Despite the usage of guidelines consistent antiemetic prophylaxis, chemotherapy induced nausea remains a significant risk factor impacting nausea. Included age and history of motion sickness. As one of the most serious treatment side effects in patients with cancer, CINV can significantly impact the quality of life and overall health of patients. Nausea was continuous in 25% of the patients during all 3 cycles.

One hundred subjects were enrolled over a seven-month period, of which 95 subjects’ diaries were issued as per CINV guidelines (7,9). The study used visual analogue scales (VAS) and patient reported outcome measures (PROMs) to get data to resemble patients’ experience as accurately as possible, and to ensure data was comparable between patients (8). This prospective, observational study included ninety-five patients receiving intravenous chemotherapy. This broad inclusion of patients gave a review of ‘real-life’ experiences of patients.

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 chemotherapy-induced nausea and 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. Chemotherapy-naive patients, as well as patients who have received prior chemotherapy, were allowed to take part. This broad inclusion of patients gave a review of ‘real-life’ experiences of patients. The study used visual analogue scales (VAS) and patient reported outcome measures (PROMs) to get data to resemble patients’ experience as accurately as possible, and to ensure data was comparable between patients (8).

This study focused on the incidence, intensity and duration of nausea in particular. 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.

Patients were issued with standard antiemetic prophylactic therapy, and rescue medication was issued as per CINV guidelines (7,8).

Results
One hundred subjects were enrolled over a seven-month period, of which 95 subjects’ diaries were evaluable. The population consisted of 56 females (71.6%) and 27 males (28.4%). The median age of the group was 57 (ranging from 24 to 85) with a mean of age 57 years old. The majority of patients experienced their first event of nausea during cycle 1. The median time to development of first episode of nausea was 29 hours (range 1 to 179). The majority of all patients experienced their first event of nausea during cycle 1.

Continuous nausea vs intermittent nausea
Nausea was continuous in 25% of the patients during all 3 cycles. Figure 1. Proportion of patients with continuous nausea during treatment.

Duration and intensity of nausea
For patients with documented intermittent nausea, the mean duration was 3.6 hours. The median maximum intensity of nausea was 6 (range 1–10) for all three cycles. Figure 4. Time to first incident of nausea experienced by patients during cycle 1, 2 and 3.

Risk factors impacting nausea
Significant risk factors impacting nausea included age and history of motion sickness. Figure 5. Age impacting the incidence of nausea during cycle 1, 2 and 3.

Conclusions
Despite the usage of guidelines consistent antiemetic prophylaxis, chemotherapy induced nausea remains a major unmet medical need worldwide. Further research should focus on treatment of nausea and vomiting, and of nausea and vomiting in advanced cancer patients. Further research should focus on treatment of nausea and vomiting, and of nausea and vomiting in advanced cancer patients.

References

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

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Incidence of nausea (median) (%)</th>
<th>Time to first event of nausea (median) (hours)</th>
<th>Median maximum intensity of nausea (range)</th>
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<tbody>
<tr>
<td>Cycle 1</td>
<td>52.4</td>
<td>29.1</td>
<td>6 (1-10)</td>
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<tr>
<td>Cycle 2</td>
<td>56.3</td>
<td>36.8</td>
<td>6 (1-10)</td>
</tr>
<tr>
<td>Cycle 3</td>
<td>45.6</td>
<td>29.3</td>
<td>6 (1-10)</td>
</tr>
</tbody>
</table>

Figure 1. The incidence of nausea vs the incidence of vomiting experienced by patients during cycle 1, 2 and 1.

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.

Figure 5. Age impacting the incidence of nausea during cycle 1, 2 and 3.

Figure 6. A history of motion sickness impacting the incidence of nausea during cycle 1, 2 and 3.

Figure 7. Gender impacting the incidence of nausea during cycle 1, 2 and 3.

Figure 8. Proportion of patients with continuous nausea during treatment.

Figure 9. Continuous nausea vs intermittent nausea.

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