



PRESS RELEASE

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**DocTIS, in the final stretch to revolutionize
the treatment of immune-mediated
inflammatory diseases**



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DocTIS, in the final stretch to revolutionize the treatment of immune-mediated inflammatory diseases

- **The DocTIS project enters its final year with a focus on the clinical trial, which is expected to confirm the promising results obtained from five years of research.**
- **Funded by the European Union, this project aims to develop innovative and personalized treatments for patients with the six most common immune-mediated inflammatory diseases (IMIDs) by combining existing medications.**

Immune-mediated inflammatory diseases (IMIDs) are a group of disorders caused by the **improper activation** of the immune system, leading it to attack the body's own cells and tissues. This not only **reduces the quality of life** for those affected but also increases the risk of developing additional diseases and can even shorten life expectancy. These conditions are **common in developed countries**, affecting up to 7% of the general population. They are also significantly **more prevalent in women**, who may be up to 10 times more likely to develop them than men.

Despite significant progress in recent years in the development of therapies for IMIDs, **many patients either do not respond adequately**, or the therapies **lose their effectiveness** over time, often leading to the discontinuation of treatment. To address this challenge, the [DocTIS project](#) ("Decision on Combinatorial Therapies in Immune-Mediated diseases using Systems approaches") was launched five years ago with **funding from the European Union**. The project focuses on **identifying combinations of existing drugs** that can provide much more effective treatments for **six of the most common IMIDs**: rheumatoid arthritis, psoriasis, psoriatic arthritis, Crohn's disease, ulcerative colitis, and systemic lupus erythematosus.

Over this period, researchers in the DocTIS project have had access to **samples and clinical data from IMID patients** through the IMID Consortium, a network of researchers studying these diseases, which involves more than 100 clinical departments across Spain. The samples under study are part of the extensive repository of biological samples from IMID patients stored at VHIR's **IMID-Biobank**, which operates under high-quality standards. With European funding, various **sources of genetic, molecular, and cellular data from IMID patients**—selected by the project's clinical collaborators—have been generated. Using advanced computational biology methods developed by the DocTIS team, it has been possible to **predict the most synergistic drug combinations**.

The DocTIS project also includes a **preclinical validation** phase, in which the most promising therapeutic combinations have been evaluated in animal models of these IMID diseases. The preclinical analysis has been **successful**, which has allowed us to begin the final validation stage in patients. The last step necessary to ensure the success of the project will, therefore, be the **validation of these results** through an innovative **clinical trial in IMID patients**. The clinical study will be carried out during 2025 and will be carried out in medical centres in both the United Kingdom and Spain.



“We are **confident** that **the trial will confirm** that the methodology developed by DocTIS researchers is a **valuable tool** for identifying synergistic drug combinations in common diseases. Ultimately, this advance will lead to a **significant improvement** in the quality of life for millions of patients”, says **Doctor Sara Marsal**, head of the Rheumatology Service at the Vall d'Hebron University Hospital, principal researcher at the Vall d'Hebron Research Institute (VHIR) and Ccoordinator of the DocTIS project.

The **DocTIS project** brings together partners from both the public and private sectors, each contributing **unique expertise** to tackle the biomedical challenge set by the European Union. Coordinated by the [Vall d'Hebron Research Institute \(VHIR\)](#), the team includes [Cardiff University](#), the [University of Verona](#), [Charité – Universitätsmedizin Berlin](#), the [Institut d'Investigacions Biomèdiques August Pi i Sunyer \(IDIBAPS\)](#), the [National Center for Genomic Analysis \(CNAG\)](#), [IMIDomics Inc](#), [HudsonAlpha Institute for Biotechnology](#), and [Zabala Innovation](#).

More information is available on the [doctis.eu](#) website and on the project's [LinkedIn](#) and [X \(Twitter\)](#) profiles.



The DocTIS research team at their latest meeting at VHIR (February 2025).

Communication Contact:

Mariano Echávarri
mechavarri@zabala.es