

World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (WCO-IOF-ESCEO 2020): Special Lecture Abstract

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ESCEO-IOF ALGORITHM FOR THE MANAGEMENT OF PATIENTS AT LOW/HIGH/VERY HIGH RISK OF FRACTURE

J. A. Kanis^{1,2}, N. C. Harvey^{3,4}, E. V. McCloskey⁵, O. Bruyère⁶, N. Veronese⁷, M. Lorentzon⁸, C. Cooper^{3,9,10}, R. Rizzoli¹¹, G. Adib¹², N. Al-Daghri¹³, C. Campusano¹⁴, M. Chandran¹⁵, B. Dawson-Hughes¹⁶, M. K. Javaid⁹, F. Jiwa¹⁷, H. Johansson^{1,2}, J. K. Lee¹⁸, E. Liu², O. D. Messina¹⁹, O. Mkinsi²⁰, D. Pinto²¹, D. Prieto-Alhambra⁹, K. Saag²², W. Xia²³, L. Zakraoui²⁴, J.-Y. Reginster^{13,25,26}

¹Centre for Metabolic Bone Diseases, University of Sheffield Medical School, Sheffield, United Kingdom, ²Mary McKillop Health Institute, Australian Catholic University, Melbourne, Australia, ³MRC Lifecourse Epidemiology Unit, University of Southampton, Southampton, United Kingdom, ⁴NIHR Southampton Biomedical Research Centre, University of Southampton and University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom, ⁵Department of Oncology & Metabolism, University of Sheffield, Sheffield, United Kingdom, ⁶Public Health, Epidemiology & Health Economics, University of Liège, Liège, Belgium, ⁷National Research Council, Neuroscience Institute, Aging Branch, Padova, Italy, ⁸Geriatric Medicine, Sahlgrenska University Hospital, Mölndal, Sweden, ⁹Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, Oxford, United Kingdom, ¹⁰Institute of Musculoskeletal Sciences, University of Oxford, Oxford, United Kingdom, ¹¹Division of Bone Diseases, Geneva University Hospitals and Faculty of Medicine, Geneva, Switzerland, ¹²Osteoporosis Center, Italian Hospital, Damascus-Syria, Damascus, Syria, ¹³Chair for Biomarkers of Chronic Diseases, Biochemistry Department, College of Science, King Saud University, Riyadh, Saudi Arabia, ¹⁴Clinica universidad de los andes, Santiago, Chile, ¹⁵Osteoporosis and Bone Metabolism Unit, Singapore General Hospital, Singapore, Singapore, ¹⁶Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, United States, ¹⁷Osteoporosis Canada, Toronto, Canada, ¹⁸Beacon Hospital, Petaling Jaya, Malaysia, ¹⁹Rheumatology Service, Cosme Argerich Hospital and IRO Clinical Research Center, Buenos Aires, Argentina, ²⁰CHU Ibn Rochd, Casablanca, Morocco, ²¹Marquette University/Department of Physical Therapy, Milwaukee, United States, ²²University of Alabama, Birmingham, United States, ²³Peking Union Medical College Hospital (East), Beijing, China, ²⁴Hospital Mongi Slim at La Marsa, Tunis, Tunisia, ²⁵Department of Public Health, Epidemiology and Health

Economics, University of Liège, Liège, Belgium, ²⁶WHO Collaborating Center for Public Health Aspects of Musculoskeletal Health and Aging, Liège, Belgium

In 2019 the International Osteoporosis Foundation (IOF) and the European Society for Clinical and Economic Evaluation of Osteoporosis and Osteoarthritis (ESCEO) published updated guidance for the diagnosis and management of postmenopausal osteoporosis. The algorithm supplements this guidance to recognise that the risk of a subsequent osteoporotic fracture is particularly acute immediately after an index fracture and wanes progressively with time. Additionally, new anabolic agents with more rapid and greater fracture risk reduction compared to antiresorptive treatments have been developed. These have the potential to revolutionise treatment strategies, particularly in individuals at very high fracture risk. These considerations argue for the identification of individuals at very high risk of fracture.

The algorithm follows the guidance of the IOF and ESCEO in the use of age-dependent intervention thresholds with the use of FRAX. In addition to the categories of low and high risk espoused in the current IOF-ESCEO guideline, very high risk can be identified as a fracture probability that exceeds the current intervention threshold by 20%. In women age 50 years or more from the UK, 64.8% would be categorised at low risk, 19.7% at high risk and 15.6% at very high risk. A FRAX adjustment is provided to take account that the probability of second fracture is particularly high in the first 2 years after a clinical vertebral fracture. The 10-year probability of a major osteoporotic fracture is multiplied by 1.04 to 2.47, depending on age. FRAX adjustments are still needed men and for index fractures other than spine fracture.

The rationale for the more refined characterisation of risk is to direct appropriate interventions. Thus, initial treatment recommendations for women at high risk might most usually start with an inhibitor of bone resorption. In contrast, women at very high risk might be more suitably treated with an anabolic treatment followed thereafter by an inhibitor of bone resorption. Such regimens save more fractures than inhibitors of bone resorption followed by anabolic agents.

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