In both unadjusted and adjusted analyses, patients who received a single prophylactic dose of IV palonosetron had a significantly lower risk of CINV and lower CINV-related charges than patients administered other IV 5-HT3-RAs, despite redosing with oral 5-HT3-RAs in the delayed phase.

Strengths of this study include a conservative comparison between palonosetron users who used no other oral antiemetics and a comparison cohort that not only used oral 5HT3 RA but also may have used other oral antiemetics such as steroids, NK1 antagonists, etc.

In the multivariate analysis (controlling for age, gender, emetic risk of index chemotherapy, cancer type, and CCI):

- The risk of CINV was significantly lower in the palonosetron only group (odds ratio=0.67; p=0.006).
- CINV-related health care charges were $277 lower for patients who received IV palonosetron vs. another 5HT3 RA with redosing of oral 5HT3 RA in the delayed phase (p=0.001).

Other IV 5HT3 RA users (n=1,467)

- Palonosetron users (n=4,245)

- Not administered additional oral 5HT3 RA (n=722 [43.9%])

- Administered additional oral 5HT3 RA (n=3,383 [79.7%])

- N=3,383

- 1,373 patients total with 862 (62.8%) initiated on antiemetic prophylaxis therapy with palonosetron and 511 (37.2%) with other IV 5HT3-RAs.

- Palonosetron patients were older (mean 58.6 vs. 55.2 years), had a lower proportion of women (74.2% vs. 80.0%), and had a lower proportion of breast cancers (52.2% vs. 60.1%) than patients treated with other 5HT3-RAs.

Conclusions

- In both unadjusted and adjusted analyses, patients who received a single prophylactic dose of IV palonosetron had significantly lower CINV and CINV-related charges than patients administered other IV 5HT3-RAs, despite redosing with oral 5HT3-RAs in the delayed phase.

- Strengths of this study include a conservative comparison between palonosetron users who used no oral antiemetics of any type to a group that not only used oral 5HT3 RA, but also may have used other oral antiemetics such as steroids, NK1 antagonists, phosphoramidates, etc.

- Exclusion of HEC patients receiving oral dexamethasone in the delayed phase, while not consistent with the current standard of care, provides a direct analysis of palonosetron alone.

- Limitations include lack of inclusion of later cycles of chemotherapy, restriction to 3 cancer types, and examination of single-day chemotherapy regimens.

- Limitations common to all claims studies include the focus on commercially insured patients, lack of detailed clinical data, and the potential that miscoding could decrease the reliability of the results.

References