

WORLD CONGRESS  
ON OSTEOPOROSIS,  
OSTEOARTHRITIS AND  
MUSCULOSKELETAL  
DISEASES

# VIRTUAL CONGRESS

August 26-28, 2021



2021 VIRTUAL



[VIRTUAL.WCO-IOF-ESCEO.org](https://VIRTUAL.WCO-IOF-ESCEO.org)

AbstractBook

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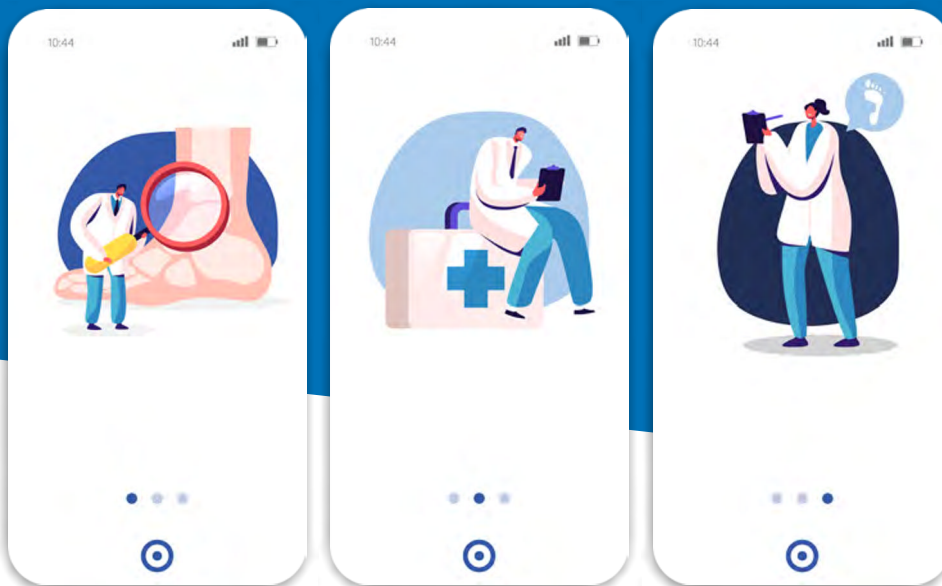


for more information visit us at [jrheum.org](http://jrheum.org)

About ESCEO and IOF  
Congress Organization  
Live Programme – Thursday August 26  
Live Programme – Friday August 27  
Live Programme – Saturday August 28  
Recorded Sessions Programme  
Special Lectures Abstracts  
Educational Lectures Abstracts  
Plenary Lectures Abstracts  
Oral Communications Abstracts  
ESCEO Symposia Abstracts  
ESCEO-IOF Symposium Abstracts  
ESCEO-WHO CC Symposium Abstracts  
EUGMS-ESCEO-IOF Symposium Abstracts  
ESPRM-ESCEO-IOF Symposium Abstracts  
SICOT-ESCEO-IOF Symposium Abstracts  
ROS-IOF-ESCEO Symposium Abstracts  
ISGE-ESCEO Symposium Abstracts  
Meet-the-Experts Abstracts  
Committee of National Societies Abstracts  
Committee of Scientific Advisors Abstracts  
Non-Sponsored Symposia Abstracts  
Satellite Symposia Abstracts  
Posters Abstracts  
Author Index

Pagination in this file will differ from the version of record  
(Osteoporosis International vol. 32 supplement 1) that will be found on [link.springer.com](http://link.springer.com)

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## ABOUT ESCEO

**The European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (ESCEO)** is a not-for-profit organization, dedicated to a close interaction between clinical scientists dealing with bone, joint and muscle disorder, pharmaceutical industry developing new compounds in this field, regulators responsible for the registration of such drugs and health policy makers, to integrate the management of Osteoporosis and Osteoarthritis within the comprehensive perspective of health resources utilization.

**The objective of ESCEO** is to provide practitioners with the latest clinical and economic information, allowing them to organize their daily practice, in an evidence-based medicine perspective, with a cost-conscious perception.

[www.esceo.org](http://www.esceo.org)



## ABOUT IOF

The International Osteoporosis Foundation (IOF) is a non-profit, non-governmental organization dedicated to the worldwide fight against osteoporosis, the disease known as “the silent epidemic”. IOF's members – committees of scientific researchers, patient, medical and research societies and industry representatives from around the world – share a common vision of a world without osteoporotic fractures. IOF now represents 268 societies in 102 locations around the world.

[www.osteoporosis.foundation](http://www.osteoporosis.foundation)

### Mission

- | Increase awareness and understanding of osteoporosis.
- | Motivate people to take action to prevent, diagnose and treat osteoporosis.
- | Support national osteoporosis societies in order to maximize their effectiveness



DEAR COLLEAGUES,

**It is with great pleasure that we welcome you to the 2021 IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases.**

The Congress' scientific programme has been developed by a team comprising members of the Committee of Scientific Advisors of the International Osteoporosis Foundation (IOF) and the Scientific Advisory Board of the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO). We would like to thank the respective Scientific Chairs, Professors Nicholas Harvey and René Rizzoli, for taking the lead in setting up an exciting and comprehensive programme that brings together the world's best in the field of musculoskeletal health and disease and takes advantage of the synergies and combined expertise of our two organisations.

We are all meeting with a common aim - to gather new knowledge, skills and tools in the prevention and treatment of osteoporosis and osteoarthritis, the two most disabling conditions in elderly people. An important addition is a focus on sarcopenia because of its intimate relation to bone and joint disease. It is our hope that this Congress will move the field one step forward on all fronts; from new understanding of bone metabolism and pathology, to new strategies and options in prevention, diagnosis and treatment.

The core scientific programme consists of **10** plenary lectures by renowned speakers and **35** oral communications selected from the very best of hundreds of submitted abstracts, and **29** oral presentations of selected posters. In addition, participants can choose among **14** different Meet-The-Expert sessions and **13** special

sessions and symposia on issues of clinical importance. We also encourage you to visit many of the scheduled poster sessions and industry sponsored satellite symposia and to visit the large commercial exhibition presented by the leading companies in the bone field.

The past 18 months has been a difficult time for face-to-face scientific communication. This meeting had originally been planned to take place in London but alas will now take place virtually. We are especially thankful for your support and participation during these unprecedented times. We will do our best to ensure that this meeting is a memorable, enriching experience for all. As the situation eases, **we look forward to meeting in person, perhaps next year in Berlin.**



**John A. Kanis**

**Jean-Yves Reginster**

A handwritten signature in black ink that reads "John A. Kanis".

A handwritten signature in blue ink that reads "Jean-Yves Reginster".

## EVENT

**WCO-IOF-ESCEO  
August 26-28, 2021**

WORLD CONGRESS ON OSTEOPOROSIS, OSTEOARTHRITIS AND MUSCULOSKELETAL DISEASES

## CONGRESS CHAIRMEN

**Jean-Yves REGINSTER**  
ESCEO President**John A. KANIS**  
IOF Honorary President

## PROGRAMME COMMITTEE

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WORLD CONGRESS  
ON OSTEOPOROSIS,  
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DISEASES

# VIRTUAL CONGRESS

March 24-26, 2022



2022 VIRTUAL



WORLD'S LEADING CLINICAL CONFERENCE ON BONE, JOINT AND MUSCLE HEALTH  
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CEST (Central European summer time)

14.00 - 17.50

Channel 1

### SCIENTIFIC SESSION I

Chairpersons: Cyrus Cooper, Nicholas Harvey

14.00 - 15.30

Channel 1

#### ROS-IOF-ESCEO Symposium

• *Royal Osteoporosis Society's Osteoporosis and Bone Research Academy – Our journey towards a cure*

Chairpersons: Cyrus Cooper, Neil Gittoes

• *Royal Osteoporosis Society Research Roadmap: the patient perspective*

• *An introduction to the Royal Osteoporosis Society's Osteoporosis and Bone Research Academy*

Juliet Compston

• *The Research Road Map: Our journey towards a cure* Nicholas Harvey

• *Exploring the research priorities : Causes and mechanisms* Stuart Ralston

• *Exploring the research priorities : Optimising effectiveness of assessments and treatment* Eugene McCloskey

• *Exploring the research priorities : Novel technologies for skeletal assessment* Emma Clark

• Q&A session

15.30

Channel 1

#### Opening of the Congress

• Cyrus Cooper

15.40

Channel 1

#### Plenary Lecture 1

• *Management of musculoskeletal disease from cradle to grave* Cyrus Cooper

16.10

Channel 1

#### Guest lecture

• *Feast or Famine: How Nutrient Intake Regulates Bone Remodeling* Cliff Rosen

16.40

Channel 1

#### Presentation of prizes and awards

• *Presentation of the IOF Olof Johnell Science Award, the IOF President's Award and the ESCEO-IOF Herbert Fleisch Medal* Cyrus Cooper

• *Presentation of the IOF Medal of Achievement* Nicholas Harvey

16.50

Channel 1

#### Honorary Lecture supported by an unrestricted grant from UCB

• *Where are the cracks? Understanding the needs in fragility fracture management*

• Kassim Javaid

17.50 - 19.30

Channel 1

### SCIENTIFIC SESSION II

Chairpersons: John A. Kanis, René Rizzoli

17.50

Channel 1

### Plenary Lecture 2

• *Building bone strength with anabolic agents* Michael R. McClung

18.20

Channel 1

### Best clinical papers published in 2020

• René Rizzoli

19.00

Channel 1

### Meet-The-Expert Session

• *Transgender medicine, bone and muscle* Jean-Marc Kaufman

19.30

Channel 1

### Adjournment

CEST (Central European summer time)

08.00 - 09.00

Channel 1

**INDUSTRY BREAKFAST SYMPOSIUM**\*See details on the [Sponsored Satellite Symposia page](#)

08.00 - 09.00

Channel 2

**INDUSTRY BREAKFAST SYMPOSIUM**\*See details on the [Sponsored Satellite Symposia page](#)

09.00 - 11.50

Channel 1

**SCIENTIFIC SESSION III**

Chairpersons: Jean-Yves Reginster, Manju Chandran

09.00

Channel 1

**Plenary Lecture 3**• *Management of bone disease in cancer* Robert E. Coleman

09.30

Channel 1

**Plenary Lecture 4**• *Thyroid, bone and cartilage* Graham Williams

10.00

Channel 1

**Meet-The-Expert Session**• *Impact of glucocorticoids on bone and muscle* Evelien Gielen

10.30

Channel 1

**Oral communication selected from abstracts**• *OC1 - RECENT SENTINEL FRACTURES AND SUBSEQUENT FRACTURE PROBABILITIES OVER TWO, FIVE AND 10-YEAR TIMEFRAMES*

Presenting author: • H. Johansson

Authors: E. V. McCloskey, N. C. Harvey, V. Gudnason, G. Sigurdsson, K. Siggeirsdottir, M. Lorentzon, E. Liu, L. Vandenput, W. D. Leslie, J. A. Kanis

10.40

Channel 1

**Meet-The-Expert Session**• *HIV and bone* Emmanuel Biver

11.10

Channel 1

**Oral communication selected from abstracts**• *OC2 - ASSOCIATIONS BETWEEN BONE AND VASCULAR HEALTH IN THE UK BIOBANK*

Presenting author: • Z. Raisi-Estabragh

Authors: L. Biasioli, J. Cooper, N. Aung, K. Fung, J. Paiva, M. Sanghvi, R. Thomson, E. M. Curtis, J. Paccou, J. Rayner, K. Werys, H. Puchta, K. Thomas, A. M. Lee, S. Piechnik, S. Neubauer, P. B. Munroe, C. Cooper, S. E. Petersen, N. C. Harvey

11.20

Channel 1

**Plenary Lecture 5**• *Bone and cartilage talk together* Ali Mobasher

11.50 - 12.00

Channel 1

**BREAK 10'**

12.00 - 13.30

Channel 1

**INDUSTRY SATELLITE LUNCH SYMPOSIUM**

\*See details on the Sponsored Satellite Symposia page

12.00 - 13.30

Channel 2

**INDUSTRY SATELLITE LUNCH SYMPOSIUM**

\*See details on the Sponsored Satellite Symposia page

13.30 - 15.20

Channel 1

**SCIENTIFIC SESSION IV**

Chairpersons: Evelien Gielen, Radmila Matijevic

13.30

Channel 1

**Plenary Lecture 6**• *Are there treatments for sarcopenia?* Marjolein Visser

14.00

Channel 1

**Meet-The-Expert Session**• *Is screening for osteoporosis useful?* E. M. Curtis

14.30

Channel 1

**Oral communication selected from abstracts**• *OC3 - A MULTICENTER, OBSERVATIONAL, EXTENSION STUDY EVALUATING THE SAFETY, TOLERABILITY, AND EFFICACY OF A SINGLE LORECIVIVINT INJECTION IN KNEE OA SUBJECTS*

Presenting author: • J. Tambiah

Authors: I. Simsek, C. Swearingen, H. Ghandehari, S. Kennedy, N. Skrepnik, Y. Yazici

14.40

Channel 1

**Meet-The-Expert Session**• *Calcium-vitamin D, still a role in osteoporosis management?* Elaine M. Dennison

15.10

Channel 1

**Oral communication selected from abstracts**• *OC4 - FRACTURE RISK IN PARKINSON'S DISEASE: DRIVEN BY LOW BONE STRENGTH, MUSCLE WEAKNESS OR FALLS?*

Presenting author: • E. V. McCloskey

Authors: P. Bhattia, H. Shreef, H. Johansson, M. Lorentzon, N. C. Harvey, J. A. Kanis

14.00 - 15.00

Channel 2

**Educational Lecture supported by an unrestricted grant from IBSA**• *Meet the evidence of pharma-grade chondroitin sulfate* Nicola Veronese

15.20 - 15.30

Channel 1

**BREAK 10'**

15.30 - 16.55

Channel 1

**SCIENTIFIC SESSION V**

Chairpersons: Claudia Campusano, Maria Luisa Brandi

15.30

Channel 1

**Plenary Lecture 7**

- *Gut microbiome, bone and joint* Georg Schett

16.00

Channel 1

**Meet-The-Expert Session**

- *Rehabilitation after fragility fracture* Olivier Bruyère

16.30

Channel 1

**Oral communication selected from abstracts**

- *OC5 - PREVALENCE AND AGREEMENT BETWEEN RECENT SARCOPIENIA DEFINITIONS: FINDINGS FROM FOUR POPULATION-BASED COHORTS*

Presenting author: • L. D. Westbury

Authors: H. E. Syddall, J. A. Cauley, P. M. Cawthon, E. M. Curtis, K. Ensrud, R. A. Fielding, H. Johansson, J. A. Kanis, M. K. Karlsson, T. Kwok, N. Lane, M. Lorentzon, D. Mellström, A. B. Newman, C. Ohlsson, E. Orwoll, E. Ribom, B. E. Rosengren, J. T. Schousboe, E. J. Shiroma, N. C. Harvey, E. M. Dennison, C. Cooper

16.40

Channel 1

**Presentation of prizes and awards**

- *Presentation of the 2020 ESCEO Medal of Excellence, the IOF CNS Medal, the ESCEO-IOF Pierre Meunier Young Scientist Award and the ESCEO-IOF Young Investigator Awards* Jean-Yves Reginster

- *Presentation of the ESCEO-AgNovos Healthcare Young Investigator Awards* Jean-Yves Reginster, James Howe

16.55 - 17.00

Channel 1

**BREAK 05'**

17.00 - 18.30

Channel 1

**INDUSTRY SATELLITE SYMPOSIUM**

\*[See details on the Sponsored Satellite Symposia page](#)

18.30

Channel 1

**Adjournment**

CEST (Central European summer time)

08.30 - 09.30

Channel 1

### INDUSTRY BREAKFAST SYMPOSIUM

\*[See details on the Sponsored Satellite Symposia page](#)

09.30 - 11.20

Channel 1

### SCIENTIFIC SESSION VI

Chairpersons: Charlotte Beaudart, Stefania Maggi

09.30

Channel 1

#### Plenary Lecture 8

• *Is genetics helping to improve osteoporosis management ?* Emma Duncan

10.00

Channel 1

#### Meet-The-Expert Session

• *Fracture during childhood and adolescence* Kate Ward

10.30

Channel 1

#### Oral communication selected from abstracts

• *OC9 - MAINTENANCE OF EFFECT OF BUROSUMAB TREATMENT AND THE IMPACT OF TREATMENT INTERRUPTION ACROSS A 96-WEEK PHASE 3 STUDY AND 48 WEEKS OF A PHASE 3B STUDY IN ADULTS WITH X-LINKED HYPOPHOSPHATEMIA (XLH)*

Presenting author: • P. Kamenicky

Authors: K. Briot, M. L. Brandi, M. Cohen-Solal, R. Crowley, R. Keen, S. Kolta, R. Lachmann, S. Ralston, J. Walsh, A. Rylands, A. Williams, W. Sun, A. Nixon, M. Nixon, K. Javaid

10.40

Channel 1

#### Meet-The-Expert Session

• *Discussion of complex bone disorder clinical cases* Nicholas R. Fuggle and Roland Chapurlat

11.10

Channel 1

#### Oral communication selected from abstracts

• *OC14 - PARATHYROIDECTOMY IS ASSOCIATED WITH REDUCED RISK OF FRACTURE AND CARDIOVASCULAR EVENTS IN PATIENTS DIAGNOSED WITH PRIMARY HYPERPARATHYROIDISM - A NATIONAL, RETROSPECTIVE COHORT STUDY*

Presenting author: • M. Lorentzon

Authors: K. F. Axelsson, M. Wallander, H. Johansson, N. C. Harvey, L. Vandenput, E. V. McCloskey, L. Enwu, J. A. Kanis, H. Litsne



09.30 - 11.20

Channel 2

**SCIENTIFIC SESSION VII**

Chairpersons: Friederike Thomasius, Etienne Cavalier

09.30

Channel 2

**Oral communication selected from abstracts**• OC6 - *GLUCOSAMINE SULPHATE: AN UMBRELLA REVIEW OF HEALTH OUTCOMES*

Presenting author: • N. Veronese

Authors: J. Demurtas, L. Smith, J.-Y. Reginster, O. Bruyère, G. Honvo, S. Maggi

09.40

Channel 2

**Oral communication selected from abstracts**• OC7 - *THE ASSOCIATIONS BETWEEN DISEASE MODIFYING ANTIRHEUMATIC DRUGS AND INCIDENT AS WELL A PROGRESSION OF RADIOGRAPHIC HAND OSTEOARTHRITIS IN RHEUMATOID ARTHRITIS PATIENTS*

Presenting author: • T. Burkard

Authors: C. Lechtenboehmer, S. Reichenback, U. A. Walker, A. M. BURDEN, T. Hügler

09.50

Channel 2

**Oral communication selected from abstracts**• OC8 - *MEANINGFUL IMPROVEMENTS IN WOMAC PAIN AND PHYSICAL FUNCTION IN THREE PHASE 3 TRIALS OF TANEZUMAB IN PATIENTS WITH MODERATE-TO-SEVERE OSTEOARTHRITIS: A RESPONDER ANALYSIS*

Presenting author: • P. Conaghan

Authors: R. H. Dworkin, T. J. Schnitzer, F. Berenbaum, R. Yang, A. G. Bushmakina, J. C. Cappelleri, M. T. Brown, L. Viktrup, L. Abraham

10.00

Channel 2

**Meet-The-Expert Session**• *Lyosis Software - A new way to manage FLS centers more efficiently and cost optimized* Werner Fehn

10.30

Channel 2

**Oral communication selected from abstracts**• OC10 - *ROMOSUZUMAB EFFICACY AND SAFETY IN EUROPEAN PATIENTS: A SUBANALYSIS OF THE PHASE 3, RANDOMISED FRAME STUDY*

Presenting author: • B. Langdahl

Authors: L. C. Hofbauer, S. Ferrari, Z. Wang, A. Fahrleitner-Pammer, E. Gielen, P. Lakatos, E. Czerwinski, E. Jodar-Gimeno, J. Timoshanko, M. Oates, C. Libanati

10.40

Channel 2

**Oral communication selected from abstracts**• OC11 - *MULTIDIMENSIONAL PROGNOSTIC INDEX AND THE RISK OF FRACTURES: AN 8-YEAR LONGITUDINAL COHORT STUDY IN THE OSTEOARTHRITIS INITIATIVE*

Presenting author: • N. Veronese

Authors: L. Smith, E. Ziguora, M. Barbagallo, L. Dominguez, C. Cooper, R. Rizzoli, J.-Y. Reginster, S. Maggi, A. Pilotto

10.50

Channel 2

**Oral communication selected from abstracts**• OC12 - *THE PREVALENCE OF COMMUNITY-DWELLING OLDER ADULTS AT HIGH FRACTURE RISK WHO ARE NOT TAKING OSTEOPOROSIS MEDICATIONS: RESULTS FROM THE CANADIAN LONGITUDINAL STUDY ON AGING (CLSA)*

Presenting author: • C. McArthur

Authors: A. Lee, H. Abu Alrob, J. D. Adachi, L. Giangregorio, L. Griffith, S. N. Morin, L. Thabane, G. Ioannidis, J. Lee, W. D. Leslie, A. Papaioannou

11.00

Channel 2

**Oral communication selected from abstracts**

• OC13 - PATIENT'S PREFERENCES FOR LIFESTYLE CHANGES IN OSTEOPOROTIC FRACTURE PREVENTION: A CROSS-EUROPEAN DISCRETE-CHOICE EXPERIMENT

Presenting author: • C. Beaudart

Authors: A. Boonen, N. Li, S. Bours, S. Goemaere, J.-Y. Reginster, C. Roux, B. MCGOWAN, A. Diez-Perez, R. Rizzoli, C. Cooper, M. Hiligsmann

11.10

Channel 2

**Oral communication selected from abstracts**

• OC15 - FRAILITY IS ASSOCIATED WITH INFLAMMATION AND REDUCED BONE MINERAL DENSITY INDEPENDENT OF FAT MASS: FINDINGS FROM UK BIOBANK

Presenting author: • E. M. Curtis

Authors: S. D'angelo, S. Woolford, R. Durdin, Z. Raisi-Estabragh, K. A. Ward, C. Cooper, N. C. Harvey

11.20 - 13.20

Channel 1

**SCIENTIFIC SESSION VIII**

Chairpersons: Gemma Adib, Mickaël Hiligsmann

11.20

Channel 1

**Meet-The-Expert Session**

• *Can we influence fracture repair?* Julio Fernandes

11.50

Channel 1

**Oral communication selected from abstracts**

• OC18 - LOCAL OSTEO-ENHANCEMENT PROCEDURE SIGNIFICANTLY INCREASES BONE MINERAL DENSITY IN THE PROXIMAL FEMUR OF POSTMENOPAUSAL WOMEN WITH OSTEOPOROSIS AT HIGH RISK FOR HIP FRACTURE

Presenting author: • De Schepper

Authors: J. Howe, J. Shaul, J. Coteur, B. Huber

12.00

Channel 1

**Meet-The-Expert Session**

• *FLS and fracture risk reduction* Kassim Javaid

12.30

Channel 1

**Oral communication selected from abstracts**

• OC23 - QUALITY OF LIFE, RESOURCE USE AND COSTS RELATED TO FRAGILITY FRACTURES: DEVELOPMENT AND EVALUATION OF MULTIDISCIPLINARY POST-FRACTURE CARE PATHWAYS

Presenting author: • J. Talevski

Authors: K. Sanders, J. Watts, L. Busija, A. Beauchamp, G. Duque, F. Borgström, J. A. Kanis, A. Svedbom, A. Stuart, S. Brennan-Olsen

12.40

Channel 1

**Meet-The-Expert Session**

• *How to warrant reliable data for calciotropic hormones and bone turnover markers assays* Etienne Cavalier

13.10

Channel 1

**Oral communication selected from abstracts**

• OC29 - CORTICAL PORE SIZE DISTRIBUTION AND VISCOELASTIC HUMAN TIBIA PROPERTIES DISCRIMINATE FRAGILITY FRACTURES INDEPENDENT OF BONE MINERAL DENSITY

Presenting author: • K. Raum

Authors: G. Armbrecht, H. Minh Nguyen, J. Massmann

13.20

**BREAK 40'**

11.20 - 14.30

Channel 2

**SCIENTIFIC SESSION IX**

Chairpersons: Helena Johansson, Emmanuel Biver

11.20

Channel 2

**Oral communication selected from abstracts**

• *OC16 - EPIGENETIC AGE ACCELERATION ASSOCIATIONS WITH SKELETAL OUTCOMES: DIFFERENTIAL IMPACTS IN MEN AND WOMEN*

Presenting author: • N. R. Fuggle

Authors: M. A. Clynes, M. O'breasail, C. Parsons, J. W. Holloway, A. Kitaba, K. A. Ward, C. Cooper, E. M. Dennison

11.30

Channel 2

**Oral communication selected from abstracts**

• *OC17 - COMPARISON OF FRACTURE RATES AND ECONOMIC OUTCOMES BETWEEN WOMEN WITH OSTEOPOROSIS RECEIVING RISEDRONATE GASTRO-RESISTANT (GR) AND ALENDRONATE*

Presenting author: • F. Thomasius

Authors: S. Palacios, A. Alam, M. Boolell, F. Vekeman, G. Gauthier

11.40

Channel 2

**Oral communication selected from abstracts**

• *OC19 - A PROSPECTIVE OPEN-LABEL OBSERVATIONAL STUDY OF A BUFFERED SOLUBLE 70 MG ALENDRONATE EFFERVESCENT TABLET ON UPPER GASTROINTESTINAL SAFETY AND MEDICATION ERRORS: THE GASTROPASS STUDY*

Presenting author: • S. Minisola

Authors: A. Ponce Vargas, G. Letizia Mauro, F. Bonet Madurga, G. Adami, D. M. Black, N. Qizilbash, J. Blanch Rubió

11.50

Channel 2

**Oral communication selected from abstracts**

• *OC20 - OSTEOCALCIN, MUSCLE FUNCTION AND 15-YEAR FALLS-RELATED HOSPITALISATIONS IN OLDER WOMEN: THE PERTH LONGITUDINAL STUDY OF AGEING WOMEN*

Presenting author: • C. Smith

Authors: J. R. Lewis, M. Sim, W. H. Lim, E. M. Lim, L. C. Blekkenhorst, T. Brennan-Speranza, L. Adams, E. Byrnes, G. Duque, I. Levinger, R. Prince

12.00

Channel 2

**Oral communication selected from abstracts**

• *OC21 - RELATIONSHIPS BETWEEN MALNUTRITION, SARCOPENIA, AND FRAILTY AND THE INCIDENCE OF COVID-19 IN OLDER ADULTS: DATA FROM THE SARCOPHAGE COHORT*

Presenting author: • L. Lengelé

Authors: M. Locquet, M. Moutschen, C. Beaudart, J.-F. Kaux, S. Gillain, C. Shadouh, J.-Y. Reginster, O. Bruyère

12.10

Channel 2

**Oral communication selected from abstracts**

• *OC22 - FUNCTIONAL BRAIN PROCESSES IN SARCOPENIA - EVIDENCE FOR DIFFERENTIAL CENTRAL NEURAL MECHANISMS IN DYNAPENIC OLDER ADULTS*

Presenting author: • W. Trost

Authors: A. Trombetti, M. Hars, N. Fernandez, F. Herrmann, T. Chevalley, S. Ferrari, G. Gold, R. Rizzoli, P. Vuilleumier

12.20

Channel 2

**Oral communication selected from abstracts**

• *OC24 - UC-II® COLLAGEN HELPS SUPPORT KNEE JOINT MOBILITY IN HEALTHY SUBJECTS: A RANDOMIZED, DOUBLE BLIND, PLACEBO-CONTROLLED STUDY*

Presenting author: • V. Juturu

Authors: K. Knaub, W. Alt, C. Schön, S. Durkee, Z. Saiyed

12.30

Channel 2

**Oral communication selected from abstracts**

• OC25 - 10-YEAR TRENDS IN PREVALENCE OF RADIOGRAPHIC HIP OSTEOARTHRITIS IN JAPANESE MEN AND WOMEN: COMPARISON OF BASELINE AND 4TH RESEARCH ON OSTEOARTHRITIS/OSTEOPOROSIS AGAINST DISABILITY STUDY SURVEYS

Presenting author: • T. Iidaka

Authors: S. Muraki, H. Oka, C. Horii, K. Nakamura, T. Akune, S. Tanaka, N. Yoshimura

12.40

Channel 2

**Oral communication selected from abstracts**

• OC26 - SAFETY, TOLERABILITY, AND PHARMACOKINETICS OF AN INTRA-ARTICULAR CORTICOSTEROID INJECTION ADMINISTERED 7 DAYS BEFORE OR AFTER INTRA-ARTICULAR LORECEVIVINT INJECTION INTO THE SAME KNEE OF HEALTHY VOLUNTEERS: AN OPEN-LABEL, PARALLEL-ARM STUDY

Presenting author: • Y. Yazici

Authors: A. Halseth, S. Kennedy, C. Swearingen, I. Simsek, M. Fineman, N. E. Lane

12.50

Channel 2

**Oral communication selected from abstracts**

• OC27 - EFFECT OF 2 FORMS OF VITAMIN D ON SKELETAL MUSCLE FIBER SIZE AND VITAMIN D RECEPTOR (VDR) CONCENTRATION IN YOUNGER POSTMENOPAUSAL WOMEN

Presenting author: • L. Ceglia

Authors: D. Rivas, M. Schögl, H. A. Bischoff-Ferrari, B. Dawson-Hughes

13.00

Channel 2

**Oral communication selected from abstracts**

• OC28 - NEUROFILAMENT-LIGHT CHAINS (NF-L), A BIOMARKER OF NEURONAL DAMAGE, IS INCREASED IN SARCOPENIC PATIENTS: RESULTS OF THE SARCOPHAGE STUDY

Presenting author: • A. Ladang

Authors: S. Kovacs, L. Lengelé, M. Locquet, J.-Y. Reginster, O. Bruyère, E. Cavalier

13.10

Channel 2

**Educational Lecture Sponsored by ESCEO through an unrestricted educational grant from Amgen**

• *Integrated Care Pathways for Bone Health: improving care around the world* Mary Bussell

14.00 - 17.00

Channel 1

**SCIENTIFIC SESSION X**

Chairpersons: Elaine M. Dennison, Bess Dawson-Hughes

14.00

Channel 1

**Meet-The-Expert Session**

• *Management of men with osteoporosis* Alberto Ferlin

14.30

Channel 1

**Oral communication selected from abstracts**

• OC30 - IN HEALTHY MEN, EARLY DECLINE IN TRABECULAR BONE MINERAL DENSITY IS, IN PART, RELATED TO DECREASES IN SEX STEROIDS

Presenting author: • T. Banica

Authors: C. Verroken, H. Zmierzak, S. Goemaere, J.-M. Kaufman, B. Lapauw

14.40

Channel 1

**Plenary Lecture 9**

• *Rehabilitation of menopausal hormone therapy in osteoporosis management* Irene Lambrinoudaki

15.10

Channel 1

**Oral communication selected from abstracts**

• OC31 - MULTICENTER PROSPECTIVE STUDY TO ASSESS EFFICACY AND SAFETY  
GLYCOSAMINOGLYCAN PEPTIDE COMPLEX IN PATIENTS WITH KNEE OSTEOARTHRITIS AND  
COMORBIDITY

Presenting author: • E. Taskina

Authors: N. Kashevarova, E. Sharapova, S. Anikin, E. Strebkova, K. Telyshev, L. Alekseeva, A. Lila, T. Raskina, E. Otteva, E. Zonova, N. Chichasova, V. Lila, I. Vinogradova, O. Ivanova, S. Yakupova, E. Shmidt

15.20

Channel 1

**Oral communication selected from abstracts**

• OC32 - IDENTIFICATION OF PATIENTS AT LOW, HIGH AND VERY HIGH RISK OF OSTEOPOROTIC  
FRACTURES IN THE UK USING FRAX

Presenting author: • E. V. McCloskey

Authors: N. C. Harvey, H. Johansson, M. Lorentzon, E. Liu, L. Vandenput, J. A. Kanis

15.30

Channel 1

**Oral communication selected from abstracts**

• OC33 - CIRCULATING MICRORNA AS BIOMARKERS OF OSTEOPOROSIS AND FRACTURE RISK

Presenting author: • S. Donati

Authors: S. Ciuffi, F. Marini, A. Botta, G. Isaia, P. D'Amelio, C. Marcocci, S. Migliaccio, S. Minisola, J. Pepe, R. Nuti, U. Tarantino, M. L. Brandi

15.40

Channel 1

**Oral communication selected from abstracts**

• OC34 - PALOVAROTENE FOR THE TREATMENT OF FIBRODYSPLASIA OSSIFICANS PROGRESSIVA IN  
FEMALES AGED  $\geq 8$  YEARS AND MALES AGED  $\geq 10$  YEARS: DATA FROM THE PHASE III MOVE TRIAL

Presenting author: • G. Baujat

Authors: R. J. Pignolo, M. Al Mukaddam, M. A. Brown, A. M. Cheung, C. L. De Cunto, P. Delai, E. C. Hsiao, P. Kannu, R. Keen, E. E. Mancilla, S. K. Berglund, R. Marino, A. Strahs, F. S. Kaplan

15.50

Channel 1

**Plenary Lecture 10**

• *New approaches of rare skeletal diseases management* Maria Luisa Brandi

17.20

Channel 1

**Oral communication selected from abstracts**

• OC35 - MIGHT NSAID USE INTERACT WITH BISPHOSPHONATE EFFICACY? EXPLORATORY ANALYSIS  
FROM THE CLODRONATE HIP STUDY

Presenting author: • E. V. McCloskey

Authors: Z. Zheng, H. Johansson, N. C. Harvey, M. Lorentzon, J. A. Kanis

16.20 - 17.20

Channel 1

**SPONSORED MEET-THE-EXPERT SESSION - BUILDING BONE, IMPROVING OUTCOMES**

\*[See details on the Sponsored Satellite Symposia page](#)

17.00

**Adjournment**

# Non-Sponsored Symposium (NSS)

## NSS1

### Joint IOF and CABS Symposium - Cancer and Bone

Chairpersons: *P. Hadji, R. Coleman*

- ▶ *Cancer treatment induced osteoporosis - really important?* – *P. Hadji*
- ▶ *Influence of adj. bisphosphonates and denosumab on breast cancer outcome.*
- *R. Coleman*
- ▶ *Surgical treatment of bone metastasis – Update 2021* – *A.A. Kurth*

## NSS2

### The Asia Pacific Consortium on Osteoporosis (APCO) NSS Paving the Way Forward for Harmonization of Osteoporosis Guidelines - the Pan Asia and Oceania FRAMEWORK of the Asia Pacific Consortium on Osteoporosis (APCO)

Chairpersons: *Cyrus Cooper, Philippe Halbout*

- ▶ *The Asia Pacific Consortium on Osteoporosis – A brief introduction* – *Manju Chandran*
- ▶ *5IQ: A novel analysis of extant guidelines*
- *Paul Mitchell*
- ▶ *The Delphi Process: Developing consensus amongst experts from 19 countries and regions* – *Manju Chandran*
- ▶ *Embedding the Framework in the Asia Pacific* – *Greg Lyubomirsky and Ms Thalia Georgiou*
- ▶ *Conclusion*

## NSS3

### Breast Cancer and Osteoporosis

Chairperson: *Yannis Dionyssiotis*

- ▶ *Breast cancer and osteoporosis*
- *Lambros Athanassiou*
- ▶ *Estrogen receptor antagonists and osteoporosis* – *Yannis Dionyssiotis*
- ▶ *Pathophysiology of osteoporosis in the context of estrogen receptor antagonist treatment*
- *Panagiotis Athanassiou*
- ▶ *Management of osteoporosis in breast cancer patients* – *Ifigenia Kostoglou-Athanassiou*

## NSS4

### Exosomes to diagnose and treat musculoskeletal diseases: An update

Chairperson: *Gustavo Duque*

- ▶ *Extracellular vesicles in musculoskeletal diseases* – *Mark W. Hamrick*
- ▶ *The role of extracellular vesicles in the pathophysiology and treatment of osteosarcoma* – *Gustavo Duque*
- ▶ *Therapeutic applications of MSC derived extracellular vesicles in osteoarthritis*
- *Susanne Grässel*

## NSS5

### SARC-F for sarcopenia: high potential for new applications

Chairperson: *John Morley*

- ▶ *The comparison of SARC-F with other screening tools for sarcopenia.* – *Karolina Piotrowicz*
- ▶ *SARC-F Questionnaire Detects Frailty in Older Adults* – *Serdar Ozkok*
- ▶ *Ability of SARC-F to Find Probable Sarcopenia Cases in Older Adults: application of alternative cut-offs* – *Gülistan Bahat*

## NSS6

### Crystals at the crossroad between inflammation and degeneration

Chairperson: *Razvan Adrian Ionescu*

- ▶ *Check your past, know your future* – *Claudiu Avram*
- ▶ *Getting well or getting hell* – *Razvan Ionescu*
- ▶ *The chicken or the egg: the causality dilemma* – *Mihai Bojinca*
- ▶ *Look into the crystal bowl* – *Florentin Ananu Vreju*

## NSS7

### Occupational musculoskeletal hazards among health professionals

Chairperson: *Yesim Gökçe-Kutsal*

- ▶ *Are health professionals vulnerable to work-related musculoskeletal disorders?* – *Yesim Gökçe-Kutsal*
- ▶ *Neck and upper extremity disorders among health professionals - Yesim Kirazli*
- ▶ *Occupational back and lower extremity problems in health personnel* – *Ayşe A. Küçükdeveci*

**NSS8****Osteoporosis in 2020+: Flattening The Curve of Fragility Fractures**Chairperson: *Bruno Muzzi Camargos*

- ▶ *Introduction* – *Bruno Muzzi Camargos*
- ▶ *Do You Believe in Tests ?* – *John Carey*
- ▶ *To Mask or Not To Mask ?* – *Jorge Morales-Torres*
- ▶ *How Awareness Could Change a Common Fate* – *Bruno Muzzi Camargos*
- ▶ *Wrap-up/Discussion*

**NSS10****Fracture Liaison Services (FLS) in Latin America: From Where and Where To**Chairperson: *Bruno Muzzi Camargos*

- ▶ *Introduction - Overview of FLS in Latin America*  
– *Bruno Muzzi Camargos*
- ▶ *Situation of the FLS in Mexico: barriers and strengths* – *Andrea Olascoaga Gómez de León*
- ▶ *How fracture liaison services (FLS) impacted post-fracture outcomes in Colombia?*  
– *Adriana Medina Orjuela*
- ▶ *FLS in public and private systems in Brazil: two worlds and a single outcome.* – *Bernardo Stolnick*
- ▶ *Conclusion* – *Bruno Muzzi Camargos.*

**NSS11****Osteoporosis in the context of autoimmune rheumatic diseases**Chairperson: *Panagiotis Athanassiou*

- ▶ *Autoimmune rheumatic diseases and osteoporosis* – *Panagiotis Athanassiou*
- ▶ *Autoimmunity and osteoporosis*  
– *Ifigenia Kostoglou-Athanassiou*
- ▶ *Biologic agents in autoimmune rheumatic diseases and bone health* – *Lambros Athanassiou*
- ▶ *Management of osteoporosis in the context of autoimmune rheumatic diseases*  
– *Yannis Dionyssiotis*

**NSS12****Presentation of the book “Osteoporosis: mitos y realidades” (“Osteoporosis: myths and realities”)**Chairperson: *David Vasquez-Awad*

- ▶ *Opening* – *David Vasquez-Awad*
- ▶ *“Osteoporosis: myths and realities” – the book* – *Jorge Felipe Ramirez*
- ▶ *Osteoporosis: an economic perspective*  
– *Diego Rosselli*
- ▶ *Osteoporosis, epidemic of the 21st century* – *David Vasquez-Awad*
- ▶ *Conclusions and closure* – *Jorge Felipe Ramirez, Diego Rosselli, David Vasquez-Awad*

**NSS13****The State of the Art in Hypophosphatasia (HPP) Diagnosis in Adults and Children**Chairperson: *Serge Ferrari*

- ▶ *Current State in Diagnosis of HPP* – *Aliya Khan*
- ▶ *Diagnostic Criteria for Children and Adolescents with* – *Eric Rush*
- ▶ *Diagnostic Criteria for Adults with HPP* – *Maria Luisa Brandi*

**NSS14****Improving the Communication of Fracture risk**Chairperson: *Mickael Hiligsmann*

- ▶ *Welcome and introduction* – *Stuart Silverman*
- ▶ *What can we learn from the literature?* – *Charlotte Beaudart*
- ▶ *Insights from interviews with patients at risk for fractures (the RICO study)* – *Mickael Hiligsmann*
- ▶ *- Key points, next steps & conclusion* – *Stuart Silverman*

**NSS15****Exercise to prevent deconditioning of older people during the covid-19 pandemic: from clinic to community setting**Chairperson: *Mylène Aubertin-Leheudre*

- ▶ *Feasibility of implementing physical activity programs in hospitalized positive covid-19 older adults* – *Yves Rolland*
- ▶ *Remote Physical Activity using Web Technology to Prevent Isolation-Related Mobility Loss in Independent older adults: a solution during the COVID-19 pandemic?* – *Mylène Aubertin-Leheudre*
- ▶ *Impacts of COVID-19 restrictions on functional status and mobility among community-dwelling pre-disabled seniors: Virtual Physical Exercises at Home, a solution?* – *Fanny Buckinx*

**NSS16****Osteosarcopenia in disabled persons**Chairperson: *Christina-Anastasia Rapidi*

- ▶ *Osteosarcopenia and neurodisability* – *Yannis Dionyssiotis*
- ▶ *Physical activity in osteoporosis and sarcopenia management and rehabilitation* – *Mark A. Lissens*
- ▶ *Conclusion - Discussion* – *All*

**NSS17****Rapid risk assessment and cost-effective methods for Osteoporosis in low resource settings – implication for practice**Chairperson: *Fatjona Kamberi*

- ▶ *Rapid risk assessment of osteoporosis using cost-effective methods – evidence from a cross sectional study in a South Eastern European country* – *Fatjona Kamberi*
- ▶ *Health beliefs, knowledge and barriers of women in local population regarding Osteoporosis – A cross-sectional study* – *Enkeleda Sinaj*
- ▶ *Awareness for early detection of Osteoporosis what the research in low resource settings suggests – evidence from a review study* – *Vjollca Ndreu*
- ▶ *The role of vitamin D in patients with osteoporosis-review* – *Jerina Jaho*

**NSS18****Depression, antidepressive treatment and osteoporosis**

- ▶ *Depression and osteoporosis* – *Ifigenia Kostoglou-Athanassiou*
- ▶ *Stress and osteoporosis* – *Panagiotis Athanassiou*
- ▶ *Antidepressive agents and osteoporosis* – *Lambros Athanassiou*
- ▶ *Management of osteoporosis in the context of depression* – *Yannis Dionyssiotis*

**NSS19****Interdisciplinary approach to chronic musculoskeletal pain**Chairperson: *Olga Kurushina*

- ▶ *Interdisciplinary approach to biomechanics in chronic musculoskeletal pain* – *Alexander Barulin*
- ▶ *Psychosomatics and cognitive-behavioral therapy in the treatment of chronic musculoskeletal pain* – *Olga Kurushina*
- ▶ *Kinesiotaping in the correction of myofascial pain* – *Bogdan Kalinchenko*
- ▶ *Non-pharmacological treatment in chronic musculoskeletal pain* – *Anna Drushlyakova*

**NSS20****The importance of Mediterranean diet in musculoskeletal diseases**Chairperson: *Stefania Maggi*

- ▶ *Mediterranean diet and sarcopenia* – *Elaine Dennison*
- ▶ *Mediterranean diet, osteoporosis and fracture* – *René Rizzoli*
- ▶ *Mediterranean diet in osteoarthritis and other inflammatory rheumatological diseases* – *Nicola Veronese*



**NSS21****The effects of vitamin K on bone; beyond coagulation**Chairperson: *Bo Abrahamsen*

- ▶ *The biology of the active forms of vitamin K.*
- *Dominic Harrington*
- ▶ *The effects of vitamin K on bone health*
- *Geeta Hampson*

**NSS22****Management of glucocorticoid induced osteoporosis**Chairpersons: *Oswaldo Daniel Messina, Luis F Vidal Neira*

- ▶ *Epidemiology and Pathogenesis* – *OD Messina*
- ▶ *Clinical features and diagnosis* – *OD Messina*
- ▶ *Therapeutic options: Candidates for receiving therapy* – *H Ratermann*
- ▶ *Modern treatment* – *W Lems*

**NSS23****Osteoclast activity defining bone strength in health and disease**Chairpersons: *Marise Lazaretti Castro, Francisco José de Paula*

- ▶ *Switching the osteoclast behavior determines the bone remodeling* – *Sandra Yasuyo Fukada*
- ▶ *Osteoclasts on: bone fragility in the primary hyperparathyroidism* – *Francisco Bandeira*
- ▶ *Osteoclasts off: quality of bone and fracture risk in the hypoparathyroidism* – *João Lindolfo Cunha Borges*
- ▶ *Closing: last considerations*

**NSS24****Assessing quality of life in sarcopenia: new insights from the SarQoL® questionnaire”**Chairperson: *Olivier Bruyère*

- ▶ *Welcome, introduction and presentation of the SarQoL® questionnaire* – *Jean-Yves Reginster*
- ▶ *Lecture 1. Clinimetric properties of Patient Reported Outcome Measures (PROMS) – Which methods for which purpose?:* – *Anton Geerinck*
- ▶ *Lecture 2. The SarQoL® questionnaire – Clinimetric properties and novel applications* – *Charlotte Beaudart*
- ▶ *Lecture 3. The Short-Form SarQoL® questionnaire - Development and validation of a Short Form Measure* – *Anton Geerinck*
- ▶ *Key points & Discussion* – *Olivier Bruyère*

## CSA Special Session

**CSA Showcase: State of the art in fracture risk mechanism and assessment**Chairperson: *Nicholas Harvey, Serge Ferrari*

- ▶ *Biomarkers of bone fragility in patients with diabetes* – *Christian Meier*
- ▶ *Vascular calcification and bone loss: Linked disorders of ageing?* – *Jorge Cannata-Andia*
- ▶ *Screening for high fracture risk in primary care* – *Eugene McCloskey*

## Educational Lectures (EL)

### EL1

#### **Dietary patterns and fracture risk**

*Stefania Maggi*

### EL2 (supported by an unrestricted grant from IBSA)

#### **Meet the evidence of pharma-grade chondroitin sulfate**

*Nicola Veronese*

### EL3

#### **Peak bone mass and primary fracture prevention**

*Peter R. Ebeling*

### EL4 (sponsored by ESCEO through an unrestricted educational grant from AMGEN)

#### **Integrated Care Pathways for Bone Health: improving care around the world**

*Mary Bussell*

### EL5

#### **Skeletal Rare Diseases: Case discussions with members of the IOF SRD Academy**

Chairperson: *Professor Nicholas Harvey, IOF CSA Chair and SRD Academy Co-chair; and Professor Maria Luisa Brandi, SRD Academy Convener and Co-chair*

▶ *Case history 1: McCune Albright Syndrome with phosphate wasting - Professor Roland Chapurlat*

▶ *Overview of McCune Albright Syndrome*

- *Professor Roland Chapurlat*

▶ *Case history 2: Tumour induced osteomalacia*

- *Dr Nicholas Fuggle*

▶ *Overview of tumour induced osteomalacia*

- *Dr Manju Chandran*

▶ *Panel discussion - chaired by Professor Maria Luisa Brandi, SRD Academy Convener and Co-chair*

*Participants: Dr Kassim Javaid, Dr Manju Chandran, Professor Serge Ferrari, Professor Roland Chapurlat, Dr Nicholas Fuggle, Professor Nicholas Harvey*

#### **Presentation of the IOF Skeletal Rare Disease Academy Awards Ceremony 2021 (Financially supported by Kyowa Kirin, which had no input into the Committee, abstract selection or awards)**

*Professor Nicholas Harvey, IOF CSA Chair, SRD Academy Co-Chair*

## ESCEO-WHO Collaborating Center Symposium

ESCEO Working Group organized under the auspices of the World Health Organization Collaborating Center for Public Health Aspects of Musculoskeletal Health and Aging.

### Interdisciplinary management of X-Linked Hypophosphatemia: from medical care to patient partnership

Chairpersons: *René Rizzoli, Manju Chandran*

▶ *Clinical manifestations of XLH throughout the lifecourse - Kassim Javaid*

▶ *Therapeutic approaches of XLH throughout the lifecourse - Agnès Linglart*

▶ *Closing remarks - Maria Luisa Brandi*

## ESPRM-ESCEO-IOF Symposium

### ESPRM-ESCEO-IOF Symposium

### Update in the management of low back pain: the role of the PRM specialist

Chairperson: *Fitnat Dincer*

▶ *The approach of physiatrists to Low Back Pain across Europe. The results of the research conducted by ESPRM Musculoskeletal Disorders Committee - Fitnat Dincer*

▶ *Update in the Pharmacological and Non pharmacological Management of Low Back Pain - Ülkü Akarimak*

▶ *Interventional pain treatment in Low Back Pain - M. A. Taskaynatan*

## ESCEO Symposia

Determinants of the differences between the ESCEO and OARSI 2019 guidelines for the management of knee osteoarthritis

Chairpersons: *Ali Mobasheri, Jean Yves Reginster*

- ▶ *Similarities and differences between the OARSI and ESCEO guidelines for the management of knee osteoarthritis* – *Ravi Bannuru*
- ▶ *How can we explain the differences between the OARSI and ESCEO guidelines for the management of knee osteoarthritis?* – *Nigel K. Arden*
- ▶ *Closing remarks* – *Olivier Bruyère*

Update of the ESCEO recommendations for the conduct of clinical trials for drugs aiming at the treatment of sarcopenia

Chairpersons: *Charlotte Beudart, Roger A. Fielding*

- ▶ *Introduction* – *Alfonso Cruz Jentoft*
- ▶ *Patients to be included in clinical trials assessing the safety and efficacy of new chemical entities aiming at the treatment of sarcopenia* – *Mario Miguel Rosa*
- ▶ *Primary and secondary endpoints for clinical trials assessing the safety and efficacy of new chemical entities aiming at the treatment of sarcopenia* – *Andrea Laslop*
- ▶ *Closing remarks*
- *Jürgen Bauer and Andrea Trombetti*

## EUGMS-ESCEO-IOF Symposium

### EUGMS-ESCEO-IOF Joint Symposium

Muscle matters for experts in osteoporosis

Chairperson: *Finbarr Martin*

- ▶ *Osteosarcopenia: prevalence and consequences* – *Barbara Rubek Nielsen*
- ▶ *Standardizing ultrasounds to assess muscle mass: the SARCUS project* – *Stany Perikisas*

## ESCEO-IOF-SICOT Symposium

ESCEO-IOF-SICOT joint Symposium : Fracture Liaison Services (FLS) in Orthopaedic Surgery

Chairpersons: *Josée Delisle, Philippe Halbout*

- ▶ *Opening message* – *Philippe Halbout, Josée Delisle*
- ▶ *Success story of collaboration between orthopaedics and rest of the world in FLS! How can I work with my orthopaedic surgeon?* – *Julio Fernandes*
- ▶ *Getting FLSs sustainable- key steps* – *Kassim Javaid*
- ▶ *Teams and empowerment! How to create synergy between the Nurse, Doctor, Family and the Patient?* – *Josée Delisle*
- ▶ *Crossfire and Q&A*
- ▶ *Closing message* – *Josée Delisle*

## ISGE-ESCEO Symposium

### Contraception and Menopause Hormone Therapy: major issues for bone health

Chairperson: *Andrea Genazzani*

- ▶ *Hormonal contraception versus hormone replacement therapy: Major issues for bone health* – *Martin Birkhaeuser*
- ▶ *HRT and fracture prevention: more than just bone* – *John Stevenson*

## ESCEO-IOF Symposium

### ESCEO-IOF Working Group

### Role of orthopaedic surgeons to ensure optimal Vitamin D levels in patients operated for an osteoporotic fracture

Chairpersons: *Didier Hannouche, Gerrit Maier*

- ▶ *Introduction and scope of the problem*  
– *René Rizzoli*
- ▶ *Prevalence of Vitamin D sufficiency/  
deficiency in patients admitted to the orthopaedic  
ward* – *Nicholas Harvey*
- ▶ *Benefits of Vitamin D in patients with fragility  
fracture* – *Kyriakos Papavasiliou*
- ▶ *Supplementation with Vitamin D during  
rehabilitation* – *Giovanni Iolascon*
- ▶ *Closing remarks* – *Maria Luisa Brandi*

## Oral Presentations (OP)

### OP1 - P164

#### EQUITY OF HEALTHCARE EXPENDITURE IN HIP FRACTURE PATIENTS ACROSS SOCIOECONOMIC GROUPS: A BENEFIT INCIDENCE ANALYSIS USING AUSICUROS DATA

*A. Lal, S. Overell, K. Sanders, J. Talevski, J. A. Kanis,  
F. Borgstrom, A. Svedbom, S. Brennan-Olsen*

### OP2 - P278

#### GREATER PQCT CALF MUSCLE DENSITY IS ASSOCIATED WITH LOWER HIP FRACTURE RISK, INDEPENDENT OF FRAX, FALLS AND BMD: A META-ANALYSIS IN THE OSTEOPOROTIC FRACTURES IN MEN (MROS) STUDY

*N. C. Harvey, E. Orwoll, J. A. Cauley, T. Kwok, M. K.  
Karlsson, B. E. Rosengren, E. Ribom, P. M. Cawthon,  
K. Ensrud, E. Liu, K. A. Ward, C. Cooper, J. A.  
Kanis, M. Lorentzon, C. Ohlsson, D. Mellström, H.  
Johansson, E. V. McCloskey*

### OP3 - P288

#### TREATMENT GAP AMONG PATIENTS WITH PRIMARY OSTEOPOROSIS: A SYSTEMATIC LITERATURE REVIEW AND META-ANALYSIS

*S. Leroy, P. Saunders-Hastings, P. Eusebi, V. Taieb,  
B. Abrahamsen, E. V. McCloskey, S. Fujiwara, C.  
Libanati, A. Moayyeri*

### OP4 - P397

#### LEONIE STUDY: POOR COMPLIANCE WITH PATIENT INSTRUCTIONS FOR TAKING ORAL BISPHOSPHONATES (ORAL BPS)

*K. Briot, B. Cortet, P. Fardellone, T. Thomas, F.  
Tremollières*

### OP5 - P155

#### RELATIVE EFFICACY AND SAFETY OF BIOLOGIC TREATMENTS FOR OSTEOARTHRITIS: A CONVENTIONAL AND NETWORK META-ANALYSIS

*L. Yang, M. Yiyiing, C. Peihua, W. Xing, F. Tianxiang,  
W. Jiaoshuai, R. Guangfeng, T. Su'An, Z. Weiya, D.  
Changhai, Z. Zhaohua*

## OP6 - P275

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*M. M. Cervo, T. McCaffrey, B. De Courten, C.-A. Ng, A. Gandham, P. Ebeling, D. Scott*

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*R. Pinedo-Villanueva, E. Burn, C. Cooper, M. K. Javaid, C. T. F. Partnership Stuy Group*

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*N. Rathnayake, S. Lekamwasam, T. Abeygunasekara, G. Liyanage, S. Subasinghe*

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*G. Shafiee, M. Nasiri, R. Heshmat, M. Ebrahimi, A. Ostovar, N. Fahimfar, I. Nabipour, B. Larijani*

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*C. Beaudart, S. Silverman, Z. Paskins, A. Boonen, J.-F. Kaux, S. Fujiwara, M. Hilgsmann*

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*J. Talevski, K. Sanders, S. Vogrin, G. Duque, A. Beauchamp, E. Seeman, S. Iuliano, A. Svedbom, F. Borgström, J. A. Kanis, A. Stuart, S. Brennan-Olsen*

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*H. P. Dimaj, B. Reichardt, E. Zitt, H. Concin, O. Malle, A. Fahrleitner-Pammer, A. Svedbom, W. Brozek*

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# Committee of National Societies Plenary Session (OCs): Osteoporotic fractures and loss of independence, what are the solutions (Prevention, treatment, care, nutrition, lifestyle rehabilitation)

Chairpersons: Famida Jiwa, Jean-Yves Reginster

## OCs1

## PREVALENCE AND AGREEMENT BETWEEN RECENT SARCOPENIA DEFINITIONS: FINDINGS FROM FOUR POPULATION-BASED COHORTS

*L. D. Westbury, H. E. Syddall, J. A. Cauley, P. M. Cawthon, E. M. Curtis, K. E. Ensrud, R. A. Fielding, H. Johansson, J. A. Kanis, M. K. Karlsson, T. Kwok, N. Lane, M. Lorentzon, D. Mellström, A. B. Newman, C. Ohlsson, E. Orwoll, E. Ribom, B. E. Rosengren, J. T. Schousboe, E. J. Shiroma, N. C. Harvey, E. M. Dennison, C. Cooper*

## OCs2

## DETERMINANTS OF MUSCLE DENSITY IN LATE ADULTHOOD: FINDINGS FROM THE HERTFORDSHIRE COHORT STUDY

*F. Laskou, L. D. Westbury, N. Nicholas, N. C. Harvey, H. P. Patel, C. Cooper, K. Ward, E. M. Dennison*

## OCs3

## FRAX BASED OSTEOPOROSIS MANAGEMENT PATHWAY FOR UKRAINIAN MEN

*V. Povoroznyuk, H. Johansson, N. Grygorieva, M. Lorentzon, A. Musienko, N. C. Harvey, E. V. McCloskey, E. Liu, J. A. Kanis*

## OCs4

## SEX DIFFERENCES IN THE ASSOCIATIONS BETWEEN CARDIOVASCULAR RISK FACTORS AND PHYSICAL FUNCTION: THE GAMBIAN BONE AND MUSCLE AGEING STUDY (GAMBAS)

*A. Zengin, M. Ó Breasail, C. P. Parsons, L. M. Jarjou, R. E. Janha, M. Jobe, A. Prentice, C. Cooper, P. R. Ebeling, K. A. Ward*

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## VITAMIN D STATUS AND ASSOCIATED VDR GENE POLYMORPHISM IN BELARUSIAN POSTMENOPAUSAL WOMEN

*P. Marozik, E. Rudenka, K. Kobets, A. Rudenka, V. Samokhovec*

## OCs6

## SOFT BONE IS WEAK: PROSPECTIVE, BLINDED INTRAOPERATIVE ASSESSMENT OF BONE CORRELATES WITH T-SCORE

*B. Nickel, D. Krueger, G. Borchardt, L. Andersen, R. Illgen, D. Hennessy, N. Binkley, P. Anerson*

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## THE EFFECT OF CALCIUM AND VITAMIN D3 ON CALCIUM HOMEOSTASIS AND FALLS INCIDENCE IN PATIENTS WITH HIGH FRACTURE RISK UNDERGOING MEDICAL REHABILITATION

*L. Marchenkova, V. Vasileva*

**OCs8****IMPROVING COMMUNICATION OF FRACTURE RISK GLOBALLY: INSIGHTS FROM INTERVIEWS WITH PATIENTS. THE RISKCOMMUNICATION STUDY OR RICO STUDY**

*C. Beaudart, S. Silverman, Z. Paskins, A. Boonen, J.-F. Kaux, S. Fujiwara, M. Hiligsmann*

**OCs9****OSTEOPOROSIS IN MIDDLE-AGED WOMEN: WHAT IS THE IMPACT OF MULTIMORBIDITY AND MEDICATION USE? A CROSS-SECTIONAL POPULATION-BASED STUDY**

*A. V. Gueldini de Moraes, L. H. Costa-Paiva, A. O. Pedro*

**OCs10****INFLUENCE OF BARIATRIC SURGERY ON 25-OH-VITAMIN D AND PARATHYROID HORMONE IN OBESE PATIENTS**

*S. H. Scharla, U. G. Lempert*

**OCs11****PATIENT'S PREFERENCES FOR LIFESTYLE CHANGES IN OSTEOPOROTIC FRACTURE PREVENTION: A CROSS-EUROPEAN DISCRETE-CHOICE EXPERIMENT**

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