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2-8), including Trifluridine/Tipiracil in 29.2% of pts. FAS-CORRECT 0-3/4-5/6+ were 32.6%/35.7%/38.1% and Tabernero subgroups BPC/GPC/PPC were 20%/42.3%/37.3%. Median of REG cycles was 3 (range 1-18 cycles). With a median follow up of 23.4 months, median OS was 6.7 months (95% CI, 6.1-7.3 months) with 12- month OS rate 20.8% and median PFS was 2.9 months (95% CI, 2.7-3.0 months) with 6-month PFS rate 14.6%. Overall Response Rate (ORR) and Disease Control Rate (DCR) were 4.6% and 25.4%, respectively. The most common grade 3-4 toxicities were asthenia (12.3%), hyperbilirubinaemia (6.4%), hypertension (3.9%) and hand-foot skin reaction (3.9%). This toxicity was managed with dose reduction in 39.2 % of cases. OS FAS-CORRECT 0-3/4-5/6+ were 9.2 vs. 6.9 vs. 5.3 m (p=0.138) and OS Tabernero subgroups BPC/GPC/PPC were 10.5 vs. 6.9 vs. 5.2 m (p=0.022). DCR FAS-CORRECT 0-3/4-5/6+ were 37.5% vs. 28.5% vs. 22.9% (p=0.121) and DCR Tabernero subgroups BPC/GPC/PPC were 48% vs. 24.4% (p=0.004).

**Conclusions:** OS and PFS observed in our serie were consistent with the CORRECT trial, although in our routine clinical practice they were slightly higher. FAST-CORRECT and, especially, Tabernero's prognostic subgroups identify patients who may benefit from long-term Regorafenib treatment.

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Incidence of brain metastases in a potentially high-risk group of patients with metastatic colorectal cancer: Results from a pilot study

L. Callesen<sup>1</sup>, A. Boysen<sup>2</sup>, R. Dalby<sup>3</sup>, K. Spindler<sup>4</sup>

<sup>1</sup>Aarhus University Hospital, Aarhus, Denmark; <sup>2</sup>Department of Oncology, Aarhus University Hospital, Aarhus, Denmark; <sup>3</sup>Department of Radiology, Aarhus University Hospital, Aarhus, Denmark; <sup>4</sup>Experimental Clinical Oncology and Department of Oncology, Aarhus University Hospital, Aarhus, Denmark

Background: Brain metastases (BM) are an uncommon presentation of metastatic colorectal cancer (mCRC) and routine imaging of the brain is not recommended. The majority of patients with BM undergo a palliative treatment course with an expected survival of few months. However, appropriately selected patients could be candidates for metastasis-directed treatment with a potential for a curative outcome. In a registry-based CRC cohort study patients undergoing curatively intended treatment of BM had more frequently rectal cancers with lung metastases. Patients undergoing curative intended treatment of BM achieved a 5-year survival rate of 12.7%. The aim of our pilot study was to prospectively investigate the incidence of BM in a potentially high-risk group of patients with mCRC. Possible prognostic biological aspects were investigated by translational analysis of blood samples.

Methods: A prospective pilot study to investigate if the currently suggested risk factors, rectal cancer and lung metastases, could add to a relevant detection rate of asymptomatic BM from CRC. Inclusion criteria: rectal cancer; lung metastasis diagnosed by histo- or cytopathology, or by clinical and imaging criteria. Exclusion criteria: contraindications for magnetic resonance imaging (MRI); previously treated or known brain metastasis. Patients underwent a standard 3T MRI scan of the brain with intravenous contrast. MRI were described by a specialized radiologist. Positive findings were discussed at the multidisciplinary tumor board for potential treatment options according to best standard of care. The level of total cell free DNA (cfDNA) in plasma samples drawn at inclusion were measured by a direct fluorescence assay (as previously published). Blood samples were available from a cohort of healthy individuals.

Results: Twenty-nine patients were included. Four patients withdraw their consent, and the remaining 25 patients underwent screening MRI of the brain. The median age was 68 years (interquartile range [61-71]) and the majority males (68%). Twenty-one patients had active lung metastases, including six with lung-only disease, whereas four patients were included during follow-up after local ablative treatments. Mutational status in tumor tissue comprised 14 (67%) with KRAS mutations, seven wild-type, and four not done. Evidence of brain metastasis was detected in one patient (4.0%; 95%CI [0.1-20.4]). The cfDNA levels were significantly higher in the study cohort (median 0.73 ng/µl) compared to the healthy cohort (median 0.52 ng/µl, p < 0.001) and there was a tendency for higher cfDNA levels in patients with primary tumor in situ (p=0.14) and in patients with liver metastases (p=0.12). The cfDNA level was 0.81 ng/µl in the patient with BM and 0.72 ng/µl in the remaining. Numbers were, however, low for sub-analyses.

Conclusions: A single asymptomatic BM was detected but we did not find an incidence of BM, which justifies routine MRI of all patients in this selected population. Future studies should focus on identifying further characteristics and biomarkers associated with high risk of BM from CRC. This would enable early detection of BM, and thereby a possibility for early intervention, prolonged survival and improved quality of life. In accordance with the literature, we found a significantly higher cfDNA level in patients compared to healthy individuals.

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Stereotactic radiosurgery for palliative management of hepatocellular carcinoma associated with portal vein thrombosis

K. AbdelKarim<sup>1</sup>, W. Hamed<sup>1</sup>, M. ElGharib<sup>1</sup>, G. Esmat<sup>2</sup>, M. Darwish<sup>1</sup>, M. Elebrashi<sup>3</sup>

<sup>1</sup>Faculty of Medicine, Ain Shams University, Cairo, Egypt; <sup>2</sup>Faculty of Medicine, Cairo University, Cairo, Egypt; <sup>3</sup>Student Hospital, Mansoura University, Egypt, Mansoura, Egypt

**Background:** The life expectancy and treatment options for the patients with hepatcocellular carcinoma HCC presented with portal vein thrombosis are frustrating. This study aimed at evaluating the efficacy and safety of stereotactic radiosurgery SRS as a palliative treatment for this group of patients.

**Methods:** Between January 2020 and March 2021, we examined patients who are ineligible for local treatment of HCC (i.e., radiofrequency RF, trans- arterial chemotherapy TACE, or even liver transplantation) because they were diagnosed to have portal vein thrombosis PVT. We offered those patients SRS as palliative treatment. The selected dose of SRS was 40 Gy in 5 fractions while sparing  $\geq 700$  cc of the liver tissue. Patients should have ECOG performance status of 1-2 with no or minimal ascites and total bilirubin of  $\geq 2.5$  mg/dl.

Results: During the study period, 16 patients were enrolled, 12 were males, and only 4 were females. The median age of those patients was 62.4 years (range 48 to 72 years). They were all having Child- Pugh B or early C (7-9). All the patients had suffered from portal vein thrombosis PVT (of the main portal vein or one of its branches). The 6 months overall survival OS was 87.5%, and the radiological response rate RR (stable disease and decreased tumour size) was found in 75% of cases (12/16) by the 3 months follow up. The thrombosed portal vein showed radiological signs of recanalization in 50% of treated patients. Those patients showed reduced levels of alpha fetoprotein and improved levels of local pain compared to the pre-treatment levels. None experienced grade 4 adverse events. By the time of data analysis (September 2021) 8 patients were still alive.

**Conclusions:** SRS as a palliative treatment for advanced HCC is safe and effective in patients with good performance status. Such results need validation with multicentre randomized studies that would recruit more patients with longer follow up.

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PET/CT radiomic features to predict clinical outcomes in locally advanced pancreatic cancer

 $\frac{\text{M. Fiore}^1}{\text{R. Coppola}^3}, \text{ E. Cordelli}^2, \text{ P. Trecca}^1, \text{ G. Petrianni}^1, \text{ G. D'Ercole}^1, \text{ E. Ippolito}^1, \\ \text{R. Coppola}^3, \text{ M. Calcagni}^4, \text{ P. Soda}^2, \text{ S. Ramella}^1$ 

<sup>1</sup>Radiation Oncology, Campus Bio-Medico University, Rome, Italy; <sup>2</sup>Computer Science and Bioinformatics Laboratory, Integrated Research Centre, Campus Bio-Medico University, Rome, Italy; <sup>3</sup>General Surgery, Campus Bio-Medico University, Rome, Italy; <sup>4</sup>UOC Medicina Nucleare, Fondazione Policlinico Universitario Agostino Gemelli, IRCCS, Rome. Italy

**Background:** Innovative biomarkers to predict clinical outcomes in pancreatic cancer would be helpful in optimizing personalized treatment approaches. In this study, we aimed to develop PET/CT-based radiomic biomarkers to predict early progression in patients with locally advanced pancreatic cancer (LAPC).

Methods: Among one-hundred fourteen patients with LAPC treated at our institution with initial chemotherapy followed by curative chemoradiation (CRT) from July 2013 to March 2022, a secondary analysis with baseline 18F-FDG PET/CT images was conducted in fifty-seven patients. All pre-treatment PET/CT were performed at a single PET/CT Centre. Clinical factors as well as semiquantitative PET parameters, including standardized uptake value (SUV), metabolic tumor volume (MTV), and total lesion glycolysis (TLG), were also reported. Early progression (EP) was defined temporally as a progression at the first evaluation, at 3 months from the start of treatment. EP was evaluated by CT scan, resulting in a dichotomous label of progression. A 3D Volume of Interest (VOI) was placed over the primary tumour,

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