Introduction: Incidence and death rates for colorectal cancer increase with age. Overall, 90% of new cases and 94% of deaths occur in individuals 50 and older, yet elderly patients are often under-represented in clinical trials of metastatic colorectal cancer. We aimed to assess the efficacy and safety of Bevacizumab (BV) in combination with neoadjuvant therapy in elderly patients with liver metastases of colorectal cancer.

Methods: This is retrospective analysis of liver resection rate after Oxaliplatin based chemotherapy (Folfox4 or Xelox) + bevacizumab (BV) in patients with liver-only metastases considered unsuitable for upfront resection. Patients were treated with Oxaliplatin based chemotherapy + BV until best response is achieved (maximum 12 cycles of chemotherapy). After neoadjuvant chemotherapy, resectability of liver metastases was assessed by CT.

Results: From October 2008, to January 2014, 43 patients with good performance status (PS 0 and 1) were treated for liver only metastases. Twenty one patients were under 60 years old (median age 53 years, from 34 years up to 59 years, 12 men and 9 female patients) and twenty two patients were over 60 years old (median age 64.5 years, from 60 years up to 76 years, 15 men and 7 female patients). Group under 60 years also received 162 cycles of therapy (mean 7.7 cycles, 4-12) and group over 60 years received 162 cycles of therapy (mean 7.3 cycles, 4-12). Response rate was comparable in each group in under 60 group is 57%(3 CR and 9 PR) and in group over 60 years is 54% (1 CR and 11 PR) p = .0,864. In each group one PD was recorded. In under 60 group 15 patients underwent metastasectomy and in over 60 group 13 patients underwent metastasectomy. Time to progression showed no statistically significant difference between two groups 12, 18 (CI 95% 8,66-15,70) months in over 60 group versus 13,95 (CI 95% 9,51-18,39) months in under 60 group, p= 0,551. Recorded toxicity was comparable in both groups.

Conclusion: Our results suggest that Bevacizumab in combination with neoadjuvant therapy in elderly patients with liver metastases are as efficient as well tolerable in elderly patients as in younger patients. Our results should be confirmed by further large prospective studies.