



IMPACT OF  
NEUTROPENIA IN  
CHEMOTHERAPY  
EUROPEAN  
STUDY GROUP

## **Risk assessment model for first cycle chemotherapy-induced neutropenia in patients with solid tumors**

Lopez-Pousa A, Rifa J, et al. *Eur J Cancer Care* 2010; 19(5):648-55

<http://www.ncbi.nlm.nih.gov/pubmed/20088918>

The authors developed a model to predict first-cycle chemotherapy-induced neutropenia in patients with solid tumours based on data of the DELFOS study. A total of 1,194 patients were enrolled and suffered, most frequently, from breast (38%), lung (18%), and colorectal (15%) cancers. Characteristics and pre-treatment parameters which were found to influence the occurrence of chemotherapy-induced neutropenia were included in an unconditional predictive model. Sensitivity was 63% and specificity 67%, and the negative predictive value 94%. Thirty- six percent of patients were identified as being at high risk of first-cycle chemotherapy-induced neutropenia. The model allowed identifying high- and low-risk patients before the initiation of chemotherapy, but validation is required before it could be used in clinical practice.