

Preliminary Results from the JunTOS Research Study: Improvement of Pharmaceutical Care in Transplant Patients

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Background information

The advancement in Solid Organ Transplant (SOT) procedures, including immunosuppressant drugs, is one of the most important therapeutic achievements of the 20th century. However, various challenges are still pending, such as the high mortality, in which a lack of adherence and the risk of rejection play a crucial role.

The JunTOS project resulted from a collaboration between the General Pharmaceutical Council of Spain and the Spanish Society of Hospital Pharmacy to ensure continuity of pharmaceutical care between healthcare levels. It has been designed to optimize the use of immunosuppressants in SOT, with special focus on adherence rates and patient education, through an improved coordination of pharmaceutical care among hospital and community pharmacists.

Purpose

To develop a pilot research project to measure the effectiveness of an optimized pharmaceutical care pathway on immunosuppressants adherence rates in patients with SOT, while assessing the impact on medicine knowledge, quality of life and health outcomes.

Method

From July 2024, a prospective, longitudinal and observational investigation has been undertaken in two regions (Cantabria and Islas Baleares) and one province (Tenerife) in Spain, including so far three hospitals and 196 community pharmacies. Eligible patients must have undergone transplant of any solid organ and be using one or more immunosuppressant medicines. They will be allocated in two cohorts (1- recently transplanted and 2- transplanted > 18 months ago), for an individual follow-up of 18 months.

In six-monthly visits, a series of questionnaires will be used to assess variables, such as the validated SMAQ for adherence, another for medicine knowledge or EQ-5D-5L scale for quality of life; ad hoc questionnaires were created for health outcomes and satisfaction. In every visit, pharmacists may display specific interventions to achieve research objectives, such as health education and the adherence clinical professional pharmacy service.

A specific technological development of Nodofarma Asistencial, a tool to register the Clinical Professional Pharmacy Services of the General Pharmaceutical Council of Spain, is being used as electronic Case Report Form and communication tool for hospital and community pharmacists.

The study protocol and all study materials were approved by Cantabria's Clinical Research Ethics Committee by June 2024.

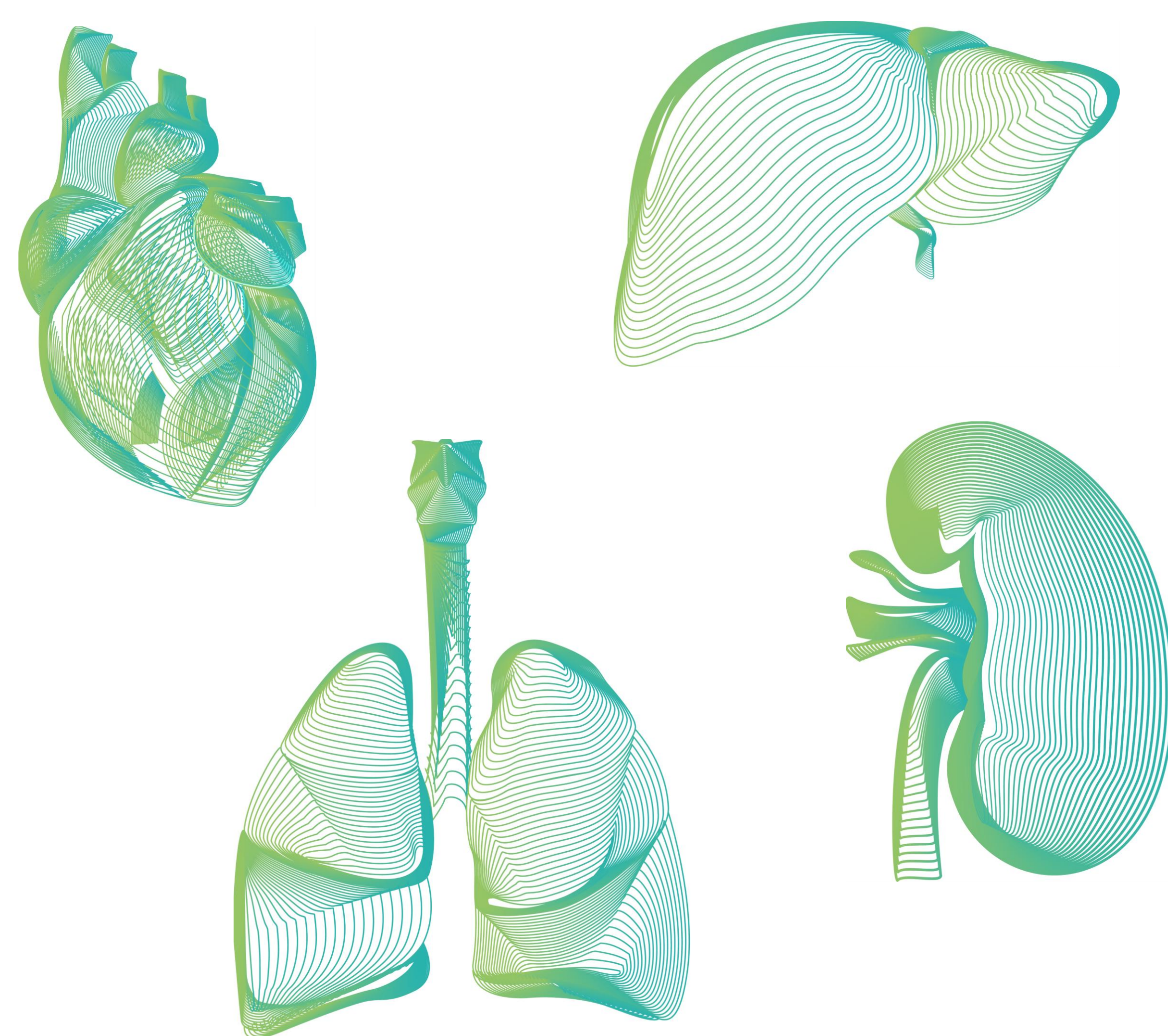
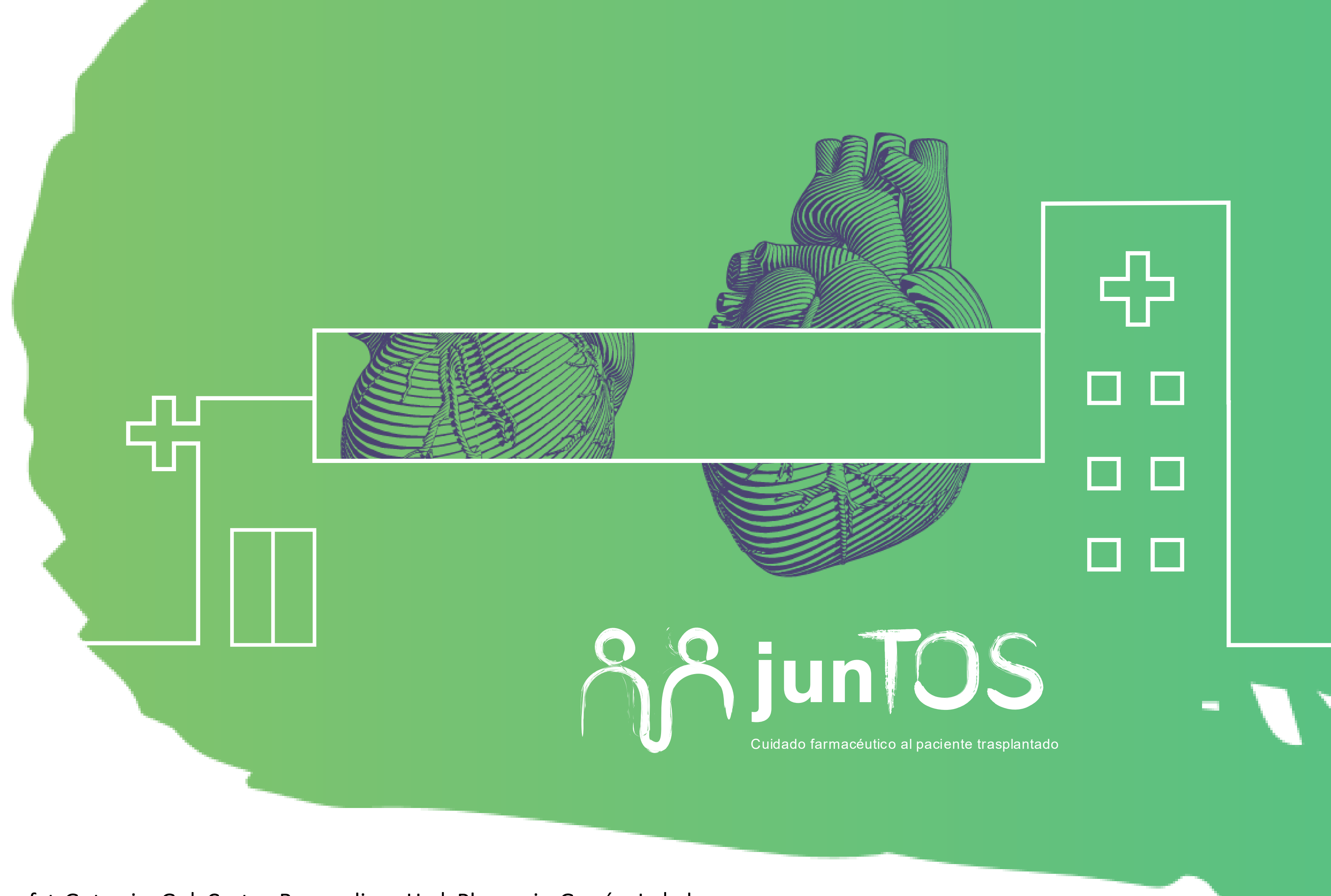
Results

During the patient recruitment phase an interim analysis was planned for 1 April. By that date a total of 147 patients had been included in the study. By cohorts, 49 patients (33%) had been recruited in cohort 1 (Hospital Pharmacy) and 98 patients (66.67%) in cohort 2 (Community Pharmacy).

Regarding adherence at 0 months, 71.43% of patients were adherent compared to 28.57% of non-adherent patients. In terms of the different types of non-adherence, unintentional non-adherence was the most common, accounting for 25% of cases.

Conclusions

junTOS is an innovative project that has so far provided training and communication tools for professionals and patients. The results of our observational research will hopefully validate the hypothesis that continuous and optimized pharmaceutical care will lead to better adherence and clinical results in the use of immunosuppressants and, in turn, in the survival and quality of life of SOT patients, thus pointing to the future evolution of pharmaceutical practice.



Pharmacotherapeutic and pharmaceutical action guide

