CRC RESEARCH #16

Sunday, October 21, 2007

1. Additional Evidence That Aranesp (darbepoetin alfa) Reduces Risk of Blood Transfusions

In cancer patients with chemotherapy-induced anemia (measured by levels of hemoglobin), use of red blood cell boosters such as Aranesp has been further shown to decrease the need for blood transfusions. Just as importantly, Aranesp did not affect survival and risk of cancer progression. *Ludwig H, et al., Patient Level Integrated analysis of Data from 6 Randomized, Double-Blind Placebo-Controlled Trials of Darbopoetin Alfa in Patients with Chemotherapy induced Anemia. Presented at European Cancer Conference. Barcelona, Spain. September 23-27, 2007. Abstract P#1104.*

2. Gene Linked with Response to Vectibix in CRC

A factor that may influence response to Vectibix is the activity of a gene known as KRAS. Treatment with Vectibix (panitumumab) benefited only those patients with tumors that lacked mutations in this KRAS gene. These findings were presented at the European Cancer Conference in Barcelona. Cancers that contain mutated forms of the KRAS gene may not respond to anti-EGFR treatments such as Vectibix. Hence, assessment of KRAS status may help identify those patients who are most likely to respond to Vectibix. *Amado RG, et al., Analysis of KRAS mutations in Patients with metastatic crc receiving panitumumab monotherapy. Presented at ECCO – 14 – the European Cancer Conference. Barcelona, Spain. September 23 – 27, 2007. Abstract 0007.*

3. Xeloda Increases 5 Year Survival in Colon Cancer

Newly released data from the University of Leeds published in the New England Journal of Medicine reconfirms that xeloda (capecitabine) increases the chance that colon cancer patients will survive 5 years compared with conventional chemo (bolus 5FU plus leucovorin). Xeloda improved relapse free survival by 14% and was associated with fewer adverse events than 5FU plus leucovorin. Furthermore, about 71% of patients given xeloda were still alive after 5 years compared to 68% of patients treated with the conventional regimen. *Press Release – Pharma Times, World News: Xeloda in Adjuvant Colon Cancer Therapy (X-ACT) Study Cohort. www.pharmatimes.com WorldNews/ViewArticle.aspx?id=11942*

4. 18F-DG PET/CT can highly increase the detection of colorectal cancer

Combined PET (positron emission tomography) and CT (computed tomography) is currently widely used in the clinical diagnosis of cancer to provide functional and morphological imaging. The value of PET/CT in detection of the reccurrence and/or mets of crc was recently confirmed in October's World Journal of Gastroenterology. PET uses the glucose analog 18 F-DG (18 Fluorodeoxyglucose) which is taken up by active tumours. High uptake results in a stronger or brighter signal in the scan. PET/CT imaging provides a whole-body overview in one examination, and can detect abnormal glucose metabolism before the morphological changes of a lesion can be identified. In the current study, the treatment plans of 16% of the cases were altered based on the PET/CT findings. Individualized treatment plans are the most important aspect of treating crc, as such PET/CT can indeed contribute to the treatment plan and subsequently prolong the life of the crc patient. *Chen LB, et al., 18 FDG PET/CT in detection of recurrence and metastasis of crc. World Journal Gastroenterology 2007; 13(37): 5025-5029.*

5. PET Also Useful for Cancer Prognosis

PET, the imaging technique typically used to identify the presence of disease may have an important future role in determining prognosis as well. Reporting in the September 4 Online First issue of *Cancer*, researchers show that positron emission tomography (PET) is useful in predicting treatment response and prognosis for various type cancer patients. FDG measures how rapidly tumours take up a radiolabelled glucose tracer. High uptake results in a stronger or brighter signal in the scan. **The researchers found that the higher the standard uptake value (SUV) for FDG in the primary tumour, the greater the rate of recurrence and the lower the rate of survival of patients.** SUV appears to be more predictive than current staging protocols (ie. Histologic features, volume of the tumour, and stage). SUV was associated with aggressive cancers (ie. Ovarian, lung, esophagus, head and neck). *Kidd, E, et al., Cancer. Published online September 4, 2007. www.medscape.com*

6. Virtual Colonoscopy Suggested as Initial Screening for CRC

Virtual Colonoscopy or Computed Tomographic colonography is an effective initial screening measure for the detection of crc. It is not as effective as a traditional optical colonoscopy, but physicians are optimistic that compliance rates may increase because it is not as invasive. A tube is inserted into the rectum and air is pumped into the colon until it is fully distended, the breath is held while lying on the back and a CT scan is performed. The same is repeated while lying on your stomach. *Pickhardt, P., et al., CT colonography versus colonoscopy for the detection of advanced neoplasia. The New England Journal of Medicine. 2007; 357: 1403-1412*

Advantages of Optical Colonoscopy:

- Direct visualization of entire colon to detect polyps, including smaller polyps (<1cm)
- Can remove suspicious polyps at time of exam
- Can prevent approx. 80% of crc from developing
- Less painful due to sedation
- Will not require as many follow up colonoscopies

Advantages of CT Colonography:

- Less invasive therefore will attract greater number of patients
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7. TACE (Trans-Arterial Chemoembolism) for the treatment of Colorectal Cancer Liver Mets

TACE or DC Bead microspheres – or drug eluting beads- both close off tiny blood vessels that feed cancer tumours and deliver chemo drugs directly to the tumours, killing cancer cells and shrinking tumours. The beads are injected into an artery in the groin and travel through blood vessels to tumours that have spread to the liver. There have been clinical trials performed involving DC Beads containing irinotecan (DEBIRI) whose results were superior to standard folfiri. *Fiorentini, G. ASCO Conference 2007 – Annual Meeting*