

## **A virus to make kidney transplants safer? EU funded project to improve life of kidney transplant patients**

17 June 2021 – A EU funded project - TTV GUIDE TX - has kicked-off to establish a tool to quantify the activity of the immune system in kidney transplant patients and thereby reducing infections and organ rejections.

If the kidneys stop working a kidney transplant can restore the kidney function. However, the immune system would recognize the new kidney as foreign and attack it. Therefore kidney-transplant recipients need drugs to reduce the function of their immune system. These drugs are called immunosuppressive drugs. If the patients take too much drugs their immune system is weak and they get infections.

Therefore transplant physicians need a tool to quantify the activity of the immune system and optimize the drug dose. The recently discovered TT virus might do this job: TT is naturally occurring in the blood of almost every healthy person and every kidney transplant recipient but it causes no disease. If the immune system is strong, the TT virus load is low; this indicates a risk for organ rejection. If the immune system is weak the TT virus load is high; this indicates a risk for infection.

The quantification of the TT virus load in the blood of kidney transplant recipients might help optimize immunosuppressive drugs and thus reduce infections and rejection. Within the TTV GUIDE TX project TT virus guided dosing of immunosuppressive drugs will be tested in a clinical trial including hundreds of kidney transplant recipients from all over Europe. Once established in routine clinical care, TT virus guidance might reduce thousands of infections and kidney transplant rejection each year. In the future the TT virus might not only help kidney transplant recipients but also patients with liver, heart and lung transplantation and guide therapy in autoimmune, infectious and oncologic diseases.

Coordinated by the Medical University of Vienna (Austria), the TTV GUIDE TX brings together 19 partners, including kidney transplant physicians, clinical virologists, project and clinical trial managers, ethicists and health care industry professionals, from 7 EU countries to run a clinical trial with almost 300 patients.

The TTV GUIDE TX project will closely work together with The European Kidney Patients' Federation (EKPF), the European umbrella organisation for 23 national kidney patients' associations.

The TTV GUIDE TX project will participate in the Pilot on Open Research Data in Horizon 2020, which aims to improve and maximise access to and re-use of research data generated by EU funded actions.

The project officially started on 1<sup>st</sup> May 2021, for a duration of 60 months. It has received support from the European Union Framework Programme for Research and Innovation Horizon 2020 with a total budget of €6 Million.

**Find out more about the project at: <https://www.ttv-guide.eu/>**

**Please go to: <https://vimeo.com/545093421> to see our project video.**

**List of Partners:**



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