>
<tr>
<th>Model Input</th>
<th>Base Case</th>
<th>Sensitivity Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price of Epoetin</td>
<td>$5,064.68</td>
<td>$499.13</td>
</tr>
<tr>
<td>Price of Ferric Gluconate</td>
<td>$499.13</td>
<td>$499.13</td>
</tr>
<tr>
<td>Treatment Efficacy</td>
<td>$11,777.93</td>
<td>$11,777.93</td>
</tr>
</tbody>
</table>

Table 3: Results from the uncertainty sensitivity analysis

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