



Expression of P53, KI-67, BCL-2, C-ERB-2, ESTROGEN, and PROGESTERONE receptors in endometrial cancer

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OBJECTIVE

To assess the immunohistochemical expression of p53, bcl-2, c-erb-2, Ki-67, estrogen and progesterone receptors in endometrial cancer patients.

METHODS

We studied 103 cases of primary untreated endometrial carcinoma in which the p53, bcl-2, c-erb-2, Ki-67, estrogen and progesterone receptor antigens were investigated by an immunohistochemical method. We evaluated the correlations among the immunohistochemical staining assessed by histoscore, and the age, grading, depth of invasion, stage of the neoplasia and extrauterine disease.

RESULTS

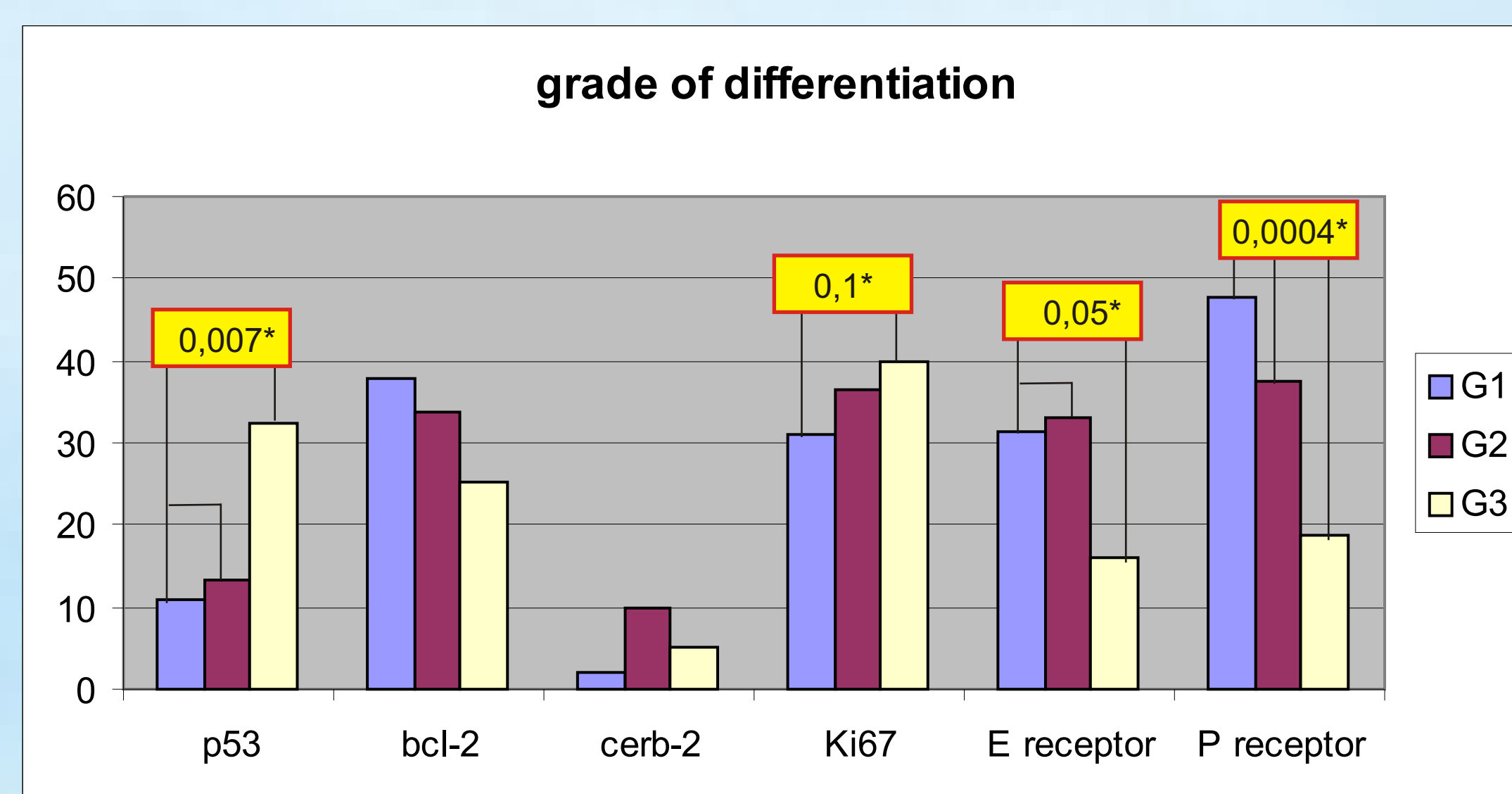
Mean age was 67 years (range 35-90). All patients were submitted to total abdominal or modified radical hysterectomy plus bilateral salpingoophorectomy. Systematic pelvic

lymphadenectomy was performed in 75 (72.5%) high-risk patients.

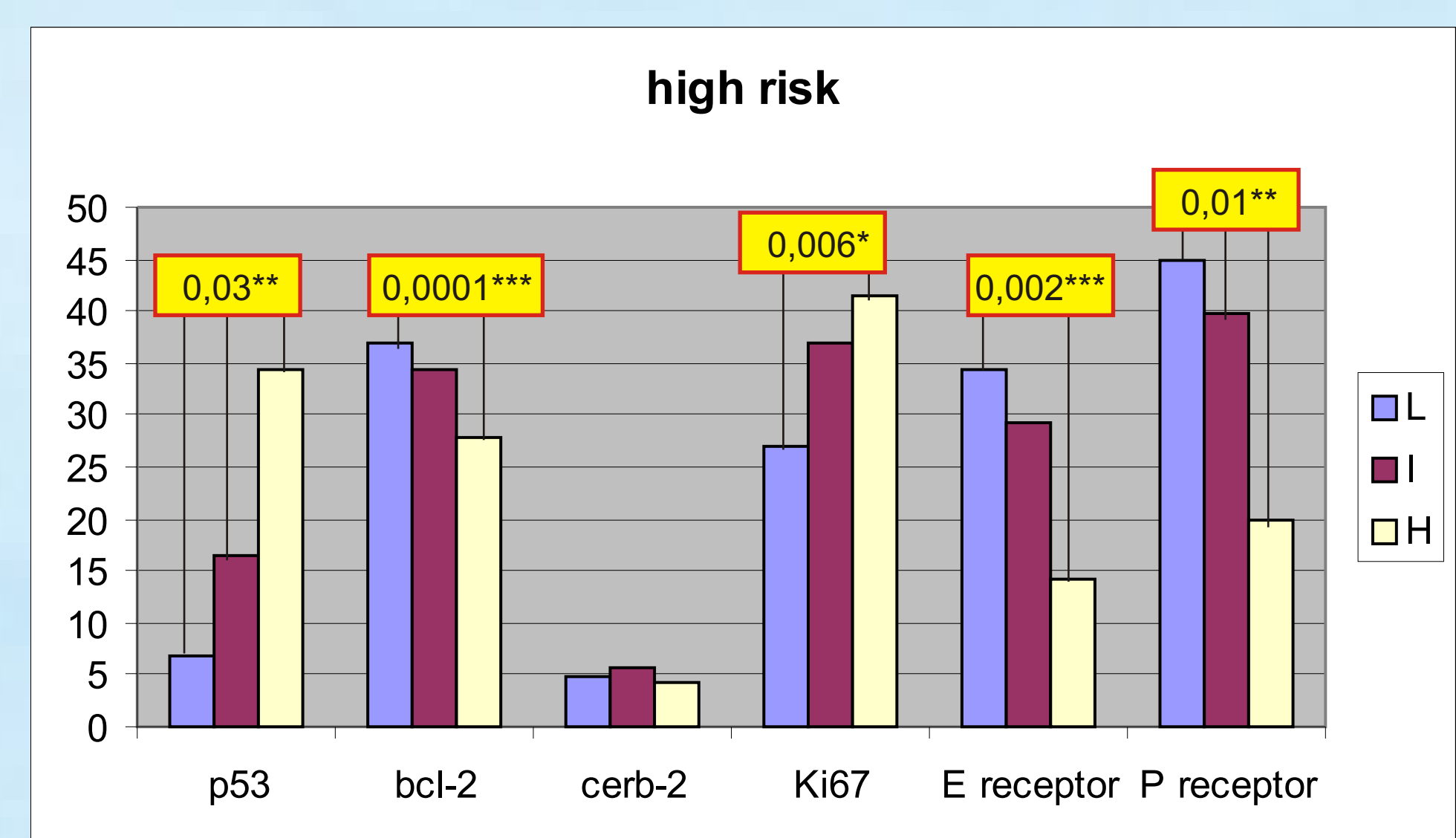
p53, bcl-2, c-erb-2, Ki-67, estrogen and progesterone receptors were positive in 49 (48%), 81 (79%), 18 (17%), 99 (96%), 73 (70%) and 87 (84%) patients respectively. There was no clear association between immunohistochemical parameters and the age of patients. p53 and Ki-67 overexpression was found to be related to poor grade of differentiation, deeper myometrial invasion, advanced stage of neoplasia and extrauterine spread of disease. Immunostaining for bcl-2 correlated inversely with FIGO stage, while c-erb-2 was overexpressed in tumors with deeper myometrial invasion. Estrogen and progesterone receptor positive tumors showed a statistically significant association with clinicopathological parameters of better clinical outcome.

CONCLUSION

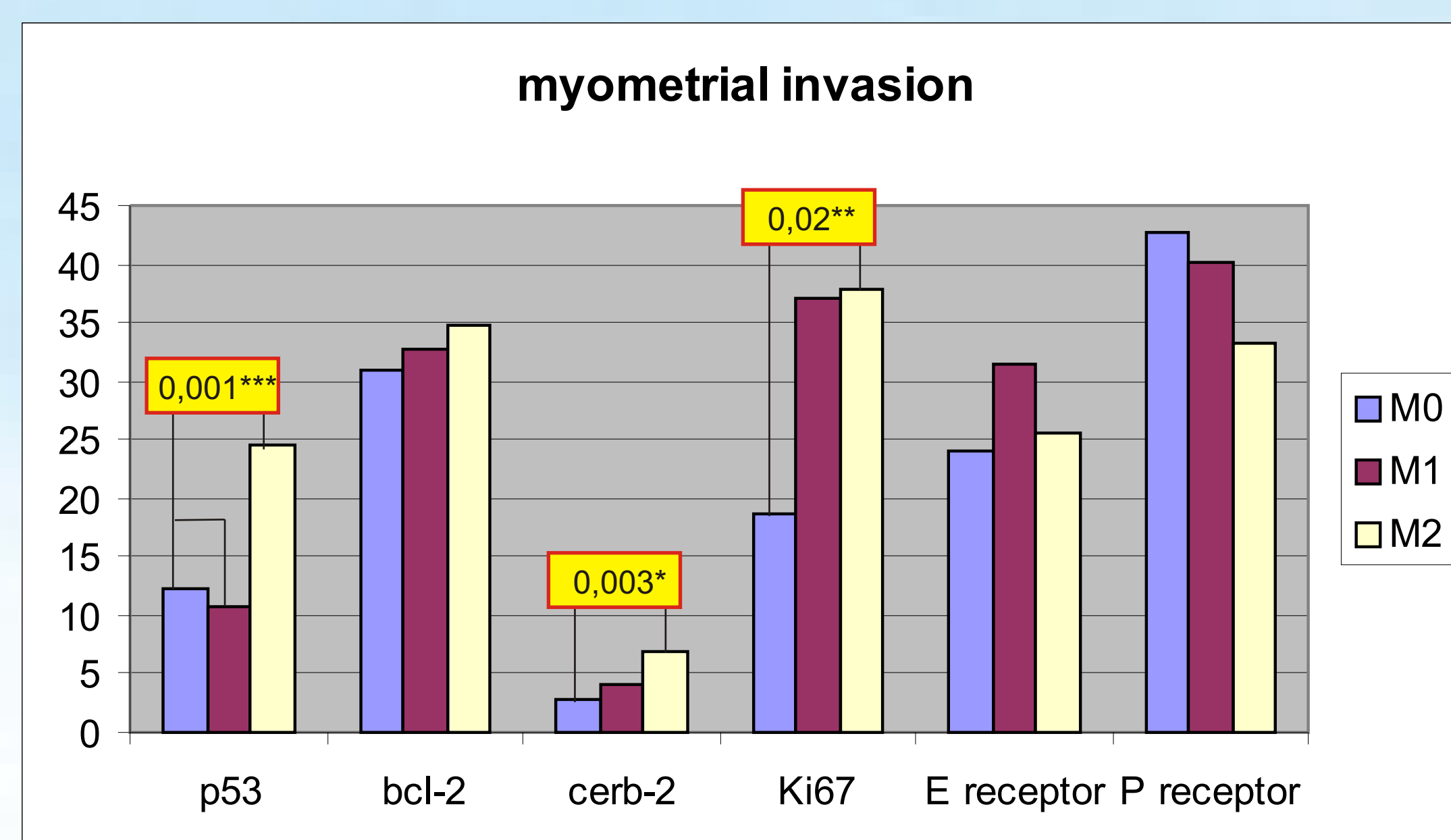
The overexpression of p53 and Ki-67 seems to indicate more malignant phenotype, while bcl-2 and c-erb-2 may have a limited role in the identification of high-risk tumors.



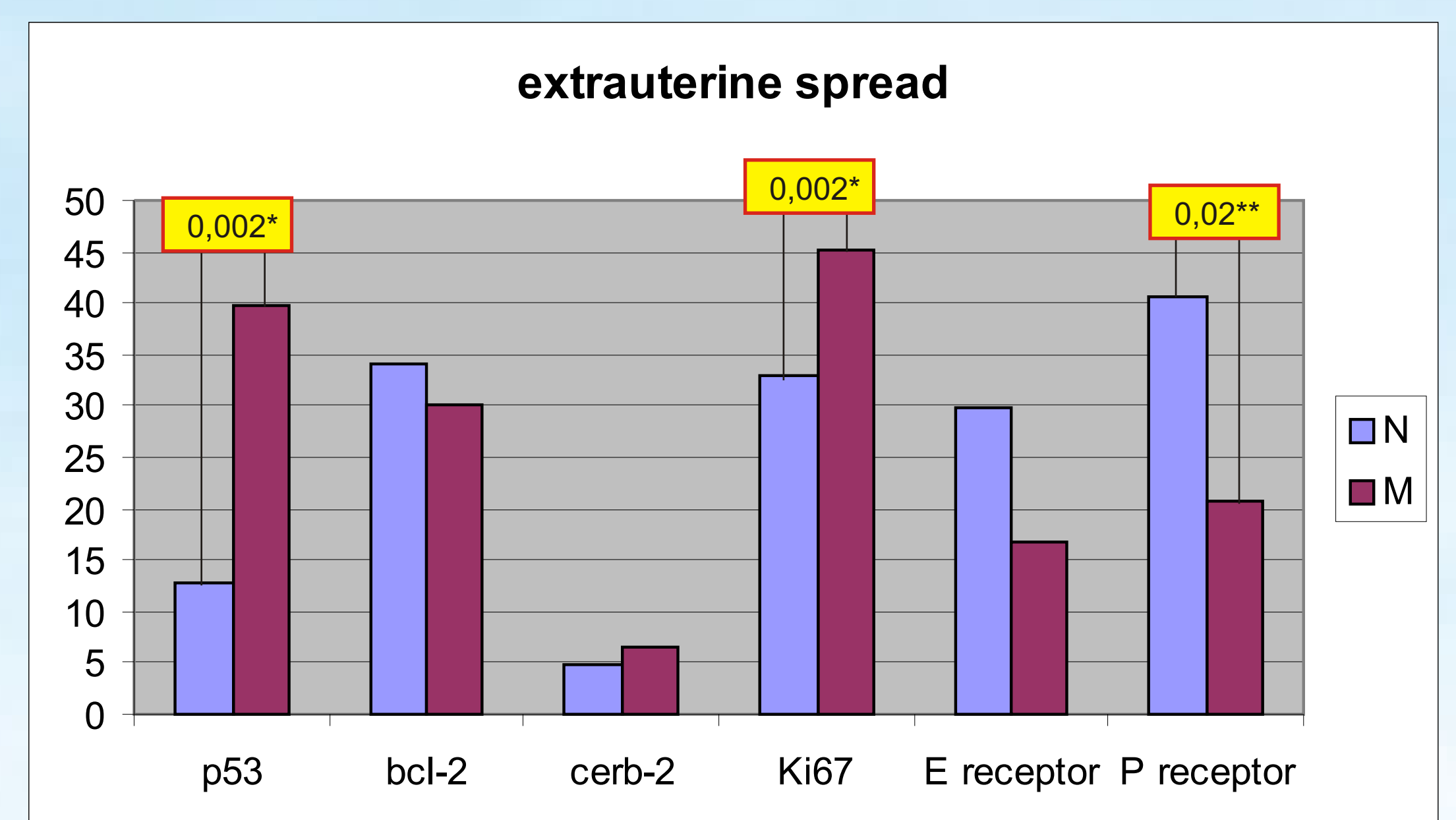
* KOLMOGOROV-SMIRNOV test



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** KRUSKAL-WALLIS test
*** MANN-WHITNEY test



* KOLMOGOROV-SMIRNOV test
** MANN-WHITNEY test
*** WALD-WOLFOWITZ test



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