Pharmacological Research in Humans

Group leader

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DESCRIPTION

The main objective (CIM) is to perform clinical drug trials and/or clinical research with the assurance of compliance with the legal, ethical, and methodological requirements stated in international standards.

Clinical trials (phase I): Activity is focused on the evaluation of systemic and local tolerability, pharmacokinetics, bioavailability, and bioequivalence (generics), and pharmacological effects.

Studies are also performed in healthy volunteers and special populations with specific characteristics, such as the healthy elderly, obesity, post-menopausal women, or renal or hepatic insufficiency.

Clinical trials (phases Ib, IIa): Specific interventions are performed in this phase, and controlled monitoring of the patient's response is required.

Furthermore, support from the integration of administrative, computer, and statistical systems enables optimal performance of clinical studies.

MAIN LINES OF RESEARCH

- Phase I clinical trials (healthy volunteers) whose main objectives include: first-time-in-humans, safety and tolerability, pharmacokinetics, bioavailability and bioequivalence (generic drugs), pharmacodynamics, interactions (drug-drug, drug-food), evaluation and characterization of biomarkers, proofs of concept, acceptability and preference studies.
- Follow-up studies in populations with the same or different characteristics: the elderly, obese volunteers, postmenopausal volunteers, the patients with liver, or kidney failure.

- Collaboration with clinical services to conduct phase II or phase III studies.

SCIENTIFIC CHALLENGES

- Consolidate and strengthen leadership in this field in Spain, conserve relationships with the pharmaceutical industry on a national level, and strengthen and extend relations abroad with multinational enterprises and industries from other sectors.
- Broaden the range of questions to address in research projects.
- Promote dissemination of our activity with a double objective: to return the knowledge generated to society and to demystify research in humans, bringing it closer to the community to foster participation in clinical trials (particularly in specific sectors of the populations, such as the elderly).
- Set up educational activities related to the two main research lines, i.e., the application of good clinical practices (GCPs) in clinical research (pathology and treatment) and social (quality of life, prevention of accident risk) consequences.

ACTIVE GRANTS

- Antonijoan Arbos, Rosa. Investigación del potencial de nuevas moléculas para el tratamiento de enfermedades fibróticas (DEFIBER III). CPP2021-008747. Ministerio de Ciencia e Innovación (MICINN). Duration: 2022-2025. 243.536,44 €.
- Antonijoan Arbos, Rosa. ERA4TB (European Accelerator of Tuberculosis Regime) project. ERA4TB GA 853989. Unión Europea. Duration: 2022-2025. 277.500,00 €.

DOCTORAL THESES DEFENDED

- Espinosa Guerrero, Alejandra Nallely. Estudio farmacoeconómico del uso de albúmina humana en pacientes sometidos a cirugía cardiaca bajo circulación extracorpórea sobre el desarrollo de Lesión renal aguda en el Hospital de la Santa Creu i Sant Pau. 18/12/2023. Universitat Autònoma de Barcelona. Supervisors: Antonijoan Arbós, Rosa Maria.

SCIENTIFIC PRODUCTION

- Mas E, Ferreri L, Cardona G, Zatorre RJ, Pla F, Antonijoan RM, Riba J, Valle M, Rodríguez A. The role of opioid transmission in music-induced pleasure. ANNALS OF THE NEW YORK ACADEMY OF SCIENCES. 2023; 1520(1)DOI:10.1111/nyas.14946. PMID:36514207. IF:5,200 (Q1/3D). Document type: Article.
- Moraga P, Prieto P, Conradie A, Benhayoun M, Rousell V, Davy M, Fuhr U, Antonijoan Arbos R, Abad F, Portolés A, Van Duinen J, Carcas AJ, Borobia AM. Academia and industry agreement on a feasibility tool for first-time-in-human clinical trial units. CTS-Clinical and Translational Science. 2023; 16(12)DOI:10.1111/cts.13655. PMID:37818923. IF:3,900 (Q3/6D). Document type: Article.