Conference News

Are you organising an annual meeting or conference which you would like to tell our readers about? Or would you like to write a report on a meeting or conference of particular interest? If so, contact Patricia McDonnell at Oncology News on T/F: +44 (0)288 289 7023, E: patricia@oncologynews.biz

CIOCC Pancreatic Cancer Forum 2013

Date: 29-30 November 2013 **Venue:** Madrid, Spain.

Strategies to achieve earlier diagnosis and optimise outcomes by improving molecular profiling and subtyping with the goal of personalising treatment were key themes at the CIOCC Pancreatic Cancer Forum. More than 115 oncologists from Europe and North America met to hear about the latest developments and remaining challenges from leading specialists in the field.

"Pancreatic has the poorest survival of any solid tumour type, with a five-year survival of only 2%," warned Malcolm Moore, Princess Margaret Hospital, Toronto, Canada, adding that pancreatic cancer is the fourth major cancer in terms of mortality by cancer site. One of the major challenges is that most patients are diagnosed with advanced disease.


Prof Moore


Prof Hidalgo

To help achieve earlier diagnosis he explained how his centre, which sees around 350 new cases each year, introduced a new procedure to streamline diagnostic testing and reduce time to diagnosis. Before the programme, figures showed that the average time from the onset of symptoms to having an appointment at the centre was 70 days (range 7-210 days), including an average time to initial diagnostic tests of 31 days before referral and 12 days from referral to appointment. "This means three months from symptoms to treatment plan, meaning anxiety for the patient as well as increasing symptoms and poorer prognosis. We felt we needed to do better and set a new target of seven days."

All referrals are now centralised and triaged so that family doctors refer patients with symptoms suggestive of pancreatic cancer directly to the centre, which calls the patient and referring doctor within 24 hours. A nurse assesses the patient over the phone before pre-booking diagnostic tests, which are carried out at a one-stop new patient clinic. Every patient is seen by one research nurse, who discusses relevant studies based on results from genetic and molecular profiling. "We need to focus on getting things done quickly to give patients the best chance," he told the meeting.

To optimise treatment of resectable pancreatic cancer, Professor Moore said, "We need to think of it as a systemic disease. Adjuvant chemotherapy is now standard of care and improves cure rate by 10%." One-year survival in metastatic pancreatic cancer has increased from 2% to 40% over the past 15 years, mainly due to improved chemotherapy. "FOLFIRINOX and nab-paclitaxel plus gemcitabine achieve similar efficacy. But about 20% of patients don't get through more than four to six weeks of treatment with FOLFIRINOX while we don't see that with nab-paclitaxel/gemcitabine," he reported.

There is growing evidence that poor performance status (PS) patients, as well as good performance status patients, can benefit from some of the newer combination first-line treatments for metastatic pancreatic cancer, suggested Volker Heinemann, Ludwig-Maximilians University of Munich, Germany. The recent National Comprehensive Cancer Network (NCCN) guidelines recommend that patients with good PS are enrolled into a clinical trial or treated with FOLFIRINOX or gemcitabine plus nab-paclitaxel while poor PS patients should be treated with gemcitabine or best supportive care. "But subgroup analysis of a recent study showed improved overall survival with gemcitabine/nab-paclitaxel compared to gemcitabine alone in patients with poor PS (KPS 70-80), with a hazard ratio of 0.61," he reported.

Improved stratification and use of more effective therapies will also optimise outcomes in locally advanced/borderline pancreatic cancer, suggested Stefano Cascinu, Universita Politecnica della Marche, Acona, Italy. He considered that resectability should be assessed based on biological criteria, with unfavourable biology defined by CA19.9 levels over 200 U/ml, symptoms (pain) and poorly differentiated tumours, as well as technical factors based on involvement of the mesenteric vessels.

Outcomes in technically challenging borderline patients can be improved by extended surgery, including multivisceral and vascular resection, and ensuring surgery is carried out by high volume centres, as well as optimising neoadjuvant treatment with gemcitabine plus nab-paclitaxel or FOLFIRINOX and considering new radiotherapy techniques such as IMRT (intensity-modulated radiation therapy). For biologically challenging borderline patients, neoadjuvant treatment can treat occult metastatic disease and provide time during which to gauge the aggressiveness of the cancer before deciding whether or not to operate.

Concluding the meeting, Manuel Hidalgo, Centro Nacional de Investigaciones Oncologicas, Madrid, Spain, warned of the need for urgent action, "In a few years, there will be more deaths from pancreatic cancer than with breast cancer, which makes this disease a really significant burden." Genetic analyses show that it is a genetically complex, heterogenous and unstable disease and there are, as yet, no biomarkers for personalising treatment, but he reported promising results emerging with personalised approaches currently at pilot stage. ■

Susan Mayor, Medical Journalist.

World Federation of Neuro-oncology Conference – A 'Young Investigator' viewpoint

Date: 21-24 November 2013. **Venue:** San Francisco, California.

The 4th Quadrennial Meeting of the World Federation of Neuro-Oncology was held, in conjunction with the 2013 Scientific Meeting and Education Day of the Society for Neuro-Oncology, in San Francisco, California, in November this year. This meeting brings together members of the Society of Neuro-oncology (SNO), from North America, the Asian Society of Neuro-oncology (ASNO) and the European Association of Neuro-oncology (EANO) together with those from numerous nations across the globe. There was a healthy representation from the British Neuro-oncology Society (BNOS), with notable attendees from Birmingham, Bristol, Cambridge, Edinburgh, Liverpool, London, Nottingham, Portsmouth etc. presenting their recent clinical and research findings. In addition, there was a very healthy attendance from the British charity sector.

Among the attendees were several young UK-based researchers. Three of these, Katy Taylor a Portsmouth graduate undertaking a PhD in paediatric oncology in Chris Jones laboratories at the Institute of Cancer Research, Sutton, Lisa Hill, a Birmingham graduate working on glioma bioogy under the supervision of Anne Logan and Garth Cruickshank in Birmingham and Zaynah Maherally, a post-doctoral researcher involved in the role of the blood brain barrier in brain tumours in Geoff Pilkington's laboratories at Portsmouth, were asked to give their thoughts on what impressed them most from the numerous oral and poster presentations. Here is what they reported:

The meeting, which attracted around 2000 delegates, targeted neuro-oncologists, medical oncologists, neurosurgeons, neuroradiologists, neuropathologists, epidemiologists, basic and translational scientists. The programme aimed to provide valuable knowledge on current studies on epidemiologic factors associated with nervous system tumours and new research being undertaken on cell biology, tumour microenvironment, signal transduction, genomic, proteomic and metabolic complexity as well as angiogenesis and invasion in brain tumours. The conference also provided a better understanding of neurocognitive intervention strategies; how to create a challenging yet successful plan to diminish the impact of brain tumours and their treatments on patients and quality of life as well as how to wisely apply therapeutic strategies related on new research on genes that are associated with brain tumours. Attending this conference gave more insights to participants on how to utilise results of new clinical studies for central nervous system tumours for improved patient outcomes and symptom management initiatives to improve quality of life of brain tumour patients.

The conference was comprised of the Education Day and the main scientific meeting. The Educational Day entitled 'From Drug Discovery to Clinic' focused mainly on the main aspects of clinical development of agents beginning with pre-clinical testing which involved animal testing and models, pharmacokinetic, pharmacodynamics and drug delivery considerations. In particular, consideration was given to overcoming the problems of achieving successful penetration across the Blood-Brain Barrier (B-BB) and of the cellular and metabolic heterogeneity of primary brain tumours; both of which are central to Zaynah's current research. This was followed by 'first-in man' studies and the challenges encountered in clinical trials. The Drug Discovery to clinic sessions were of particular interest to us and we found the presentations targeting specific pathways by Paul Mischel and Preclinical modelling by C. Ryan Miller of great interest. This lecture really drove home the message of why targeting EGFR signalling pathways has proved so problematic. He stressed the dangers of using sub-therapeutic doses and concluding that targets need to be very carefully selected. Miller's presentation on pre-clinical *in vitro* and *in vivo* modelling was of great interest. Other presentations explored the difficulties in getting drugs across the blood brain barrier (Manish Aghi) and various possible ways of delivering therapeutic agents.

Concurrent sessions addressed the specific challenges of clinical design and specific pathways that are being evaluated in the pre-clinical arena. In addition, the Educational Day included a Quality of Life Session with talks highlighting Palliative Care, Symptom Management and Paediatric Quality of Life. Another welcomed module, targeting different cultures of society, entitled 'Overview of Palliative Care and Integration into the Trajectory of the Illness' was included in the programme and addressed cultural issues including models of care in Europe, Australia and Asia.

The main scientific meeting was built on the traditional SNO format presenting top-scoring abstracts, keynote speakers and early morning sessions. The opening session highlighted current techniques for 'Maximal Safe Resection of Glioma', 'Paediatric Genomics Update' and 'Innovative Quality of Life Programs' in the Clinic Settings as well as Abstract Award Presentations in 'Pathology/Genomics' sessions followed by high-quality talks dealing with 'Angiogenesis and Invasion' and 'Paediatric Clinical'. The main meeting agenda also focussed on 'Facts, Controversies and Future Challenges' together with aberrant 'Signalling Pathways' and 'Clinical Trials for Low Grade Glioma'.

The main SNO scientific meeting was heavily loaded with genomic analysis trying to identify patterns in glioblastoma gene profiles and specific mutations which were common across different patient cohorts. These sessions very interesting and it was noted that most research was focussed around EGFR signalling in particular. Several approaches to TCGA were discussed in relation to multiple layers of genomic information at the mRNA and microRNA level. The only consistent issue from these talks was the regulatory role of methylation, rather than specific gene patterns across patient cohorts. Colin Watts gave a very nice summary session on the multifactorial approach to targeting and identifying heterogeneity (both within and between patients). This was particularly relevant to Lisa's own project which explores EGFR blockade using a naturally occurring glycoprotein as a possible uniform targeting principle. It was apparent that the age-old problems are still relevant – in particular, how to target tumour heterogeneity. It seems that the presentations at this meeting generated more questions than answers. From a paediatric standpoint - particularly appropriate to Katy's PhD field of study - there were a whole host of informative talks on childhood brain tumours, including low and high grade

gliomas, diffuse intrinsic pontine gliomas (DIPGs), medulloblastomas, CNS primitive neuro-ectodermal tumours (CNS-PNETS), Atypical tetratoid/ Rhabdoid tumours (ATRT), gangliomas (GGs) and dysembroplastic neuroepithelial tumours (DNTs). Of particular interest were those following up research into the consequence and targeting of gliomas that habour K27M mutations in histone H3, which was first described only 18 months ago. Two talks described published data demonstrating the global reduction of di and tri methylation in these mutant tumours. Dr Zhiguo Zhang reported this dominant mutation effect linking with its ability to reprogram epigenetic landscape and gene expression. Whereas Dr Sriram Vennetti utilised IHC to show decreased H3K27 tri-methylation and its inhibition of EZH2 activity. Award winning speaker Dr Rintaro Hashizume presented very promising data in targeting H3K27M mutant tumours, showing inhibition of cell viability and colony formation *in vitro* and reduction of tumour growth *in vivo* using GSK-J4, a selective inhibitor of the H3K27 demethylase JMJD3. Among the range of posters there were several focused on different research aspects of paediatric glioma. Starting with development, Dr Carretti (M.Monje lab, SU, USA) presented work on the neuro-glial interactions in the pontine micro-environment, looking at the effects of neuronal activity on neural stem and glial precursor cells within orthotopic DIPG mouse models. For preclinical models, Dr Marigil (M. Alonso lab, HSJD, Spain) highlighted an implantable guided-screw system to successfully create DIPG orthotopic models. Also, Kelly Barton (O.Becher lab, DU, USA) presented genetically engineered PDGF-B-driven brainstem glioma mouse models, of which they found their PDGFBB;Ink4a-ARF deficient model responded to CDK4-6 inhibition. Finally an early phase trial using irinotecan and carboplatin to treat relapsed paediatric high grade glioma patients, presented by Dr Filipek (CMHI, Poland), saw promising results for the regimen with acceptable toxicity.

These poster viewing sessions allocated on each evening during the main meeting gave us the opportunity to talk with various professors and other scientists about our work and establish where it may fit in with projects of other researchers. As early career scientists, these meetings are very useful to network and be surrounded by leaders in the field.

Overall, we found this meeting was highly valuable, not only to see the exciting new developments in research that directly relate to our individual research interests, but also to gain greater understanding of the field of CNS tumours. ■

Report by: Katy Taylor BSc, Glioma Team, Divisions of Molecular Pathology and Cancer Therapeutics, The Institute of Cancer Research, Sutton.

Lisa Hill BMedSci, Group of Neurotrauma and Neurodegeneration, University of Birmingham.

Dr Zaynah Maherally BSc MSc PhD, Cellular and Molecular Neuro-oncology Research Group, University of Portsmouth.

BNOS 2014

Date: 9-11 July 2014. **Venue:** Liverpool, UK.

The British Neuro-oncology Society (BNOS) is the only UK multidisciplinary society dedicated to advances in research and the treatment of adult and paediatric brain tumours. Our annual meeting attracts delegates from all clinical neuro-oncology specialties (including representatives from neuro-surgery, neuro-oncology, neurology, neuroradiology and neuropathology), clinical nurse specialists, charities and basic scientists who lead the field in neuro-oncology research. Our annual meetings are well attended, sociable and stimulating and serve as a platform for networking and formulating the essential collaborations to drive forward brain tumour research.

BNOS 2014 will be held in Liverpool from 9th-11th July in the John Lennon Art and Design Building, John Moores University, which is adjacent to the Liverpool Metropolitan Cathedral. The theme of the meeting will be "Contemporary Approaches to Paediatric and Adult Brain Tumours", with a topical programme of relevance to both clinicians and scientists. The Education Day on 9th July will have parallel sessions presenting state of the art clinical management for clinicians and state of the art science for scientists, designed to provide an excellent training opportunity for young clinicians and scientists.

In parallel to the main BNOS meeting on 10th and 11th July there will be separate symposia for Nurses and other Allied Health Care Professionals on "Contemporary approaches to the clinical care of adult and paediatric brain tumour patients". The nursing and AHP symposia proved to be very successful in BNOS 2013 and we hope that these sessions will prove equally popular in 2014.

British Neuro-Oncology Society

In addition to plenary speakers of international renown, there will be proffered presentations and posters, with a call for abstracts in February. There will also be a Young Investigators Award details of which may be obtained from the BNOS website again in February. ■

For further information visit: www.bnos.org.uk