

# **Ki-67 as a prognostic marker in mantle cell lymphoma-consensus guidelines of the pathology panel of the European MCL Network.**

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## **Source**

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## **Abstract**

Mantle cell lymphoma (MCL) has a heterogeneous clinical course and is mainly an aggressive B cell non-Hodgkin lymphoma; however, there are some indolent cases. The Ki-67 index, defined by the percentage of Ki-67-positive lymphoma cells on histopathological slides, has been shown to be a very powerful prognostic biomarker. The pathology panel of the European MCL Network evaluated methods to assess the Ki-67 index including stringent counting, digital image analysis, and estimation by eyeballing. Counting of 2 x 500 lymphoma cells is the gold standard to assess the Ki-67 index since this value has been shown to predict survival in prospective randomized trials of the European MCL Network. Estimation by eyeballing and digital image analysis showed a poor concordance with the gold standard (concordance correlation coefficients [CCC] between 0.29 and 0.61 for eyeballing and CCC of 0.24 and 0.37 for two methods of digital image analysis, respectively). Counting a reduced number of lymphoma cells (2 x 100 cells) showed high interobserver agreement (CCC = 0.74). Pitfalls of the Ki-67 index are discussed and guidelines and recommendations for assessing the Ki-67 index in MCL are given.

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