

COST Innovators Grant Terms of Reference

Annex to the COST Action Memorandum of Understanding (MoU) (MoU Ref: 011/16)

This document constitutes the Addendum of the Memorandum of Understanding of Action CA15210. The Action submitted a COST Innovators Grant (CIG) application that was evaluated and selected for funding (CSO approval 25 May 2021).

The foreseen duration of the CIG is 12 months and the CIG activities started on 01 November 2021.

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CIG Abstract

Kidney Exchange Programmes (KEPs) greatly enhance living kidney donation by allowing a patient to “swap” their willing but incompatible donor with that of another patient who is in a similar position, so that each patient concerned can receive a compatible kidney. Non-directed (altruistic) donors can also benefit multiple patients by triggering “chains” of transplants. Many European countries operate successful KEPs, and the ENCKEP COST Action has undertaken foundational work in the development of transnational European collaboration on KEPs, which can improve outcomes through countries pooling their resources. However, a software infrastructure that will allow European countries to easily develop and operate new transnational KEPs is lacking. This project will deliver such a software tool, KEP-SOFT, which will be ready to be deployed as part of an actual transnational KEP.

This will be done by building on a prototype software product developed as part of ENCKEP, and by drawing on the existing expertise that has been accumulated within ENCKEP, which includes clinicians, policy makers, optimisation experts, computer scientists, mathematicians and economists. KEP-SOFT will be made freely available as a resource to the European transplantation community, and to National Transplantation Organisations (NTOs) in particular. Importantly, we have direct communication channels to ensure that NTOs can benefit from this work and deploy the software, as many ENCKEP participants are senior clinicians (e.g., nephrologists, kidney surgeons) and/or policy makers (e.g., directors) in NTOs, and this range of expertise is reflected in the composition of the CIG Team.

CIG Objectives

1. Primary Objective: Deliver a software tool (building on a prototype software tool for simulating transnational European Kidney Exchange Programmes - KEPs) and drawing on the existing expertise that has been accumulated within the ENCKEP Action, which includes clinicians, policy makers, optimisation experts, computer scientists, mathematicians and economists.
2. Secondary Objective 1: Develop and test KEP-SOFT, a software tool that will allow optimal solutions to be constructed for shared pools that originate from transnational kidney exchange programmes. This tool will be made available as a web-service to maximise accessibility and ease of use.
3. Secondary Objective 2: Work with NTOs to ensure that solutions are in place to allow countries to share sensitive data relating to donor and recipient compatibility, whilst respecting GDPR legislation.

4. Secondary Objective 3: Promote KEP-SOFT to NTOs to advocate its deployment in new and existing national and transnational kidney exchange programmes.
5. Secondary Objective 4: Ensure that collaboration arrangements are ratified to protect the IPR of those CIG Team Members and Participants, and their institutions, who will contribute to KEP-SOFT