

**Regence BlueCross BlueShield of Oregon • Regence BlueShield  
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**Medication Policy Manual**

**Policy No:** dru164

**Topic:** Sancuso<sup>®</sup>, granisetron topical patch

**Date of Origin:** November 14, 2008

**Revised/Effective Date:** November 14, 2008

**Next Review Date:** November 2009

**IMPORTANT REMINDER**

This Medical Policy has been developed through consideration of medical necessity, generally accepted standards of medical practice, and review of medical literature and government approval status.

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control.

The purpose of medical policy is to provide a guide to coverage. Medical Policy is not intended to dictate to providers how to practice medicine. Providers are expected to exercise their medical judgment in providing the most appropriate care.

**Description**

The granisetron topical patch (Sancuso<sup>®</sup>) is a 5-HT<sub>3</sub> antagonist medication used to prevent nausea and vomiting. Each patch provides up to seven days of therapy.

## **Policy/Criteria**

- I.** Most contracts require prior authorization approval of granisetron topical patches prior to coverage. Granisetron topical patches may be considered medically necessary when both criteria A and B below are met.
  - A.** Granisetron topical patches are used for the prevention and/or treatment of nausea/vomiting associated with chemotherapy and/or radiation therapy.

### **AND**

- B.** Treatment with at least one generic 5-HT<sub>3</sub> antagonist (ondansetron or oral granisetron) is not effective or not tolerated.

## **II. Administration, Quantity Limitations, and Authorization Period**

- A.** Regence considers the granisetron topical patch to be a self-administered medication.
- B.** When prior authorization is approved, granisetron topical patches may be authorized in quantities of up to two patches per month. Quantities exceeding two patches per month may be approved when appropriate for the prescribed chemotherapy and/or radiation treatment regimen, not to exceed four patches per month (for example, if radiation is prescribed weekly, up to four patches per month may be approved).
- C.** Authorization may be reviewed at least every six months to confirm that current medical necessity criteria are met and that the medication is effective.

## **III. Granisetron topical patches are considered investigational when used for all other conditions, including but not limited to:**

- A.** Hyperemesis gravidarum.
- B.** Nausea and vomiting of pregnancy (NVP).
- C.** Post-operative nausea and vomiting (PONV).

## Position Statement

- All of the 5-HT<sub>3</sub>-antagonist antiemetic medications are effective in preventing nausea and vomiting. [24-26, 30]
- No single 5-HT<sub>3</sub>-antagonist antiemetic medication has been shown to work better or be better tolerated than another when given in equally potent doses whether given by mouth, by injection, or via a topical patch. [12, 31-36]
- Two of the 5-HT<sub>3</sub>-antagonist antiemetic medications, ondansetron and granisetron, are available as generics and provide the best value in preventing nausea and vomiting.

## Summary

### *Chemotherapy and Radiation Therapy*

- The American Society of Clinical Oncology (ASCO) provides recommendations for antiemetic use during chemotherapy: [12]
  - \* Acute Emesis (0 - 24 hours after chemotherapy) - A single dose of a 5-HT<sub>3</sub>-receptor antagonist just prior to highly emetogenic chemotherapy agents (e.g., cisplatin, cyclophosphamide, and lomustine) and moderately emetogenic chemotherapy (e.g., carboplatin, iphosphamide, and idarubicin), as part of an antiemetic regimen.
  - \* For consecutive days of highly and moderately emetogenic chemotherapy, a 5-HT<sub>3</sub>-receptor antagonist during each day of chemotherapy.
  - \* Delayed Emesis (24 to 72 hours after chemotherapy) - For moderately emetogenic chemotherapy, dexamethasone or a 5-HT<sub>3</sub>-receptor antagonist is recommended for up to two to three days. 5-HT<sub>3</sub>-receptor antagonists are no longer recommended for delayed emesis due to highly emetogenic chemotherapy.
  - \* An antiemetic, including a 5-HT<sub>3</sub>-receptor antagonist, may be considered in high dose or pediatric chemotherapy.
- ASCO also provides recommendations for antiemetic use during radiation therapy: [12]

- \* A single dose of a 5-HT<sub>3</sub>-receptor antagonist before each fraction of radiation when there is high, intermediate, or low risk of radiation-induced emesis.
- \* A dopamine receptor or a 5-HT<sub>3</sub>-receptor antagonist as needed for minimal-risk radiation therapy.
- There are no well-designed studies to support antiemetic therapy for periods greater than 24 hours after the last dose of radiation therapy.
- A small (n = 39) double-blind, randomized parallel study evaluated the efficacy of 1 mg granisetron IV vs. 3 mg IV. Of the group getting 3 mg, 90% showed complete response vs. 60% in the group receiving 1 mg. The approved U.S. dose of 2 mg was not evaluated. <sup>[27]</sup>

*Nausea and Vomiting of Pregnancy (NVP) versus Hyperemesis Gravidarum*

- NVP occurs in the majority of pregnant women, is commonly limited in duration, and does not adversely affect pregnancy outcomes.
  - \* Non-pharmacological treatment of NVP is preferred over pharmacological therapies and includes dietary modifications; eating small, bland, frequent, low fat, high carbohydrate meals; avoiding emetogenic odors; avoiding iron supplements; and relaxation.
  - \* Hyperemesis gravidarum, which is more rare than uncomplicated NVP, is severe, persistent, uncontrollable nausea and vomiting during pregnancy resulting in dehydration and weight loss. Electrolyte and metabolic disturbances, nutritional deficiency, and ketosis may also occur.
  - \* Treatment of hyperemesis gravidarum may include non-pharmacological therapies and parenteral hydration with glucose, electrolytes, and vitamins, often in an inpatient setting. Antiemetics, corticosteroids, and sedatives are used for the acute vomiting.

### *Antiemetics in Pregnancy and Hyperemesis Gravidarum*

- Diphenhydramine, dimenhydrinate, meclizine, doxylamine, and metoclopramide (rated FDA Pregnancy category B) have not been associated with an increased risk of teratogenicity when used in humans, and have demonstrated some level of efficacy in NVP or hyperemesis gravidarum in clinical trials.
- There is extensive experience indicating that the combination of doxylamine and pyridoxine is safe in pregnancy. Doxylamine and pyridoxine are available as Diclectin<sup>®</sup> in Canada. Canadian physicians use this product as first line therapy for NVP. Doxylamine and pyridoxine are currently available without a prescription in the U.S.
- Ondansetron, granisetron, dolasetron, and palonosetron are also rated FDA Pregnancy category B. <sup>[24-26, 30-31]</sup> Studies using ondansetron during pregnancy are limited and there are currently no clinical trials evaluating dolasetron, granisetron, or palonosetron in NVP or hyperemesis gravidarum.
- Ondansetron has not demonstrated superiority over other antiemetics in the treatment of hyperemesis gravidarum. There are no controlled trials that evaluate the safety of high-dose or long-term use of ondansetron in pregnancy.
- Doses of ondansetron used in clinical trials for the treatment of hyperemesis gravidarum ranged from 4mg to 10mg IV daily, up to TID. <sup>[6, 15-16]</sup>
- Ondansetron may be considered medically necessary for the treatment of hyperemesis gravidarum. There is no useful evidence supporting the use of dolasetron, granisetron, or palonosetron for this indication.

### *Postoperative Nausea and Vomiting*

- Efficacy and benefits in preventing/treating postoperative nausea and vomiting with a 5-HT<sub>3</sub>-receptor antagonist have not been demonstrated beyond 24 hours.

## Safety

- Headache was the most commonly observed adverse effect with 5-HT<sub>3</sub>-receptor antagonists in clinical trials. [24-26, 30]

## Dosing: Granisetron topical patches

- Granisetron topical patches are indicated for the prevention of nausea and vomiting in patients receiving moderately and/or highly emetogenic chemotherapy for up to five consecutive days. [31]
- Granisetron topical patches should be applied at least 24 hours prior to starting chemotherapy. [31]
- The patches are designed to deliver 3.1 mg of granisetron per 24 hours for up to 7 days. [31]

## 5-HT<sub>3</sub> receptor antagonists: Use in Other Conditions

- There are preliminary trials which have used ondansetron in the treatment of memory impairment in schizophrenic patients [17], neuropathic pain [18], pruritus of cholestasis [19], ataxia and incoordination secondary to brain injury [20], Tourette's disorder [21], fatigue with primary biliary cirrhosis [22], fatigue in chronic Hepatitis C, [23] cocaine dependence [28] and schizophrenia [29]. The trials were all of short duration, they enrolled small populations, and several included ondansetron given by injection.

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Cross References
Aloxi <sup>®</sup> , palonosetron dru163
Anzemet <sup>®</sup> , dolasetron dru069
Emend <sup>®</sup> , aprepitant dru091
Kytril <sup>®</sup> , granisetron dru068
Zofran <sup>®</sup> , ondansetron dru046

Codes	Number	Description
N/A		