

## Attended Posters – Sunday, 6 May 2007

### P001-S OSTEOCLASTS SECRETE NON-BONE DERIVED SIGNALS THAT INDUCE BONE NODULE FORMATION

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### P004-S THE EXTRACELLULAR MATRIX (ECM) COMPONENT PRELP (PROLINE/ARGININE-RICH END LEUCINE-RICH REPEAT PROTEIN) INHIBITS OSTEOCLASTOGENESIS

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### P007-S SRC MEDIATED CBL-PI3KINASE INTERACTION REQUIRED FOR OSTEOCLAST FUNCTION

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### P010-S HIGH-THROUGHPUT GENETIC EXPRESSION PROFILES AND PROTEOMICS APPROACHES FOR UNDERSTANDING THE BISPHOSPHONATE'S MODES OF ACTION ON BONE

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### P013-S ZOLEDRONIC ACID RESISTANCE MECHANISMS OF OSTEOSARCOMA CELL LINES

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### P016-S THE ACTIVIN A – FOLLISTATIN SYSTEM: POTENT REGULATOR OF EXTRACELLULAR MATRIX SYNTHESIS AND MINERALIZATION

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### P019-S KINETIC ANALYSIS OF CONFORMATIONAL CHANGES IN FARNESYL PYROPHOSPHATE SYNTHASE INDUCED BY NITROGEN CONTAINING BISPHOSPHONATES

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### P022-S NO EVIDENCE OF ASSOCIATION BETWEEN CODING LRP5/6 POLYMORPHISMS AND BMD AND FRACTURE RISK IN THREE INDEPENDENT LARGE-SCALE POPULATION BASED STUDIES OF YOUNG AND ELDERLY MEN

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### P025-S IDENTIFICATION OF SEX-SPECIFIC EFFECTS OF TNFRSF11B POLYMORPHISMS ON THE RISK TO DEVELOP PAGET'S DISEASE OF BONE

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**P028-S INTRINSIC BONE QUALITY IN FRAGILITY HIP FRACTURE PATIENTS: ALTERED MINERALISATION AND MICRODAMAGE ACCUMULATION**

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**P031-S EFFECT OF ONCE-YEARLY INFUSION OF ZOLEDRONIC ACID 5 MG IN POSTMENOPAUSAL WOMEN WITH OSTEOPOROSIS**

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**P034-S IBANDRONATE-INDUCED BONE MINERAL DENSITY GAINS ARE RELATED TO VERTEBRAL ANTIFRACTURE EFFICACY**

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**P037-S BONE MINERAL DENSITY RESPONSE TO 24 MONTHS OF TERIPARATIDE (RPTH 1-34) IN PATIENTS WITH INADEQUATE RESPONSE TO PRIOR ANTIRESORPTIVE TREATMENT**

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**P040-S THE INFLUENCE OF A ONE-YEAR MODERATE INTENSITY SCHOOL-BASED PHYSICAL ACTIVITY PROGRAM ON BONE DENSITY, MUSCLE STRENGTH, BODY COMPOSITION AND PHYSICAL PERFORMANCE IN PRE-PUBERTAL GIRLS -DATA FROM THE PEDIATRIC OSTEOPOROSIS PREVENTION (POP) STUDY**

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**P041-S INCIDENCE OF NUTRITIONAL AND HEREDITARY RICKETS AMONG CHILDREN LIVING IN DENMARK**

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**P044-S OSTEOSPHERES: A NOVEL APPROACH FOR SCAFFOLD-ENHANCED EX VIVO OSTEOGENESIS**

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**P047-S ACTIVATED PLATELETS STIMULATE DIFFERENTIATION AND PROLIFERATION OF PRIMARY HUMAN BONE CELLS**

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**P053-S MECHANICAL AND MATERIAL PROPERTIES OF CORTICAL BONE FROM nNOS NULL MICE**

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**P056-S EFFECT OF TEMPERATURE AND FLUORIDE ON AMELOBLASTS IN VITRO**

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**P059-S PROSTAGLANDINS DIFFERENTIALLY AFFECT OSTEOGENIC DIFFERENTIATION OF HUMAN ADIPOSE TISSUE-DERIVED MESENCHYMAL STEM CELLS**

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**P062-S BRIDGING OF RABBIT TIBIA NONUNION PROMOTED BY EXTRACORPOREAL SHOCKWAVE**

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**P065-S ULTRASTRUCTURAL AND CHEMICAL ANALYSES OF APATITE CRYSTAL IN HARD TISSUE OF CONODONT FOSSIL**

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**P068-S TYPE OF PHYSICAL ACTIVITY AS A DETERMINANT OF BMC IN ADOLESCENT WOMEN: A 7-YEAR FOLLOW-UP**

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**P071-S RELATIONSHIP BETWEEN WHOLE BODY, FOREARM AND AP SPINE DENSITY IN A POPULATION OF HEALTHY CHINESE ADOLESCENTS**

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**P074-S PATHOLOGICAL OA CHONDROCYTES ARE PRIMED FOR DESTRUCTION COMPARED TO THAT OF HEALTHY CHONDROCYTES BY EXCESSIVE INDUCTION OF AGGREGANASE ACTIVITY IN RESPONSE TO PRO-INFLAMMATORY CYTOKINES**

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**P077-S BONE-LIKE HYDROXYAPATITE FORMATION IN HUMAN BLOOD**

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**P080-S THE EFFECT OF RHBMP-4 INCORPORATED COLLAGEN HYDROGEL ON OSTEOGENESIS OF NON-DECORTICATED POSTERIOR SPINAL FUSION**

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**P083-S BONE TENDON JUNCTION REGENERATION WITH ARTICULAR CARTILAGE**

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**P085-S HRT, POSTMENOPAUSAL OSTEOPOROSIS AND WEIGHT GAIN**

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**P088-S INCREASED BONE REMODELING DUE TO DISUSE INCREASES TUMOR GROWTH**

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**P091-S HEAVY METAL DEPOSITION IN PERIPROSTHETIC MINERALIZED BONE TISSUE: INVESTIGATION OF HIP ARTHROPLASTY WEAR DÉBRIS DEGRADATION UNDER DARKFIELD ILLUMINATION WITH PROTON INDUCED X-RAY EMISSION**

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**P094-S EVOLUTION OF PERI-ARTICULAR HAND BONE MINERAL DENSITY IN RHEUMATOID ARTHRITIS**

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**P097-S DOES HISTORICAL FORMS OF HYPERPARATHYROIDISM STILL EXIST?**

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**P100-S OPG, RANK AND RANK LIGAND EXPRESSION IN THYROID LESIONS**

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**P103-S THE PREVALENCE OF THE OSSIFICATION OF POSTERIOR LONGITUDINAL LIGAMENT IN KOREAN**

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**P106-S CALCIUM PYROPHOSPHATE DIHYDRATE (CPPD) CRYSTALLINE DEPOSITS IN THE KNEE: ARTHROSCOPIC, RADIOGRAPHIC AND THE SYNOVIAL FLUID STUDY**

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**P109-S EFFECTIVE USE OF PAMIDRONATE IN PEDIATRIC PATIENTS WITH AVASCULAR NECROSIS FOLLOWING GLUCOCORTICOID THERAPY: 3 CASE REPORTS**

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**P112-S THE ASSOCIATION OF RADIOGRAPHIC OSTEOARTHRITIS OF KNEE AND LUMBAR SPINE WITH PAIN: THE RESEARCH ON OSTEOARTHRITIS AGAINST DISABILITY (ROAD) STUDY**

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**P115-S RELEVANCE OF USING 99MTC-NTP 15-5 IN CHONDROSARCOMA IN VIVO IMAGING TO DETECT EARLY TUMOR RECURRENCE: DIAGNOSTIC APPLICATIONS TO ZOLEDRONATE-TREATED RATS**

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**P118-S A PROSPECTIVE TWO YEARS FOLLOW-UP OF THORACIC AND LUMBAR OSTEOLYTIC VERTEBRAL FRACTURES CAUSED BY MULTIPLE MYELOMA TREATED WITH BALLOON-KYPHOPLASTY**

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**P121-S DEVELOPMENT OF AN IN VITRO MODEL TO INVESTIGATE JOINT OCHRONOSIS IN ALKAPTONURIA**

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**P124-S EFFECT OF ANTI-TUMOUR NECROSIS FACTOR ALPHA (INFliximab) ON HUMAN OSTEOBLAST CELL VIABILITY IN PATIENTS WITH ACTIVE INFLAMMATORY BOWEL DISEASE: AN IN-VITRO STUDY**

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**P127-S REGULATION OF PARATHYROID HORMONE-RELATED PROTEIN RELEASE AND EXPRESSION BY EXTRACELLULAR CALCIUM AND PHOSPHATE IN OSTEOBLAST PROGENITOR CELLS**

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**P130-S MECHANOSENSITIVITY AND ELASTICITY OF BONE CELLS UNDER ROUND AND FLAT MORPHOLOGIES**

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**P133-S NEW INSIGHTS INTO PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR GAMMA ACTION: STIMULATION OF HUMAN OSTEOBLAST DIFFERENTIATION**

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**P136-S OLEUROPEIN INDUCES OSTEOBLASTOGENESIS AND INHIBITS ADIPOGENESIS: EFFECT ON DIFFERENTIATION FROM OF BONE MARROW-DERIVED STEM CELLS**

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**P139-S (-)-EPIGALLOCATECHIN-3-GALLATE (EGCG) MODULATE OPG/RANKL/RANK IN MURINE BONE MARROW MESENCHYMAL STEM CELL AND OSTEOBLAST**

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**P142-S EXPOSURE OF MC3T3-E1 OSTEOBLAST-LIKE CELLS TO ARACHIDONIC ACID, DOCOSAHEXAENOIC ACID AND PARATHYROID HORMONE MODULATES OSTEOPROTEGERIN AND RANKL SECRETION**

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**P145-S DECREASED OXIDATIVE CAPACITY AND INCREASED EXPRESSION OF PROAPOPTOTIC GENES IN MSC DURING AGEING IN VITRO**

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**P148-S CAMKIBETA mRNA IS EXPRESSED IN THE GROWTH PLATE AND INHIBITS PROLIFERATION OF PRIMARY OSTEOBLASTS IN CULTURE**

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**P151-S MECHANICAL STIMULATION OF A SINGLE OSTEOCYTE INDUCE INTERCELLULAR CALCIUM WAVES THROUGH THE OSTEOCYTE NETWORK**

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**P154-S MODULATION OF THE RESORPTION SURFACE BY INHIBITORS CHANGES OSTEOBLAST ADHESION**

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**P157-S SEPARATE EFFECTS OF PRESSURE AND FLUID FLOW ON BONE CELLS IN VITRO**

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**P160-S PHOSPHATE STIMULATES MATRIX GLA PROTEIN EXPRESSION IN OSTEOBLASTS: ROLE OF ERK1/2 AND FRA-1**

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**P163-S GROWTH DEFECT, REDUCED MINERALIZATION AND TIBIAL BOWING IN A MOUSE MODEL FOR NEUROFIBROMATOSIS TYPE 1**

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**P166-S BIM IS TRANSCRIPTIONALLY REGULATED DURING INDUCTION OF APOPTOSIS BY**

**GROWTH FACTOR WITHDRAWAL IN OSTEOBLASTS**M. Liang<sup>\*1</sup>, B. Espina<sup>1</sup>, R. G. G. Russell<sup>1</sup>, P. A. Hulley<sup>1</sup><sup>1</sup>Nuffield Department of Orthopaedic Surgery, University of Oxford, Oxford, United Kingdom**P169-S ROLE OF PARATHYROID HORMONE-RELATED PROTEIN AND VASCULAR ENDOTELIAL GROWTH FACTOR ON THE DECREASED OSTEOBLAST FUNCTION ASSOCIATED WITH DIABETIC OSTEOPENIA**D. Lozano<sup>\*1</sup>, L. F. de Castro<sup>1</sup>, E. Gómez-Barrena<sup>1</sup>, F. Manzarbeitia<sup>1</sup>, S. Gómez<sup>1</sup>, M. V. Alvarez-Arroyo<sup>1</sup>, P. Esbrit<sup>1</sup><sup>1</sup>Bone and Mineral Metabolism Laboratory, Fundación Jiménez Díaz Capio Group, Madrid, Spain**P172-S OSTEOPROTEGERIN PRODUCTION BY MG63 BUT NOT BY SAOS-2 OSTEOSARCOMA CELLS IS STIMULATED BY A FACTOR PRESENT IN SERUM**H. S. McCarthy<sup>\*1</sup>, H. L. Smith<sup>1</sup>, M. J. Marshall<sup>1</sup><sup>1</sup>Charles Salt, RJAH Orthopaedic Hospital, Shropshire, United Kingdom**P175-S GLUCOCORTICOIDS REDUCE THE SECRETION OF BONE ANABOLIC SIGNALS FROM A SUBSET OF MATURE OSTEOCLASTS**A. V. Neutzsky-Wulff<sup>\*1</sup>, K. Henriksen<sup>1</sup>, C. Christiansen<sup>2</sup>, T. J. Martin<sup>3</sup>, M. A. Karsdal<sup>1</sup><sup>1</sup>Pharmacology, Nordic Bioscience, Herlev, <sup>2</sup>CCBR, Ballerup, Denmark, <sup>3</sup>St Vincent's Institute, Melbourne, Australia**P178-S DIFFERING STRAIN REGIONS AND SHEAR FORCES UNDER CYCLIC BIAXIAL LOADING IN THE FLEXERCELL-STRAIN-UNIT**C. E. Ott<sup>\*1</sup>, S. Ahrens<sup>1</sup>, F. H. Bleckwehl<sup>2</sup>, M. Thompson<sup>3</sup>, U. Kornak<sup>1</sup>, G. Duda<sup>2</sup>, S. Mundlos<sup>1</sup><sup>1</sup>Institute for Medical Genetics, <sup>2</sup>Trauma and Reconstructive Surgery, Charité Universitätsmedizin Berlin, Berlin, Germany, <sup>3</sup>Department of Engineering Science, University of Oxford, Oxford, United Kingdom**P181-S AMELOBLASTIN (AMBN), A KEY FACTOR IN ENAMEL DEVELOPMENT AND MINERALIZATION, IS EXPRESSED AND REGULATED IN HUMAN MESENCHYMAL AND HEMATOPOETIC STEM CELLS, BONE CELLS AND IN ADIPOSE TISSUE**M. V. Tamburstuen<sup>\*1</sup>, G. Pezeshki<sup>2</sup>, S. Reppe<sup>3</sup>, G. Kvalheim<sup>4</sup>, I. Slaby<sup>1</sup>, H. S. Berner<sup>1</sup>, P. Lyngstadaas<sup>1</sup>, J. E. Reseland<sup>1</sup><sup>1</sup>Department of Biomaterials, University of Oslo, Oslo, Norway, <sup>2</sup>Dept. of Conservative Dentistry and Periodontology, University of Ulm, Ulm, Germany, <sup>3</sup>Department of Medical Biochemistry, University of Oslo,<sup>4</sup>The Norwegian Radium Hospital, Montebello, Oslo, Norway**P184-S BONE CELL GROWTH IS ENHANCED IN HISTOCARE™ GEL**R. Sabertrasekh<sup>\*1</sup>, C. Busch<sup>2</sup>, M. Monjo<sup>1</sup>, S. Lyngstadaas<sup>1</sup>, J. Reseland<sup>1</sup><sup>1</sup>Department of Biomaterials, Institute for Clinical Dentistry, University of Oslo, Oslo, Norway, <sup>2</sup>Department of Pathology, University Hospital, Uppsala, Sweden**P187-S GENE EXPRESSION IN HUMAN OSTEOBLASTS AND OSTEOCLASTS IN A THREE DIMENSIONAL TISSUE CULTURE MODEL**A. Sundaresan<sup>\*1</sup>, N. R. Pellis<sup>2</sup><sup>1</sup>Biology, Texas Southern University, <sup>2</sup>Space Life Sciences, NASA, Houston, United States**P190-S STEM CELL TRANSPLANTATION FOR TREATMENT OF CONGENITAL PSEUDOARTHROSIS OF THE TIBIA -PRELIMINARY RESULTS FROM 2 CELL TRANSPLANTATIONS**J. Tikkanen<sup>\*1</sup>, V. Vahasarja<sup>2</sup>, H. Leskelä<sup>1</sup>, P. Lehenkari<sup>1</sup><sup>1</sup>Department of Surgery, University of Oulu, Oulu, Finland, <sup>2</sup>Department of Pediatric Surgery,**P193-S OPTIMIZATION OF EXPRESSION AND PURIFICATION OF RECOMBINANT BONE MORPHOGENETIC PROTEIN-6 (RBMP-6)**V. Kufner<sup>\*1</sup>, S. Vukicevic<sup>1</sup><sup>1</sup>Department of Anatomy, Medical School, Zagreb, Croatia**P194-S ICAM-1 EXPRESSION IN A CO-CULTURE OF HUMAN BONE LINING CELLS AND OSTEOCLAST PRECURSORS INCREASES DURING OSTEOCLASTOGENESIS**V. Bloemen<sup>\*1</sup>, T. Schoenmaker<sup>2</sup>, T. J. de Vries<sup>2</sup>, V. Everts<sup>1</sup><sup>1</sup>Department of Oral Cell Biology, <sup>2</sup>Departments of Oral Cell Biology and Periodontology, Academic Centre of Dentistry Amsterdam, Amsterdam, Netherlands

**P197-S C-SRC KINASE INHIBITOR AZD0530 INHIBITS THE FORMATION AND ACTIVITY OF HUMAN OSTEOCLASTS**

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**P200-S CHARACTERIZATION OF THE ROLE OF PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR (PPAR)-DELTA IN OSTEOCLAST BIOLOGY**

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**P203-S HYDROGEN PEROXIDE AS A REGULATOR OF RANKL-INDUCED CALCIUM OSCILLATIONS AND OSTEOCLAST DIFFERENTIATION**

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**P206-S ROLE OF PLCGAMMA2 IN OSTEOCLASTS DIFFERENTIATION AND FUNCTION**

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**P209-S N-ACETYLGLACTOSAMINE GLYCOCOCONJUGATES IN BONE RESORBING OSTEOCLASTS**

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**P212-S RANKL-INDUCED OSTEOCLAST SURVIVAL IS ASSOCIATED WITH ENHANCED LEVELS OF MCL-1**

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**P215-S IN SILICO PROMOTER ANALYSIS OF VACUOLAR PROTON PUMP SUBUNITS**

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**P218-S CCAAT/ENHANCER BINDING PROTEIN (C/EBP) BETA REGULATES OSTEOBLAST AND OSTEOCLAST DIFFERENTIATION**

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**P221-S MANIPULATING THE ANABOLIC AND CATABOLIC RESPONSE IN BONE GRAFT REMODELLING. SYNERGISM BY A COMBINATION OF LOCAL BMP-7 AND A SINGLE SYSTEMIC DOSIS OF ZOLEDRONATE**

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**P224-S BONE TURNOVER MARKERS AND EARLY DETECTION OF BONE METASTASES IN PATIENTS WITH PROSTATE CANCER; A LONGITUDINAL APPROACH**

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**P227-S EXPRESSION AND REGULATION OF TOLL-LIKE RECEPTOR 2 BY FIBRONECTIN FRAGMENTS IN HUMAN ARTICULAR CHONDROCYTES**

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**P230-S JUVENILE HYALINE FIBROMATOSIS. CASE REPORT**

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**P233-S EFFECT OF RANK/RANKL/OPG HAPLOTYPES ON BONE PHENOTYPE AFTER TOTAL HIP ARTHROPLASTY**

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**P236-S HAPLOTYPES OF PROMOTER AND INTRON 1 POLYMORPHISMS IN THE COLIA1 GENE ARE ASSOCIATED WITH INCREASED RISK OF OSTEOPOROTIC FRACTURE**

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**P239-S COMMON GENETIC VARIATION IN THE ESTROGEN RECEPTOR BETA GENE IS ASSOCIATED WITH INCREASED RISK OF OSTEOARTHRITIS**

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**P242-S VITAMIN D AND ESTROGEN RECEPTOR-ALPHA POLYMORPHISMS ARE RELATED TO BONE DENSITY IN HEALTHY RUSSIAN ADOLESCENTS**

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**P245-S CHARACTERIZATION AND MAPPING OF ALI34: A NEW ENU-DERIVED MURINE MODEL FOR OSTEOARTHRITIS**

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**P248-S ANDROGEN RECEPTOR CAG REPEAT POLYMORPHISMS: ASSOCIATIONS WITH FEMORAL SHAFT BONE MASS AND BODY SIZE IN YOUNG MEN**

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**P251-S EVIDENCE FOR ASSOCIATION BETWEEN THE ILE1062VAL POLYMORPHISM IN LRP6 AND BMD BUT NOT FOR INTERACTION WITH TWO LRP5 VARIANTS IN THE ODENSE ANDROGEN STUDY**

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**P254-S ALLELIC VARIANTS OF THE ENZYME MTHFR AND OSTEOPOROTIC FRACTURES**

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**P257-S RELATIONSHIP OF C420G POLYMORPHISM IN THE PROMOTER OF RESISTIN GENE WITH BONE MINERAL METABOLISM IN KOREAN WOMEN**

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**P258-S THE N-TERMINAL FRAGMENT OF PARATHYROID HORMONE-RELATED PROTEIN INDUCES EPITHELIAL-MESENCHYMAL TRANSITION BY TRANSACTIVATION OF THE EPIDERMAL GROWTH FACTOR RECEPTOR**

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**P261-S SERUM ADIPONECTIN LEVELS ARE POSITIVLY ASSOCIATED WITH THE DIESEASE SEVERITY OF RHEUMATOID ARTHRITIS EVALUATED WITH THE EXTENT OF OVERALL JOINT DESTRUCTION**

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**P264-S CARDIOVASCULAR DISTRIBUTION OF THE CALCIUM-SENSING RECEPTOR BEFORE AND AFTER BURNS**

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**P267-S EFFECTIVENESS OF HIGH AND MODERATE DOSES OF VITAMIN D3 IN PREVENTION OF OSTEOPOROSIS IN POSTMENOPAUSAL WOMEN**

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**P270-S ESTROGEN STRONGLY ATTENUATES COLLAGEN-INDUCED ARTHRITIS IN RATS**

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**P273-S DEVELOPMENT OF BONE AND MINERAL ASSAYS FOR THE LIAISON® IMMUNOASSAY ANALYZER**

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**P276-S DEXAMETHASONE INTERFERES WITH THE P2 RECEPTORS-INDUCED CELL SIGNALLING**

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**P279-S EFFECTS OF INTERMITTENT PTH ADMINISTRATION ON OPG, RANKL AND SOST mRNA AND PROTEIN IN PRIMARY AND SECONDARY METAPHYSEAL TRABECULAR BONE OF THE RAT**

G. Silvestrini<sup>\*1</sup>, P. Ballanti<sup>1</sup>, M. Sebastiani<sup>1</sup>, M. Leopizzi<sup>1</sup>, S. Berni<sup>1</sup>, E. Bonucci<sup>1</sup>

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**P282-S CALCITONIN INCREASE PROTEOGLYCAN LEVELS IN HUMAN OSTEOARTHRITIC ARTICULAR CARTILAGE BY STIMULATION OF PROTEOGLYCAN SYNTHESIS AND INHIBITION OF AGGREGANASE ACTIVITY MEDiated IN PART THROUGH INDUCTION OF INCREASED CAMP LEVELS**

B. Sondergaard<sup>\*1</sup>, S. H. Madsen<sup>1</sup>, E. U. Sumer<sup>1</sup>, C. Christiansen<sup>2</sup>, M. A. Karsdal<sup>1</sup>

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**P285-S 24 MONTHS OF CINACALCET IN HEMODIALYSIS PATIENTS: IMPACT ON CALCIUM SALTS AND CALCIUM-FREE PHOSPHATE BINDERS**

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**P288-S THE PREVALENCE OF OSTEOPOROSIS AND VITAMIN D DEFICIENCY/INSUFFICIENCY AMONG ELDERLY PEOPLE WITH FALLS IN DENMARK**

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**P291-S VERTEBRAL COMPRESSION FRACTURES MAY BE SILENT IN OSTEOPOROTIC ELDERLY**

S. Ariogul<sup>\*1</sup>, B. B. Yavuz<sup>1</sup>, M. Halil<sup>1</sup>, Z. Ulger<sup>1</sup>, M. Cankurtaran<sup>1</sup>

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**P294-S CHANGES IN BONE MINERAL DENSITY DURING ANTI-TNF APLHA THERAPY IN RHEUMATOID ARTHRITIS PATIENTS**

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**P297-S GENDER-RELATED DIFFERENCES IN THE FEMUR GEOMETRY MEASUREMENTS AND THEIR RELATIONSHIP TO BONE MINERAL DENSITY**

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**P300-S PERSISTENCE IN OSTEOPOROSIS TREATMENT IN ELDERLY AFTER HIP FRACTURE**

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**P303-S RECOGNIZING OSTEOPOROSIS AND ITS CONSEQUENCES IN QUÉBEC (ROCQ): THE CARE GAP FOLLOWING A FRAGILITY FRACTURE**

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**P306-S LOCALIZATION OF STRONTIUM, BY X-RAY MICROANALYSIS CARTOGRAPHY, IN BONE BIOPSIES OF POSTMENOPAUSAL OSTEOPOROTIC WOMEN TREATED FOR 3 YEARS WITH STRONTIUM RANELATE**

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**P309-S RISEDRONATE IS SAFE AND EFFECTIVE IN MEN WITH OSTEOPOROSIS IN A 2-YEAR, DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED, MULTICENTER STUDY**

S. Boonen\*<sup>1</sup>, P. D. Delmas<sup>2</sup>, D. Wenderoth<sup>3</sup>, K. J. Stoner<sup>4</sup>, R. Eusebio<sup>5</sup>, E. S. Orwoll<sup>6</sup>

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**P312-S THE IDENTIFICATION OF PATIENTS IN NEED OF TREATMENT FOR OSTEOPOROSIS IS IMPROVED BY USING VERTEBRAL FRACTURE ASSESSMENT AT THE TIME OF DXA SCANNING**

S. Chavrimootoo\*<sup>1</sup>, B. Whelan<sup>1</sup>, P. Hodnett<sup>2</sup>, M. O'Sullivan<sup>1</sup>, E. Falvey<sup>1</sup>, M. Daly<sup>1</sup>, S. Harney<sup>1</sup>, F. Shanahan<sup>3</sup>, M. Maher<sup>2</sup>, M. G. Molloy<sup>1</sup>

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**P315-S THE IMPACT OF SUB OPTIMAL COMPLIANCE AND PERSISTENCE WITH BISPHOSPHONATE THERAPY ON POST MENOPAUSAL OSTEOPOROTIC FRACTURE RISK**

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**P318-S TERIPARATIDE AFTER ANTIRESORPTIVE**

G. M. D'Avola\*<sup>1</sup>, M. Caminiti<sup>2</sup>, M. Calitro<sup>3</sup>, E. Russo<sup>4</sup>, S. Denaro<sup>5</sup>, A. Reda<sup>6</sup>, D. D'Avola<sup>7</sup>

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**P321-S SECONDARY FRACTURE PREVENTION MEASURES IN ORTHOPEDIC WARDS IN BELGIUM**

J. Devogelaer\*<sup>1</sup>, Y. Boutsen<sup>2</sup>, L. De Clercq<sup>3</sup>, S. Porlau<sup>4</sup>, P. Geusens<sup>5</sup>, S. Goemaere<sup>6</sup>

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**P324-S DXA BODY COMPOSITION CHANGES IN PATIENTS WITH ANOREXIA NERVOSA AFTER**

**WEIGHT GAIN**S. Di Gregorio<sup>\*1</sup>, J. Vanmanshoven<sup>2</sup>, L. Del Rio<sup>1</sup>, C. Sole<sup>1</sup>, E. Bone<sup>1</sup><sup>1</sup>CETIR, Centre Medic, Barcelona, Spain, <sup>2</sup>Katholieke Universiteit Leuven, Pharmacy, Leuven, Belgium**P327-S FIRST RESULTS OF THE SABRE STUDY: THE EFFECTS OF RISEDRONATE SODIUM ON BONE METABOLISM IN POSTMENOPAUSAL WOMEN RECEIVING ADJUVANT ANASTROZOLE FOR EARLY BREAST CANCER**R. Eastell<sup>\*1</sup>, R. A. Hannon<sup>1</sup>, G. Clack<sup>2</sup>, M. Campone<sup>3</sup>, J. R. Mackey<sup>4</sup>, J. P. Apffelstaedt<sup>5</sup>, C. van Poznak<sup>6</sup><sup>1</sup>Academic Unit of Bone Metabolism, University of Sheffield, Sheffield, <sup>2</sup>AstraZeneca, Macclesfield, United Kingdom, <sup>3</sup>Centre René Gauducheau, Site Hospitalier Nord de Nantes, Nantes, France, <sup>4</sup>Department of Oncology, University of Alberta, Edmonton, Canada, <sup>5</sup>Department of Surgery, University of Stellenbosch, Tygerberg, South Africa, <sup>6</sup>Department of Internal Medicine, University of Michigan, Ann Arbor, United States**P330-S THE EFFECT OF AMYLIN(1-8) ON BONE IN OVARIECTOMIZED RATS**M. Ellegaard<sup>\*1</sup>, M. Stahlhut<sup>1</sup>, C. Thorkildsen<sup>2</sup>, J. S. Petersen<sup>2</sup>, S. Pedersen<sup>3</sup>, N. R. Jorgensen<sup>4</sup>, P. Schwarz<sup>5</sup><sup>1</sup>Dept. of Molecular Pharmacology, <sup>2</sup>Dept. of Pharmacology, Zealand Pharma, Glostrup, <sup>3</sup>Dept. of Endocrinology, <sup>4</sup>Dept. of Clinical Biochemistry, Hvidovre University Hospital, Hvidovre, <sup>5</sup>Research Center of Ageing and Osteoporosis, Dept. of Geriatrics, Glostrup University Hospital, Glostrup, Denmark**P333-S A CONVENIENT NEW APPROACH TO SIMPLIFY OSTEOPOROSIS TREATMENT REGIMEN FOR RISEDRONATE PLUS CALCIUM AND VITAMIN D**P. Fardellone<sup>\*1</sup>, A. Varbanov<sup>2</sup><sup>1</sup>Department of Rheumatology, CHU, Amiens, France, <sup>2</sup>Procter & Gamble Pharmaceuticals, Mason, OH, United States**P336-S IN VIVO ASSESSMENT OF TRABECULAR AND CORTICAL BONE MICROARCHITECTURE BY HIGH-RESOLUTION COMPUTED TOMOGRAPHY SPECIFIES THE NATURE OF BMD CHANGES FROM PEAK BONE MASS TO THE MENOPAUSE**S. L. Ferrari<sup>\*1</sup>, T. Chevalley<sup>1</sup>, J. P. Bonjour<sup>1</sup>, R. Rizzoli<sup>1</sup><sup>1</sup>Service of Bone Diseases, Dept of Rehabilitation and Geriatrics, Geneva University Hospital, Geneva, Switzerland**P339-S GAINS IN BMD WITH ONCE WEEKLY RISEDRONATE. TWO YEARS RESULTS**C. Galesanu<sup>\*1</sup>, C. Ciubotariu<sup>1</sup>, N. Lisnic<sup>1</sup>, M. Mateiuc<sup>1</sup><sup>1</sup>Endocrinology, University of Medicine and Pharmacy, Iasi, Romania**P342-S STRUCTURAL PARAMETERS OF DISTAL RADIUS AND IPSILATERAL ULNA SHOW GOOD CORRELATION**J. Goldhahn<sup>\*1</sup>, T. Rutishauser<sup>1</sup>, T. L. Mueller<sup>2</sup>, F. Eckstein<sup>3</sup>, O. Trentz<sup>4</sup>, R. Müller<sup>2</sup><sup>1</sup>Upper Extremity, Schulthess Clinic, <sup>2</sup>Institute for Biomechanics, ETH, Zurich, Switzerland, <sup>3</sup>Institute of Anatomy and Musculoskeletal Research, Paracelsus Private Medical University, Salzburg, Austria, <sup>4</sup>Division of Trauma Surgery, University Hospital, Zurich, Switzerland**P345-S GOOD PERSISTENCE AND ADHERENCE WITH ORAL BISPHOSPHONATES REDUCE FRACTURE RATE IN PATIENTS WITH OSTEOPOROTIC FRACTURES**H. Gothe<sup>\*1</sup>, P. Hadji<sup>2</sup>, A. Höer<sup>3</sup>, P. Storz<sup>3</sup>, M. Olson<sup>4</sup>, B. Häussler<sup>3</sup><sup>1</sup>Health Care Research, IGES Institute for Health Care and Social Research, Berlin, <sup>2</sup>Department of Endocrinology, Reproductive Medicine and Osteoporosis, Philipps-University of Marburg, Marburg, <sup>3</sup>Health Care Research, IGES Institute for Health and Social Research, Berlin, Germany, <sup>4</sup>Health Economics and Outcomes Research, Novartis Pharma AG, Basel, Switzerland**P348-S CLINICAL IMPORTANCE OF ACCURACY-ERROR AND REFERENCE VALUES IN DXA-A NATIONWIDE STUDY**E. Hamborg-Petersen<sup>\*1</sup>, E. Hanmann<sup>1</sup>, B. Toet<sup>1</sup>, B. Abrahamsen<sup>2</sup>, B. Langdahl<sup>3</sup>, A. P. Hermann<sup>4</sup>, A. Gotfredsen<sup>5</sup>, J. Beck-Jensen<sup>6</sup>, K. Brixen<sup>1</sup><sup>1</sup>Endocrinology, Odense University Hospital, Odense, <sup>2</sup>Internal Medicine, Copenhagen University Hospital, Gentofte, Copenhagen, <sup>3</sup>Internal Medicine, Aarhus University Hospital, Aarhus, <sup>4</sup>Internal Medicine, Kolding Hospital, Kolding, <sup>5</sup>Internal Medicine, Amager Hospital, <sup>6</sup>Internal Medicine, Copenhagen University Hospital, Hvidovre, Copenhagen, Denmark**P351-S SERUM CALCIUM VALUES AFTER ONE MONTH'S TREATMENT WITH FULL-LENGTH PARATHYROID HORMONE PTH(1-84) OF POSTMENOPAUSAL WOMEN WITH PRIMARY OSTEOPOROSIS**

D. Hosking<sup>\*1</sup>, M. Diaz-Curiel<sup>2</sup>, R. Rizzoli<sup>3</sup>, P. Delmas<sup>4</sup>, M. Brandi<sup>5</sup>, D. Felsenberg<sup>6</sup>, L. H. Hyldstrup<sup>7</sup>

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**P354-S PROFILE OF PATIENTS TREATED WITH TERIPARATIDE. RESULTS FROM THE DANISH PTH**

**DATABASE**

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**P357-S APPROPRIATE BONE MINERAL DENSITY TESTING FOLLOWING A MULTIFACETED OSTEOPOROSIS EDUCATIONAL INTERVENTION: CANADIAN QUALITY CIRCLE (CQC) NATIONAL PROJECT**

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**P360-S FRACTURE RISK ASSESSMENT IN ACUTE HOSPITAL ADMISSIONS**

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**P363-S Abstract withdrawn**

**P366-S VERTEBRAL BODY EVALUATION BY VFA IN CLINICAL PRACTICE**

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**P369-S PRIMARY CARE PHYSICIANS' PREFERENCES TO BISPHOSPHONATE THERAPIES IN PATIENTS WITH SEVERE OSTEOPOROSIS FOLLOWING A MULTIFACETED OSTEOPOROSIS EDUCATIONAL INTERVENTION: CANADIAN QUALITY CIRCLE (CQC) PILOT PROJECT**

B. Kvern<sup>\*1</sup>, G. Ioannidis<sup>2</sup>, L. Thabane<sup>3</sup>, A. Papaioannou<sup>2</sup>, A. Gafni<sup>3</sup>, A. Hodzman<sup>4</sup>, D. Johnstone<sup>5</sup>, C. Crowley<sup>6</sup>, J. D. Adachi<sup>2</sup>

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**P372-S CORRELATION OF PHALANGEAL QUANTITATIVE ULTRASOUND WITH PQCT AND DXA MEASUREMENTS IN HEALTHY POSTMENOPAUSAL**

J. M. Lavado-Garcia<sup>1</sup>, M. L. Canal-Macias<sup>2</sup>, C. Costa-Fernandez<sup>2</sup>, J. F. Calderon-Garcia<sup>2</sup>, R. Roncero-Martin<sup>2</sup>, J. D. Pedrera-Zamorano<sup>\*2</sup>

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**P375-S BONE MINERAL DENSITY AND BONE TURNOVER IN POSTMENOPAUSAL WOMEN WITH REMISSION CUSHING'S DISEASE**

L. A. Marchenkova<sup>\*1</sup>, A. V. Dreval<sup>1</sup>, E. Y. U. Polyakova<sup>1</sup>, L. M. Portnoy<sup>2</sup>, I. P. Ermakova<sup>3</sup>, V. P. Buzulina<sup>3</sup>

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**P378-S MINERAL DENSITY AND BONE TURNOVER IN A PATIENT AFFECTED BY SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) TREATED WITH TERIPARATIDE**

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**P381-S CHARACTERIZATION OF BONE QUALITY IN HIP ARTROPLASTY: COMPARISON BETWEEN FRAGILITY HIP FRACTURE AND HIP OSTEOARTHRITIS**

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**P384-S NO ASSOCIATION BETWEEN KNOWLEDGE ON OSTEOPOROSIS AND ADHERENCE WITH TREATMENT – A CROSS-SECTIONAL QUESTIONNAIRE STUDY**

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**P387-S COMPARISON OF RISEDRONATE, RALOXIFENE, CALCITONIN AND ACTIVE VITAMIN D TREATMENTS IN POSTMENOPAUSAL OSTEOPOROSIS WITH LOW BACK PAIN**

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**P390-S ROLE OF THE ULTRASOUNDS DEVICES IN THE MONITORING OF BONE STRENGTH IN PEDIATRIC PATIENTS AT RISK OF OSTEOPOROSIS**

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**P393-S RISK FACTORS ASSOCIATED WITH LOW BONE MINERAL DENSITY AND OSTEOPOROTIC FRACTURES IN BRAZILIAN WOMEN – THE SAO PAULO OSTEOPOROSIS STUDY (SAPOS)**

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**P396-S EXPERIMENTAL AND CLINICAL RESEARCH INTO EFFECTIVENESS OF CALCEMIN FOR PROPHYLAXIS AND TREATMENT OF OSTEOPOROSIS**

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**P399-S ORAL IBANDRONATE PRESERVES TRABECULAR MICROARCHITECTURE: MICRO COMPUTED TOMOGRAPHY FINDINGS FROM THE BONE STUDY**

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**P402-S ERYTHROMYCIN INHIBITS IMPLANT WEAR-INDUCED OSTEOLYSIS THROUGH MODULATION OF VEGF SIGNALING IN A MOUSE MODEL**

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**P405-S THE IMPACT OF CALCIUM INTAKE ON PERIPROSTHETIC BONE MINERAL DENSITY**

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**P408-S GROWTH HORMONE-DERIVED PEPTIDE (AOD9604) PREVENTS BONE LOSS AND FRAGILITY IN THE OVARIECTOMIZED RAT MODEL OF OSTEOPOROSIS**

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**P411-S ADJACENT FRACTURES AFTER BALLOON KYPHOPLASTY OF OSTEOPOROTIC VERTEBRAL FRACTURES-A PROSPECTIVE TWO YEAR FOLLOW UP**

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**P414-S RELATION BETWEEN ADIPONECTIN AND BONE MINERAL DENSITY IN PATIENTS WITH POSTMENOPAUSAL OSTEOPOROSIS**

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**P417-S ICARO STUDY (INCIDENCE AND CHARACTERIZATION OF “INADEQUATE TREATMENT RESPONDER PATIENTS” IN OSTEOPOROSIS): RESULTS AT ONE-YEAR FOLLOW-UP**

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**P420-S WATER-BASED EXERCISE PROGRAM IMPROVES BALANCE AND QUALITY OF LIFE IN POSTMENOPAUSAL WOMEN WITH OSTEOPOROSIS**

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**P423-S 3-HYDROXY-3-METHYLBUTYRATE ADMINISTRATION DIMINISHES FUNDECTOMY-INDUCED OSTEOPENIA OF THE LUMBAR SPINE IN PIGS**

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**P426-S EFFECTS OF TREATMENT WITH FLUORIDE ON BONE MINERAL DENSITY AND FRACTURE RISK – A META-ANALYSIS**

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**P429-S LOW SERUM TSH CORRELATES WITH THE NUMBER OF VERTEBRAL FRACTURES IN POSTMENOPAUSAL WOMEN WITH OSTEOPOROSIS**

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**P432-S BONE EFFECTS OF A CATHEPSIN K INHIBITOR IN THE ADULT ESTROGEN DEFICIENT RABBIT**

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**P435-S DIFFERENCE IN CENTRAL INTRERVERTEBRAL PRESSURES DURING VERTEBROPLASTY AND BALLOON KYPHOPLASTY?**

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**P438-S PRECISION IMPROVEMENTS WITH DXA**

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**P441-S BONE MINERAL DENSITY IN RATS WITH IRON ENRICHED DIET AND REPEATED BLOOD LOSSES**

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**P443-S INSULIN LEVELS CONTRIBUTE TO BONE LOSS RATES AND BMD IN HEALTHY POSTMENOPAUSAL WOMEN OVER AND ABOVE THE ASSOCIATION EXPLAINED BY FAT MASS**

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**P446-S RISK FACTORS OF WRIST FRACTURES IN GREEK POPULATION**

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**P449-S THE PREVALENCE OF OSTEOPOROSIS INCREASES QUICKLY THROUGH THE EARLY MENOPAUSE**

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**P452-S DETERMINANTS OF PEAK BONE MASS IN YOUNG FEMALE WOMEN**

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**P455-S OSTEOPOROSIS STUDY IN COMPLETE SPINAL CORD INJURED MEN**

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**P458-S TRANSVERSE ELEMENTS OF VERTEBRAL TRABECULAR BONE ARE SACRIFICIAL ELEMENTS ALLOWING DISSIPATION OF ENERGY**

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**P461-S BONE MICROARCHITECTURAL ASSESSMENT IN MALE IDIOPATHIC OSTEOPOROSIS BY 3D MICRO-CT**

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**P464-S EXCESS MORTALITY AFTER HIP FRACTURE AMONG POSTMENOPAUSAL WOMEN: EVIDENCE FROM DATA SEARCHES AND LIFE-TABLE ANALYSES FOR LONG-TERM DIFFERENCES IN ABSOLUTE RISK OF DEATH AFTER HIP FRACTURE**

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**P467-S WALKING AND MODES OF HABITUAL PHYSICAL ACTIVITY ARE BENEFICIAL FOR BONE AND BODY COMPOSITION IN OLDER WOMEN**

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**P470-S RELATIONSHIP BETWEEN SERUM HSCRP CONCENTRATION AND BIOCHEMICAL BONE TURNOVER MARKERS IN HEALTHY PRE-AND POSTMENOPAUSAL WOMEN**

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**P473-S EARLY REDUCTION OF HIP FRACTURES DEMONSTRATES RISEDRONATE IS MORE COST-EFFECTIVE THAN GENERIC ALENDRONATE: THE CASE OF GERMANY**

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**P476-S DIFFERENCES IN THE NORMAL REFERENCE VALUES FOR THE BIOCHEMICAL BONE MARKERS IN GREEK PREMENOPAUSAL WOMEN**

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**P479-S FHS IS RELATED TO BONE METABOLISM IN EARLY POSTMENOPAUSAL WOMEN**

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**P482-S PREVALENCE OF DISEASES AND USE OF DRUGS THAT AFFECT BONE IN POSTMENOPAUSAL WOMEN ATTENDED IN A PRIMARY CARE CENTER OF SPAIN. THE CAMARGO COHORT STUDY**

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**P485-S BONE HISTOMORPHOMETRY IN MALE IDIOPATHIC OSTEOPOROSIS; INFLUENCE OF BODY COMPOSITION, SEX HORMONES AND INSULIN-LIKE GROWTH FACTOR-1 ON BONE FORMATION**

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**P488-S DIETARY VITAMIN D IN BRAZILIAN POPULATION**

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**P491-S INFLUENCE OF ORCHECTOMY ON BONE MINERAL DENSITY IN MALE RATS OF REPRODUCTIVE AGE**

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**P494-S THE AFFECT OF AGE ON VITAMIN D LEVEL: SIGNIFICANT DIFFERENCES BETWEEN**

**EUROPE AND NORTH AMERICA**J. D. Ringe<sup>\*1</sup>, X. Zhou<sup>2</sup>, A. B. Klemes<sup>2</sup><sup>1</sup>Rheumatology Osteology, Med Medizinische Klinik 4, Allgemeine Innere Akademisches Lehrkrankenhaus der Universität zu Köln, Leverkusen, Germany, <sup>2</sup>, Procter & Gamble Pharmaceuticals, Mason, Ohio, United States**P497-S SPINE VARIATIONS IN HEALTHY ADULT WOMEN ANALYZED BY DIGITAL VERTEBRAL MORPHOMETRY (DVM)**E. J. A. Roldán<sup>\*1</sup>, R. Capiglioni<sup>2</sup>, V. Montangero<sup>3</sup>, F. Aude<sup>4</sup><sup>1</sup>Scientific Direction, Gador S.A., Buenos Aires, <sup>2</sup>Inst. Tecnologías Especiales, Univ. Abierta Interamericana, Rosario, <sup>3</sup>Osteology, Univ. Maimónides, Bs. As., <sup>4</sup>Inst. Tecnologías Especiales, Univ. Abierta Interamericana, Rosario, Argentina**P500-S BONE MINERAL DENSITY AND CALCIUM-PHOSPHORUS METABOLISM IN PATIENTS WITH UNDERWEIGHT**M. Tsagareli<sup>\*1</sup>, E. Giorgadze<sup>2</sup>, K. Asatiani<sup>3</sup>, K. Bochorishvili<sup>3</sup>, N. Tsagareli<sup>3</sup>, I. Bestavashvili<sup>4</sup>, T. Sulikashvili<sup>4</sup><sup>1</sup>Endocrine Disorders, N4 Clinical Hospital, Tbilisi, Georgia, <sup>2</sup>Endocrine Disorders, N4 Clinical Hospital, Tbilisi, <sup>3</sup>, <sup>4</sup>Endocrine Disorders, N4 Clinical Hospital, Tbilisi, Georgia**P503-S HIGH PREVALENCE BUT INSUFFICIENT RECOGNITION AND UNDER-TREATMENT OF VERTEBRAL FRACTURES IN ELDERLY PATIENTS**M. Vis<sup>\*1</sup>, M. J. van Henegel<sup>2</sup>, L. C. Tulner<sup>2</sup>, B. A. C. Dijkmans<sup>1</sup>, W. F. Lems<sup>1</sup><sup>1</sup>Rheumatology, VU University Medical Center, <sup>2</sup>Clinical Geriatrics, Slotervaart Hospital, Amsterdam, Netherlands**P506-S LOW ESTIMATES OF PRAL (NUTRITIONAL ACID LOAD) CORRELATES WITH BONE ULTRASOUND MEASUREMENTS IN ELDERLY FRACTURED WOMEN**E. Wynn Dumartheray<sup>\*1</sup>, S. A. Lanham-New<sup>2</sup>, D. R. Whittamore<sup>2</sup>, M. Krieg<sup>3</sup>, P. Burckhardt<sup>4</sup><sup>1</sup>Consultation d'Ostéoporose, CHUV-PMU, Lausanne, Switzerland, <sup>2</sup>School of Biomedical and Molecular Sciences, University of Surrey, Guildford, United Kingdom, <sup>3</sup>Consultation d'Ostéoporose, CHUV-PMU,<sup>4</sup>Consultation d'Ostéoporose, Clinique Bois-Cerf, Lausanne, Switzerland