OBJECTIVE:
To assess the clinical efficacy of a hydrogen peroxide mouth rinse, sodium bicarbonate containing Toothette® Plus swab, and a water-based mouth moisturizer on oral health of patients undergoing chemotherapy for cancer.

STUDY DESIGN:
Double-blind, stratified, two-treatment, parallel trial involving 48 adult volunteers at two cancer treatment centers over a four-week period.

CONTROL:
Baking soda and water rinses or lemon glycerin solution.

RESULTS:
• “Only 24% of patients in the Sage group showed tissue abnormalities compared to 44% of those in the control group.”
• Mucositis Evaluation – “To summarize, in percentages, the adverse change in mucositis was 3% in the Sage group and 15% in the control group.”
• Plaque Index – (Table 3)
• Gingivitis Index – (Table 4)
• Statistical Evaluation – “There was no significant difference between groups because the sample sizes differed and there was a wide variation within the subjects’ responses. However, for almost all comparisons, results of evaluations using Sage products were better than those of the control group.”

ADVERSE EFFECTS:
• No significant product-related adverse effects, including staining of teeth, were observed in either group.
• “The Sage group patients almost unanimously liked their product (34/35), whereas only 1 of 16 patients in the control group liked their product.”

CONCLUSION/DISCUSSION:
• “Patients felt the Perox-A-Mint® solution and Toothettes® were soothing, left a clean, fresh feeling in their mouth, and helped to reduce thick ropey saliva.”
• “This indicates that Sage 6000 also may be helpful in patients affected by xerostomia.”
• “Sage products significantly reduced the chemical or metallic taste in the mouth due to chemotherapy, helped improve appetite and decreased a feeling of nausea in most patients.”
• “The Sage 6000 kit can be recommended for safety and efficacy in patients undergoing chemotherapy and concomitant therapy.”

Table 3  Plaque Index Changes from Baseline

<table>
<thead>
<tr>
<th>Group</th>
<th>Minimal Change</th>
<th>Improved</th>
<th>Worse</th>
<th>Percentage Minimal and Improved</th>
<th>Percentage Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage (n=14)</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>Control (n=6)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Table 4  Gingivitis Index Changes from Baseline

<table>
<thead>
<tr>
<th>Group</th>
<th>Minimal Change</th>
<th>Improved</th>
<th>Worse</th>
<th>Percentage Minimal and Improved</th>
<th>Percentage Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage (n=14)</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Control (n=6)</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>66%</td>
<td>34%</td>
</tr>
</tbody>
</table>