The aim of this study was to define predictive factors for the therapy response and early recurrence after hepatectomy in patients that received conversion therapy FOLFOX4 and bevacizumab for colorectal liver metastases. This observational retrospective single center analysis included sixty-five patients treated with bevacizumab and FOLFOX4 regimen for potentially resectable colorectal liver metastases. Patients were divided in groups based on objective therapeutic response. Groups with early (≤ 3 months) and late recurrence (≥ 12 months) after hepatectomy were selected. Disease characteristics among groups were compared as well as univariate and multivariate analysis.

Independent risk factor for the lack of therapy response was rectal localization (OR 3.86 [95% CI 1.31-11.34]; p = 0.014). Left colon cancer was independent protective factor for the response absence (OR 0.205 [95% CI 0.05-0.80]; p = 0.022). Independent predictive factors for early recurrence were synchronous liver disease (OR 18 [95%CI 2.47-131.28]; p = 0.004) and the number of metastases (OR 2.42 [95% CI 1.14-5.01]; p = 0.021). In multivariate model only synchronous liver metastases had statistical significance (OR 13.79 [95% CI 1.54-123.77]; p = 0.019).

Left colon cancer was predictor of response to therapy with bevacizumab and FOLFOX4 and rectal localization was indicative of response absence. Independent risk factors for early recurrence were the number of metastases and synchronous liver involvement.

Key words: colorectal cancer, metastases, liver, predictors