WORLD CONGRESS ON OSTEOPOROSIS, OSTEOARTHRITIS AND MUSCULOSKELETAL DISEASES

Sunday, April 14th

2024 LONDON

Dear Guest,

As Chair of the Scientific Programme Committee for the 2024 WCO-IOF-ESCEO Congress, it is our great pleasure to welcome you to the magnificent city of London.

The task of selecting a limited number of abstracts for oral presentation from the plethora of high quality papers submitted was indeed challenging. Throughout the meeting, in addition to the invited plenary lectures and carefully selected oral communications, we devoted considerable time to reviewing and discussing posters.

Our "Meet the Expert" sessions have always been well attended and have proved invaluable in fostering the exchange of knowledge and experience among the participating practitioners. In recognition of their importance, we have allocated a dedicated session covering a wide range of relevant musculoskeletal conditions. These sessions always generate lively debate and interaction, providing clear and actionable insights for daily clinical practice. We are optimistic that this year's sessions will maintain the same level of success as in the past.

We would also like to emphasise the importance of the nonsponsored symposia, which have proved to be a resounding success in recent years. These events provide a unique platform for the exchange of knowledge between distinguished scientists and healthcare professionals. We believe that this World Congress, with its stellar line-up of plenary lectures, engaging oral communications and insightful poster sessions, will further enhance the success of our previous congresses. It is our collective endeavour to advance efforts to reduce the burden of osteoporosis, osteoarthritis and musculoskeletal diseases for the benefit of our patients.

We wish you a productive, enjoyable and enriching meeting.

Yours sincerely, René Rizzoli & Cyrus Cooper

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Summary of the meeting



Here is a summary of the key points and events of the third day of the WCO-IOF-ESCEO Congress currently taking place in London, UK. Yesterday's morning session featured two important plenary presentations. Dr Abrahamsen delivered the first lecture, focusing on recent advances regarding the additional effects of potent anti-resorptive drugs used in the treatment of osteoporosis (PL5). He highlighted the growing body of indirect evidence and post-trial data suggesting the need to assess the impact of these drugs beyond bone health, particularly in clinical trials aimed at addressing broader public health concerns such as frailty, falls, breast cancer, atherosclerosis and diabetes. The second lecture, presented by Dr Chandran, focused on the management of osteoporosis in diverse ethnic populations (PL6). She discussed the differences in bone mineral density (BMD) between ethnic groups, the differences in fracture risk between ethnic

groups, and the challenges of establishing intervention thresholds for fracture risk in multi-ethnic societies.

Some of yesterday's oral presentations were related to new technologies. For example, Dr De Gruttola showed the efficacy of an automated artificial intelligence X-ray image processing application for opportunistic screening of patients at very high risk of lumbar spine fracture, using DXA as ground truth (OC23). In another, Dr Scott presented the potential for automatically derived hip shape from DXA scans to be included in risk assessment tools, as it is associated with hip fracture independently of total hip BMD (OC19). Still using new technologies, but adding health economics to the mix, Dr Hiligsmann showed that radiofrequency echographic multi-spectrometry (REMS) is a cost-effective strategy for diagnosis of osteoporosis treatment in the USA (OC22).

Yesterday morning, two oral communications were related to vitamin D. In the first, Dr Cavalier presented results from the SarcoPhAge study showing that the vitamin D metabolite ratio (VMR) is a better indicator of vitamin D deficiency than 25-hydroxyvitamin D alone (OC24). In the second communication, Dr Nickolas showed that the addition of calcitriol to cholecalciferol in kidney transplant recipients does not improve skeletal health but causes hypercalcaemia (OC25).

Sarcopenia was a major topic of discussion during yesterday's sessions, particularly in the two afternoon plenary lectures. In the first, Dr Cruz-Jentoft highlighted the differences in definitions across continents that have hampered research efforts and the universal integration of sarcopenia detection and management into routine clinical practice (PL7). He also highlighted the resurgence of misinterpretation of sarcopenia, particularly when body composition assessment (typically using CT scans) is available but functional measures are lacking. This resurgence has led to the misattribution of sarcopenia to reduced muscle mass alone, when it also includes malnutrition and cachexia. Dr Cruz-Jentoft also shared insights from the Global Leadership Initiative in Sarcopenia (GLIS). In the second plenary lecture by Dr Cherubini, it was emphasised that there are currently no approved drugs for the prevention or treatment of sarcopenia (PL8). Instead, personalised non-pharmacological intervention is recommended for sarcopenic older people, including resistance training and other exercises such as aerobic and balance training, combined with adequate



Auditorium A



nutrition, especially protein intake. falls (OC29). Another study presented However, Dr Cherubini highlighted by Dr Johansson was a meta-analysis of ongoing studies aimed at identifying drugs for the treatment of sarcopenia. Of particular note was Dr Beliën's presentation (current and former) and fracture risk on the safety and efficacy of RJx-01, a (OC33). Analysing data from 1,634,449 novel drug combination identified using participants, the study found that current proprietary in silico discovery and C. smoking, observed in 12% of participants, elegans screening/validation platforms (OC30). She noted that pre-clinical studies have demonstrated synergistic benefits of RJx-01 in the treatment of sarcopeniarelated phenotypes, and Phase 1b clinical trial data support advancement into a Phase 2 trial.

Yesterday, the importance of modifiable risk factors for musculoskeletal disease and its consequences was discussed at length. For example, Dr Trombetti highlighted from the SAFE 3-year longitudinal cohort study in Geneva that global sagittal balance of the spine independently contributes to physical impairment in older adults, while global coronal balance predicts incident



Scientist Award

contribution to the field of musculoskeletal years. disorders made by a young scientist who

IOF Olof Johnell Science Award

The Olof Johnell Science Award, named topics are bone markers, vitamin D, PTH, in honour of the late Professor Olof vascular calcification markers, markers Johnell, recognises an individual who has of acute kidney diseases, glomerular contributed to the field of osteoporosis filtration rate (estimation, biomarkers), in a scientific or policy implementation markers of frailty and sarcopenia, LC-MS/ area worldwide. This year's recipient MS methods for steroids and peptides is Professor Etienne Cavalier. Etienne quantification. Etienne Cavalier is the Cavalier is currently Professor of Clinical actual President of the Royal Belgian Chemistry at the University of Liege Society of Laboratory Medicine and is the and Head of the Department of Clinical Chairman of the IFCC-IOF Committee for Chemistry of the University Hospital of bone markers. Liege in Belgium. His current research

57 international cohorts to investigate the association between smoking significantly increased the risk of any fracture in both men and women. Notably, the study observed a reduction in fracture risk among former smokers compared with current smokers, indicating the skeletal benefits of smoking cessation. Dr Zoulakis also presented an interesting study in line with the FRAX update (OC32). The study showed that using FRAXplus, which allows adjustment of fracture probabilities based on additional clinical information, a significant number of older women would have their 10-year fracture probabilities increased above the intervention threshold. In fact, this adjustment more accurately reflects their increased fracture risk (OC32).



ESCEO-IOF Pierre Meunier Young

Dr Nagendra Lakshmi will be presented has demonstrated the ability to carry out with the 2024 ESCEO-IOF Pierre Meunier high quality research and is expected to Award. This award recognises the become a key opinion leader in the coming



Dr. Beaudart, Prof. Cavalier, Prof. McCloskey



PRE-COMPETITIVE CONSORTIUM ON OSTEOPOROSIS AND BONE HEALTH

An initiative from ESCEO and IOF to support the five-year partnership signed between ESCEO and the World Health Organization to improve the management of osteoporosis

ESCEO and IOF are very proud to announce the creation of the Pre-Competitive Consortium on Osteoporosis and Bone Health (PRECCO). This Consortium, created to support the five-year partnership signed between ESCEO and the **World Health Organization** to improve the management of osteoporosis, involves a diverse range of stakeholders, who place the osteoporotic patients at the center of their priorities, independently of their immediate strategy, in terms of content and timeline. The stakeholders supporting the PRECCO are listed below.



2025 ROME

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> April 10-13, 2025 Roma Convention Center La Nuvola **Rome | Italy**



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