

First BEAT was opened to evaluate safety events of BEV in a broader pt population using a variety of CT regimens.

**Methods and material:** First BEAT started in June 2004 and aims to enrol up to 2000 mCRC pts globally. Eligible pts starting with first-line CT (choice of CT is at the physician's discretion) are treated until progression with BEV (5 mg/kg every 2 weeks [5FU based CT] or 7.5 mg/kg every 3 weeks [capecitabine based CT]). SAEs include deaths, new and prolonged hospitalizations, life-threatening as well as medically significant events. BEV-related (investigators' assessment) SAE's and survival are reported as information becomes available (24 hours).

**Results:** By May 17, 2005, 951 pts had been enrolled in 32 countries. 606/951 pts (male 58%; median age 60 years [31% were >65 years]; PS 0–1 99%) had data for baseline analyses. Median follow-up was 4.1 months (mean 4.4); 522 pts had been followed-up for >60 days. The most common first-line CT regimens used with BEV were FOLFOX (27%), CAPOX (20%), FOLFIRI (18%) and capecitabine (7%).

Among the 942 pts that had started treatment with BEV, 257 SAEs were reported in 161 pts including 31 deaths. 60-day mortality was 2.1%. 67 BEV related SAEs, including 8 deaths (1<sup>1</sup>), were reported in 57 (6%) pts. The related SAE included 13 venous TE, 7 (2<sup>1</sup>) pulmonary embolism, 6 (1<sup>1</sup>) GI perforation, 6 (1<sup>1</sup>) bleeding, 6 diarrhea, 5 abdominal pain, 5 arterial TE, 3 fever, 2 hypertension, 1 GI inflammation, 1 peptic oesophagitis, 1 (1<sup>1</sup>) mucositis with peritonitis/sepsis, 1 (1<sup>1</sup>) ileus, 1 (1<sup>1</sup>) sudden death, 1 (1<sup>1</sup>) cardiac arrest, 1 abscess, 1 cardiac palpitation, 1 dyspnea, 1 allergic reaction, 1 surgery and 1 rigors.

**Conclusions:** In this ongoing, large community-based study, the safety profile of BEV in first line mCRC pts receiving a variety of CT regimens, namely FOLFOX, CAPOX, FOLFIRI and capecitabine, appears consistent with that observed in the pivotal trial. Updated safety data (including additional SAEs) will be presented.

## Oral presentations (Tue, 1 Nov, 9.15–11.15)

### GI – rectal cancer

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ORAL

#### The Swedish rectal cancer trial – long-term effects of preoperative radiotherapy

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**Background:** To evaluate the long-term outcome after curative rectal cancer surgery in a material randomised to preoperative radiotherapy and surgery or surgery alone.

**Patients and Methods:** Between 1987 and 1990 eleven hundred and sixty eight patients were randomised in the Swedish Rectal Cancer Trial. Of these, 908 had an R0 resection, 454 of which had surgery alone and 454 had preoperative radiotherapy with 25 Gray in 5 days the week before surgery. Long-term follow-up was made by matching the curatively treated patients to three nation-wide health registries; the Swedish Cancer Register, the Hospital Discharge Register and the Cause of Death Register. Actuarial methods were used to calculate cumulative survival and cumulative recurrence rates. Groups were compared using the log-rank test and proportions with the Chi-square test.

**Results:** Median follow-up time was 13 years (range 3–15). The over all survival rate in the irradiated group was 38% and 30% (p=0.008) in the surgery alone group. The corresponding figures for cancer specific survival were 72% vs. 62% (p=0.03). The over all local recurrence rate in the irradiated group was 9%, compared to 26% (p<0.001) in the surgery alone group. The reduction in local recurrence rates was significant in all stages (I–III) and in tumor heights up to 10 centimetres.

**Conclusions:** The benefits of short-term preoperative radiotherapy in terms of increased over all and cancer specific survival, as well as a reduction of local recurrences after curative rectal cancer surgery, remain after a very long follow-up.

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#### Long-term results of a randomised trial comparing preoperative short-course radiotherapy vs. preoperative conventionally fractionated chemoradiation for rectal cancer

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**Background:** The primary aim of the trial was to detect whether larger tumor shrinkage after chemoradiation compared to short-course radiotherapy will result in an increased rate of anterior resections. No benefit of chemoradiation was found in terms of sphincter preservation (Radiother Oncol 1994; 72:15). The current report presents a comparison of long-term results.

**Material and methods:** Three hundred and sixteen patients with cT3–4 resectable rectal cancer without sphincters' infiltration and with a lesion accessible to digital rectal examination were randomized to receive either preoperative short-course irradiation (5 × 5 Gy) with subsequent total mesorectal excision (TME) performed within 7 days or chemoradiation (50.4 Gy, 1.8 Gy per fraction plus bolus of 5-fluorouracil and leucovorin) followed by TME after 4–6 weeks.

**Results:** By the late-breaking abstract deadline of 15 September following data will be submitted: overall survival, disease free survival, cumulative frequency of local recurrences and late complications rate.

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ORAL

#### Prognostic value of [18F] FDG PET patients treated with neo-adjuvant radio-chemotherapy for rectal cancer: long term results

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**Objective:** The purpose of the present study was to assess the prognostic value of [18F] FDG PET performed at restaging in patients with locally advanced rectal cancer submitted to neo-adjuvant radio-chemotherapy (RCT).

**Material and methods:** Eighty-eight consecutive patients with histologically proven rectal adenocarcinoma, clinical stage II–III according to TNM classification, were enrolled. All patients received the same neo-adjuvant RCT schedule. One month after RCT completion, all patients were restaged by ultrasound, CT scan, MRI, endoscopy and [18F] FDG PET. Surgery was performed in all cases within 8–9 weeks from completion of RCT. Median follow-up after surgery was 38 months (range 6–66).

**Results:** In the long-term follow-up patients' group, the 5-year overall survival and disease-free survival were 83% and 73%, respectively. Multivariate statistical analysis using Cox model showed that only two parameters at restaging were prognostic independent predictors of both overall survival and disease-free survival: pathologic stage (p-Stage) and especially [18F]FDG PET. In fact, the 5-year overall survival was 91% in patients with a negative PET post-RCT versus 72% in those with positive PET (p=0.024), while it was 81% versus 62% (p=0.003) for the 5-year disease-free survival. In PET-negative group only 8% of patients experienced distant metastases, and no patient pelvic failure. Statistical power was further increased when combining the p-Stage with the 18F-FDG PET results. In particular, the 5-year overall survival was 95% in the PET-negative/p-Stage 0–I patients versus 70% in PET-positive/p-Stage II–IV patients (p=0.001), while it was 93% versus 65% for the disease-free survival (p=0.0003).

**Conclusion:** In patients with locally advanced rectal cancer treated with neo-adjuvant RCT, the combined evaluation of p-Stage and 18F-FDG PET at restaging identifies a subgroup of patients characterised by good response to RCT and more favourable prognosis. In these patients a conservative surgical approach with organ preservation, like complete local excision, might be considered.