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## **The importance of G-CSF prophylaxis in R-CHOP-14 therapy for diffuse large B-cell lymphoma in routine clinical practice**

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The objective of this study was to describe the importance of granulocyte colony-stimulating factor (G-CSF) prophylaxis in R-CHOP-14 therapy for diffuse large B-cell lymphoma (DLBCL). The analysis included a subgroup of patients from the IMPACT NHL international, retrospective and prospective, observational, multicentre study conducted in clinical practice. A total of 409 patients receiving chemotherapy with rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone every 14 days (R-CHOP-14) were analysed. Most patients (n=222, 54%) were planned for six cycles of chemotherapy and 357 out of all patients (87%) completed their planned number of cycles. 64 out of 409 patients (16%) did not receive primary prophylaxis with G-CSF, but 61 of these patients received either secondary prophylaxis with G-CSF (n=56, 92%) or G-CSF treatment (n=5, 8%). Febrile neutropenia (FN) occurred in 20% of patients (n=81). Dose delays >3 days and dose reductions  $\geq 10\%$  occurred more often in patients without primary G-CSF prophylaxis than in patients receiving primary prophylaxis (75% vs. 47% and 19% vs. 12%, respectively). More patients achieved  $\geq 90\%$  relative dose intensity (RDI) in the primary prophylaxis group (68%) than in the group not receiving primary G-CSF prophylaxis (47%). Statistically significant predictors of RDI <90% were higher International Prognostic Index (IPI) score, absence of G-CSF primary prophylaxis, and increased age. The study showed that primary G-CSF prophylaxis may improve chemotherapy delivery in DLBCL patients.