

## PREDICTORS OF THERAPY RESPONSE AND EARLY RECURRENCE IN PATIENTS WITH POTENTIALLY RESECTABLE COLORECTAL LIVER METASTASES TREATED WITH BEVACIZUMAB AND FOLFOX4 AS A CONVERSION THERAPY

Miljana Džunić<sup>1</sup>, Bojana Pejčić<sup>2</sup>, Marija Andjelković-Apostolović<sup>3,4</sup>, Svetislav Vrbić<sup>1,4</sup>, Ivica Pejčić<sup>1,4</sup>, Ivan Petković<sup>1</sup>

<sup>1</sup>Clinic of Oncology, Clinical Center Niš, Serbia

<sup>2</sup>Oncology and Hematology department, Diakonie Klinikum Stuttgart, Germany

<sup>3</sup>Public Health Institute Niš, Serbia

<sup>4</sup>University of Niš, Faculty of Medicine, Niš, Serbia

Contact: Miljana Džunić

Blvd dr Zoran Djindjić 48, 18000 Niš, Serbia

E-mail: drmdzunic@gmail.com

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 ( $\leq 3$  months) and late recurrence ( $\geq 12$  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.

Acta Medica Medianae 2019;58(3):72-79.

**Key words:** colorectal cancer, metastases, liver, predictors