Scientific Symposium (Sun, 25 Sep, 14:45−16:45)
Tailored Chemotherapy in Colon Cancer

177 INVITED

The Genomic and Stem Cell Perspective

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This presentation comprises a review of recent progress in colorectal cancer genetics and some new data in this field. The latter will include findings on: (i) inherited determinants of 5FU and bevacizumab toxicity; (ii) paradoxical influences of telomere length on colorectal cancer susceptibility and prognosis; and (iii) the potential importance of intestinal stem cell numbers in cancer predisposition. The applicability of genetic testing to colorectal cancer prevention in the general population is also discussed.

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The Role of Microsatellite Instability in the Era of Personalized Medicine

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Microsatellite instability (MSI) is the molecular fingerprint of a deficient mismatch repair system. Approximately 15% of colorectal cancers (CRC) display MSI. The majority of these tumours are secondary to hypermethylation of the promoter of *MLH1* (sporadic MSI CRC). In addition, approximately 2−3% of MSI CRCs are caused by germline mutations in one of the mismatch repair genes *MLH1*, *MSH2*, *MSH6* or *PMS2* and are part of the presentation of the Lynch Syndrome (hereditary MSI CRC cases). A clinic-pathological profile of MSI tumours has been consistently described with recognizable features such as right-sided location, older age of diagnosis, lower pathological stage, characteristic histological tumour grade, mucinous presentation, prominent numbers of tumour infiltrating lymphocytes, absence of dirty necrosis, and the presence of a Crohn's like nodular infiltrate thus leading to the concept of an MSI phenotype in CRC. Multiple clinical studies have confirmed that MSI tumours result in a better prognosis than microsatellite stable (MSS) CRC; in fact, MSI tumours have a reduced likelihood of dissemination to lymph nodes and distant organs. However, MSI cancers do not necessarily benefit from the same chemotherapeutic strategies used to treat MSS tumours. Specifically, stage II cases with MSI cancers do not benefit from 5-Fluorouracil-based adjuvant chemotherapy regimens compared to MSS ones and have an inferior outcome. New data suggest a possible benefit for irinotecan-based regimens for MSI CRC, but these findings need further clarification. Moreover, data regarding the activity of Oxaliplatin in MSI CRCs is emerging but not conclusive at the present moment. Therefore, information on the MSI status has the potential to be informative on assisting the clinician in the selection of chemotherapy in the adjuvant and metastatic setting, although more data is needed. As the molecular basis of MSI CRC is elucidated, mutations in kinases and other candidate genes such as those involved in double strand break repair that harbor microsatellite tracts are clearly over-represented in MSI tumours and represent an opportunity to explore specific targeted therapeutics. We will review the data on the effect of targeted therapies against the PI3K-AKT-mTOR pathway and the use of PARP inhibitors in MSI CRCs, as well as other targeted agents. Some of these new therapeutic strategies have recently emerged from pathway-centered approaches that have examined the role of synthetic lethality in this tumour subtype. In addition, the use of systems biology approaches using meta-analysis of gene expression profiles of MSI tumours have provided with additional opportunities for targeting MSI tumours. These therapeutic strategies can be exploited not only in the context of treatment of hereditary and sporadic MSI tumours but also as chemopreventive agents for patients diagnosed with Lynch Syndrome.

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Optimal Approach on the KRAS Wild Type

Abstract not received

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Optimal Approach of the KRAS Mutant

Abstract not received

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The Angiogenesis Inhibition

Abstract not received

Scientific Symposium (Sun, 25 Sep, 14:45−16:45)
Joint ECCO and ASCO Scientific Symposium on Improving the Quality of Delivered Cancer Care by Tools and Guidelines

182 INVITED

Paedatrics as Model of Centralising Treatment of Rare Cancers

Abstract not received

183 INVITED

QOPI Project

Abstract not received

184 INVITED

Electronic Health Records and Other Health Information Technology and Their Ability to Measure and Improve Cancer Care

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Background: Cancer care has grown increasingly complex, in a relatively short time frame, making safe and optimal performance more of a challenge. In addition, it has become imperative to measure quality of ones cancer practice, and in some locations, such as the US, quality performance is linked to payment. Electronic health records (EHRs), and other health information technology (HIT) has the capability to positively impact both of these areas.
Methods: This presentation will be a compilation of the author's experience with HIT in regard to decision support to aid clinical performance, and in the measurement of oncology practice quality.
Results: The adoption of EHRs in the US has been slow in all settings, and particularly in medical and surgical oncology practices. There are relatively few vendors whose products adequately serve oncologists. Recently the Certification Commission on Health Information Technology (CCHIT) released criteria for oncology specific certification as well as criteria for clinical research certification. The establishment of these criteria, and the financial incentives for EHR adoption through government funding and reimbursement incentives, will hopefully increase EHR usage in the oncology community. EHRs already have the capability to provide substantial improvements in practice safety with aggregation of critical clinical information, standardization and decision support. In addition some EHRs are capable of monitoring practice performance, reporting the data, which can lead to performance improvement. In addition, EHRs have the potential to contribute data to large databases which can be used for research in unique and potentially very productive ways.
Conclusions: HIT has tremendous potential to improve oncology practice quality by live-time active use with decision support, and through performance measurement, as well as the aggregation of large informative databases.

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Eurocancoms Project − Multidisciplinary Guidelines Where are we?

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Guidelines, defined as systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances, are practice tools to guide clinical treatment and care. Cancer treatment and care is becoming more and more complex and multidisciplinary and interdisciplinary cooperation is of utmost importance to ensure an optimal approach for the individual cancer patient.
It is therefore important, that when these guidelines are developed, involvement of the stakeholders is ensured.
Between April 2010 and July 2010, an electronic questionnaire based on the "Appraisal of Guidelines Research and Evaluation" was developed and sent to the different European Cancer Organisations (ECCO) members and other Scientific European Organisations involved in cancer care. It contained a module on the multidisciplinary approach of the guidelines.
Thirty European Cancer Organisations were contacted and 70% responded to the questionnaire. Of these, 38% were not involved in the production of cancer guidelines.
Of the 13 organisations producing guidelines, 47% involved less than 3 oncology disciplines; 38% from 3 to 5 and 15% involved more than 5 oncology disciplines. There was no systematic composition of the guideline development groups.
The most common disciplines always involved were medical oncologists (7); radiation oncologists (6); surgeons (5) and nurses (5). Disciplines