SAFETY AND EFFECTIVENESS OF BEVACIZUMAB IN COMBINATION WITH CHEMOTHERAPY IN PATIENTS WITH METASTATIC COLORECTAL CANCER IN ELDERLY POPULATION: UPDATED RESULTS FROM A LARGE CZECH OBSERVATIONAL REGISTRY

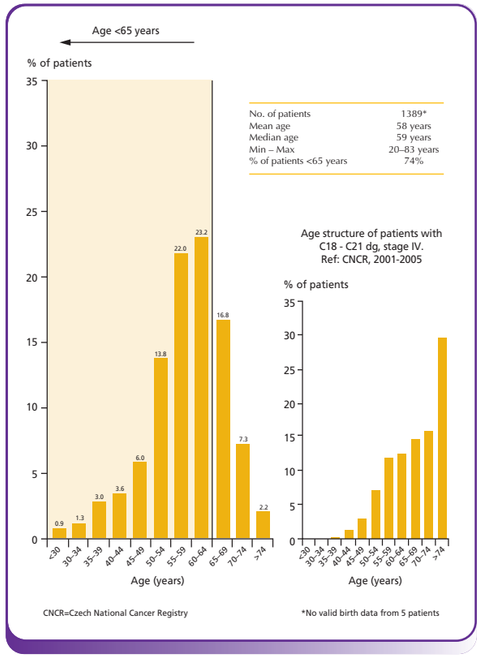
E. Kubala,[1] J. Bartos,[2] L. B. Petruzelka,[3] J. Prausova,[4] V. Benesova,[5] J. Gruna,[6] J. Finek,[7] P. Twardzikova,[8] B. Melichar,[9] M. Kohoutek[10]

[1]Oncology and Radiotherapy Department, University Hospital Hradec Kralove, Hradec Kralove; [2]Hospital Liberec, Liberec; [3]Charles University in Prague, First Faculty of Medicine, Prague; [4]Oncology and Radiotherapy Department, University Hospital Motol, Prague; [5]Hospital Jihlava, Radiotherapy and Oncology Department, Jihlava; [6]J.G. Mendel Oncology Institute, Novy Jicin; [7]Radiotherapy and Oncology Department, University Hospital Plzen, Plze; [8]University Hospital Ostrava, Department of Oncology and Radiotherapy, Ostrava; [9]Department of Oncology, Palacký University Hospital Olomouc, Olomouc; [10]Centre of Oncology, T. Bata Hospital, Zlin, Czech Republic

Background

- We have already reported our experience from the Czech Specific Therapeutic Programme, the initial part of a large Czech community-based observational registry monitoring safety and efficacy of bevacizumab in combination with standard chemotherapy for patients with metastatic colorectal cancer (mCRC).
- We also reported the updated results from the whole registry (n=1658) of patients treated with bevacizumab across all lines and within the 1st-line setting (n=1394).
- As one-quarter of diagnosed patients were ≥65 years of age, important decisions related to intensity of chemotherapy treatment and use of biologics had to be taken (Figure 1). Hence, we focused on possible differences between the two age groups (<65 years and ≥65 years) in efficacy and safety.

Figure 1. Patients' age (1st-line mCRC)



Methods

- Data from 1658 unselected patients with mCRC who received bevacizumab plus chemotherapy between Oct 2005 and Oct 2009 were collected from 22 centers.
- Chemotherapy regimen choice was at the physicians' discretion.
- Patients received bevacizumab 5 mg/kg every 2 weeks or 7.5 mg/kg every 3 weeks depending on the chemotherapy regimen.
- Patients were followed-up until death or loss to follow-up.
- Data were reported every 6 months including disease status per oncologist assessment.
- Both overall (OS) and progression-free survival (PFS) times were assessed using standard Kaplan-Meier methodology.

Results

- Median follow-up time in all patients was 7.6 months and median follow-up for 1st-line patients was 7.7 months. Safety data are available for 1658 patients. 1394 patients were treated with bevacizumab within the 1st-line setting: efficacy results were obtained from 1300 patients for PFS, and from 1294 patients for OS. 5 patients with invalid birth date were excluded from some analyses.
- First-line treatment was completed in 696 patients, 565 patients are still on treatment, and data for 133 patients are missing (Figure 2).
- The most frequent chemotherapy regimens included XELOX (478 patients; 34%), FOLFOX4 (454 patients; 33%), FOLFIRI (141 patients; 10%) and XELIRI (92 patients; 7%). Figure 3 shows a comparison between the two age groups.
- Median treatment duration was 24 weeks (Figure 4).

Figure 2. Gender and treatment status (1st-line patients, N=1389*)

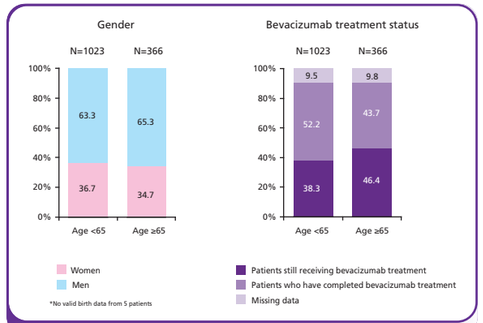


Figure 3. Type of chemotherapy regimen (1st-line patients; N=1394)

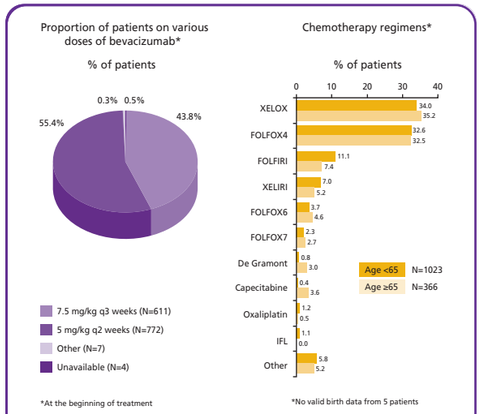
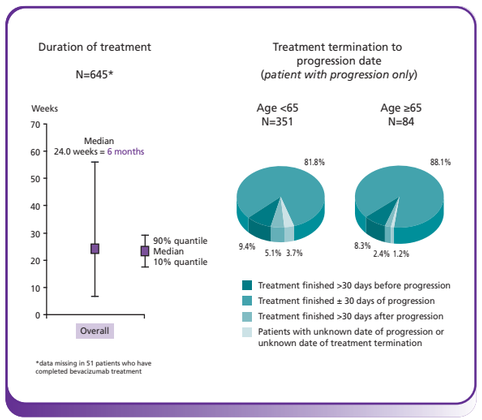


Figure 4. Duration of bevacizumab treatment (1st-line, in patients with bevacizumab treatment termination)



- Median PFS was 11.7 months in the <65 years group and 12.8 months in the ≥65 years group; p=0.274 (Figure 5).
- Median OS was 29.3 months in the <65 years group and 29.5 months in the ≥65 years group; p=0.709 (Figure 6).

Figure 5. PFS by age (1st-line patients)

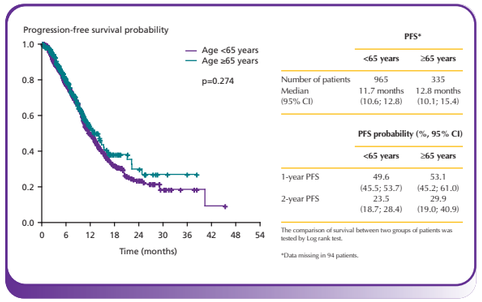
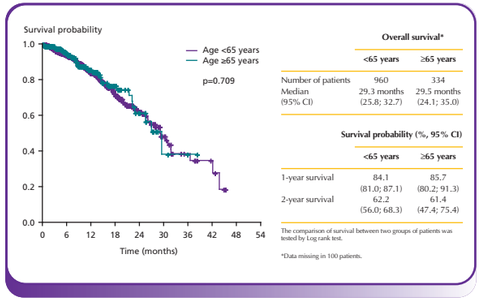


Figure 6. Overall survival by age (1st-line patients)



Safety

- Adverse events (AEs) considered to be related to bevacizumab were reported in 162 patients (<65 years [72.0%]). AEs included hypertension (60 patients; 3.6%), proteinuria (28 patients; 1.7%), arterial thromboembolic event (TE; 8 patients; 0.5%), venous TE (31 patients; 1.9%; 2 deaths), diarrhea (4 patients; 0.2%), bleeding (18 patients; 1.1%), vomiting (5 patients; 0.3%), GIT perforation (3 patients; 0.2%), and others (25 patients; 1.5%).
- Grade 3/4 AEs considered to be related to bevacizumab were reported in 53 patients (<65 years [67.9%]). Grade 3/4 AEs included hypertension (21 patients; 1.3%), proteinuria (1 pt; 0.1%), arterial TE (4 patients; 0.2%), venous TE (8 patients; 0.5%; 2 deaths), diarrhea (3 patients; 0.2%), bleeding (4 pt; 0.2%), vomiting (4 patients; 0.2%), GIT perforation (2 pt; 0.1%), and other (12 patients; 0.7%).
- Comparison between the two age groups is described in Figures 7 and 8.

Figure 7. Adverse reactions by age (all patients)

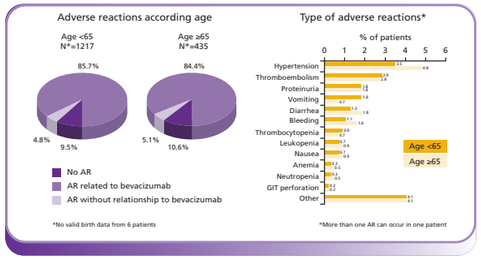
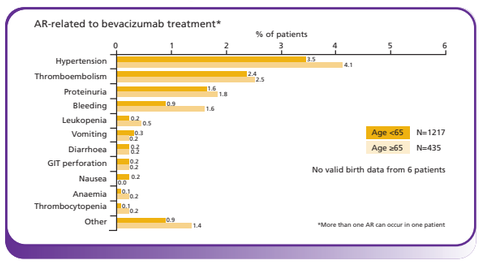


Figure 8. Adverse reactions by age related to bevacizumab treatment (all patients)



Conclusions

- Efficacy and safety of bevacizumab plus chemotherapy in the Czech population based on clinical registry data appear to be consistent with those observed in other observational trials.
- Bevacizumab is effective in the elderly population (≥65 years), and no differences in efficacy were identified between the two age groups (<65 years, ≥65 years).
- Bevacizumab is well tolerated within the ≥65 years age group and is similar to that of the <65 years age group.

References

Vyzula et al. Ann Oncol 2008;19Suppl. 6(vi79ff-2011).
Prausova J, et al. Ann Oncol 2009;20Suppl.7(vii71–vii72ff-0171).
Berry SR, et al. ASCO GI 2008; Abst #350.
Berry SR, et al. J Clin Oncol 2008;26(May 20 suppl): Abst #4025.
Hurwitz H et al. N Engl J Med 2004;350:2335–2342.
Saltz LB, et al. J Clin Oncol 2008;26:2013–2019.
Ackland SP, et al. ASCO GI 2008; Abst #463.
Kabbinavar FF, et al. J Clin Oncol 2005;23:3706–3712.

Acknowledgments

Medical writing/editing support was provided by Miller Medical Communications UK. The medical writing/editing support was funded by F. Hoffmann-La Roche.

Presented at the 2010 American Society of Clinical Oncology Gastrointestinal Cancers Symposium, January 22–24, 2010, Orlando, USA.