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P1 Abstract withdrawn

P2 Treatment of partial growth arrest using cylindrical costal osteochondral graft
Ryo Orito (Osaka, Japan)

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P4 Applicability of the Tanner-Whitehouse 3 method to United Kingdom children
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Khalaf Alshamrani (Sheffield, United Kingdom)

P5 Response of bone to mechanical stimulation in the offspring of MAVIDOS study
mothers in a single centre; the effect of antenatal vitamin D supplementation.
Sujatha Gopal (Sheffield, United Kingdom)

P6 Pseudohypoparathyroidism type Ib initially masquerading as epileptic seizures
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Stepan Kutilek (Pardubice, Czech Republic)

P7 Bone morphology patterns in children with osteogenesis imperfecta
Cathleen Raggio (New York, United States)

P8 Polyhydramnios: sole risk factor for non-traumatic fractures in two infants
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P9 Do lifestyle factors play a role on bone health in boys diagnosed with Autism
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Rachel L Duckham (Geelong, Australia)

P10 Radiographic evidence of zoledronic acid given during pregnancy – a case report
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P11 Reference values of cortical thickness, bone width, and Bone Health Index in
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Peter Thrane (Hørsholm, Denmark)

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P13 Clinical implications of modeling the maturational spurt
Melanie Boeyer (Missouri, United States)

P14 Bone health in children with congenital heart disease
Marta Erlandson (Saskatoon, Canada)

P15 TA-46 prevents premature synchondrosis and restores foramen magnum size in a
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Guylene Rignol (Nice, France)
Higher neonatal bone mineral content and lower IL-6 levels in offspring of overweight/obese women following antenatal exercise: The IMPROVE randomized controlled trial (RCT)
Sumudu Nimali Seneviratne (Colombo, Sri Lanka)

Sex and maturation effects on trabecular and cortical microarchitecture in children and young adults
Tandy Aye (California, United States)

Bone mass and fracture prevalence in Childhood Brain Cancer Survivors (CBCS) 2 or 5 years after off therapy
Natascia di Iorgi (Genova, Italy)

Bone fragility and metabolism

Progressive-deforming form of osteogenesis imperfecta in neonates - own experience
Katarzyna Haladaj (Łódź, Poland)

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Efficacy and safety of intravenous infusion of ibandronic acid in children with Osteogenesis Imperfecta
Shokery Awadalla (Bogota, Colombia)

Tibia microarchitecture in children with recent fractures
Rebecca Moon (Southampton, United Kingdom)

What happens to the skeleton at the time of diagnosis of paediatric cancer?
Artemis Doulgeraki (Athens, Greece)

The role of the RACK1-c-Src axis in regulation of osteoclast function
Jin Hee Park (Seoul, South Korea)

Short term mechanical stimulation using whole body vibration identifies differences in bone response between prepubertal boys with and without prior fracture
Rachel Harrison (Sheffield, United Kingdom)

Parathyroid hormone is higher in infants with fracture as opposed to without fracture undergoing skeletal survey for suspected non-accidental injury, and is inversely associated with mean corpuscular haemoglobin content.
Nick Bishop (Sheffield, United Kingdom)

Response to mechanical stimulation of bone in children with osteogenesis imperfecta and the effect of bisphosphonate therapy
Sivagamy Sithambaran (Sheffield, United Kingdom)

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     Lidia Zhytnik (Tartu, Estonia)

P30  Bone mass, sclerostin and body composition in women with anorexia nervosa: a 3-year follow-up after weight gain therapy
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P31  Determinants of survival in osteogenesis imperfecta (OI) Type II
     Ruchi Nadar (Birmingham, United Kingdom)

P32  Successful use of oral acetazolamide in symptomatic subcutaneous calcifications in hyperphosphatemic tumoral calcinosis
     Ruchi Nadar (Birmingham, United Kingdom)

P33  Unusual case of severe hypophosphataemic rickets and renal stones associated with valproate use
     Donatella Pintus (Liverpool, United Kingdom)

P34  Bone metabolism and bone mineral density in Duchenne muscular dystrophy.
     Joanna Bautembach-Minkowska (Gdansk, Poland)

P35  Atypical fractures in pediatric patients with osteogenesis imperfect treated with zoledronic acid
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P36  ALPL gene mutation in a family
     Silvia Vai (Milano, Italy)

P37  Generation of osteogenesis imperfecta type XIV zebrafish models
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P38  Clinical features and approach to treatment in pediatric patients with McCune-Albright syndrome: monocentric experience.
     Nadezhda Makazan (Moscow, Russian Federation)

P39  Bone health outcomes in children with Duchenne Muscular Dystrophy
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P40  Stature and body weight more than age explain functionality level in children with Osteogenesis Imperfecta
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P41  Increased prevalence of fractures in poorly chelated children with beta thalassemia
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P42  FGF 23 measurements in children with fibrous dysplasia: useful or not?
     Zilla Huma (London, United Kingdom)
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Saila Laakso (Helsinki, Finland)

Bone mass and vertebral fractures in South African (SA) children on prolonged oral glucocorticoids (GCs) for chronic non-malignant illnesses
Kebashni Thandrayen (Johannesburg, South Africa)

Osteogenesis imperfecta type 15 with neurological phenotype associated with homozygous WNT1 mutation and uniparental isodisomy for chromosome 12
Belinda Crowe (London, United Kingdom)

Vertebral fractures are more prevalent than long bone fractures in boys with glucocorticoid-treated Duchenne Muscular Dystrophy: Results of a prospective observational study
Stefan A Jackowski (Ottawa, Canada)

Anorexia nervosa: weighing in on bone health surveillance
When should it be performed?
Mekhala Ayya (Birmingham, United Kingdom)

Does improved genetic screening make it more difficult to diagnose osteogenesis imperfecta?
Eleanor Burke (Galway, Ireland)

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Bone mineral density and vitamin D status in children with chronic neurological syndromes - clinical observations
Elzbieta Jakubowska-Pietkiewicz (Lodz, Poland)

Treatment with asfotase alfa for patients with infantile hypophosphatasia and screening plan of hypophosphatasia by low ALP level and dental findings in Korea
Sungyoon Cho (Seoul, South Korea)

Higher dose of burosumab is needed for treatment of children with severe forms of X-linked hypophosphatemia
Volha V Zhukouskaya (Le Kremlin Bicêtre, France)

Variable familial expression of spondylometaphyseal dysplasia with coxa vara and a novel FN1 mutation
Elisabeth Steichen-Gersdorf (Innsbruck, Austria)

Successful treatment with enzyme replacement therapy in a girl with severe infantile Hypophosphatasia
Katrin Heldt (St.Gallen, Switzerland)

Is oral health correlated with skeletal phenotype in primary metabolic bone diseases? A preliminary report of the Greek experience
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Unusual cause of abdominal pain in adolescent girl
Milan Bayer (Prague, Czech Republic)

Effective therapy with growth hormone of an adolescent patient with growth hormone deficiency and osteopetrosis. A case report
Elpis Athina Vlachopapadopoulou (Athens, Greece)

The validity of serum alkaline phosphatase to identify nutritional rickets in Nigerian children on a calcium-deprived diet
Tom Thacher (Rochester, United States)

Effective treatment of a patient with hypophosphatemic rickets leading to normal adult height
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FGF23-expressing osteocytes are confined to bone packets that completed primary mineralization in patients with chronic kidney disease on dialysis (CKD5D)
Nadja Fratzl-Zelman (Vienna, Austria)

Biochemical and genetic analysis in patients with odontohypophosphatasia in Japan
Takuo Kubota (Suita, Japan)

Tissue non-specific alkaline phosphatase activity and mineralization capacity of bi-allelic mutations from severe perinatal and asymptomatic hypophosphatasia phenotypes: Results from an in-vitro mutagenesis model
Suma Uday (Birmingham, United Kingdom)

Bone geometry and microarchitecture deficits in children with Alagille Syndrome
Joseph Kindler (Philadelphia, United States)

Missense mutations in ENPP1 result in osteoporosis in patients and is recapitulated in the ENPP1 loss of function murine model
Demetrios Braddock (New Haven, United States)

Tumor induced osteomalacia in a 12-year-old girl: Case report
Voraluck Phatarakijnirund (Bangkok, Thailand)

Bone densitometry and body composition in children with hypophosphatasia
William McIver (Birmingham, United Kingdom)

Bone health outcomes in children and adolescents with neuromuscular disease
Andrew Biggin (Westmead, Australia)

Clinical case of a child with a hereditary vitamin D dependent rickets type 1a, complicated by rachitic lung and oxygen dependence
Nina Polyakova (Moscow, Russian Federation)

Experience of implementation and monitoring of burosumab treatment in a multi-disciplinary setting
Caroline Marr (Sheffield, United Kingdom)

P70 Metabolic bone disease of prematurity – comparing neonatal and endocrine approaches using a nationwide survey
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Poonam Dharmaraj (Liverpool, United Kingdom)

P73 Burosumab initiation in a UK X-linked hypophosphataemia cohort: real-world use resonates with research evidence
Poonam Dharmaraj (Liverpool, United Kingdom)

P74 Burosumab can improve pain and quality of life for children with X-linked hypophosphataemia and their families: a London centre’s experience
Robyn Gilbey-Cross (London, United Kingdom)

P75 Active vitamin D analogues and oral phosphate for the treatment of X-linked hypophosphataemia in paediatric patients: A systematic literature review and survey of expert opinion on current needs.
Zulf Mughal (Manchester, United Kingdom)

P76 Safety profile of asfotase alfa treatment of patients with hypophosphatasia: a pooled analysis
Michael P. Whyte (Saint Louis, United States)

P77 Long-term efficacy profile of asfotase alfa in the treatment of patients with hypophosphatasia: a pooled analysis
Michael P. Whyte (Saint Louis, United States)

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Tiahna Spencer (Bethesda, United States)

P81 Bone health in adolescent females with anorexia nervosa may be preserved by high lean mass
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P82 Tertiary hyperparathyroidism and post-operative hungry bone syndrome in a patient with X-linked hypophosphatemic rickets
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P87  Assessment of bone density by DXA in poorly controlled children with β-Thalassemia: Correction for hepatic iron -overload by manual analysis
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P94  Characteristics of ultradistal radius bone density during childhood: Results from the Bone Mineral Density in Childhood Study
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Association of serum alkaline phosphatase with radiological rickets severity in children with X-linked hypophosphataemia on conventional therapy
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The effect of vitamin D on bone health assessed by radiogrammetry: a double-blind placebo-controlled vitamin D supplementation trial in infants
Suma Uday (Birmingham, United Kingdom)

Pre and post-natal achondroplasia, retrospective series of 64 consecutives cases with analyze of the diagnostic methods and timing issues
Genevieve Baujat (Paris, France)

High-resolution MRI assessment of the muscle-fat-bone unit in young adults with childhood onset Crohn's disease
Lewis Steell (Glasgow, United Kingdom)

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Vitamin D levels among Lebanese children: Do we need to alter normal level?
Yasser Yaghi (Saida, Lebanon)

Vitamin D deficiency in children in Israel: a cross-sectional study and possible associated factors
Gerard Korchia (Jerusalem, Israel)

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Vitamin D deficiency nutritional rickets presenting to secondary care in children (<16 Years) – A United Kingdom surveillance study
Nick Shaw (Birmingham, United Kingdom)

Respiratory health impacts quality of life for adults with OI
Cathleen Raggio (New York, United States)

Scoliosis and cardiopulmonary outcomes in adults with osteogenesis imperfecta: A pilot study
Cathleen Raggio (New York, United States)

Sex differences in the longitudinal associations between body composition and bone stiffness index in European children and adolescents
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Intravenous bisphosphonate treatment in severe infantile hypercalcemia associated with Williams Syndrome
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Reversion to pamidronate after switch to zoledronic acid in children with bone disease
Amanda Peacock (Sheffield, United Kingdom)

How early is early enough – bisphosphonate treatment in osteogenesis imperfecta
Heike Hoyer-Kuhn (Cologne, Germany)

Growth hormone therapy in a child with severe short stature due to Miller-McKusick-Malvaux (3M) syndrome-2
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Hypercalcaemia and osteonecrosis of the jaw in association with denosumab use in the paediatric population
Christie-Lee Wall (Westmead, Australia)

Protocol: A randomized trial of zoledronate in children with cerebral palsy
Jakob Bie Granild-Jensen (Randers, Denmark)

Intermittent bi-daily sub-cutaneous teriparatide infusion in children with hypoparathyroidism: a single-centre experience
Sacha Flammier (Lyon, France)

A multi-criteria decision analysis of the value of burosumab for the treatment of paediatric patients with X-linked hypophosphatemia in Portugal
Ines Alves (Évora, Portugal)

Nine-month follow-up data on biochemical, clinical, radiological and functional parameters in a clinical cohort of children at Evelina London Children's Hospital with X-linked hypophosphataemia treated with burosumab
Jessica L. Sandy (London, United Kingdom)

Does prior bisphosphonate therapy in children and adolescents with cerebral palsy alter surgical outcomes?
Melissa Fiscaletti (Montreal, Canada)

Changes in DXA Z-scores during bisphosphonate (BP) therapy in patients with osteogenesis imperfecta (OI) at a tertiary care hospital in South Africa
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Management of foramen magnum stenosis in patients with achondroplasia: relative merit of clinical and radiological indications for foramen magnum decompression
William Singleton (Bristol, United Kingdom)

Bone mineral changes in 43 children with osteogenesis imperfecta treated by pamidronate.
Mikhail Kostik (St Petersburgh, Russian Federation)

Osteogenesis imperfecta: Skeletal outcomes after bisphosphonates Discontinuation at Final Height
Marie-Eve Robinson (Montreal, Canada)

The safety and efficacy of denosumab versus zoledronic acid in the treatment of pediatric osteoporosis: A randomized controlled pilot trial
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An evaluation of the rebound phenomenon during denosumab therapy in children with low turnover osteoporosis
Marie-Eve Robinson (Montreal, Canada)

Long-term growth hormone treatment alters glucose metabolism in achondroplasia
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Self-reported sedentary time is negatively associated with microarchitecture of the tibia
Rebecca Moon (Southampton, United Kingdom)

Gender specific paediatric reference data for muscle function parameters assessed using jumping mechanography
Sonal Palande (Pune, India)

Patients with nephropatic cystinosis display lower cortical thickness and grip strength
Susanne Bechtold-Dalla Pozza (Munich, Germany)

Gonadotrophin releasing hormone analogues utilised in late and post-pubertal adolescents causes a reduction in bone density in transgender teenagers attending a national gender dysphoria clinic
Talat Mushtaq (Leeds, United Kingdom)

Association of grip strength and body composition in Indian boys and girls
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Assessment of muscle mass and function in Indian children with Type 1 diabetes
Sonal Palande (Pune, India)

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Marie Sediva (Prague, Czech Republic)

P162 Bone monitoring and morbidity in adults with Duchenne muscular dystrophy: Challenges in implementation of standards of care
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P163 Prenatal oligohydramnios is associated with hip shape in adolescent males
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Lubica Ticha (Bratislava, Slovakia)

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Jos Draaisma (Nijmegen, Netherlands)

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Rebecca Moon (Southampton, United Kingdom)

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Barbara Misof (Vienna, Austria)

P170 Serum 25-hydroxyvitamin D requirements to prevent rickets in Nigerian children on a calcium-deprived diet
Tom Thacher (Rochester, United States)

P171 Seasonal Variations in Vitamin D Status in Children with Haematological Malignancies in Sweden
Natalja Jackmann (Uppsala, Sweden)

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Motor and nutritional aspects of individuals with osteogenesis imperfecta assisted in Brazilian midwest region  
Giovana Ceolho (Brasilia, Brazil)

Supplementation of children with type 1 diabetes with milk or pharmacological calcium for improving bone health- A randomized controlled trial  
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Dietary behaviours and compromised nutritional intakes in children with Osteogenesis Imperfecta  
Lisa Mills (Bristol, United Kingdom)

Prevalence of vitamin D deficiency in newly diagnosed children with cancer  
Heidi Kecskemethy (Wilmington, United States)

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Feasibility of a 13-week targeted exercise intervention on tibial bone mineral density in adolescents with Developmental Coordination Disorder  
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The role of hydrotherapy in the management of children with severe Osteogenesis Imperfecta  
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Clinical and radiological characteristics of children’s forearm deformations with hereditary multiple exostosis (clinical observation)  
Ekaterina Belousova (St. Petersburg, Russian Federation)

A retrospective review of modern spine surgery in the skeletal dysplasia population  
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Walking quality of children with healed Perthes disease  
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Handgrip strength as functionality and independence indicative in osteogenesis imperfecta  
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Functional outcomes of an adult with osteogenesis imperfecta after rehabilitation post-bilateral Girdlestone procedure: a case report  
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Material based on bioactive glass to replace bone defects in children after removal of tumors  
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High impact exercise to improve musculoskeletal outcomes in Crohn's disease: a feasibility questionnaire
Lewis Steell (Glasgow, United Kingdom)

Severe osteoporosis with life threatening vertebral fractures in a 15-years-old boy with juvenile idiopathic arthritis: a successful spinal cord decompression and posterior spinal fusion Th2-Th12
Jerzy Konstantynowicz (Bialystok, Poland)

Increased prevalence of overweight and obesity and its clinical predictors in children affected by X-linked hypophosphatemia
Volha V Zhukouskaya (Le Kremline Bicetre, France)

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Janani Devaraja (Sheffield, United Kingdom)

Cleidocranial dysplasia: A patient with severe dental phenotype
Artemis Doulgeraki (Athens, Greece)

Cone-shaped epiphyses involving the knees: report of a case and differential diagnosis.
Artemis Doulgeraki (Athens, Greece)

Supporting the emotional well-being of children living with osteogenesis imperfecta; an upstream health promotion initiative
Ali Seasman (Sheffield, United Kingdom)

Developing a high chair to meet the needs of infants with Achondroplasia; a collaboration between Evelina London Children's Hospital and Brunel University.
Jill Massey (London, United Kingdom)

Double trouble: A case of Trisomy 21 and achondroplasia
Stacey Todd (Glasgow, United Kingdom)

Skeletal dysplasia in Saul Wilson Syndrome
Merete Ljungberg (Copenhagen, Denmark)

Growth velocity measured by biomarker, COLX, in achondroplasia
Hanne Hove (Copenhagen, Denmark)

Sleep related problems in children with osteogenesis imperfecta
Kieran Murphy (Sheffield, United Kingdom)

A playful type of intervention for infants with osteogenesis imperfecta
Rebecca Jones (Sheffield, United Kingdom)
The Multidisciplinary Team (MDT) Approach: What does it look like and why does it matter? An illustration of a true MDT approach to provide holistic care for a child with severe and complex osteogenesis imperfecta. 
Rebecca Jones (Sheffield, United Kingdom)

Diversity of outcomes in randomised trials of interventions for children with osteogenesis imperfecta 
Richard McGee (Westmead, Australia)

Whole body vibration training for children and adolescents with congenital myopathy 
Verity Pacey (North Ryde, Australia)

Juvenile dermatomyositis (JDM) and hypoparathyroidism (HP) in an adolescent girl 
Jennifer Miller (Chicago, United States)

Vibration therapy improves mobility and has no detrimental impact on bone health in adolescents with mild cerebral palsy independent of daily protocol duration (9 minutes/day vs. 15 minutes/day) 
Silmara Gusso (Auckland, New Zealand)

Side-alternating vibration training improves mobility and has no detrimental impact on bone health in young children with mild-moderate cerebral palsy. 
Silmara Gusso (Auckland, New Zealand)

A qualitative analysis of the burden-of-illness associated with X-linked hypophosphataemia (XLH) in children and adolescents 
Nermina Ferizovic (Cambridge, United Kingdom)

Bone mineral density in surgical hemivertebrae treatment in a prematurely born child – a case study 
Dragana Vukliš (Novi Sad, Serbia)

Robot-assisted exercises in children with cerebral palsy – A case study 
Rastislava Krasnik (Novi Sad, Serbia)

Group exercises aimed at poor body posture correction assisted by humanoid robot – A case study 
Dragana Vukliš (Novi Sad, Serbia)

Motor developmental outcomes in 2 babies with very severe osteogenesis imperfecta (type II) 
Claire Sweeney (Birmingham, United Kingdom)

Persistently low trabecular bone mineral density and normal bone strength at the radius over 3 years after simultaneous pancreas kidney transplantation 
Ondrej Soucek (Prague, Czech Republic)

Premature Physeal closure following 13-cis-retinoic acid administration in neuroblastoma 
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Mark Heathfield (London, United Kingdom)

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Genetic loss of heparanase does not inhibit osteochondromas in Ext1 and Ext2 double heterozygous hereditary multiple osteochondroma mouse model
Kalyan Nannuru (Tarrytown, United States)

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Evaluating a therapy-led school and nursery outreach service for children with Osteogenesis Imperfecta
Alex Bultitude (London, United Kingdom)

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Assessment of multidisciplinary care of children with osteogenesis imperfecta at The Royal Manchester Children's Hospital
Paula Galloway (Manchester, United Kingdom)

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Maria-Elena Lautatzis (Toronto, Canada)

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Rebecca Jones (Sheffield, United Kingdom)

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Mikhail Kostik (St Petersburg, Russian Federation)

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CD64: an adjunct to Kocher’s criteria to differentiate septic arthritis and transient synovitis in children
Ajai Singh (Lucknow, India)

Impact of pubertal suppression on body composition and bone density in adolescents with gender dysphoria
Sheila Shepherd (Glasgow, United Kingdom)

Chronic recurrent multifocal osteomyelitis in children with hypophosphatasia explained by anti-inflammatory nucleotidase activity of tissue nonspecific alkaline phosphatase in mesenchymal and hematopoietic cells
David Magne (Villeurbanne, France)

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Validation study of automated bone age assessment in 1285 children and adolescents aged 5 to 16 years
Klara Maratova (Prague, Czech Republic)

Nutritional status and bone mineral density in children with epidermolysis bullosa
Nataliya Balatska (Kiev, Ukraine)

Monitoring skull base abnormalities in children with osteogenesis imperfecta
Amaka Offiah (Sheffield, United Kingdom)

Foramen magnum stenosis (FMS): neuroradiological aspects before and after cervical decompression in paediatric patients with achondroplasia (ACH)
Anna Elsa Maria Allegri (Genova, Italy)