
PROGRAM: 6TH EUROD WINTER MEETING JANUARY 2023

***** Leuven, Thursday, Jan 19, 2023 *****

14:00 – 18:00: EUROD research forum

Chairs: Marie-Helene Lafage-Proust & Marc Vervloet

Presentations 20 min (15'+5')

The EUROD research forum aims to gather basic and clinical researchers in CKD-MBD and focuses on scientific progress in renal bone disease. The mission of the EUROD research forum is to share knowledge, foster collaboration, and enhance networking. The EUROD research forum comprises a mixture of invited mini lectures (ML), selected free communications (FC), and short pitches (P). There will be ample time for discussion.

14:00 – 15:40: Research Forum Part 1

- 14:00-14:20 (ML): Assessment of calcium balance in CKD (**Rukshana Schroff**, London/UK)
- 14:20-14:40 (ML): Proton pump inhibitors and bone health (**Hanne Skou Jørgensen**, Leuven/BE + Aarhus/DK)
- 14:40-15:00 (FC): *To be determined*
- 15:00-15:20 (FC): *To be determined*
- 15:20-15:40 (ML): CaSR and Phosphate: spotlight on phosphate-sensing (**Mariano Rodriguez**, Cordoba/Spain)

15:40 – 16:10: Coffee break

16:10 – 18:00: Research Forum Part 2

- 16:10-16:30 (ML): Calciprotein particles at the interface of bone and vessels (**Andreas Pasch**, Linz/Austria, Bern/Switzerland)
- 16:30-16:50 (ML): CKD-MBD targets; a Pediatric Perspective? (**Justine Bacchetta**, Lyon/France)
- 16:50-17:10 (FC): *To be determined*

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- 17:10-17:30 (ML): Calcium, vitamin D and skeletal health (**Geert Carmeliet**, Leuven/Belgium)
 - 17:30-17:50 (FC): *To be determined*

17:50 – 18:00: Best Abstract Award (Pieter Evenepoel, Leuven/Belgium)

19:30 – 21:30: Faculty dinner (on invitation)

*****Leuven, Friday Jan 20, 2023 *****

10:30 – 17:00: CME part 1

Controversies in renal osteodystrophy: Calcium and magnesium in CKD – Friend or Foe

Exogenous **calcium** loading, especially through calcium containing phosphate binders, is appointed to be a major culprit of the excessive vascular calcification burden in patients with CKD. Calcium deposited in the vascular wall, however, may also originate from skeletal calcium efflux, driven by hyperparathyroidism or inflammation. The role of this endogenous calcium cycling in the pathophysiology of vascular calcification is underexposed in scientific literature. The connotation of calcium as a ‘vascular toxin’ triggered a ‘war on calcium’. As a consequence, many CKD patients risk ending up with a negative calcium balance, conferring an increased risk of osteoporosis with related morbidity and mortality. It is time for a more balanced view on the role of calcium-balance in CKD.

Magnesium, meanwhile, is experiencing a true Renaissance in CKD-MBD. Experimental and clinical (observational) data show that magnesium may not only attenuate vascular calcification, but also preserve bone health and confer a survival benefit. As a consequence, magnesium supplementation, either via Mg containing phosphate binders, or via the dialysate, has gained much interest in clinical centers. Pending confirmation by RCT, caution is warranted as overzealous supplementation is not without risks.

This CME aims for an in depth discussion of current controversies with regard to calcium and magnesium supplementation in CKD.

10:30 – 10:45: Welcome and introduction (Pieter Evenepoel, Leuven/Belgium)

10:45 – 11:45: Session 1: Evolving concepts – what’s new

Chairs: Pieter Evenepoel & Nathalie Bravenboer

Presentations 30 min (25'+5')

- **Update: Vascular calcification (Markus Ketteler, Stuttgart/Germany)**
- **Update: Osteoporosis (Renate de Jongh, Amsterdam/NL)**

11.40 – 12:30: Session 2: Ca and Mg homeostasis in health and CKD

Chairs: Anibal Ferreira & Justine Bacchetta

Presentations 25 min (20'+5')

- Essentials of divalent cation homeostasis in health (**Joost Hoenderop**, Nijmegen/NL)
- Calcium and Magnesium metabolism in CKD (**Lucile Figueres**, London/UK, Nantes/France)

12:30 – 13:20: Lunch

13:20 – 15:30: Session 3: Calcium in vascular/skeletal (patho) biology

Chairs: Sandro Mazzaferro & Hanne Skou Jørgensen

Presentations: variable (20 or 30 minutes)

- Calcium balance in CKD: positive, neutral, or negative? (**Pieter Evenepoel**, Leuven/Belgium) (15'+5')
- Calcium, a cardiovascular toxin in CKD? (**Rukshana Schroff**, London/UK) (15'+5')
- Ca supplementation in CKD: skeletal benefits outweigh vascular concerns (**Sandro Mazzaferro**, Rome/Italy) (25+5')
- Ca supplementation in CKD: vascular concerns outweigh skeletal benefits (**Antonio Bellasi**, Lugano/Switzerland) (25+5')
- Panel debate on Ca supplementation (30')

15:30 – 16:00: Coffee break

16:00 – 17:15: Session 4: Mg and vascular/skeletal (patho) biology

Chairs: Mathias Haarhaus & Syazrah Salam

Presentations: 30 minutes (25+5')

- Role of Mg in vascular and skeletal (patho)biology (**Iain Bressendorf**, Copenhagen/DK)
- Mg supplementation in CKD: benefits and concerns (**Marc Vervloet**, Amsterdam/NL)
- Panel debate on Mg supplementation (15')

17:15 – 18:30: Network Meeting

20:00 – 22:30: Guided walk and dinner

***** Leuven, Saturday, Jan 21, 2023 *****

10:00 – 13:30: CME part 2

Location: St-Barbara

Break-out: Florquin, De Paepe, St Barbara, St Gommarus

The challenge of osteoporosis in CKD: balancing risks and benefits of common therapies

Osteoporosis is a state of bone fragility, where low bone mass and disrupted bone microarchitecture leads to an increased susceptibility of fracture. In CKD, a complex metabolic bone disease combine with traditional risk factors, multimorbidity, and polypharmacy leaving our patients at a particularly high risk. The risk of fracture rises in parallel with decreasing kidney function, and is 4-6-fold higher than in the background population in late-stage CKD. Fractures are a major cause of morbidity and associates with high rates of hospitalization and mortality. Over the last decades, both our ability to identify patients at risk through imaging and fracture prediction tools, and the pharmaceutical armamentarium to tackle bone fragility, has developed enormously. However, a huge treatment gap exists between those at risk of fracture and those receiving specific fracture-preventive treatment. The complex pathophysiological background of fractures in CKD, coupled with lack of hard evidence, often leaves the physician in a state of therapeutic inertia. This hands-on CME aims to provide an update on the clinical assessment and

treatment of osteoporosis in CKD, by means of state of the art lectures and interactive discussions and will focus on balancing risks and benefits of common therapies: calcium supplementation, bisphosphonates and denosumab.

10:00 – 11:00: State-of-the art

Location: Convent of Chièvres, Room St Barbara (1st floor)

- Ca supplementation in CKD: report of the EUROD consensus meeting (**Pieter Evenepoel**, Leuven/Belgium & **Rukshana Shroff**, London/UK)
- Denosumab or bisphosphonates in patients with advanced CKD and osteoporosis: balancing risks and benefits (**Mathias Haarhaus**, Stockholm/Sweden)

11:00 – 12:00: Case discussions

Location: Convent of Chièvres

Chair: **Pieter Evenepoel**

Panelists: **Mathias Haarhaus, Renate de Jongh**

- 11:00 – 12:00: Case-discussions in small groups, faculty act as facilitators
(4 groups, two cases per group, distributed among participants prior to meeting)
- 12:00 -13:00: Panel debate of cases with input from audience

13:00 – 13:30: Closing remarks (Pieter Evenepoel, Leuven, BE)