

The Colorectal Carcinoma – Treatment Research and Treatment Reality in Oncology Practices (Anti-VEGF or Anti-EGFR Therapies)

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Approach

For the palliative therapy of the colorectal carcinoma there are potent drugs available such as the cytostatics 5-FU, irinotecan, oxaliplatin and capecitabine. In 01/2005, the monoclonal antibody bevacizumab was approved, cetuximab in 06/2004, panitumumab in 12/2007 and aflibercept in 02/2013. How are these substances applied in everyday life and which are the results of the therapy, in particular with regard to metastases resection?

Methodology

Since 2003, 124 oncology practices from all federal states of Germany have been documenting 9,490 disease histories of patients with a colorectal carcinoma (CRC) as part of the **Project team of Internal Oncology (PIO)**. 8,932 cases thereof with a total of 20,272 therapies were analyzed in the registry **ONCOReg** (as of 09/05/2016).

Results

Gender: 5,399 (60.4%) m; 3,533 (39.6%) f

UICC: 3,357 (37.6%) patients were in a metastasized stage initially (fig. 1). Metastases were detected during the course of the disease in additional 2,561 (28.7%) patients.

Surgery of primary tumor: n = 8,298 (92.9%), including 7,181 (86.5%) R0 resection

KRAS (n=2,648): 1,689 (63.8%) wild type; 959 (36.2%) mutated

NRAS (n= 298): 251 (84.2%) wild type; 7 (15.8%) mutated

Palliative therapies (n = 14,707):

5,836 of the patients received a 1st-line chemotherapy, 3,940 (67.5%) of them a 2nd-line and 2,186 (37.5%) a 3rd-line therapy. Bevacizumab was mainly applied as 1st-line therapy, aflibercept and cetuximab as 2nd-line and panitumumab as 3rd-line therapy (fig. 2+3).

Patients with distant metastases: 5,918 (66.3%);

Age at start of metastasis: median 67 (19-92) years;

Metastases resections: 1,360 (23.0%) patients with 1,703 resections; tumor residues: 1,067 (62.7%) R0; 59 (3.5%) R1; 60 (3.5%) R2; 517 (30.4%) RX;

Primary metastases resections: 926 (15.6%) patients; **Thereof UICC IV at FD:** 313 (33.8%);

Secondary metastases resections: 523 (8.8%) patients;

Interventional treatments of metastases: 160 (2.7%) with 220 treatments; thereof 73 (33.2%) RFA, 34 (15.5%) brachytherapy, 32 (14.5%) TACE, 29 (13.2%) SIRT

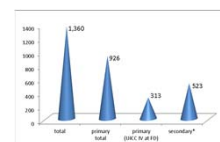


Fig. 4: Metastases resections
(*during or after palliative therapy)

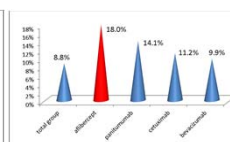


Fig. 5: Secondary metastases resections

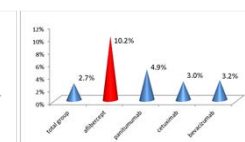


Fig. 6: Metastases treatments

1,360 (23.0%) patients underwent a metastases resection, 160 (2.7%) an interventional metastases treatment (fig. 4-6). 95 practices (80.5%) initiated a metastases resection. Their rate was between 6.6 and 39.2% in oncology practices with more than 50 analyzed patients.

A secondary metastases resection was performed mainly during or after a 1st-line therapy (fig. 7). Its median duration was 126 days (fig. 8). Also patients with a progressive disease were brought to a metastases resection.

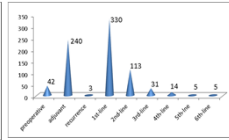


Fig. 7: Therapy before
metastases resection

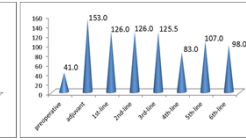


Fig. 8: Duration of therapy (days)
before metastases resection

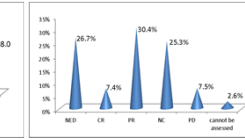


Fig. 9: Success of therapy
before metastases resection

Survival

The **median progression-free survival** is at 9.9 or 6.4 months for the 1st or 2nd-line therapy, the median **overall survival** is at 25.1 or 15.3 months. Fig. 10 shows the registry data in comparison to published studies.

The median overall survival as from the start of distant metastasis is at 28.3 months and prolonged to 54.6 months after a secondary metastases resection (fig. 11+12).

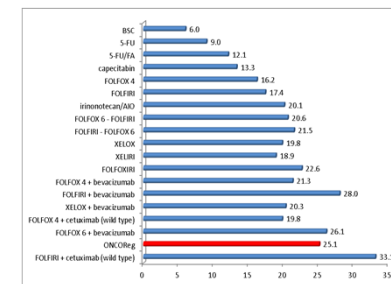


Fig. 10: Overall survival as from start of 1st-line therapy

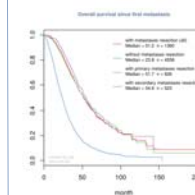


Fig. 11: Overall survival as from
start of distant metastasis
- with metastases resection (n = 1,360) 51.2 months
- with primary metastases resection (n = 926) 51.7 months
- with secondary metastases resection (n = 523) 54.6 months
- without metastases resection (n = 4,558) 23.8 months

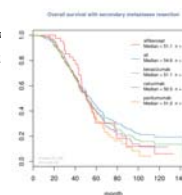


Fig. 12: Overall survival with
secondary metastases resection
Aflibercept (n = 44) 51.1 months
Total group (n = 523) 54.6 months
Bevacizumab (n = 327) 51.1 months
Cetuximab (n = 199) 50.5 months
Panitumumab (n = 94) 51.2 months

Conclusion

The targeted treatment of CRC in the practices is reflected by the median overall survival of 25.1 months from the start of the 1st-line therapy. Existing distant metastases were resected in 23% of the cases which led to a prolongation of the overall survival as from the start of distant metastasis from 23.8 to 51.2 months.

9% of the patients underwent a secondary resection (during or after palliative therapy). Their median survival is at 54.6 months. The collection of data and its analysis will be continued.