



It is an honour and a great privilege to welcome you to this World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal diseases jointly organised by the International Osteoporosis Foundation (IOF) and the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO). This WCO-IOF-ESCEO 2019 congress, which is held in Paris, France, between April 4 and April 7, is the largest event worldwide, fully dedicated to the clinical and economic aspects of osteoporosis, osteoarthritis and musculoskeletal diseases and gathers more than 4,000 delegates.

Dear Colleague, Welcome

The Scientific Advisory Committee, co-chaired by Professor René Rizzoli and Professor Cyrus Cooper, had an extremely difficult task, to select oral presentations, among more than 1400 submitted abstracts of the highest quality.

During this congress, prestigious scientists, from all parts of the world, will give you the opportunity of being in touch with the latest scientific developments in various fields. We expect that researchers and clinicians from around the world will experience a diversified and enriching scientific meeting. The final programme includes:

- | Stimulating plenary lectures on various 'hot' topics delivered by the fields' leading experts;
- | Clinically-focused Meet-the-Expert Sessions, restricted in the number of participants to enable more effective interactions;
- | A large number of special sessions such as the Educational Lecture, the Oral Communication of Selected Posters, the symposia of scientific organisations (i.e. World Health Organization, International Osteoporosis Foundation, European Society for

Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases, European Union Geriatric Medicine Society, Fragility Fracture Network, European Society of Physical and Rehabilitation Medicine), and the Committee of National Societies Special Plenary session;

- | Around 19 non-sponsored workshops selected by a panel chaired by the Scientific Chairs of the Congress, and endorsed according to their topicality and quality.

Many satellite symposia will take place. Their programmes have been carefully reviewed by the organisers to make sure that an appropriate amount of unbiased science will be outlined.

We are convinced that you will enjoy this congress, in the beautiful city of Paris and that the key messages that you will take home after the meeting will help you in your daily practice for the benefit of your patients.

We wish you a very successful meeting

Jean-Yves Reginster & John A. Kanis
Co-Chairmen

Highlights of the meeting

The WCO-IOF-ESCEO congress, here in Paris, is the largest meeting in the field of osteoporosis, osteoarthritis and musculoskeletal diseases, 4,136 attendees seeking information on the epidemiology, pathogenesis, prevention, and treatment of these important public health problems. More than 1400 abstracts were submitted addressing all these topics. During the first two days of the congress, many important and interesting communications were presented either orally or as poster communications. We highlight here only a small part of all the science thus far presented during the congress.

The meeting began on Thursday April 4 with two lectures from Dr Rizzoli that reviewed the best clinical articles published in 2018 and presented the update of the European guidelines for the diagnosis and management of osteoporosis.

On Friday, the scientific session started with the plenary lecture of Dr McCloskey that reviewed when and why use a bone forming agent (PL1). He noted that the reason why to use bone-forming agents is that they have a different mechanism of action to antiresorptives which leads to more marked improvements in skeletal mass and/or structure with a consequent greater efficacy in reducing fracture risk. He also pointed out that more expensive agents, such as bone-forming treatments, will be of greatest merit and utility when targeted to patients at high risk of fracture. As the speaker of the second selected oral communication of the day, Dr McCloskey also showed that the efficacy of romosozumab

on fractures is significantly greater in patients at high baseline fracture risk, when compared to placebo (OC2).

Yesterday morning, a substantial number of the oral communications was related to the management of osteoporosis. For example, Dr Lorentzon presented the results of two trials indicating that falls risk does not affect the ability of hormone therapy to reduce the risk of fracture in postmenopausal women (OC1). In another study in patients with osteoarthritis enrolled in the ACTIVE study, Dr Lane showed that abaloparatide resulted in significant reduction in risk of new vertebral fracture versus placebo (OC4). Another study, using a real-world setting, suggested that vertebral fractures occur more often in patients who discontinue denosumab treatment, yet the overall incidence is low (OC10).

Epidemiology of fracture was also extensively covered yesterday, starting with the communication of Dr Prieto-Alhambra that reported in real world cohorts of fractured patients from Denmark, Spain, and the UK that the annual imminent fracture risk is around 10% in the first year following a first fracture, and higher in older patients and after a hip or clinical spine fracture (OC6). In close relation to this presentation, Dr Johansson noted that the 10-year FRAX probabilities of fracture can be adjusted in the presence of a recent fracture and are likely to be useful in treatment decision-making (OC7). Unfortunately, the treatment gap of osteoporosis continues to grow as highlighted by Dr Abrahamsen showing an absence of a clinically significant change, from 1996 to 2017, in the mean age of the hip fracture populations in Denmark (OC8)

Oral communication from selected abstracts of yesterday afternoon were mainly devoted to the epidemiology and the management of osteoarthritis and sarcopenia. In his plenary lecture, Dr Arden reminded the audience that patients fulfilling the criteria for knee osteoarthritis already have significant joint damage, involving several tissues such as cartilage, meniscus, underlying bone and synovium, often with substantial secondary biomechanical dysfunction (PL3). This makes it imperative to intervene earlier in the course of osteoarthritis, well before it becomes a multi-tissue disease and before an adverse biomechanical environment is produced. In osteoarthritis, a more global management



The Opening Ceremony

of patient is of course needed, as highlighted by Dr Roubille showing a significant association between cardiovascular comorbidities and structural progression of knee osteoarthritis over a 5-year of follow-up of a French cohort (OC11). The importance of a global management was also pointed out by Dr Fuggle that showed that muscle mass and body composition were associated with the future development of knee pain and radiographic osteoarthritis in the Hertfordshire Cohort Study (OC 13)

Regarding sarcopenia, it should be reminded that, in October 2018, the European Working Group on Sarcopenia in Older People (EWGSOP) revised its consensus definition. Using this new definition, Dr Scott confirmed that sarcopenia was associated with poorer bone health compared with probable and no sarcopenia, and also with increased likelihood of 12-month incident falls (OC12). On the other side, the team of Dr Brennan-Olsen presented their study showing that sarcopenia and its individual components were associated with worse disability amongst adults in low- and middle-income countries, indicating the global relevance of this preventable morbidity, and foreseeable trajectories towards frailty (OC13).

Another important session of yesterday's meeting was the IOF Committee of the National Societies (CNS) Special Plenary Session on the important topic from a public health perspective: "Clinical, social, ethical and economic burden of osteoporosis and fragility fractures". Interestingly, during this session, much time was devoted to short but intensive presentations of study results from different member societies.



The WCO Audience



J.-Y. Reginster, C. Defraigne & W.-B. Xia

2019 ESCEO Medal of Excellence

Christine Defraigne, Past-President of the Belgian Senate, in office 2014 to 2018, was announced as the winner of the ESCEO Medal of Excellence. Christine Defraigne stated: "It is a great honor and privilege to receive this Award. I am extremely grateful to the hard work of so many excellent team members and collaborators who have

contributed to implement osteoporosis guidelines despite the limited healthcare resources. We should continue our work and improve the decision making at different levels of the healthcare so that osteoporosis and other musculoskeletal conditions could be managed appropriately using the most recent evidence".

IOF Olof Johnell Science Award

The Olof Johnell Science Award, named in honour of the late Professor Olof Johnell, honours an individual who has contributed to the field of osteoporosis in a scientific or policy implementation area, worldwide.

This year, the Award is given to Professor John A Kanis who is Emeritus Professor in Human Metabolism, and Director of the Centre for Metabolic Bone Diseases (Formerly WHO Collaborating Centre), University of Sheffield, UK and Professorial Fellow at the Catholic University of Australia (Melbourne). He is President Emeritus of the International Osteoporosis Foundation (IOF President from 2008-2017), member of its Committee of Scientific Advisors and Chairman of the Working Group on Epidemiology and Quality of Life. He is the Editor in Chief of Osteoporosis International and Archives of Osteoporosis, and serves on the editorial board of several journals. He is the author of more than 1000 papers, chapters



C. Cooper, J. A. Kanis, K. Johnell, I. Redlund-Johnell & A. Johnell

and books on bone disease and metabolism. His current major interest is in the development of risk assessment algorithms and the formulation of practice guidelines in many regions of the world.

Professor Kanis stated: "It is an honour and privilege to receive this Award. It is also testimony to the hard work of so many

excellent team members and collaborators who have contributed to our research programme, as well as the institutions that have provided such welcome support. We shall continue our efforts to understand the causes and develop preventive strategies against the consequences of osteoporosis and other disabling musculoskeletal conditions."

IOF President's Award

The International Osteoporosis Foundation President's Award honours an IOF member who has made a significant and unstinting contribution to the advancement of the work of the IOF, through furthering one or more of the mission statements and/or goals of the Foundation. The recipient is selected by the IOF President, with the approval of the IOF Executive Committee. This year, because of the quality of their involvement, two IOF members were awarded, i.e. Drs Matijevic and Lyubomirsky.



R. Matijevic, C. Cooper & G. Lyubomirsky

ESCEO-AgNovos Healthcare Young Investigator Awards



The happy award winners with J.-Y. Reginster & J. Howe

ESCEO has the pleasure to inform you that the individuals listed below have been selected for the ESCEO-AgNovos Healthcare Young Investigator Awards. They have been carefully chosen based on the quality of their abstract related to bone strength, bone quality, falls risk, primary or secondary fracture prevention or multi-disciplinary post-fracture care.

The young investigators are: Banica Thiberiu, Berkvens Jessica, Fauny Marine, Heilmeyer Ursula, McArthur Caitlin, Negm Ahmed Mohamed, Raptis Konstantinos, Romagnoli Cecilia, Talevski Jason, Veronese Nicola.

ESCEO-IOF Herbert Fleisch Medal

The European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) and the International Osteoporosis Foundation (IOF) are proud to announce that Professor Jonathan Adachi has been awarded the ESCEO-IOF Herbert A. Fleisch Medal. Herbert Fleisch was a renowned researcher whose groundbreaking work contributed to the development of scientific knowledge about bone diseases and their treatment.

Jonathan Adachi is Professor of Medicine at the Michael DeGroote School of Medicine at McMaster University and Director of the Hamilton Arthritis Centre at St. Joseph's Healthcare in Hamilton, Ontario, Canada. He is the inaugural holder of the

Alliance for Better Bone Health Chair in Rheumatology. He is a Past President of Osteoporosis Canada and currently serves on the Scientific Advisory Committee of that organization. He is both a member of the International Osteoporosis Foundation (IOF) Board and of the IOF Committee of Scientific Advisors.

Professor Rizzoli went on to state: "This award appropriately recognizes an individual whose work has influenced knowledge about bone disorders. Within these last thirty years, Jonathan Adachi has contributed significantly to the general management of osteoporosis and continues to do so."



R. Rizzoli & J. Adachi

IOF Committee of National Societies Medal



J.-Y. Reginster & V. Babalyan

The IOF Committee of National Societies Medal is a new award that honours an individual who has made an important contribution to the IOF's Committee of National Societies (CNS) through active participation in CNS activities and by expanding IOF's message and outreach in his/her country. The CNS, comprising more than 200 patient and medical societies, is IOF's core membership committee. As a group it forms the world's largest single network of national organizations dedicated to osteoporosis and musculoskeletal disorders. CNS societies are run

by committed individuals who - often as volunteers - do invaluable work in raising public awareness and improving patient care at the national level. Their grassroots efforts in implementing IOF information campaigns locally have helped spread key prevention messages around the world.

This IOF CNS Medal has been awarded yesterday to Doctor Varta Babalyan.