



IMPACT OF
NEUTROPENIA IN
CHEMOTHERAPY
EUROPEAN
STUDY GROUP

The use of chemotherapy regimens carrying a moderate or high risk of febrile neutropenia and the corresponding management of febrile neutropenia: an expert survey in breast cancer and non-Hodgkin's lymphoma

Gerlier L, Lamotte M, Bosly A, et al. *BMC Cancer* 2010; 10:642

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The primary objective of this study was to obtain real-life data on the use of chemotherapy regimens with a high or moderate risk ($\geq 10\%$) of febrile neutropenia (FN) and the observed incidence of FN in daily practice. Two similar but separate surveys were conducted, one in breast cancer (161 patients) and one in NHL (39 patients). Only one breast cancer patient received primary prophylaxis (PP), 42% received secondary prophylaxis (SP) and 44% developed a severe neutropenic event (refers to either FN or prolonged severe neutropenia *PSN+ defined as an episode of severe neutropenia grade 4, without fever, for ≥ 5 days) without PP with colony-stimulating factor (CSF). Consequences of severe neutropenic events included dose delays, dose reductions, decreased number of chemotherapy cycles, and switches to other chemotherapy regimens. In the NHL sample, CSF was given to 26% of patients as PP and to 41% as SP. In total, 49% of NHL patients experienced a neutropenic event (41% FN and 8% PSN). Among those 41% of FN patients, 38% experienced dose delays in at least one chemotherapy cycle. Hospitalizations occurred in 48% of the patients without CSF prophylaxis, in 19% of those with PP, and in 20% of those with SP. These results indicate that patients with breast cancer or NHL receiving chemotherapy regimens with a moderate or high risk of FN may benefit from the use of primary CSF prophylaxis.