



## 3.5.10 Human Genetic Variability Group

Publications: **2**

Q1: **1**



### COMPOSITION

**Ana Fernández Santander.** Catedrática de Genética del Departamento de Medicina. Universidad Europea de Madrid

**Beatriz Antón Pascual.** Médico Adjunto en Oncología Médica. Hospital Universitario Doce de Octubre

**María Gaibar Alonso.** Profesora contratada doctora. Universidad Camilo José Cela

**Diego Malón Jiménez.** Médico Adjunto en Oncología Médica. Hospital Universitario de Fuenlabrada

**Apolonia Novillos Villajos.** Profesora ayudante doctor. Universidad Complutense de Madrid

**José María Rodríguez Piñas.** Profesor Adjunto. Universidad Europea de Madrid

**Alicia Romero Lorca.** Catedrática de Bioquímica y Biología Molecular. Universidad Europea de Madrid

**Amalia Moreno Torres.** Facultativo Especialista de Área en Anatomía Patológica. Hospital Universitario de Fuenlabrada

### STRATEGIC OBJECTIVE

The final objective of our group is to contribute to pharmacogenetics and precision medicine. We try to identify genetic biomarkers that could be used to predict who patients will have better response, benefit and outcome and lesser toxicity to specific drugs.

#### Planned Research Projects

- Genetic biomarkers of toxicity in oncological immunotherapy
- Genetic biomarkers of efficacy in oncological immunotherapy
- Worldwide genetic variability in polymorphisms associated with COVID severity

#### Transfer of Results

- Contributions in national and international congresses
- Publications in JCR journals

#### Training and education programme

- Students of medicine, nursery, etc, will be able to join to the group as PhD students

#### Dissemination

- Publications in JCR journals and national and international congresses
- Guides for physicians

#### Internationalization

The team will call for European programs when specific programs related to our re-

search will be opened. Gender Equality Quality Program: Gender equality is achieved in our group because women and men have the same conditions and opportunities to belong and to work with us.

### RESEARCH LINES

Pharmacogenetics and cancer

- Pharmacogenetics in breast cancer
- Pharmacogenetics in colorectal cancer
- Pharmacogenetics and immunotherapy

Genetic variability of human populations

### RESEARCH ACTIVITY

#### Publications

- Romero-Lorca A, de la Calle L, Novillo A, Fernández-Santander A, Blanco MA, Rodelgo T, Andréu-Vázquez C, Gaibar M. Artistic swimming in girls: anthropometrics, genotype and athletic performance. *Rev Int Med Cienc Ac.* 2022; 22(85): 215-29. Article. IF: 1.3; Q4
- Gaibar M, Novillo A, Romero-Lorca A, Malón D, Antón B, Moreno A, Fernández-Santander A. FGFR1 amplification and response to neoadjuvant Anti-HER2 treatment in early HER2-positive breast cancer. *Pharmaceutics.* 2022; 14(2): 242. Article. IF: 5.4; Q1.

#### Research projects

**Fernández Santander A.** Biomarcadores genéticos de toxicidad en inmunoterapia en pacientes con melanoma maligno: análisis de polimorfismos de tipo snp en genes reguladores de las respuestas inmunitaria e inflamatoria (2022/UEM19). UEM. 2022-2023.

Management centre: UEM

**Fernández Santander A.** Estudio de polimorfismos de tipo cnv como posibles biomarcadores de eficacia del tratamiento con bevacizumab así como de supervivencia en pacientes con cáncer colorrectal metastásico (2021/UEM08). UEM. 2021-2022.

Management centre: UEM