

**Combination Use of Filgrastim and Pegfilgrastim in Breast Cancer Patients
in a Commercially Insured Population**

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Background: Filgrastim and pegfilgrastim are used to improve neutrophil count recovery following chemotherapy-induced myelosuppression, reducing the risk of febrile neutropenia-related infections in patients. The use of these agents has also been shown to improve tolerability of chemotherapy regimens and to reduce the need to withhold or reduce scheduled doses of chemotherapy.

Objective: To describe the use of filgrastim and pegfilgrastim in a commercially insured cohort of breast cancer patients.

Study Design: Retrospective cohort study using administrative claims data.

Methods: The analysis was conducted using inpatient and outpatient medical and prescription-drug claims from a commercially available administrative claims database for CY 2007-2008. Female patients were selected who had no breast cancer-related medical or pharmaceutical claims for at least six months, followed by an index breast cancer claim and no less than six months of follow-up. Use of filgrastim and pegfilgrastim was followed using inpatient and outpatient claims with related HCPCS J-codes and NDC codes.

Results: 8,602 women with breast cancer were identified, of which 1,762 (20.5%) had at least one claim for either filgrastim or pegfilgrastim. 85.5% of patients received only pegfilgrastim and 10.6% had claims for both agents. Patients receiving both agents had significantly fewer claims on average for each agent as compared to patients on pegfilgrastim monotherapy (4.7 vs. 3.7, $p<0.001$) and those on filgrastim monotherapy (11.8 vs. 5.7, $p<0.001$). The duration of therapy for patients receiving both agents was significantly longer than those women who received either monotherapy (100.4 days vs. 62.9 days for filgrastim monotherapy and 71.6 days for pegfilgrastim monotherapy).

Conclusions: Current guidelines do not address substitution or concurrent use of filgrastim and pegfilgrastim to support chemotherapy regimens. This pattern of use is observed in a substantial number of women and differs in terms of duration compared to monotherapy with either agent.