



IMPACT OF
NEUTROPENIA IN
CHEMOTHERAPY
EUROPEAN
STUDY GROUP

Comparative effectiveness of colony-stimulating factors for febrile neutropenia: a retrospective study

Tan H, Tomic K, et al. *Curr Med Res Opin* 2011; 27(1):79-86

<http://www.ncbi.nlm.nih.gov/pubmed/21091127>

This observational retrospective study was designed to evaluate the comparative effectiveness of pegfilgrastim prophylaxis versus filgrastim prophylaxis in reducing neutropenia-related hospitalisations in patients with non-Hodgkin lymphoma (NHL), breast or lung cancer. A total of 5571 chemotherapy cycles administered to 1618 patients with the use of pegfilgrastim or filgrastim were included in the analysis. The most commonly used colony-stimulating factor (CSF) was pegfilgrastim (89% of cycles) compared to filgrastim (11% of cycles). Neutropenia or infection were less common in the filgrastim group (42%) than in the pegfilgrastim group (49%) although pegfilgrastim was given as early prophylaxis (on day 3 of chemotherapy cycle) in 93.6% of cases and filgrastim was given as early prophylaxis in 37.5% of the cases. Neutropenia-related hospitalisations occurred more often with filgrastim prophylaxis (3.5%) than with pegfilgrastim prophylaxis (1.1%) and more often in delayed prophylaxis (3.7%) than in early prophylaxis (1.2%). It is not clear whether improved effectiveness of pegfilgrastim was due to timing or choice of substance, therefore it is important to conduct other studies with more variation in the use and timing of therapies, and patient compliance, as a basis for developing recommendations for clinical practice.