

Multi-organ Damage



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Main Lines of Research

Bone Metabolism and Osteoporosis

- ▶ Analysis of genetic influence on osteoporosis by means of aggregation studies in families of three or more generations with a minimum of 15 members.
- ▶ Bone structure study with quantitative CT of hip and spine, analysing the contribution of trabecular and cortical components using HRCT.
- ▶ Description of fat values and percentages in a normal population (in collaboration with the HIV Unit and CETIR Medical Group).
- ▶ Analysis of the influence of an intervention (physical exercise) on changes in the muscle compartment of patients with cirrhosis measured by DXA and HRQCT (in collaboration with the Gastroenterology Department).

- ▶ Description of bone structure in patients with a history of acromegaly assessed by DXA and HRQCT.

Hypertension and Vascular Risk

- ▶ Hypertension and quality of life.
- ▶ Refractory hypertension.
- ▶ Use of alirocumab in hypercholesterolaemia.

Clinical Management, Internal Medicine and Geriatrics

- ▶ Health care quality indexes (mortality, readmissions, etc).
- ▶ Perioperative medicine.
- ▶ Potentially inappropriate prescribing to older patients admitted to hospital.
- ▶ Central Sensitization Syndromes.

Rheumatology and Rheumatoid Arthritis

- ▶ Immunomodulation due to anti-CD20 (rituximab) treatment and study of polymorphisms.

- ▶ Pharmacokinetics of methotrexate.
- ▶ Evaluation of baricitinib in patients with moderately to severely active rheumatoid arthritis who have had an inadequate response to methotrexate or antiTNF therapy.
- ▶ Evaluation of tofacitinib in patients with moderately to severely active rheumatoid arthritis with inadequate response to biologic DMARD.
- ▶ Evaluation of the JAK-STAT pathway in patients with rheumatoid arthritis treated with tocilizumab.

Systemic Sclerosis

- ▶ Capillaroscopy patterns and correlation with auto-antibodies and pulmonary function tests.
- ▶ Evidence-based detection of pulmonary arterial hypertension in systemic sclerosis: the DETECT study.
- ▶ Use of endothelin receptor antagonism to prevent pulmonary arterial hypertension (in collaboration with Vall d'Hebron University Hospital, Barcelona, Spain).
- ▶ Genetic studies in systemic sclerosis and collaboration with DUO Registry and LAUDES study.
- ▶ Study of capillaroscopy patterns in diffuse connective tissue diseases: QuantiCAP study.

Gout

- ▶ Epidemiology of hyperuricaemia and gout.

Sjögren Syndrome

- ▶ Clinical and epidemiological findings in Spanish patients with primary Sjögren syndrome (in collaboration with Spanish Society of Rheumatology).

Challenges

- ▶ To establish stable work relations between the HSCSP Bone Metabolism and Genomics of Complex Diseases Groups and the Bone Metabolism Unit of Hospital del Mar Medical Research Institute and the Faculty of Biology of the University of Barcelona.
- ▶ To strengthen ties between the HSCSP Rheumatology and Immunology departments regarding the study of immunological diseases.

Collaborations

Collaborations with other IIB Sant Pau Groups

- ▶ Digestive Diseases (Dr Germán Soriano). Study by densitometry and ergospirometry of the effects of an exercise programme in overweight patients with liver cirrhosis.
- ▶ Orthopaedic Surgery and Traumatology Service (Dr José Carlos González Rodríguez). Randomized, double-blind, placebo-controlled clinical trial of parallel groups assessing the efficacy of subcutaneous denosumab for periprosthetic resorption decrease in patients with total knee prosthesis, IIB-SP-DEN-2012-24, Eudra No: 2012-001285-15.
- ▶ Cardiovascular Risk Group (Dr Laiz Matas). Longitudinal epidemiological study for the assessment of arterial stiffness in patients with renal insufficiency and treatment with vitamin D3 and vitamin D analogues, IIBSP- VIT-2013-138.

External Collaborations

- ▶ Dr Luis del Rio. Standardized measures of different tissues using dual-energy X-ray absorptiometry, CETIR Medical Group, Barcelona, Spain.
- ▶ Internal Medicine Pneumonia Study (ENEMI), coordinated by the Hospital General Universitario Gregorio Marañón, Madrid, Spain.

Active Grants

- ▶ Jordi Casademont Pou. Estudio GAO: de los fenotipos intermediarios al análisis global del genoma. P114/01036. Instituto de Salud Carlos III. Duration: 2015-2018. 76,000.00 €.

Note: Total amount granted to PI. It does not include indirect costs.

Theses

- ▶ Ainhoa Simon Estrada. Adult Attachment Styles in American and Spanish Patients with Fibromyalgia and Rheumatoid Arthritis: a Cross-Sectional Study. Universitat Autònoma de Barcelona. Director: Jordi Casademont. Date of defense: 20/09/2017.
- ▶ Matas Pericas, Laia. Risc cardiovascular en pacients que consulten a urgències d'un hospital general amb un accident vascular agut. Universitat Autònoma de Barcelona. Directors: Juan Antonio Arroyo Díaz, Alex Roca-Cusachs Coll. Date of defense: 26/06/2017.

Multi-organ Damage

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Bone H.G., Wagman R.B., Brandi M.L., Brown J.P., Chapurlat R., Cummings S.R., Czerwinski E., Fahrleitner-Pammer A., Kendler D.L., Lip-puner K., Reginster J.-Y., Roux C., Malouf J., Bradley M.N., Daizadeh N.S., Wang A., Dakin P., Pannacciulli N., Dempster D.W., Papapoulos S., 10 years of denosumab treatment in postmenopausal women with osteoporosis: results from the phase 3 randomised FREEDOM trial and open-label extension (2017) *LANCET DIABETES ENDO*, 5 (7), 513-523.

IF: 19.313

Bossini-Castillo L., Campillo-Davo D., Lopez-Isac E., Carmona F.D., Simeon C.P., Carreira P., Callejas-Rubio J.L., Castellvi I., Fernandez-Nebro A., Rodriguez-Rodriguez L., Rubio-Rivas M., Garcia-Hernandez F.J., Madronero A.B., Beretta L., Santaniello A., Lunardi C., Airo P., Hoffmann-Vold A.-M., Kreuter A., Riemekasten G., Witte T., Hunzelmann N., Vonk M.C., Voskuyl A.E., De Vries-Bouwstra J., Shiels P., Herrick A., Worthington J., Radstake T.R.D.J., Martin J., An MIF promoter polymorphism is associated with susceptibility to pulmonary arterial hypertension in diffuse cutaneous systemic sclerosis (2017) *J RHEUMATOL*, 44 (10), 1453-1457.

IF: 3.470

Casademont J., Healthcare systems and alcohol consumption - can they coexist? Sistema sanitario y consumo de alcohol. ¿Es posible la convivencia? (2017) *REV CLIN ESP*, 217 (7), 394-395.

IF: 1.184

Casademont J., RECALMIN II: Information for improving the country's Internal Medicine Services RECALMIN II: información para la mejora de los Servicios de Medicina Interna del país (2017) *REV CLIN ESP*, 217 (8), 462-463.

IF: 1.184

Cebolla A., Campos D., Galiana L., Oliver A., Tomas J.M., Feliu-Soler A., Soler J., Garcia-Campayo J., Demarzo M., Banos R.M., Exploring relations among mindfulness facets and various meditation practices: Do they work in different ways? (2017) *CONSCIOUS COGN*, 49, 172-180.

IF: 2.272

Clotet S., Matas L., Pomar V., Casademont J., Acute mediastinitis as a rare complication of an infectious mononucleosis Mediastinitis aguda como complicación atípica de una mononucleosis infecciosa (2017) *ENFERM INFECC MICR CL*.

IF: 1.707

De-Ugarte L., Caro-Molina E., Rodriguez-Sanz M., Garcia-Perez M.A., Olmos J.M., Sosa-Henriquez M., Perez-Cano R., Gomez-Alonso C., Del Rio L., Mateo-Agudo J., Blazquez-Cabre-

ra J.A., Gonzalez-Macias J., Pino-Montes J.D., Munoz-Torres M., Diaz-Curiel M., Malouf J., Cano A., Perez-Castrillon J.L., Nogueas X., Garcia-Giralt N., Dlez-Perez A., SNPs in bone-related miRNAs are associated with the osteoporotic phenotype (2017) *SCI REP-UK*, 7 (1).

IF: 4.122

Feliu-Soler A., Pascual J.C., Elices M., Martin-Blanco A., Carmona C., Cebolla A., Simon V., Soler J., Fostering Self-Compassion and Loving-Kindness in Patients With Borderline Personality Disorder: A Randomized Pilot Study (2017) *CLIN PSYCHOL PSYCHOT*, 24 (1), 278-286.

IF: 2.508

Gueme M., Perez-Granda M.J., Capdevila J.A., Barberan J., Pinilla B., Martin-Rabadan P., Bouza E., Millan J., Perez de Oteya C., Muino A., Villalba M., Cuenca C., Castano J.G., Delgado C.M., Zamorano S., Gomez B., Collado J.M., Salinas M.T., Amat A.S., Lazaro J.R., del Villar Sordo V., del Valle Sanchez M., Benach A.F., Vidal E., Albiach L., Agud Aparicio J.M., Saez de Adana Arroniz E., Casademont i Pou J., Solchaga V.P., Castellon F.E., Obanos T.R., Egurbide Arberas M.V., Arana J.N., Lopez E.G., Gaviria A.Z., Clemente I.N., Ruiz P.C., Salomo A.C., Iftimie S.M., Castillo A.M., Barbera Farre J.R., Laveria A.O., Ribera M.C., Pallares N.B., Suarez P.C., Cepeda Piorno F.J., Andres N.A., Rodriguez Tarazona R.E., Rodriguez Zapata M.M., Costa Cerda M.A., Nationwide study on peripheral-venous-catheter-associated-bloodstream infections in internal medicine departments (2017) *J HOSP INFECT*, 97 (3), 260-266.

IF: 3.354

Humbert L., Martelli Y., Fonolla R., Steghofer M., Di Gregorio S., Malouf J., Romera J., Barquero L.M.D.R., 3D-DXA: Assessing the Femoral Shape, the Trabecular Macrostructure and the Cortex in 3D from DXA images (2017) *IEEE T MED IMAGING*, 36 (1), 27-39.

IF: 6.131

Kendler D.L., Marin F., Zerbini C.A.F., Russo L.A., Greenspan S.L., Zikan V., Bagur A., Malouf-Sierra J., Lakatos P., Fahrleitner-Pammer A., Lespessailles E., Minisola S., Body J.J., Geusens P., Moricke R., Lopez-Romero P., Effects of teriparatide and risedronate on new fractures in post-menopausal women with severe osteoporosis (VERO): A multicentre, double-blind, double-dummy, randomised controlled trial (2017) *LANCET*.

IF: 53.254

Laiz A., Malouf J., Marin A., Longobardi V., de Caso J., Farrerons J., Casademont J., Impact of 3-monthly vitamin D supplementation plus exercise on survival after surgery for osteoporotic hip fracture in adult patients over 50 years: A pragmatic randomized,

partially blinded, controlled trial (2017) *J NUTR HEALTH AGING*, 21 (4), 413-420.

IF: 2.868

Langdahl B.L., Libanati C., Crittenden D.B., Bolognese M.A., Brown J.P., Daizadeh N.S., Dokoupilova E., Engelke K., Finkelstein J.S., Genant H.K., Goemaere S., Hyldstrup L., Jordan-Gimeno E., Keaveny T.M., Kendler D., Lakatos P., Maddox J., Malouf J., Massari F.E., Molina J.F., Ulla M.R., Grauer A., Romosozumab (sclerostin monoclonal antibody) versus teriparatide in postmenopausal women with osteoporosis transitioning from oral bisphosphonate therapy: a randomised, open-label, phase 3 trial (2017) *LANCET*, 390 (10102), 1585-1594.

IF: 53.254

Lopez-Ferrer A., Laiz A., Puig L., The safety of ustekinumab for the treatment of psoriatic arthritis (2017) *EXPERT OPIN DRUG SAF*, 16 (6), 733-742.

IF: 3.156

Malouf-Sierra J., Tarantino U., Garcia-Hernandez P.A., Corradini C., Overgaard S., Stepan J.J., Borris L., Lespessailles E., Frihagen F., Pappasiliou K., Petto H., Aspenberg P., Caeiro J.R., Marin F., Effect of Teriparatide or Risedronate in Elderly Patients With a Recent Pertrochanteric Hip Fracture: Final Results of a 78-Week Randomized Clinical Trial (2017) *J BONE MINER RES*, 32 (5), 1040-1051.

IF: 6.314

Marquez P.H.P., Torres O.H., San-Jose A., Vidal X., Agusti A., Formiga F., Lopez-Soto A., Ramirez-Duque N., Fernandez-Moyano A., Garcia-Moreno J., Arroyo J.A., Ruiz D., San-Jose A., Agusti A., Vidal X., Aguilera C., Ballarin E., Perez E., Barbe J., Bocanegra C.P., Toscano A., Pal C., Teixidor T., Fernandez-Moyano A., Hernandez M.G., de la Rosa Morales R., Martinez M.N.B., Lopez-Soto A., Bosch X., Palau M.J., Rovira J., Navarro M., Formiga F., Chivite D., Roson B., Vallano A., Cabot C., Garcia J., Ballesteros I., Torres O.H., Ruiz D., Turbau M., Ponte P., Ortiz G., Ramirez-Duque N., Cobas P.-C.R., Gil P., Potentially Inappropriate Antihypertensive Prescriptions to Elderly Patients: Results of a Prospective, Observational Study (2017) *DRUG AGING*, 34 (6), 453-466.

IF: 2.381

Masanés F., Rojano I Luque X., Salva A., Serra-Rexach J.A., Artaza I., Formiga F., Cuesta F., Lopez Soto A., Ruiz D., Cruz-Jentoft A.J., Cut-off points for muscle mass — not grip strength or gait speed — determine variations in sarcopenia prevalence (2017) *J NUTR HEALTH AGING*, 21 (7), 825-829.

IF: 2.868

*TIF: 189.688 **MIF: 8.247

Scientific Production

Nolla J.M., Martin E., Llamas P., Manero J., de la Serna A.R., Fernandez-Miera M.F., Rodriguez M., Lopez J.M., Ivanova A., Aragon B., An estimate of the cost of administering intravenous biological agents in Spanish day hospitals (2017) *THER CLIN RISK MANAG*, 13, 325-334.

IF: 1.995

Rivas-Cobas P.C., Ramirez-Duque N., Gomez Hernandez M., Garcia J., Agusti A., Vidal X., Formiga F., Lopez-Soto A., Torres O.H., San-Jose A., Characteristics of potentially inappropriate prescribing of drugs in elderly polypathological patients Características del uso inadecuado de medicamentos en pacientes pluripatológicos de edad avanzada (2017) *GAC SANIT*, 31 (4), 327-331.

IF: 1.581

Rua-Figueroa I., Lopez-Longo J., Galindo-Izquierdo M., Calvo-Alen J., Del Campo V., Olive-Marques A., Perez-Vicente S., Fernandez-Nebro A., Andres M., Eraisquin C., Tomero E., Horcada L., Uriarte E., Freire M., Montilla C., Sanchez-Atrio A., Santos G., Bo-

teanu A., Diez-Alvarez E., Narvaez J., Martinez-Taboada V., Silva-Fernandez L., Ruiz-Lucea E., Andreu J.L., Hernandez-Beriain J.A., Gantes M., Hernandez-Cruz B., Perez-Venegas J., Pecondon-Espanol A., Marras C., Ibanez-Barcelo M., Bonilla G., Torrente V., Castellvi I., Alegre J.J., Calvet J., Marengo J.L., Raya E., Vazquez T., Quevedo V., Munoz-Fernandez S., Rodriguez-Gomez M., Ibanez J., Pego-Reigosa J.M., Incidence, associated factors and clinical impact of severe infections in a large, multicentric cohort of patients with systemic lupus erythematosus (2017) *SEMIN ARTHRITIS RHEU*, 47 (1), 38-45.

IF: 4.356

Suarez-Calvet X., Gallardo E., Pinal-Fernandez I., De Luna N., Lleixa C., Diaz-Manera J., Rojas-Garcia R., Castellvi I., Martinez M.A., Grau J.M., Selva-O'Callaghan A., Illa I., RIG-I expression in perifascicular myofibers is a reliable biomarker of dermatomyositis (2017) *ARTHRITIS RES THER*, 19 (1).

IF: 4.269

Torres Bonafonte O.H., Gil Olivas E., Perez Macho E., Pacho Pacho C., Mateo Roca M., Casademont Pou J., Ruiz Hidalgo D., Predictors of drug-resistant pathogens in community-onset pneumonia: Are factors considered in health-care-associated pneumonia useful in the emergency department? Predictores de patógenos resistentes en las neumonías procedentes de la comunidad: ¿Es útil en urgencias el concepto de neumonía asociada a cuidados sanitarios? (2017) *EMERGENCIAS*, 29 (5), 306-312.

IF: 3.608

Zamora C., Canto E., Nieto J.C., Bardina J., Diaz-Torne C., Moya P., Magallares B., Ortiz M.A., Julia G., Juarez C., Llobet J.M., Vidal S., Binding of platelets to lymphocytes: A potential anti-inflammatory therapy in rheumatoid arthritis (2017) *J IMMUNOL*, 198 (8), 3099-3108.

IF: 4.539

Other Publications

- ▶ Casademont J. Resolución voluntaria de mini-casos de fisiopatología y semiología clínica: una nueva experiencia docente. *Educ Med*. 2017; 18(2): 121-24.