Centro Nacional de Investigaciones Oncológicas (CNIO)
(Spanish National Cancer Research Centre)

CNIO Cancer Conference: PTEN and the AKT route
Madrid, May 8-10, 2006

Organisers
Ana Carrera, Centro Nacional de Biotecnología, CSIC, Madrid, Spain
Pier Paolo Pandolfi, Memorial Sloan-Kettering Cancer Center, New York, USA
Peter Vogt, Scripps Research Institute, La Jolla, USA

Monday - May 8, 2006

Welcome Address
9:30 Mariano Barbacid - CNIO Director

Session 1: PI3K function in disease
09:40 Lewis Cantley - Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, USA
The role of PI3-Kinase in Cancer
10:20 Ana Carrera – CNB, CSIC, Madrid, Spain
PI3K isoforms in Health and Disease
11:00 Matthias Wymann - University of Basel, Switzerland
Mixed partners for PI3Kgamma in allergy and inflammation
Coffee (11:40)
12:00 Peter Vogt - Scripps Research Institute, La Jolla, USA
The Oncogenicity of PI3-Kinase
12:40 (Short talk) Amancio Carnero - CNIO, Madrid, Spain
Mice expressing myrAKT1 in the mammary gland developed carcinogen-induced ER positive mammary tumors that mimic human breast cancer
13:00 Emilio Hirsch - Torino University, Turin, Italy
Kinase-dependent and independent function of PI3Kgamma distinctly controls cardiac hypertrophy and contractility
13:40 Bart Vanhaesebroeck – Ludwig Institute for Cancer Research, London, UK
Key role for the p110alpha PI3K in growth and metabolic regulation
Lunch (14:20)

Session 2: mTOR, an effector regulating cell growth
15:30 Nahum Sonenberg - McGill University, Montreal, Canada
The role of the elf4E/4E-BPs downstream targets of the PTEN/Akt/mTOR signaling pathway in cancer
16:10 George Thomas - University of Cincinnati, Cincinnati, USA
The Role of the Nutrient Input in TSC1/2-Rheb Mediated mTOR signalling
Coffee - Poster session (16:50)
17:30 David Sabatini - MIT, Cambridge, USA
Regulation of growth by the mTOR pathway
18:10 Brian Hemmings - Friederich Miescher Institute, Basel, Switzerland
Mechanisms of PKB/AKT regulation by hydrophobic motif phosphorylation, and in vivo functions revealed by gene ablation
Tuesday - May 9, 2006

Session 3: PDK1 and FOXO, the pathway from membrane to the nuclei
9:30  Domenico Accili - Columbia University, New York, USA
Regulation of metabolism and cellular differentiation by the forkhead transcription factor Foxo1
10:10 (Short talk)  Han You - The Campbell Family Institute for Breast Cancer Research, Toronto, Canada
Regulation of transactivation-independent pro-apoptotic activity of p53 by FOXO3a
10:30  Anne Brunet - Department of Genetics, Stanford University, USA
FOXO transcription factors in longevity
Coffee - Poster session (11:10)

Session 4: PTEN, the master pathway downregulator
12:20  Pier Paolo Pandolfi - MSKCC, New York, USA
The tumor suppressor network in the regulation of PI3K/mTOR signaling
13:00  Tak Mak - Toronto University, Toronto, Canada
Beyond PTEN mutations: the PI3'K pathway as an integrator of multiple inputs during tumorigenesis
Lunch (13:40)
15:00  Ramon Parsons - Columbia University, New York, USA
PTEN and PI3K pathway alterations in breast cancer
15:40  Rafael Pulido - Centro de Investigación Príncipe Felipe, Valencia, Spain
Nuclear PTEN: a tale of many tails
Coffee - Poster session (16:20)
17:00  Peter Downes - University of Dundee, UK
Negative regulation of PTEN by reactive oxygen species and phosphorylation
17:40  Xuejun Jiang - Memorial Sloan-Kettering Cancer Center, New York, USA
Regulation of PTEN by Ubiquitin-Mediated Proteasomal Degradation

Wednesday - May 10, 2006

Session 5: Therapy based on PI3K/AKT/mTOR pathway interference
9:30  Neal Rosen - Memorial Sloan-Kettering Cancer Center, New York, USA
Title to be confirmed
10:10  Paul Workman - Cancer Research UK Centre for Cancer Therapeutics, The Institute of Cancer Research, Sutton, Surrey, UK
Drugging the PI3 kinase pathway for cancer treatment
10:50  Anke Klippel - Merck Research Laboratories, Boston, USA
Effectors of deregulated PI 3-kinase signaling that mediate malignant cell growth
Coffee - Poster session (11:30)
12:00 (Short talk)  Jesús Paramio, CIEMAT, Madrid, Spain
Deregulated Akt expression induces developmental alterations in ectodermal organs and spontaneous tumours in the skin and the oral cavity
12:20  Suzanne Baker - St. Jude Children's Research Hospital, Memphis, USA
PTEN Signaling and Growth Regulation in Brain
13:00  Eric Holland - Memorial Sloan-Kettering Cancer Center, New York, USA
La, Perifosine, and preclinical trials of gliomas
Poster Prize Announcement and Closure (13:40)
Lunch (13:45)
List of posters (in alphabetical order of presenting author)

1. **Amparo Andrés-Pons** - Centro de Investigación Príncipe Felipe, Valencia, Spain
   Functional analysis of human PTEN mutations

2. **Andreas Bader** - The Scripps Research Institute, La Jolla, USA
   Phosphorylation by Akt disables the anti-oncogenic activity of YB-1

   RPS6KA2, a putative tumour suppressor gene at 6q27 in sporadic epithelial ovarian cancer

4. **Raquel Blanco** – CNIO, Madrid, Spain
   Inactivation of LKB1 in cancer affects the control of AMPK/mTOR and cell viability upon energetic stress

5. **John Brognard** – UCSD, San Diego, USA
   Differential termination of Akt signaling by a second isoform of the novel phosphatase PHLPP

6. **Carlotta Costa** - University of Torino, Torino, Italy
   Constitutive delocalization of PI3Kgamma selectively blocks chemotaxis by altering PtdIns(3,4,5)-P3 polarization

7. **Pedro Cutillas** - Ludwig Institute for Cancer Research, London, UK
   Absolute quantification of PI3K/Akt signal transduction

8. **Mercè de Frias** - IDIBELL- Universitat de Barcelona, L'Hospitalet de Llobregat, Spain
   Regulation of Akt/PKB by phosphatidylinositol 3-kinase-dependent and -independent pathways in B-cell chronic lymphocytic leukemia cells: role of protein kinase Cbeta

9. **Rachelle Dillon** - McGill University, Montreal, Canada
   The role of Akt-2 in mammary gland development and tumourigenesis

10. **Angelos Garcia-Pardo** - Centro de Investigaciones Biológicas (CIB), Madrid, Spain
    Interference with the Akt/NF-kappaB survival pathway by the depsipeptide AT514 induces apoptosis in B-cell chronic lymphocytic leukemia cells

11. **Severine Gharbi** - LICR London Branch, London, UK
    Exploring the specificity of LY294002, a well established inhibitor of the PI3Kinase family

    Hunt For Novel Interactors of Akt2 Kinase

13. **Nick Leslie** - University of Dundee, Dundee, UK
    Regulation of PTEN stability through phosphorylation

14. **Romnia Marone** - Institute of Biochemistry and Genetics, University of Basel, Basel, Switzerland
    Targeting the PI3K pathway in melanoma

15. **Leticia Odriozola** - Mount Sinai School of Medicine, New York, USA
    Interaction of the tail with the C2 and phosphatase domain regulates PTEN function

16. **Giuliana Pelicci** - European Institute of Oncology, Milan, Italy
    Involvement of the neural adaptor protein RAI (SHC-C) in gliomagenesis

17. **Francesca Petrera** – ICGEB, Trieste, Italy
    PI3K and AKT expression in liver cancer

18. **Almudena Porras** - F. Farmacia, Universidad Complutense de Madrid, Madrid, Spain
    Negative regulation of Akt activity by p38alpha MAP kinase involves membrane localization of PP2A through interaction with caveolin-1

19. **Teresa Sánchez** - University of Connecticut Health Center, Farmington, CT, USA
    PTEN as an effector in sphingosine-1-phosphate signalling

20. **Violeta Serra** – Vall d’Hebron University Hospital, Barcelona, Spain
    Somatic mutations of epidermal growth factor receptor signal transducers in cholangiocarcinoma

21. **Banu Surucu** - Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland
    Delineating the role of DNA-PK in the activation of PKB by S473 hydrophobic motif phosphorylation

22. **Giuseppe Viglietto** - Universita’ Magna Graecia, Catanzaro, Italy
    The retinoblastoma family member Rb2/p130 is a novel substrate of the protein kinase Akt