Content

Special Clinical Session – Strategies for Progress
ANR Nurses Special Session
Charities Special Session
"Errata"
Special Session Abstracts
Updated programme

13:00 – 14:15 Tuesday June 22nd
Hall B
Special Clinical Session – Strategies for Progress
Chairs: Kate Matthay and Frank Berthold

Opening
13.00-13.04 Introduction
Kate Matthay, United States and Frank Berthold, United States

Group Qualifications
13.04-13.16 SS2 John Maris, United States Page 87
13.16-13.28 SS3 Ruth Ladenstein, Austria Page 87
13.28-13.40 SS4 Thorsten Simon, Germany Page 87

Challenge Round
13.40-13.45 Michelle Haber, Australia
13.45-13.50 Michio Kaneko, Japan
13.50-13.55 Godfrey Chan, Hong Kong
13.55-14.00 Nai-Kong Cheung, USA
Alt. 13.40-14.00 Invited Discussants

Finals
14.00-14.10 General discussion
14.10-14.15 Conclusions
Kate Matthay and Frank Berthold
Updated programme

14:30 – 16:00 Tuesday June 22nd
Room 403
ANR Nurses Special Session with focus on Late-effects

Special programme for nurses in pediatric oncology and other interested.
Hosted by ANR 2010 Nurses Committee; Pernilla Pergert, Karin Enskär, Per Kogner
Chairs: Karin Enskär and Pernilla Pergert

14:30  SS5 A national education for nurses in pediatric oncology care in Sweden
       Enskär Karin, Sweden

14:45  POC18 Illness experience and factors that constitute resilience in families with a neuroblastoma child
       Lee Ya-Ling, Taiwan

14:50  POC19 The impact of a multidisciplinary team approach in the case management of neuroblastoma
       Liu Yen-Lin, Taiwan

14:55  POC22 Role of nursing in the implementation of chimeric anti-GD2 antibody with immunotherapy (ANBL0032) into clinical practice
       Mills Denise, Canada

15:00  C10 Late outcomes after treatment for neuroblastoma
       Diller Lisa, United States

15:10  PL36 Long-term toxicity in survivors of ENSG5 trial for children with high-risk neuroblastoma
       Moreno Lucas, United Kingdom

15:20  PL35 Long term outcome: the price of treatment for surviving high-risk neuroblastoma
       Hero Barbara, Germany

15:30  SS6 Perspectives on late outcomes of a patient, a parent and a physician
       Edgardh John, Sweden; Edgardh Ingrid, Sweden; Evans Audrey, United States

15:50  Discussion
13:00 – 15:30 Wednesday June 23rd
Room 403
Charities special session

Meeting’s for charities representatives and other interested
Hosted by the Swedish Children’s Cancer Foundation.

Updated programme
13:00 – 14:30 Wednesday June 23rd
Room 403
Charities special session with focus on palliation and grief with aspects of cultural differences
Meeting’s for charities representatives and other interested
Hosted by the Swedish Children’s Cancer Foundation.

Chairs: Olle Björk and Margareta af Sandeberg

13:00 Welcome, an introduction to the session by the secretary general of the Swedish Children’s Cancer Foundation
Björk Olle, Sweden

13:10 SS7 Sweden’s first hospice for children
Kumlien Catharina & Edner Ann, Sweden

13:30 SS8 Cultural differences in pediatric oncology and palliative care
Pergert Pernilla, Sweden

13:45 SS9 The Bereavement Visit in pediatric oncology
Isaac Yaniv, Israel

14:00 SS10 Psychological morbidity in parents following the loss of their child to cancer – What can we do to help?
Kreicbergs Ulrika, Sweden

14:15 SS11 A Nordic cross-professional working group on ethics
Castor Anders, Sweden

14:30 Discussion and conclusions
“Errata”

Tuesday

14:30 – 16:00  Tuesday June 22nd
Hall B
Workshop 3 – Next generation sequencing techniques in neuroblastoma genomics
Organizers: Ingrid Öra and Tommy Martinsson
Chairs: Javed Khan and Tommy Martinsson

15:00  WS19  Next-Generation Sequencing to characterize somatic alterations in
neuroblastoma samples
Olivier Delattre, France

Speaker replaced by Isabelle Janoueix-Lerosey

Thursday

08:00 – 09:00  Thursday June 24th
Hall A/B
The Road to Stockholm and Beyond 4
Chairs: Olivier Delattre and Murray Norris

Michio Kaneko and Murray Norris

13:00 – 14:30  Thursday June 24th
Hall C
Parallel session 11 – Prognostic factors and markers
Chairs: Kurkure Puma and Dominique Valteau-Couanet

Tushar Vora and Dominique Valteau-Couanet

14:30 – 16:00  Tuesday June 22nd
Hall A
Parallel session 3 – Immunotherapy
Chairs: Holger Lode and Jean Michon

Holger Lode and Alice Yu

Posters

POT68  Bi-directional regulation of the wild type of ALK in neuroblastoma: its high
expression in stage 4S tumors and transcriptional activation by MYCN and Sp1
Akihito Takahashi; Hego Asmaa; Aijker Rahman; Kamru Hasan; Daisuke Takagi; Yasutoshi Tateum;
Miki Ohira; Shamin Hossain; Jeemin Adler; Afsuke Nakagawa; Akira Nakagawa
Japan
POT 68 Withdrawn
SS3 Strategies to improve outcome and quality of life in patients with neuroblastoma: Activities of the SIOPEN European Neuroblastoma Group

Ladenstein, Ruth
Austria

Becoming a legal entity has allowed the SIOPEN platform to grow beyond European Community FP5 funding when SIOPEN-R-NET research platform was created and currently 20 countries are engaged in the trial portfolio and research tasks.

The ongoing High-risk neuroblastoma trial HR-NBL1/SIOPEN is recruiting well and has now reached a total of 1424 patients. The first randomisation within this study has shown an important role for G-CSF during Rapid Cojec induction (Ladenstein, J Clin Oncol, in press). Recruitment for the high dose therapy question will be closed within a year having accrued 566 randomised patients so far. The recent results of the COG Study ANBL0032 had major implications on our immunotherapy arm and HR-NBL1/SIOPEN study was amended. It compares now the treatment with retinioc acid and antibody ch14.18/CHO versus ch14.18/CHO RA and additional I-MIBG (Simon, Thorsten, Netherlands).

Having become partners within the SIOPEN EC - FP7 project ENCCA (European Network for Clinical Research in Children and Adolescents) we are thrilled that the project was granted by the EC having developed ch14.18/CHO over the last 8 years on the basis of Europe-wide fund raising support. We have been developed for analysis of such data. However, most of them require specialist bioinformatic support or are time consuming or are not integrated in one user-friendly platform. We developed a tool for basic and advanced analysis of such data, called R2. This web-based tool enables swift and user-friendly analyses by any interested researcher. We have generated expression profiles of a series of 88 neuroblastoma tumors, as well as from a limited number of ganglioneuromas and ganglineuroblastomas. The series is annotated for clinical and molecular parameters. R2 enables to analyse expression values for any gene, establish its prognostic value and find correlating patterns with other genes. It also permits global expression analysis and prognostic ordering for gene sets, which can be formed by KEGG pathways, functional groups, etc. For patient expressed genes can be efficiently be identified within annotated parameters, like age, stage, histology etc.

Any resulting gene list can be analysed for pathway or gene ontology enrichment, or be visualized in heat maps. Finally, the R2 tool and database includes Affymetrix expression profiles of over 20,000 normal and tumor samples from other tissues, grouped per tumor or tissue type. This enables to search for expression profiles of specific genes over a wide range of tissues. The web-based R2 analysis tool and database will be made publicly available at the ANR.

The long-term objectives of our committee rely on continued robust specimen collection and annotation to support the discovery and validation efforts required for a personalized approach to neuroblastoma diagnosis, prognostication, treatment and surveillance. Ongoing projects focused on discovery of oncogenic drivers, detection of rare residual tumor cells and identifying genomic signatures of tumor behavior will all be highlighted in ANR2010, and will be integrated into future clinical trials. For patients with high-risk disease, the recent demonstration that passive immunotherapy with ch14.18 combined cytokines (alternating GM-CSF and IL2) to improve antitumor effects of cellular cytotoxic reactions dramatically improves survival rates when administered shortly after myeloablation therapy (Yu et al., NEJM in press) will provide the new baseline for which future studies will be compared. Ongoing clinical research is focused on further defining the toxicities associated with this regimen, and future studies will seek to further improve efficacy (e.g. hu14.18-IL2) and/or reduce toxicity. A parallel major goal is to improve the quality of induction/consolidation response to cytotoxic therapy. Major efforts include plans test the efficacy of i1-MIBG in frontline therapy in a randomized controlled trial, and to integrate molecularly targeted agents into the current chemotherapy backbone of induction therapy. Inhibitors of ALK, IGF1R and AURKA are lead candidates at this time, but it is clear that a major obstacle is ANR2010, and will be integrated into future clinical trials. For patients with high-risk disease, the recent demonstration that passive immunotherapy with ch14.18 combined cytokines (alternating GM-CSF and IL2) to improve antitumor effects of cellular cytotoxic reactions dramatically improves survival rates when administered shortly after myeloablation therapy (Yu et al., NEJM in press) will provide the new baseline for which future studies will be compared. Ongoing clinical research is focused on further defining the toxicities associated with this regimen, and future studies will seek to further improve efficacy (e.g. hu14.18-IL2) and/or reduce toxicity. A parallel major goal is to improve the quality of induction/consolidation response to cytotoxic therapy. Major efforts include plans test the efficacy of i1-MIBG in frontline therapy in a randomized controlled trial, and to integrate molecularly targeted agents into the current chemotherapy backbone of induction therapy. Inhibitors of ALK, IGF1R and AURKA are lead candidates at this time, but it is clear that a major obstacle is ANR2010, and will be integrated into future clinical trials. For patients with high-risk disease, the recent demonstration that passive immunotherapy with ch14.18 combined cytokines (alternating GM-CSF and IL2) to improve antitumor effects of cellular cytotoxic reactions dramatically improves survival rates when administered shortly after myeloablation therapy (Yu et al., NEJM in press). However, special emphasis on patient subsets with continued suboptimal outcomes, such as very young infants with INRG Stage M5 disease, older children with Stage L2 disease and unfavorable genomic features, and the adolescents and young adults with any stage of disease, will require international cooperation and harmonization of approaches.

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Nurses programme

SS5
A National education for nurses in pediatric oncology in Sweden
Enskär, Karin1, Olle Björk2, Ildiko Marky2, Kirsti Pekkanen2, Pernilla Pergert2
1 Department of Nursing Science, School of Health Science, Jönköping University, 2 Childhood Cancer Research Unit, Department of Women’s and Children’s Health, Karolinska Institutet, Stockholm.

A new, advanced education in Pediatric Oncology Nursing Care for nurses in Sweden has been carried out, in three educational programs, during 2002-2010. The education was a joint venture between the University of Gothenburg, Sweden and The Swedish Children’s Cancer Foundation who finance part of the education. The goal of this education was twofold: to bring about a broader knowledge in child oncology and nursing and lay a ground for future research for nurse in Nursing Science in Pediatric Oncology Care. Based on the criteria to admit nurses from Sweden’s six Child Oncology Centres as well as from county hospitals caring for children with cancers 62 nurses were selected.

Each two-year program comprised two parts: Nursing Science in Pediatric Oncology Care (30 ECTS credits) and Medical pediatric oncology (15 ECTS credits). Between intensive educational periods of four 5 day blocks each, the students completed clinical practice and individual and group assignments. The intensive blocks included lectures, discussions and workshops in groups. The examination comprised written exams, independent essays and oral tests as well as developing an Standardized nursing care program related to a specific diagnose such as Neuroblastoma.

The evaluation shows that the education answered to the need and expectations of the participating nurses. They also felt privileged to have had the opportunity to increase their knowledge. The increased knowledge gave the nurses a higher security in their nursing role based on a broader knowledge in pediatric oncology and a greater awareness of the varying needs of the patients’ and their families. It is important in the future to offer nurses opportunity to advanced education in order to enable them to further their skills in pediatric nursing care and allow them to take part in research.

SS6
Perspective on late effects of a patient and parent
Ingrid Edgardh and John Edgardh, Solentuna, Sweden

Four years old John was diagnosed with high-risk neuroblastoma stage 4 with his primary tumour in the adrenal, bone metastases in the skull and tumour cells in the bone marrow. At presentation he had suddenly started to squint. He had elevated intracranial pressure due skull metastases and thrombosis. John was treated with OPEC/OJEC chemotherapy, surgery, radiotherapy to the abdomen during surgery and to the skull metastases, high-dose chemotherapy with stemcell rescue and treatment with 13-cis retinoic acid.

Today John is 18 years old. He seems to be free from the neuroblastoma but his daily life is affected by late effects of the disease and treatments. John is smart and humorous; today he is a strong and colourful person. He has payed a prize of treatment for surviving high risk neuroblastoma. In the seminar John will for the first time in public tell about his perspectives of being a survivor.

When John started to recover after the treatments his difficulties slowly became obvious although his first years was clouded by the fear for relapse. Meanwhile John and his family struggled with his severe difficulties to concentrate and to remember, his ticing, an enormous fatigue, pains in his legs and stomach and difficulties in school. The family all had to learn what it meant to live with hidden disabilities and the demands it made on the family. His parents have had a very long struggle to get proper support for John and to find a school with pedagogical skills. The knowledge of how to support a child with a different brain function caused by neuroblastoma and its treatment is lacking.

The last 13 years has taught me, his mother, to live on the thin line between hope and despair. It has taken our family to places with different views of the landscape of life. Some of them have had a painful beauty, some has just been too heavy, and there have been moments of overwhelming luck. During these years we have learned the importance of transforming the meaningless to something constructive and enjoy our lives. Most important we have had the luck to see John and his two siblings growing in midst of our family.

An extract from the book Can I Die, Mummy? (Kan jag dö, mamma? Alfabeta, 2005, translation by Sarah Death) written as an attempt to explain what cancer can do in a family:

“One day, death came to visit. He didn’t bother to ring the bell, just walked straight in, pulled out a kitchen chair and took a seat. As if that was okay.”
The Bereavement Visit in Pediatric Oncology

Ann Edner
Stockholm, Sweden.

In September 2010 the first hospice for children and youth will open in Sweden. It has been a lot of prework done making this possible. Looking outside Sweden we see the world’s first hospice for children and youth opened in Oxfordshire, UK, in November 1982 and shortly thereafter the United States got the same. Children’s hospice care focuses on life and living. Providing hospice services for children and youth with life-threatening conditions and their families presents an uniquely difficult and rewarding task. One of the challenges faced is that many pediatric referrals come to hospice very late. Parents need the support of hospice care services, but are not willing to give up on aggressive therapies for their child/youth. The first Swedish Hospice for Children and Youth will be placed at Erstads gård south of Stockholm and have the capacity to take care of 7 children with their families. It will be open for incurable, progressive sickness, but also for irreversible non-progressive sickness where the parents need to be relieved pressure. Preferably patients from the Stockholm area will be referred to the Children’s Hospice, but it will also be possible to send patients from outside Stockholm.

The palliative care will include medical personnel (nurses, doctor), physiotherapist, occupational therapist, psychologist, care for the soul/spirit. We also think that complementary treatment is very important, for example we will introduce the first therapy dog in pediatric care. She is a labrador called “Livia”.

Cultural differences in paediatric oncology and palliative care

Pernilla Persson1, Solvig Ekbäck2, Karin Enskål2 and Olle Björk3
1 Dept. of Women’s and Children’s Health, Karolinska Institutet, Stockholm, Sweden, 2 Dept. of LIME, Karolinska Institutet, Stockholm, Sweden, 3 Dept. of Nursing Science, School of Health Sciences, Jönköping University, Jönköping, Sweden.

Paediatric cancer, including Neuroblastoma, often entails demanding circumstances for families, and the healthcare staff. The interactions between the staff and the patient's family, which stands in contrast to the go-it-alone vacuum of the empty and lonely time in which the family now must find their way. Detachment from the oncology unit is added to the long list of decontextualizing tasks that the family must perform as part of their work of grieving. Conversely, oncology staff members also deal with distressed patients from the hospice area, and the deceased: sublimation of this process into the hectic daily routine of the ward can lead to unresolved emotional needs surrounding the issues of death and mourning and, possibly, to the burn out so often encountered in those who work with children with cancer.

A bereavement visit by the oncology staff is a way of filling this void. It may also facilitate the early phases of mourning for the family and give the staff profound insight into the tragic drama in which they had recently participated.

Our staff has performed bereavement visits for more than 20 years. Families have come to expect these visits, and they have become as much an integral part of our end-of-life care program as the administration of analgesic medications. Every family is visited, even if they live far from our facility. These home visits are part of an integrated program that we provide for bereaved families that includes a condolence letter by the department chair, small support groups for parents and siblings during the first year after the child's death, and larger meetings of bereaved parents for formal lectures and informal discussions. The visit team includes the child's primary physician, a nurse to whom the patient was particularly close, and the family's social worker.

Various aspects of the bereavement visit, including difficulties encountered, will be presented based on our experience.

Psychological morbidity in parents following the loss of their child to cancer – what can we do to help?

Ulrika Kreicberg
Karolinska institutet, Stockholm, Sweden

The loss of a child is described as one of the most stressful life events possible. The grief following the loss of a child is more intense and longer lasting than any other losses. Bereaved parents are at increased risk of psychological morbidity. Yet, no time frame has been established. Some studies suggest it might take about four to six years to work through the loss of a child. Even though it is a traumatic experience most parents come to terms with the loss over time. Before the loss, caused by illness, parents are commonly exposed to protracted physical and emotional suffering of the child. A number of factors may impact the bereavement outcome e.g. other losses, financial problems, pre-morbidity, all factors that cannot be managed or avoided within the healthcare setting. Even the age and gender of the child has been found to affect parental bereavement outcome. For fathers the risk of anxiety and depression is greater after the loss of an older child, i.e. above the age of eight. Their risk of anxiety and depression is nearly twice as high compared to fathers losing a younger child. No such risk related to the child's age is seen in mothers. In addition to the age, gender of the child affects mothers and fathers differently. None of these risk factors can be managed or avoided in health care. Still, it may be of importance for clinicians to be aware of them in their daily work with families.

Some factors are modifiable or even avoidable in the health care. The child's suffering e.g. from unrelied pain is known to affect bereaved parents. Not having clinicians present at the moment of death increases parents' likelihood of reporting bereavement pain and in addition also a difficult moment of death. Location of the child's death is another factor demonstrated to impact bereaved parents morbidity. Fathers are less likely to suffer from depression if the child dies at home. Yet, it may be questioned whether it is the actual location of the child's death that is of importance or the planning of it that is important. The latter leads us to the signifiicance of communication in paediatric palliative care and parental bereavement.

In pediatric palliative care communication is possibly of the same importance as the knife in surgery. Open and honest communication has been emphasized. However, to inform families when care shifts from curative to palliative is a challenging task. Clinicians should offer parents special support during this time. It has been found that support to parents as late as during the week of the last month improves their grieving process. Communication about the child's prognosis has proven valuable for the bereavement outcome. Most parents want to be fully informed, yet clinicians fear this type of communication. Parents who have been informed by clinicians that their child's death is imminent are, not surprisingly, more likely to be aware of the pending death. Parental awareness impacts a number of factors e.g. tailoring the child's care according to their wishes. Home care and even home deaths is more likely to be considered if parents are aware of their child's death being imminent. Parents being aware of the child's imminent death are more likely to talk about their child. Such an approach has been shown to reduce the risk of psychological morbidity in bereaved parents. If the parents perceive the child to be aware of his or her imminent death this is the strongest factor of actually talking about death. Many children in paediatric palliative care are unable of any type of communication because of age, birth defects or illness. When the child is unable to communicate mothers are more likely to think that it would be best for the child to die. This does not apply to fathers; they are less concerned about lack of communication.
Assisting grieving families is an important part of pediatric palliative care. It should start already at the time of the child’s diagnosis. Bereavement support has been studied but with conflicting results. Several studies have shown both professional and social support to be beneficial for parents’ grief outcome, but not all parents find it helpful. Some parents want to cope on their own, with or without support from family or friends. To identify parents at risk for pathological grief reactions is a challenge for clinicians. Tailored support to those who need it most is the goal.