

All sessions in **High Tor 1** unless otherwise indicated

09:00

Registration and coffee

10:00

Pre-meeting allied health professionals' workshop: Early life interventions and assessments

Co-organised with **ERN BOND**

Chairs: Claire Hill (*Sheffield, UK*)
Luca Sangiorgi (*Bologna, Italy*)

10:00 **Welcome**

Claire Hill (*Sheffield, UK*)
Luca Sangiorgi (*Bologna, Italy*)

10:05 **Under 5s developmental assessment and playful intervention**

Rebecca Jones (*Sheffield, UK*)
Carrie Marr (*Sheffield, UK*)
Lisa Mills (*Bristol, UK*)

10:55 **The Rehabilitation Consensus**

Oliver Semler (*Cologne, Germany*)

11:35 **Coffee**

11:50 **Discussion: Functional assessment and outcomes in OI**

Facilitators: Claire Hill (*Sheffield, UK*)
Luca Sangiorgi (*Bologna, Italy*)

12:30

LUNCH

13:20

Welcome to the 14th International Conference on Osteogenesis Imperfecta

Nick Bishop (*Sheffield, UK*)

13.25

Opening keynote lecture

Chairs: Nick Bishop (*Sheffield, UK*)
Joan Marini (*Bethesda, USA*)

IS1 **What can the osteogenesis imperfecta community learn from other diseases: Duchenne exon skipping and gene therapy approaches**
Annemieke Aartsma-Rus (*Leiden, Netherlands*)

13:50

The “real world” of osteogenesis imperfecta

Chairs: Catherine DeVile (*London, UK*)
Cathleen Raggio (*New York, USA*)

13:50

IS2 **ERN BOND: Diagnostic pathways**
Valérie Cormier-Daire (*Paris, France*)

14:15

IS3 **Registries for osteogenesis imperfecta: where we are and where we are heading**
Kassim Javaid (*Oxford, UK*)

14:40

IS4 **Whose life is it anyway? The challenge to include the patient voice in studies of osteogenesis imperfecta**
Laura Tosi (*Washington DC, USA*)

15:05

COFFEE BREAK

Chairs: Oliver Semler (*Cologne, Germany*)
Laura Tosi (*Washington DC, USA*)

15:30

Patient organisations as partners

Tracy Hart (*OI Foundation CEO*)
Patricia Osborne (*Brittle Bone Society CEO*)
Ingunn Westerheim (*OIFE President*)

16:00

IS5 **Key4OI project update**
Richard Kruse (*Wilmington, USA*)

16:10

Oral communications

Chairs: Oliver Semler (*Cologne, Germany*)
Laura Tosi (*Washington DC, USA*)

16:10

OC1 Bispecific antibody neutralizing both sclerostin and Dickkopf 1 prevents fragility fractures and increases fracture healing rate in an osteogenesis imperfecta mouse model
Ann Zovein (*Boston, USA*)

16:20

OC2 Molecular mechanisms of lung pathology in a G610C mouse model
Elena Makareeva (*Bethesda, USA*)

16:30

OC3 Non-invasive quantification of bone remodeling dynamics in adults with OI using time-lapse high-resolution peripheral quantitative computed tomography imaging
Seyedmahdi Hosseinitabatabaei (*Montreal, Canada*)

16:40

OC4 Fracture-targeted anabolics for treatment of osteogenesis imperfecta fractures
Stewart Low (*West Lafayette, USA*)

16:50

OC5 The IMPACT survey has produced a self-reported, 2,276-respondent dataset of individuals with OI, their caregivers and close relatives
Frank Rauch (*Montreal, Canada*)

17:00

Plenary Lecture

Chairs: Paul Arundel (*Sheffield, UK*)
Nick Bishop (*Sheffield, UK*)

IS6 Bone research in Sheffield – the last 100 years
Richard Eastell (*Sheffield, UK*)

17:30

Close

18:30

Buses to INOX

19:00-22:00

Dinner

INOX

PARALLEL SESSIONS

HIGH TOR 2

08:45

Molecular pathophysiology of osteogenesis imperfecta

Chairs: Paul Coucke (*Ghent, Belgium*)
Joan Marini (*Bethesda, USA*)

08:45

IS7 Circadian clock regulation of collagen homeostasis

Joan Chang (*Manchester, UK*)

09:15

IS8 Bone, brain and beyond

Meena Balasubramanian (*Sheffield, UK*)

09:45

Oral communications

Chairs: Paul Coucke (*Ghent, Belgium*)
Joan Marini (*Bethesda, USA*)

09:45

OC6 TMEM38B-null OI osteoblasts have altered differentiation, mineralization, and cellular adhesion processes

Milena Jovanovic (*Bethesda, USA*)

09:55

OC7 Conditional trimeric intracellular cation channel B knockout mouse: a tool to study osteogenesis imperfecta type XIV

Roberta Besio (*Pavia, Italy*)

10:05

OC8 Zebrafish *tmem38b* Knock out unveils the in vivo role of Trimeric Intracellular Cation (TRIC) channel B on cell homeostasis

Antonella Forlino (*Pavia, Italy*)

10:15

OC9 Mutations in SEC16B causes bone fragility and muscular hypotonia

Wolfgang Högl (*Linz, Austria*)

10:25

OC10 Homozygous *Kdelr2*-mutant mice display defects in endochondral and intramembranous bone formation

Alice Stephan (*Cologne, Germany*)

10:35

OC11 The role of KDELR2 in the bone-related mechanism of osteogenesis imperfecta

Dimitra Micha (*Amsterdam, Netherlands*)

10:45
Coffee

HIGH TOR 5

08:45

Wellbeing in osteogenesis imperfecta

Chairs: Lena Lande Wekre (*Oslo, Norway*)
Lisa Mills (*Bristol, UK*)

08:45

IS9 Psychological well-being in children and young people with osteogenesis imperfecta

Rebecca Jones (*Sheffield, UK*)

09:15

IS10 Transition from child to adult care

Davina Ford (*Sheffield, UK*)

Jennie Walsh (*Sheffield, UK*)

09:45

IS11 Sleep

Ruth Kingshott (*Sheffield, UK*)

10:15

Oral communications

Chairs: Lena Lande Wekre (*Oslo, Norway*)
Lisa Mills (*Bristol, UK*)

10:15

OC12 Effects of neuraxial anesthesia on postoperative pain scores in children with osteogenesis imperfecta

Nicholas Bohannon (*Omaha, USA*)

10:25

OC13 The 'F-Words' in osteogenesis imperfecta: our favourite words for child and family centred care

Belinda Crowe (*London, UK*)

10:35

OC14 Regional neuromuscular blocks and pain catheters for perioperative pain control in the setting of osteogenesis imperfecta extremity orthopaedic procedures

Jean Franzone (*Wilmington, USA*)

PARALLEL SESSIONS

HIGH TOR 2

11:15

Poster pitches

Chairs: Kassim Javaid (*Oxford, UK*)
Brendan Lee (*Houston, USA*)

11:15

P29 **Studies of OI patient and murine osteoblasts to investigate phenotypic variability of dominant osteogenesis imperfecta**
Milena Jovanovic (*Bethesda, USA*)

11:20

P11 **Mechano-regulation of bone formation and mineralization in healthy and type XI osteogenesis imperfecta patient-specific 3D bone organoids**
Julia Griesbach (*Zürich, Switzerland*)

11:25

P21 **Crispant analysis in zebrafish as a tool for rapid functional screening of disease-causing genes for osteogenesis imperfecta.**
Sophie Debaenst (*Ghent, Belgium*)

11:30

P69 **Gene expression profiling of fetal mesenchymal stem cells during osteogenic differentiation**
Emine Begum Gencer-Oncul (*Stockholm, Sweden*)

11:35

P103 **Skeletal muscle mitochondria function in osteogenesis imperfecta murine and G610C mouse models**
Tara Crawford (*Columbia, USA*)

11:40

P87 **Patient osteoblast model for osteogenesis imperfecta using induced mesenchymal stem cells**
Lauria Claeys (*Amsterdam, Netherlands*)

11:45

P51 **Ifitm5/BRIL p.S42L murine model for atypical type VI OI has elevated serum alkaline phosphatase and disordered bone matrix but decreased bone cell function**
Gali Guterman-Ram (*Bethesda, USA & Haifa, Israel*)

11:50

P3 **Identification of modifier genes underlying intra-familial phenotypic variability in zebrafish OI models using whole exome sequencing and linkage analysis**
Tamara Jarayseh (*Ghent, Belgium*)

HIGH TOR 5

11.15 – 12.00

Orthopaedic workshop: Upper and lower limb rodding/ How to measure, record and share outcomes of surgery across centres

Chair: James Fernandes (*Sheffield, UK*)

11:15

IS12 **What is success in OI surgery ?**
Cathleen Raggio (*New York, USA*)

11:25

IS13 **Outcome measures in OI surgery – disease-specific, generic or both?**
Claire Hill (*Sheffield, UK*)

11:35

IS14 **Rod bending and failure to telescope – are all complications?**
Nick Nicolaou (*Sheffield, UK*)

11:45

Round table consensus: Standardising outcomes across the global community

Chair: Stephen Giles (*Sheffield, UK*)
Tae-Joon Cho (*Seoul, Republic of Korea*)
James Fernandes (*Sheffield, UK*)
Cathleen Raggio (*New York, USA*)
Maegen Wallace (*Omaha, USA*)

12:00

Posters (odd numbers attended)

13:00

Lunch

PARALLEL SESSIONS

HIGH TOR 2

14:00

Cellular/tissue pathophysiology

Chairs: Antonella Forlino (*Pavia, Italy*)
Outi Mäkitie (*Helsinki, Finland*)

14:00

IS15 Collagen processing and endoplasmic reticulum stress

Sergey Leikin (*Bethesda, USA*)

14:30

IS16 Osteocyte and pulmonary changes in mouse models of OI: a transcriptomic approach

Roy Morello (*Little Rock, USA*)

HIGH TOR 5

14:00

The effects of choices on rehabilitation post-surgery

Chair: Stephen Giles (*Sheffield, UK*)

IS19 Acetabular protrusion and its clinical implication

Tae-Joon Cho (*Seoul, Republic of Korea*)

Clinical case discussions – how I would approach post-operative recovery

Chair: Nick Nicolaou (*Sheffield, UK*)

Tae-Joon Cho (*Seoul, Republic of Korea*)

Paul Esposito (*Nebraska, USA*)

James Fernandes (*Sheffield, UK*)

Claire Hill (*Sheffield, UK*)

Peter Smith (*Chicago, USA*)

15:00

Coffee

15:30

Looking at non-bone tissues (basic and clinical perspectives)

Chairs: Paul Arundel (*Sheffield, UK*)
Peter Smith (*Chicago, USA*)

15:30

IS20 Muscle in osteogenesis imperfecta: all that's brittle is not bone

Alex Ireland (*Manchester, UK*)

16:00

IS21 Lung

Cathleen Raggio (*New York, USA*)

16:30

IS22 Brittle bones and neurones - neurological aspects of osteogenesis imperfecta

Catherine DeVile (*London, UK*)

17:00

Poster pitches

Chairs: Paul Arundel (*Sheffield, UK*)
Peter Smith (*Chicago, USA*)

17:00

P62 Long-term results of initial and reoperation surgeries with Fassier-Duval intramedullary rods in femurs and tibias of children with osteogenesis imperfecta

Maegen Wallace (*Omaha, USA*)

17:05

P46 The fate of bent telescopic rods in children with osteogenesis imperfecta: do all bent rods need to be revised?

David Fralinger (*Wilmington, USA*)

17:10

P102 Design and development of an e-Health program for youth with osteogenesis imperfecta – Teens OI

Raissa Passos dos Santos (*Montreal, Canada*)

17:15

P82 Technique of telescopic nailing of the femur by retrograde approach (FRA) in patients with osteogenesis imperfecta: clinical and radiological results.

Zagorka Pejcin (*Paris, France*)

17:20

P36 Bone microarchitecture in osteogenesis imperfecta assessed with high-resolution peripheral quantitative CT

Melissa Bevers (*Venlo, Netherlands*)

17:25

P14 Assessing the safety and efficacy of tranexamic acid usage in osteogenesis imperfecta patients undergoing femoral rodding

Vincent Eaton (*Omaha, USA*)

17:30

Coffee

17:40

Sponsored session

18:45

Close

FREE EVENING

PARALLEL SESSIONS

HIGH TOR 2

08:45

Preclinical model systems

Chairs: Meena Balasubramanian (*Sheffield, UK*)
Roy Morello (*Little Rock, USA*)

08:45

IS23 Murine models for OI: Three decades and counting

Joan Marini (*Bethesda, USA*)

09:15

IS24 What can zebrafish tell us about osteogenesis imperfecta?

Paul Coucke (*Ghent, Belgium*)

09:45

IS25 Disease in a dish: modelling skeletal dysplasias using human induced pluripotent stem cells

Shireen Lamandé (*Melbourne, Australia*)

10:15

Oral Communications

Chairs: Meena Balasubramanian (*Sheffield, UK*)
Roy Morello (*Little Rock, USA*)

10:15

OC15 A novel 3D-bioprinted patient-specific bone organoid approach for studying mineral formation and mechanics of type XI osteogenesis imperfecta

Anke de Leeuw (*Zurich, Switzerland*)

10:25

OC16 Cell stress in hypertrophic chondrocytes is responsible for growth deficiency in G610C OI mice

Satoru Otsuru (*Baltimore, USA*)

10:35

OC17 Collagen C-propeptide cleavage deficiency increases bone mineralization by increasing ossification pathways and decreasing collagen organization and mineral particle thickness

Aileen Barnes (*Bethesda, USA*)

10:45

Coffee

11:15

Debate on the utility of different systems to inform translation into clinical studies

Chair: Nick Bishop (*Sheffield, UK*)
Antonella Forlino (*Pavia, Italy*)
Frank Rauch (*Montreal, Canada*)

HALIFAX HOTEL

08:45

Orthopaedic technical workshops

For health professionals involved in the management of surgical interventions and rehabilitation

Chair: James Fernandes (*Sheffield, UK*)

08:45 **Introduction**

Stephen Giles (*Sheffield, UK*)

08:50 **Fassier-Duval rodding of the lower limb - technical pearls**

Paul Esposito (*Nebraska, USA*)

09:00 **Non-telescopic options for the skeletally mature patient**

Tae-Joon Cho (*Seoul, South Korea*)

09:10 **The TST rodding system- technical pearls**

Ozan Ali Erdal (*Istanbul, Turkey*)

Muharrem Inan (*Istanbul, Turkey*)

09:20 **Clinical case discussions- surgical treatment of lower limb deformity**

Chair: Nick Nicolaou (*Sheffield, UK*)

Tae-Joon Cho (*Seoul, Republic of Korea*)

Paul Esposito (*Nebraska, USA*)

James Fernandes (*Sheffield, UK*)

Stephen Giles (*Sheffield, UK*)

Cathleen Raggio (*New York, USA*)

Peter Smith (*Chicago, USA*)

10:00 **Coffee**

10:15 **Practical workshop:**

Pega Medical lower limb Fassier-Duval rodding

10:00 Introduction: Pega

10:05 Group 1: SLIM/GAP nail

10:05 Group 2: Fassier-Duval rodding

10:25 Group 1: Fassier-Duval rodding

10:25 Group 2: SLIM/GAP nail

11:00 **Coffee**

11:15 **Practical workshop:**

TST rodding system for the lower limb

12:00

Posters (even numbers attended)

13:00

Lunch

14:00

Bench to bedside – making it work for patients

Chairs: Stuart Ralston (UK)
Marianne Rohrbach (Zurich, Switzerland)

14:00

IS26 **Early phase studies in OI**
Brendan Lee (Houston, USA)

14:30

IS27 **Clinical management of rare bone diseases: lessons and synergies across diseases**
Outi Mäkitie (Helsinki, Finland)

15:00

IS28 **Integrated care: the holistic approach**
Paul Arundel (Sheffield, UK)

15:30

Coffee

16:00

Oral communications

Chairs: Richard Kruse (Wilmington, USA)
Frank Rauch (Montreal, Canada)

16:00

OC18 **Evaluating the osteoanabolic potential of Galunisertib, a TGF- β receptor inhibitor, in mesenchymal stem cells isolated from Osteogenesis Imperfecta pediatric patients and in oim mice model**
Arantza Infante (Barakaldo, Spain)

16:10

OC19 **Osteocyte mechanoresponsiveness in osteogenesis imperfecta**
Chen Zhang (Amsterdam, Netherlands)

16:20

OC20 **Drug screening on OI human experimental models: increasing the osteoanabolic potential of MSCs**
Natividad Alcorta-Sevillano (Barakaldo, Spain)

16:30

OC21 **The study between scoliosis and genotypes in osteogenesis imperfecta patients**
Michael To (Hong Kong, China)

16:40

OC22 **Pulmonary function and structure in young adults with types III, IV and VI osteogenesis imperfecta**
Joan Marini (Bethesda, USA)

16:50

OC23 **Boost Brittle Bones Before Birth: A clinical trial on stem cell transplantation for treatment of osteogenesis imperfecta**
Cecilia Götherström (Huddinge, Sweden)

17:00

Plenary Lecture

Chairs: Richard Kruse (Wilmington, USA)
Frank Rauch (Montreal, Canada)

IS29 **Surgical solutions in abnormal bone conditions**
Peter Smith (Chicago, USA)

17:30

Close

18:30

Buses to Sheffield Cathedral

19:00-22:00

Conference Dinner

SHEFFIELD CATHEDRAL

08:30

Sponsored session

09:00

Advancing clinical practice, 2022 and beyond

Chairs: James Fernandes (*Sheffield, UK*)
Nick Nicolaou (*Sheffield, UK*)

09:00

IS30 **Surgical management of skeletal dysplasia – lessons for osteogenesis imperfecta**
Tae-Joon Cho (*Seoul, Republic of Korea*)

09:30

IS31 **Intramedullary nailing in OI. Challenges and opportunities**
Paul Esposito (*Nebraska, USA*)

10:00

Break

10:10

Oral Communications

Chairs: Darko Anticevic (*Zagreb, Croatia*)
Valérie Cormier-Daire (*Paris, France*)

10:10

OC24 **Impaired osteoblastogenesis and extracellular matrix formation in an MBTPS2-knockout cell-based model of X-linked Osteogenesis imperfecta**
Tatyana Danyukova (*Hamburg, Germany*)

10:20

OC25 **Anti-Siglec 15 treatment improves trabecular and cortical bone parameters in adult female mice with moderate-to-severe osteogenesis imperfecta**
Cathy Raggio (*New York, USA*)

10:30

OC26 **Syntaxin18 defects in human and zebrafish cause traffic jams and unravel key roles in early bone development**
Brecht Guillemin (*Ghent, Belgium*)

10:40

OC27 **Allografting is an effective biological method of fixation and increases bone trophicity in osteogenesis imperfecta**
Marine de Tienda (*Paris, France*)

10:50

OC28 **Anabolic therapies for bone healing of a femoral critical-sized segmental defect in a mouse model of osteogenesis imperfecta**
Kyle Kavaseri (*Montreal, Canada*)

11:00

OC29 **Unraveling of the ultrastructural features that determine the variability in phenotypic severity in different dominant forms of OI, using the zebrafish as a model.**
Adelbert De Clercq (*Ghent, Belgium*)

11:10

OC30 **Myostatin deficiency in osteogenesis imperfecta mouse models: potential of post- and pre/peri-natal therapeutic strategies to improve musculoskeletal health in osteogenesis imperfecta**
Charlotte Phillips (*Columbia, USA*)

11:20

OC31 **Multimodal treatment for severe spinal deformity in osteogenesis imperfecta: rationale, outcomes and complications**
Jean Franzone (*Wilmington, USA*)

11:30

Coffee

11:45

Round table discussion: Current trials in osteogenesis imperfecta

Moderators:

Nick Bishop (*Sheffield, UK*)
Gerard Pals (*Amsterdam, Netherlands*)

Brendan Lee (*Houston, USA*)
Ken Poole (*Cambridge, UK*)
Stuart Ralston (*Edinburgh, UK*)

12:45

Plenary departure address

Chair: Joan Marini (*Bethesda, USA*)

IS32 **Current and future treatment perspectives for osteogenesis imperfecta**
Nick Bishop (*Sheffield, UK*)

13:10

Awards and conference close

Nick Bishop (*Sheffield, UK*)
Joan Marini (*Bethesda, USA*)

13:15

Lunch and depart

- P1** Significant modifiable risk factors for bone health in patients with osteogenesis imperfecta; the importance of lateral thinking.
Artemis Doulgeraki (*Athens, Greece*)
- P2** Effect of bisphosphonate treatment on oral health status of children and adolescents with osteogenesis imperfecta
Artemis Doulgeraki (*Athens, Greece*)
- P3** Identification of modifier genes underlying intra-familial phenotypic variability in zebrafish OI models using whole exome sequencing and linkage analysis
Tamara Jarayseh (*Ghent, Belgium*)
- P4** Genetic analysis of Osteogenesis Imperfecta in Brazil
Temis Felix (*Porto Alegre, Brazil*)
- P5** Characteristic modes of failure in single entry telescopic rods: a combined 2 centre experience
India Cox (*Bristol, UK*)
- P6** Spine care in osteogenesis imperfecta from a distance: single center experience
Jeanne Franzone (*Wilmington, USA*)
- P7** 3D image registration marginally improves short-term in-vivo precision of high resolution peripheral quantitative CT images from adults with osteogenesis imperfecta compared to cross-sectional-area registration
Syedmahdi Hosseinatababaei (*Montreal, Quebec*)
- P8** Generation of Osteogenesis imperfecta stem cell bioresource to decipher disease mechanism and aid drug discovery
Chiara F Sander (*Sheffield, UK*)
- P9** Oral health related quality of life in children with Osteogenesis Imperfecta of different ethnic backgrounds
Jasmine May Cachia Mintoff (*London, UK*)
- P10** Bleeding assessment in 195 patients with Osteogenesis Imperfecta
Koert Gooijer (*Zwolle, The Netherlands*)
- P11** Mechano-regulation of bone formation and mineralization in healthy and type XI Osteogenesis Imperfecta patient-specific 3D bone organoids
Julia Griesbach (*Zürich, Switzerland*)
- P12** Should Osteogenesis Imperfecta be labeled as a low bone mass condition?
Cathleen Raggio (*New York, USA*)
- P13** Surgical correction of skeletal malocclusion in Osteogenesis Imperfecta
Joseph Napoli (*Philadelphia, USA*)
- P14** Assessing the safety and efficacy of tranexamic acid usage in Osteogenesis Imperfecta patients undergoing femoral rodding
Maegen Wallace (*Omaha, USA*)
- P15** Therapeutic use of Indomethacin in Osteogenesis Imperfecta Type V
James Law (*Birmingham, UK*)
- P16** Quality of life in Osteogenesis Imperfecta: evaluation of the content validity of the OIQoL questionnaire in an international cohort.
Claire Hill (*Sheffield, UK*)
- P17** What are the perceived therapy needs of adults living with Osteogenesis Imperfecta? A focus group study.
Sophie Barlow (*Stanmore, UK*)
- P18** A service evaluation examining the clinical application of the; Bleck, Brief Assessment of Motor Function Lower Limb and the Screening Tool for Everyday Mobility and Symptoms (STEM) in the functional assessment of children aged 6-18 years who have Osteogenesis Imperfecta
Carrie Marr (*Sheffield, UK*)
- P19** Insight into the bone mechanism of CRTAP-null osteoblasts
Aileen Barnes (*Bethesda, USA*)
- P20** Severe Obesity in Osteogenesis Imperfecta - What are the Treatment Options?
Jannie Dahl Hald (*Aarhus, Denmark*)
- P21**  Crispant analysis in zebrafish as a tool for rapid functional screening of disease-causing genes for Osteogenesis Imperfecta.
Sophie Debaenst (*Ghent, Belgium*)
- P22** "O.I. wish orthopaedic surgeons had better strategies to help with..." - results of a patient and parent-based survey
Maegen Wallace (*Omaha, USA*)
- P23** Physical activity of children with osteogenesis imperfecta during the period of immobilization (fractures) and during the «light» period (period of full functioning)
Nadezhda Epishina (*St Petersburg, Russia*)
- P24** Investigating the transition from paediatric to adult services and the management of ongoing care of adults for osteogenesis imperfecta: A qualitative study
Chloe Morgan (*Swansea, UK*)
- P25** Service evaluation reviewing the application of the Bayley Scale of Infant and Toddler development in children with severe, complex and atypical Osteogenesis Imperfecta.
Carrie Marr (*Sheffield, UK*)

- P26** Cross-centre psychology collaboration on the adaptation of young person 'tree of life' narrative therapy groups to online during the COVID-19 pandemic, as part of the NHS England Osteogenesis Imperfecta National Service.
Rebecca Jones (*Sheffield, UK*)
- P27** Cardiovascular characteristics and abnormalities in patients with Osteogenesis Imperfecta: a systematic review
Sara Verdonk (*Amsterdam, The Netherlands*)
- P28** Molecular characterization of a newly reported MBTPS2 variant in a fetus affected with severe Osteogenesis Imperfecta
Giulio Marcionelli (*Zurich, Switzerland*)
- P29** Studies of OI Patient and Murine Osteoblasts to Investigate Phenotypic Variability of Dominant Osteogenesis Imperfecta
Milena Jovanovic (*Bethesda, USA*)
- P30** A new X-linked PLS3 gene variant identified in a patient with osteogenesis imperfecta
Petar Brlek (*Zagreb, Croatia*)
- P31** Genotype-phenotype correlation and effects of bisphosphonates in rare forms of osteogenesis imperfecta : a retrospective study
Maëlle-Charlotte Charpié (*Paris, France*)
- P32** Pulmonary complications in Osteogenesis Imperfecta Type III
Hollis Chaney (*Washington, DC, USA*)
- P33** Port-a-Cath placement in pediatric patients with Osteogenesis Imperfecta requiring long-term vascular access
Maegen Wallace (*Omaha, USA*)
- P34** Intramedullary canal sclerosis as a result of prolonged bisphosphonate therapy in children with osteogenesis imperfecta type III and IV
Darko Antičević (*Zagreb, Croatia*)
- P35** Tibial rodding challenges and nailing technique choice in children with Osteogenesis Imperfecta and narrow intramedullary canals using the "telescoping principles": a narrative review and expert opinion
Alice Tao Ran Guo (*Montreal, Quebec, Canada*)
- P36** Bone microarchitecture in osteogenesis imperfecta assessed with high-resolution peripheral quantitative CT
Melissa Bevers (*Venlo, The Netherlands*)
- P37** Early intervention program for children with OI. 5 years of experience of the Center for Inborn Pathology GMS Clinic
Natalia Belova (*Moscow, Russia*)
- P38** Stiff hips in patients with Osteogenesis Imperfecta : a providential femoral neck fracture
Marine de Tienda (*Paris, France*)
- P39** Tibia sliding elastic nailing technique in moderate-to-severe Osteogenesis Imperfecta :long-term outcomes
Marine de Tienda (*Paris, France*)
- P40** Laboratory assessment in patients with the highest bleeding scores on the Self bleeding assessment tool out of 195 patients with Osteogenesis Imperfecta
Koert Gooijer (*Zwolle, The Netherlands*)
- P41** Understanding the Physical Well-being of Adults with Osteogenesis Imperfecta
Kathleen Montpetit (*Montreal, Canada*)
- P42** Treatment response in Osteogenesis imperfecta - Two-year retrospective analysis of paediatric patients treated with bisphosphonates
Mirko Rehberg (*Cologne, Germany*)
- P43** Relative larger Aortic Root Diameter in Osteogenesis Imperfecta Type 3 compared to type 1 and 4
Koert Gooijer (*Zwolle, The Netherlands*)
- P44** Tooth size in individuals with osteogenesis imperfecta
Henri Tuurala (*Helsinki, Finland*)
- P45** Implementation of an Osteogenesis imperfecta patient registry to investigate clinical spectrum and genotype-phenotype correlations in OI
Timothée Ndarugendamwo (*Zürich, Switzerland*)
- P46**  The fate of bent telescopic rods in children with Osteogenesis Imperfecta: do all bent rods need to be revised?
Jeanne Franzone (*Wilmington, USA*)
- P47** Altered bone healing mechanoresponse exhibited by mouse models of osteogenesis imperfecta
David Bertrand (*Montreal, Canada*)
- P48** Ophthalmological screening guidelines for individuals with osteogenesis imperfecta : a scoping review
Sarah Moussa (*Montreal, Canada*)
- P49** Oral health related quality of life in adults with osteogenesis imperfecta, in Spain
Amira Elfituri (*Madrid, Spain*)
- P50** Lack of psychosocial intervention assessment in OI: a narrative literature review
Marie-Catherine Mongenot (*Westmount, Canada*)
- P51** Ifitm5/BRIL p.S42L murine model for atypical type VI OI has elevated serum alkaline phosphatase and disordered bone matrix but decreased bone cell function
Gali Guterman-Ram (*Bethesda, USA & Haifa, Israel*)

- P52** Experience, problems and prospects of development of the program of diagnostics and treatment of osteogenesis imperfecta in children in the Republic of Kazakhstan.
Dossanova Assem (*Nur-Sultan, Kazakhstan*)
- P53** Clinical management of the adult patient with Osteogenesis Imperfecta
Arjan Harsevoort (*Zwolle, The Netherlands*)
- P54** Patient Reported Experience Of Clinical Care Of Osteogenesis Imperfecta (OI) During The COVID-19 Pandemic
Coreen Kelday (*Dundee, UK*)
- P55** A Dual centre transition clinic for young people with mild, moderate and severe Osteogenesis Imperfecta
Martyn Dudley (*London, UK*)
- P56** Genetics of Rare Skeletal Disorders among Pakistani Consanguineous Families
Mehran Kausar (*Gilgit, Pakistan*)
- P57** Prevalence and Hospital Admissions in Patients With Osteogenesis Imperfecta in The Netherlands: A Nationwide Registry Study
Silvia Storoni (*Amsterdam, The Netherlands*)
- P58** The European Registry for Rare Bone and Mineral Conditions (EuRR-Bone): Results of a Survey on Osteogenesis Imperfecta
Ana Luisa Priego Zurita (*Leiden, The Netherlands*)
- P59** How we made an Impact – The role of Patient Advocacy Groups in recruitment to surveys on rare conditions
Ingunn Westerheim (*Oslo, Norway*)
- P60** Sleeping Compression - Lengthening Nail; Off-label use for treatment of non union then lengthening in Osteogenesis Imperfecta patient
Yasser Elbatrawy (*Cairo, Egypt*)
- P61** Skull fractures, cervical spine fractures and intracranial injuries in children with Osteogenesis Imperfecta: a cohort study
Georgina Williams (*London, UK*)
- P62** Long-Term Results of Initial and Reoperation Surgeries with Fassier-Duval Intramedullary Rods in Femurs and Tibias of Children with Osteogenesis Imperfecta
Maegen Wallace (*Omaha, USA*)
- P63** Impact of pandemic on self-report measures for children with Osteogenesis Imperfecta(OI): a preliminary look
Maureen Donohoe (*Wilmington, USA*)
- P64** 'In-Out-In' K-wires sliding technics in severe tibial deformities of osteogenesis imperfecta
Tristan Langlais (*Paris, France*)
- P65** What's in a Name? Prevalence of Metaphyseal Fractures in Children with Osteogenesis Imperfecta in the First Two Years of Life
Ella Riley (*Sheffield, UK*)
- P66** Evidence for Metaphyseal Fractures Typical of Abuse in Osteogenesis Imperfecta: A Systematic Review
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