

Symposium Sheldonian Theatre, Oxford

Bisphosphonates: Bones and Beyond

Date: Tuesday 27th and Wednesday 28th September 2022 Venue: Sheldonian Theatre, Oxford, OX1 3AZ.

Programme:

Day 1: Setting the scene

9.00

Welcome and Introduction

Harriet Teare, Programme Director, UK SPINE Knowledge Exchange at University of Oxford



Setting the scene

Chairs for the morning:

Gordon Duff, Former Pro-Vice Chancellor & Principal of St Hilda's College. Former Chair of MHRA

Richard Eastell, Professor of Bone Metabolism, Director of the Mellanby Centre for Musculoskeletal Research, University of Sheffield

Professor Richard Eastell | Medical School | The University of Sheffield

9.20

Bisphosphonates: Setting the scene

Graham Russell, Emeritus Professor of Musculoskeletal Pharmacology, Universities of Oxford and Sheffield

<u>Graham Russell — Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (ox.ac.uk)</u>



10.05

Bisphosphonates: Clinical trials with zoledronate. A view from New Zealand.

Ian Reid, Medical and Health Sciences, University of Auckland, New ZealandIan R ReidUniversity of Auckland | New Zealand (omicsonline.org)



10.50

Refreshments

11.15

Bisphosphonates: Clinical trials with zoledronate. A view from the United States
Ken Lyles, Professor of Medicine, Senior Fellow in the Center for the Study of Aging and
Human Development, Duke University of Medicine, USA
Kenneth Ward Lyles | Duke Department of Medicine





12.00

Bisphosphonates in cancer.

Rob Coleman, Emeritus Professor of Medical Oncology in the Department of Oncology and Metabolism at the University of Sheffield.

Robert (Rob) Coleman | Medical School | The University of Sheffield

12.45

Lunch

Mechanisms

Chairs for the afternoon:

Graham Russell, Emeritus Professor of Musculoskeletal Pharmacology, Universities of Oxford and Sheffield

Gordon Duff, Former Pro-Vice Chancellor & Principal of St Hilda's College. Former Chair of MHRA

13.30

Mechanisms: Senolytics. Where are we now?

Jim Kirkland, Endocrinologist, Mayo Clinic, Minnesota

James L. Kirkland - Mayo Clinic Research



14.15

Mechanisms: Cellular, genomic, and proteomic studies.

James Edwards, Principal Investigator, Oxford Skeletal Ageing and Regeneration group. Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences James Edwards — Nuffield Department of Orthopaedics, Rheumatology and



Musculoskeletal Sciences (ox.ac.uk)

14.45

Mechanisms: Understanding the senolytic and senomorphic effects of zoledronate treatment in an ageing mouse model.

Eleanor Platt, Molecular Scientist, Medicine Discovery Catapult, Alderley Park, Cheshire Eleanor Platt - Medicines Discovery Catapult



15.15

Refreshments

15.45

Mechanisms: Autophagy, Acute phase response, gamma delta T cells, innate immunity. Ghada Alsaleh, Research Fellow, Kennedy Institute of Rheumatology, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences

<u>Ghada Alsaleh — Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (ox.ac.uk)</u>



16.15 Followed by 45-minute discussion of the day.

17.00 Meeting close.

18.00 Tour and history of St Peter's College

Alison Ray - Dr Alison Ray | St Peter's College Oxford

18.30 Drinks at St Peter's College.

History | St Peter's College Oxford

19.00 Dinner at St Peter's College.



Day 2: How do we design studies to treat multiple long-term conditions (multimorbidities)?

Chairs for the morning:

Chas Bountra, Pro Vice Chancellor for Innovation, University of Oxford

Rob Coleman, Emeritus Professor of Medical Oncology in the Department of Oncology and Metabolism at the University of Sheffield.



9.00

Bisphosphonates - mortality observational studies and end points for ageing trials.

Steve Cummings, Professor Emeritus, Department of Medicine, UCSF Steven R. Cummings - San Francisco Coordinating Center (ucsf.edu)



9.45

Trial designs and statistics.

Duncan Richards, Climax Professor of Clinical Therapeutics, University of Oxford <u>Duncan Richards — Nuffield Department of Orthopaedics, Rheumatology and</u> Musculoskeletal Sciences (ox.ac.uk)



Jonathan Cook, Associate Professor, expert in medical statistics, clinical trials and surgery research. Nuffield Department of Orthopaedics, University of Oxford <u>Jonathan Cook — Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (ox.ac.uk)</u>



10.30

Surrogate endpoints and safety of bisphosphonates in osteoporosis trials.

Richard Eastell, Professor of Bone Metabolism, Director of the Mellanby Centre for Musculoskeletal Research, University of Sheffield

Professor Richard Eastell | Medical School | The University of Sheffield



11.10

Refreshments

11.30

Special features of pharmacology of bisphosphonates.

Serge Cremers, Associate Professor of Pathology & Cell Biology. Department of Pathology & Cell Biology, Columbia University, USA.

Serge Cremers - Pathology (columbia.edu)



12.00

Orazol; A case study of regulatory interaction and potential future options.

John Fox, Chief Executive Officer at TRANSCRIPTOGEN LTD (20) John Fox | LinkedIn

12.45

Lunch Chairs for the afternoon:

Richard Eastell, Professor of Bone Metabolism, Director of the Mellanby Centre for Musculoskeletal Research, University of Sheffield

Steve Cummings, Professor Emeritus, Department of Medicine, UCSF

13.30 Next steps.

Marian Schini, Clinical Research Fellow, Department of Oncology and Metabolism, University of Sheffield

Dr Marian Schini | Medical School | The University of Sheffield



14.00

An evaluation of potential benefits of bisphosphonates beyond traditional uses.

Daniel Prieto-Alhambra, Professor of Pharmaco and Device Epidemiology, Nuffield

Department of Orthopaedics

<u>Daniel Prieto-Alhambra — Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (ox.ac.uk)</u>



14.30

Sarcopenia: definitions, challenges and unmet medical opportunities.

Nick Harvey, Professor of Rheumatology and Clinical Epidemiology, MRC Lifecourse Epidemiology Unit, University of Southampton Harvey, Nick – MRCLEC (soton.ac.uk)



15.00

Role of the NIHR.

Gary Ford, Professor of Stroke Medicine at University of Oxford, Chair of AHSN network. University of Oxford

Gary A Ford - Oxford Academic Health Science Network (oxfordahsn.org)



- 15.20 Refreshments
- 15.45 Round table discussion and conclusions.
- 16.30 Meeting close.
- 18.30 Social event for those staying in Oxford overnight (details to follow)

Organising committee:

Prof. Graham Russell, Botnar Research Centre, University of Oxford

Prof. Richard Eastell, Mellanby Centre, University of Sheffield

Dr. Harriet Teare, Programme Director, UK SPINE Knowledge Exchange at University of Oxford









Attendees:

Bob Fishleigh, University of Oxford

Bob Fishleigh Oxford University Innovation

Gayle Marshall, Medicine Discovery Catapult

<u>Gayle Marshall at Medicines Discovery Catapult</u>

Tatiane Vilaca, University of Sheffield **Jack Zhan,** University of Oxford **Jinsen Lu,** University of Oxford

UK SPINE operations:

Clare Denton, UK SPINE, Knowledge Exchange coordinator Philippa Crane, UK SPINE, Knowledge Exchange manager Karen Froud, UK SPINE, Administrator

Notes:



