**Programme: Tuesday 30 August**

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

**09:00**
Registration and coffee

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**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)

**10:05** 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)

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**12:30**
LUNCH

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**13:20**
Welcome to the 14th International Conference on Osteogenesis Imperfecta

**Nick Bishop (Sheffield, UK)**

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**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)

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

**14:15**
ERN BOND: Diagnostic pathways
Valérie Cormier-Daire (Paris, France)

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

**14:40**
Registries for osteogenesis imperfecta: where we are and where we are heading
Kassim Javaid (Oxford, UK)

**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**
Key4OI project update
Richard Kruse (Wilmington, USA)
Programme: Tuesday 30 August

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
**Programme: Wednesday 31 August**

**HIGH TOR 2**

**08:45**

**Molecular pathophysiology of osteogenesis imperfecta**

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

- **IS7** Circadian clock regulation of collagen homeostasis  
  Joan Chang (Manchester, UK)
- **IS8** Bone, brain and beyond  
  Meena Balasubramanian (Sheffield, UK)

**09:45**

**Oral communications**

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

- **OC6** TMEM38B-null OI osteoblasts have altered differentiation, mineralization, and cellular adhesion processes  
  Milena Jovanovic (Bethesda, USA)
- **OC7** Conditional trimeric intracellular cation channel B knockout mouse: a tool to study osteogenesis imperfecta type XIV  
  Roberta Besio (Pavia, Italy)
- **OC8** Zebrafish tmem38b Knock out unveils the in vivo role of Trimeric Intracellular Cation (TRIC) channel B on cell homeostasis  
  Antonella Forlino (Pavia, Italy)
- **OC9** Mutations in SEC16B causes bone fragility and muscular hypotonia  
  Wolfgang Högler (Linz, Austria)
- **OC10** Homozygous Kdelr2-mutant mice display defects in endochondral and intramembranous bone formation  
  Alice Stephan (Cologne, Germany)
- **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)

- **IS9** Psychological well-being in children and young people with osteogenesis imperfecta  
  Rebecca Jones (Sheffield, UK)
- **IS10** Transition from child to adult care  
  Davina Ford (Sheffield, UK)  
  Jennie Walsh (Sheffield, UK)
- **IS11** Sleep  
  Ruth Kingshott (Sheffield, UK)

**10:15**

**Oral communications**

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

- **OC12** Effects of neuraxial anesthesia on postoperative pain scores in children with osteogenesis imperfecta  
  Nicholas Bohannon (Omaha, USA)
- **OC13** The ‘F-Words’ in osteogenesis imperfecta: our favourite words for child and family centred care  
  Belinda Crowe (London, UK)
- **OC14** Regional neuromuscular blocks and pain catheters for perioperative pain control in the setting of osteogenesis imperfecta extremity orthopaedic procedures  
  Jean Franzone (Wilmington, USA)
Programme: Wednesday 31 August

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
P67 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

<table>
<thead>
<tr>
<th>14:00</th>
<th>HIGH TOR 2</th>
<th>HIGH TOR 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td><strong>Cellular/tissue pathophysiology</strong></td>
<td><strong>The effects of choices on rehabilitation post-surgery</strong></td>
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<tr>
<td>Chairs:</td>
<td>Antonella Forlino (Pavia, Italy)</td>
<td>Chair: Stephen Giles (Sheffield, UK)</td>
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<td></td>
<td>Outi Mäkitie (Helsinki, Finland)</td>
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<td>14:00</td>
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<tr>
<td>IS15</td>
<td>Collagen processing and endoplasmic reticulum stress</td>
<td>IS19 Acetabular protrusion and its clinical implication</td>
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<td></td>
<td>Sergey Leikin (Bethesda, USA)</td>
<td>Tae-Joon Cho (Seoul, Republic of Korea)</td>
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<td>14:30</td>
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<tr>
<td>IS16</td>
<td>Osteocyte and pulmonary changes in mouse models of OI: a transcriptomic approach</td>
<td>Clinical case discussions – how I would approach post-operative recovery</td>
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<tr>
<td></td>
<td>Roy Morello (Little Rock, USA)</td>
<td>Chair: Nick Nicolaou (Sheffield, UK)</td>
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<td>Tae-Joon Cho (Seoul, Republic of Korea)</td>
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<td>Paul Esposito (Nebraska, USA)</td>
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<td>James Fernandes (Sheffield, UK)</td>
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<td></td>
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<td>Claire Hill (Sheffield, UK)</td>
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<td>Peter Smith (Chicago, USA)</td>
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</table>

15:00
Coffee
15:30
Looking at non-bone tissues (basic and clinical perspectives)

Chairs: Paul Arundel (Sheffield, UK)
Pete 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)
Pete 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 Pejin (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
08:45
Preclinical model systems

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

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)

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)
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
**Programme: Friday 2 September**

**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 Guillemyn (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**
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Speaker/Institution</th>
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<tbody>
<tr>
<td>P1</td>
<td>Significant modifiable risk factors for bone health in patients with osteogenesis imperfecta; the importance of lateral thinking.</td>
<td>Artemis Doulgeraki (Athens, Greece)</td>
</tr>
<tr>
<td>P2</td>
<td>Effect of bisphosphonate treatment on oral health status of children and adolescents with osteogenesis imperfecta</td>
<td>Artemis Doulgeraki (Athens, Greece)</td>
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<tr>
<td>P3</td>
<td>Identification of modifier genes underlying intra-familial phenotypic variability in zebrafish OI models using whole exome sequencing and linkage analysis</td>
<td>Tamara Jarayseh (Ghent, Belgium)</td>
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<tr>
<td>P4</td>
<td>Genetic analysis of Osteogenesis Imperfecta in Brazil</td>
<td>Temis Felix (Praia alegre, Brazil)</td>
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<tr>
<td>P5</td>
<td>Characteristic modes of failure in single entry telescopic rods: a combined 2 centre experience</td>
<td>India Cox (Bristol, UK)</td>
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<tr>
<td>P6</td>
<td>Spine care in osteogenesis imperfecta from a distance: single center experience</td>
<td>Jeanne Franzone (Wilmington, USA)</td>
</tr>
<tr>
<td>P7</td>
<td>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</td>
<td>Seyedmahdi Hosseinitabatabaei (Montreal, Quebec)</td>
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<tr>
<td>P8</td>
<td>Generation of Osteogenesis imperfecta stem cell bioresource to decipher disease mechanism and aid drug discovery</td>
<td>Chiara F Sander (Sheffield, UK)</td>
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<td>P9</td>
<td>Oral health related quality of life in children with Osteogenesis Imperfecta of different ethnic backgrounds</td>
<td>Jasmine May Cachia Mintoff (London, UK)</td>
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<td>P10</td>
<td>Bleeding assessment in 195 patients with Osteogenesis Imperfecta</td>
<td>Koert Gooijer (Zwolle, The Netherlands)</td>
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<tr>
<td>P11</td>
<td>Mechano-regulation of bone formation and mineralization in healthy and type X1 Osteogenesis Imperfecta patient-specific 3D bone organoids</td>
<td>Julia Griesbach (Zurich, Switzerland)</td>
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<tr>
<td>P12</td>
<td>Should Osteogenesis Imperfecta be labeled as a low bone mass condition?</td>
<td>Cathleen Raggio (New York, USA)</td>
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<tr>
<td>P13</td>
<td>Surgical correction of skeletal malocclusion in Osteogenesis Imperfecta</td>
<td>Joseph Napoli (Philadelphia, USA)</td>
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<tr>
<td>P14</td>
<td>Assessing the safety and efficacy of tranexamic acid usage in Osteogenesis Imperfecta patients undergoing femoral rodding</td>
<td>Maegen Wallace (Omaha, USA)</td>
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<tr>
<td>P15</td>
<td>Therapeutic use of Indomethacin in Osteogenesis Imperfecta Type V</td>
<td>James Law (Birmingham, UK)</td>
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<tr>
<td>P16</td>
<td>Quality of life in Osteogenesis Imperfecta: evaluation of the content validity of the OIQoL questionnaire in an international cohort.</td>
<td>Claire Hill (Sheffield, UK)</td>
</tr>
<tr>
<td>P17</td>
<td>What are the perceived therapy needs of adults living with Osteogenesis Imperfecta? A focus group study.</td>
<td>Sophie Barlow (Stanmore, UK)</td>
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<tr>
<td>P18</td>
<td>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</td>
<td>Carrie Marr (Sheffield, UK)</td>
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<tr>
<td>P19</td>
<td>Insight into the bone mechanism of CRTAP-null osteoblasts</td>
<td>Aileen Barnes (Bethesda, USA)</td>
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<tr>
<td>P20</td>
<td>Severe Obesity in Osteogenesis Imperfecta - What are the Treatment Options?</td>
<td>Jannie Dahl Hald (Aarhus, Denmark)</td>
</tr>
<tr>
<td>P21</td>
<td>Crispant analysis in zebrafish as a tool for rapid functional screening of disease-causing genes for Osteogenesis Imperfecta</td>
<td>Sophie Debaenst (Ghent, Belgium)</td>
</tr>
<tr>
<td>P22</td>
<td>“O.I. wish orthopaedic surgeons had better strategies to help with…” - results of a patient and parent-based survey</td>
<td>Maegen Wallace (Omaha, USA)</td>
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<tr>
<td>P23</td>
<td>Physical activity of children with osteogenesis imperfecta during the period of immobilization (fractures) and during the «light» period (period of full functioning)</td>
<td>Nadezhda Epishina (St Petersburg, Russia)</td>
</tr>
<tr>
<td>P24</td>
<td>Investigating the transition from paediatric to adult services and the management of ongoing care of adults for osteogenesis imperfecta: A qualitative study</td>
<td>Chloe Morgan (Swansea, UK)</td>
</tr>
<tr>
<td>P25</td>
<td>Service evaluation reviewing the application of the Bayley Scale of Infant and Toddler development in children with severe, complex and atypical Osteogenesis Imperfecta.</td>
<td>Carrie Marr (Sheffield, UK)</td>
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</tbody>
</table>
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)

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