Introduction
Chemotherapy-induced nausea is now recognized as a specific clinical problem which is often not optimally treated. It remains the most important unmet medical need regarding chemotherapy-induced nausea and vomiting (CINV). For many years, CINV has been regarded as a single entity, however, there is a concern that vomiting have been the initial focus of anti-emetic research and nausea was perceived as a secondary endpoint. As one of the most serious treatment side effects in patients with cancer, CINV can significantly compromise patients’ quality of life, but due to evidence-based research and guideline consistent CINV prophylaxis (GCCP), chemotherapy-induced vomiting can be prevented in the majority of patients. Despite this, patients still experience nausea and its burden is often underestimated by the healthcare professionals.

Materials & Methods
This prospective, observational study included ninety-five patients receiving intravenous chemotherapy at a private oncology clinic. All subjects signed an informed consent document before commencing with the study. Despite the usage of guidelines consistent antiemetic prophylaxis, chemotherapy induced nausea remains a significant risk factor impacting nausea. All the exact same format for the MASCC anti-emetic tool was used, but data was collected on a more frequent basis. By collecting the data in this way, it was expected that results seen, be as close to the real-life experience as possible.

Results
One hundred subjects were enrolled over a seven-month period, of which 95% subjects’ diaries were evaluable. The population consisted of 85 females (71.5%) and 21 males (28.5%). The median age of the group was 57 (ranging from 24 to 85) with a mean age of 57 years old. The emetogenicity of the chemotherapy received by the patients was 25 LEC patients (26.3%), 24 MEC (25.3%) patients and 46 HEC (48.4%) patients. The role of age, gender and motion sickness showed particular significance in the incidence of nausea, independently of the level of emetogenicity of chemotherapy received.

### Incidence of nausea
The incidence of nausea of the entire population was significantly higher than vomiting during all cycles of treatment.

#### Continuous nausea vs intermittent nausea
Nausea was continuous in 25% of the patients during all 3 cycles.

### Table 1. The incidence, intensity, duration and time to first event of nausea during cycle 1, 2 and 3.

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Incidence of Nausea (overall phase) %</th>
<th>Time in first event of nausea (hours)</th>
<th>Intensity of Nausea (VAS Score out of 10)</th>
<th>Time to first incident of nausea (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle 1</td>
<td>57.9</td>
<td>26.82</td>
<td>5.86</td>
<td>4.07</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>50.0</td>
<td>30.05</td>
<td>5.97</td>
<td>3.28</td>
</tr>
<tr>
<td>Cycle 3</td>
<td>45.6</td>
<td>28.21</td>
<td>5.85</td>
<td>3.63</td>
</tr>
<tr>
<td>% Patients with Continuous Nausea</td>
<td>31.6</td>
<td>21.8</td>
<td>24.1</td>
<td></td>
</tr>
</tbody>
</table>

### Figures
- **Figure 1.** The incidence of nausea vs the incidence of vomiting experienced by patients during cycle 1, 2 and 3.
- **Figure 2.** The proportion of patients without nausea during cycle 1, 2 and 3.
- **Figure 3.** Proportion of patients with continuous nausea during treatment.
- **Figure 4.** Time to first incident of nausea experienced by patients during cycle 1, 2 and 3.

### References