Scientific Program for the CABS Meeting at ECTS

Rome, Italy

**Clinical Day**

May 14, 2016

I. Welcome (9:00 to 9:05am, Peyman Hadji, Daniele Santini)

II. Understanding the problem (9:05 to 10:40am, Chairs: **Daniele Santini, David Roodman**)

9:05 – 9:25am : The fatal attraction between cancer and bone (**Lorenz Hofbauer**)

9:25 – 9:45am : Inhibiting the early steps of the metastatic process (**Ingunn Holen**)

9:45 – 10:05am: Blocking deconstruction: New bone targeted agents at work (**Philippe Clezardin**)

10:05 – 10:25am : Myeloma and bone – A never ending story? (**Peter Croucher**)

10:25-10:40am : Structured panel discussion: What are the unanswered preclinical questions? (**All speakers**)

10:40 – 11:00am: Coffee Break

III. Clinical management of bone metastases (11am to 12:15pm, Chairs: **Alfredo Berutti, Jean-Jacques ody**)

11:00 – 11:20am : Myeloma bone disease- Can we do better? (**Evangelos Terpos**)

11:20 – 11:40am : Prostate cancer and bone metastasis – Which bone targeted treatments should I consider? (**Bertrand Tombal, TBC**)

11:40am – 12:00pm : Breast cancer and bone metastasis – Do we still have a problem? (**Luis Costa**)

12:00 – 12:15pm : Structured panel discussion: Does the underlying cancer type matter when treating bone metastases? (**All speakers**)

12:15 – 1:00pm: Lunch
IV. Clinical management of cancer treatment induced bone loss (CTIBL) and more…

(1:00 to 2:30pm, Chairs: Matti Aapro, Peyman Hadji)

Times TBD: Cancer treatment induced osteoporosis – What is the size of the problem? (Paymen Hadji)

Times TBD: Treatment of CTIBL – A new standard of care? (Michael Gnant)

Times TBD: Treatment of bone metastases update 2016 (Matti Aapro)

Times TBD: Structured panel discussion: Title TBD (All speakers)

V. Multidisciplinary treatment of bone metastases (2:30 to 3:30pm, Chairs: Peter Croucher, Matti Aapro)

2:30 – 2:50pm: Surgical treatment – When, why and how? (Andreas Kurth)

2:50 – 3:10pm: Radiation treatment – Still the best treatment for bone metastases? (Peter Barrett-Lee)

3:10 – 3:30pm: Bone pain – Mechanisms and interventions (Carla Ripamonti)

3:30 – 3:50pm: Coffee Break

VI. Controversies in malignant bone disease (3:50 to 4:10pm, Chair: Francesco Bertoldo)

3:50 – 4:10pm: Bone biomarkers – Are any of them useful for diagnosis, treatment section or disease monitoring? (Daniele Santini)

VII. Oxford style debate (4:10 to 4:55pm, Moderator: Peyman Hadji)

4:10 – 4:55pm: Bone targeted treatments should be part of standard adjuvant treatment for women with early breast cancer (Pro: Rob Coleman, Con: Pier Franco Conte)

4:55 – 5:00pm: Closing remarks (Daniele Santini, Peyman Hadji)
**PRE-Clinical Day**

**May 15, 2016**

I. Genomics of primary bone cancer and bone metastasis development (8:00 to 10:00 am, Chairs: Dominique Heymann, Katherine Weilbaecher)

8:00 – 8:10am : Tribute to Paolo Blanco (Anna Teti)

8:10 – 8:40am : Leveraging the evolutionary history of lethal prostate cancer (Steve Bova)

8:40 – 9:10am : MAF is a mediator of breast cancer bone metastasis (Roger Gomis)

9:10 – 9:20am: Secreted YB-1 (Y-box binding protein 1) as a biomarker of bone disease progression in pts with breast cancer and bone metastases (Sandra Casimiro)

9:20 – 9:30am: Bone and metabolic parameters are associated with overall survival in pts with bone metastases from adenocarcinoma (Cyrille B. Confavreux)

9:30 – 9:40am: Blocking IL-1R signaling inhibits breast cancer growth and bone metastases by altering the tumor microenvironment (Penelope Ottewell)

9:40 – 9:45am: Osteoblastic and osteolytic bone metastases induce divergent angiogenic responses (Janine Hensel)

9:45 - 9:50am: Roundabout receptors: New actors in bone metastatic niche formation (Francois Le Pape)

9:50 – 9:55am: Cripto/Grp 78 drive the metastatic phenotype in human osteotropic prostate cancer (Eugenio Zoni)

9:55 – 10:00am: p62-ZZ Domain signaling inhibition prevents MM cell-induced epigenetic repression at the Runx2 promoter and rescues osteoblast differentiation (G. David Roodman)

**10:00 – 10:30am: Coffee & Poster Exhibition**

II. Bone marrow micrometastasis, including tumor dormancy (10:30 am to 12:30 pm, Chairs: Peter Croucher, Philippe Clezardin)

10:30 – 11:00am : Tumor dormancy (Klaus Pantel)

11:00 – 11:30am : Metastasis: Role of micro-RNAs in bone metastasis (Gabri van der Pluijm)

11:30 – 11:40am: Prostate cancer microRNAs in extracellular vesicles stimulate osteoclastogenesis (Irene Bijnsdorp)
Integrin a5 is an independent prognosis factor and a potential therapy target for breast cancer bone metastasis (Francesco Pantano)

Cancer cell homing to the bone marrow is modulated by the mesenchymal stromal cell (Inaam Nakchbandi)

Peripheral tumor re-growth following combination therapy-role of the bone microenvironment (Marie-Therese Haider)

Inhibition of BMP signaling reduces bone destruction and impacts niche maintenance in a mouse model of multiple myeloma (Sarah Gooding)

Antagonizing miR-218 prevents breast cancer-induced osteolytic (Hanna Taipaleenmäki)

Mesenchymal stromal cells promote osteosarcoma stemness and migratory potential via IL-6 secretion (Margherita Cortini)

12:30 – 2:15pm: Lunch & Poster Exhibition

III. Involvement of the bone microenvironment, including osteoimmunology in primary tumors and bone metastasis (2:15 to 4:15 pm, Chairs: Patricia Juarez, Claire Edwards)

Educational lecture on immunotherapy and virotherapy of osteotropic and primary bone cancers (Thor bald van Hall)

Immunotherapy for myeloma (Evangelos Terpos)

Blockade of C5aR impairs tumor-induced osteoclastogenesis preventing bone metastasis colonization in lung cancer (Daniel Ajona)

Osteoblasts inhibit the immune response against cancer (Inaam Nakchbandi)

Visualizing the tumor immunity in living bone marrow by intravital 2-photon imaging (Erika Yamashita)

Anti-sclerostin treatment prevents multiple myeloma bone disease and reduces tumor burden (Michelle McDonald)

Targeting skeletal metastatic breast cancer with bisphosphonic matrix metalloproteinase – 2 inhibitors (Marilena Tauro)
4:05 – 4:10pm: Inhibition of KPNA4 attenuates prostate cancer metastasis (Xin Li)

4:10 – 4:15pm: Lysyl oxidase promotes survival and outgrowth of colon cancer cells in the bone marrow, enabling bone metastasis formation (Caroline Reynaud)

4:45 – 5:45pm: Poster, Reception and Refreshments

IV. Musculoskeletal effects of cancer in bone and cancer induced bone pain (5:45 to 7:35 pm, Chairs: Julie Sterling, Ingunn Holen)

5:45 – 6:15pm: Muscle weakness in patients with bone metastasis (Theresa Guise)

6:15 – 6:45pm: Interactions between cancer and osteocytes in bone (Evan Keller)

6:45 – 6:55pm: Muscle dysfunction in immune competent mice with osteolytic breast cancer in bone is associated with skeletal muscle oxidation of RyR1 (Jenna Regan)

6:55 – 7:05pm: Biphosphonates prevent osteolysis and muscle weakness in aromatase inhibitor-treated mice with breast cancer bone metastases (Laura Wright)

7:05 – 7:15pm: In vitro mechanotransduction of osteosarcoma cells (Thomas R. Coughlin)

7:15 – 7:25pm: 3D tissue engineered constructs for modeling tumor-induced bone disease (Julie Sterling)

7:25 – 7:35pm: New models of breast and lung cancer bone metastases for preclinical efficacy testing (Mari I. Suominen)