

## **Impact of primary prophylaxis with granulocyte colony-stimulating factor on febrile neutropenia and mortality in adult cancer patients receiving chemotherapy: a systematic review.**

Kuderer NM, Dale DC, Crawford J, Lyman GH. *J Clin Oncol.* 2007;  
**25(21):3158-67.**

Study overview: This systematic literature review and meta-analysis evaluated data from 17 randomised controlled trials that compared the clinical efficacy and safety of granulocyte colony-stimulating factor (G-CSF) primary prophylaxis with placebo. The studies included 3,493 adult patients with a solid tumour or lymphoma.

Key findings: Primary G-CSF prophylaxis reduced the relative risk (RR) of febrile neutropenia by 46%, and reduced the RR of infection-related and early mortality by over 40%. Average relative dose intensity was significantly higher in patients who received G-CSF compared with placebo (95% versus 87%). Musculoskeletal pain was reported more frequently in G-CSF-treated patients.

Conclusions: This meta-analysis showed that G-CSF primary prophylaxis reduced the risk of FN and infection-related/early mortality across a broad range of malignancies and chemotherapy regimens.

<http://www.ncbi.nlm.nih.gov/pubmed/17634496?dopt=Citation>