Building Resilience Against crisis: a systematic and global approach to adVancE organ Safety and supply in Transplantation

European Society for Organ Transplantation (ESOT) was founded 40 years ago and are dedicated to the pursuit of excellence in organ transplantation. ESOT works with leading transplantation experts, and supports research, education, and European policy changes.

Istituto Superiore di Sanità - Centro Nazionale Trapianti (ISS - CNT) is a public technical and scientific body of the Italian Health System, under the control of the Ministry of Health (MOH). The National Transplant Centre (CNT) is located at ISS premises and act as technical body of the MOH in the organization and management of organ donation and transplantation.

Organizzazione Nazionale dei Trapianti (ONT) is a technical coordinating body, belonging to the Spanish Ministry of Health, in charge of developing the functions related to the procurement and clinical use of organs, tissues and cells.

Slovenija - transplant (ST) Founded by the government of the Republic of Slovenia (RS), ST operates under the auspices of the Ministry of Health of RS. ST is a central liaison body that links together donor and transplant centres within the national transplantation network.

Eurotransplant is responsible for the allocation of donor organs in Austria, the Netherlands, Luxembourg, Belgium, Germany, Croatia, Slovenia and partially Hungary. This international collaborative framework includes all transplant hospitals, tissue-typing laboratories and hospitals where organ donations take place.

Agence de la Biomédecine (ABM) is a national agency established by the 2004 bioethics law, with competence in the fields of human medically assisted reproduction (MAR), embryology and human genetics.

Országos Veretlégtranszplantációs Központ (OVT) The Hungarian National Blood Transfusion Service, serve as the national centralized provider of blood component products to the hospital sector in Hungary.

INSERM is Europe’s leading academic research institution in the biomedical field. It aims to improve health by advancing knowledge about living organisms and diseases, developing innovative treatment modalities and conducting research on public health.

European Public Health Alliance (EPHA) is a change agent - Europe’s leading NGO Alliance advocating for better health. A member-lead organisation made up of public health NGOs, patient groups, health professionals and disease groups, we work to improve health and strengthen the voice of public health in Europe.

www.bravest-project.eu

Disclaimer: Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them. REF: 101056986 — BRAVEST — EU4H-2021-PJ
MISSION AND VISION

Stemming from the lessons learned during the SARS-CoV2 pandemic, BRAVEST project aims at analysing organizational and management procedures in organ donation and transplantation, based on real-world evidence and cutting-edge analysis methodologies.

This will allow to identify the most effective clinical practice; identify good clinical practice procedures; develop guidelines and propose sustainable innovative actions directed at improving the resilience of the donation and transplant systems and networks, ensure the continuity of supply of organs while maintaining the safety of donation and transplant, and ultimately increase the accessibility to transplantation for all patients with end-stage organ disease.

Such resilience is meant to reinforce organizations, in order to cope with stress conditions, ranging from eventual additional epidemics, but also wars, earthquakes, ecological disasters, which are increasingly hitting several areas in Europe, as well as the world around.

OBJECTIVES AND AIMS

In this project we aim to analyze the factors that have influenced the organ procurement processes before, during and after the onset of SARS-CoV2 pandemic, focusing on specific clinical features of the donors, outcomes of the allocation procedures, and operational protocols and practices put in place to ensure safety and continuity of supply of organ donation. In particular we will compare procedures and practices for organ procurement and risk management before, during and following the pandemic peaks. The rate per million inhabitants of donor signaled and procured, the organ successfully transplanted and the recipient short term outcome will be the main outcome measure. Of note, this analysis will focus also on recipient management procedures during the pandemic, aiming to capture adverse events related to the donation process, and the obstacles faced by transplant candidates to be allocated an available organ during the pandemic (i.e. transplant programs unable to accept available organs because of lack of personnel).

Data analysis based on artificial intelligence algorithms will allow us to derive evidences that, integrated with existing published data, will support the production of documents for good clinical practice procedures, guidelines and proposing sustainable innovative actions directed at improving the resilience of the donation and transplant systems and networks, ultimately favoring a more equitable access to transplantation for all patients with end-stage organ disease. Such resilience is meant to reinforce the organizations in time of crisis whenever new threats may affect transplantation across Europe.

EXPECTED IMPACT:

The BRAVEST project aims to derive evidence that supports the development of robust guidelines and to improve the delivery of clinical practice procedures. Furthermore, proposing innovative measures to improve the resilience of transplantation systems and networks will facilitate equal access to transplantation for all patients with end-stage organ disease.