

SUMMARY

ENGLISH

Variability in outcome of renal allograft pairs (twins) originating from the same deceased donor. The STCS renal allograft twin study.

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The "STCS-allograft-twin study" is a project that examines the success factors of renal transplant survival across Switzerland. Success means that a kidney transplant can maintain a good function over a long period of time and protects the patient from return to dialysis. For patients and the transplant teams, it is therefore of crucial importance to direct the patient's care so that the kidney transplant works as long as possible, while at the same time reducing the side effects of immunosuppression to a minimum. Fortunately, transplant medicine has made significant progress in recent decades, so that renal transplant survival is now on average 15 years, and mortality after renal transplantation is very low. Despite these good results, we are still faced today with the problem that transplant survival in certain patients is significantly shorter than expected. Research into the success factors of the longevity of kidney transplants is and will remain one of the central tasks of transplantation medicine.

In the usual case of deceased donation, both kidneys are available for transplantation, and frequently each of the two kidneys from the same donor is implanted into two different recipients. That is, often two different recipients each receive a kidney of the same deceased donor. It is important to know that one single kidney is sufficient to maintain good kidney function. Scientifically, one can make use of this situation by investigating whether each individual kidney originating from the same donor works equally well in their recipient, or whether the outcome is different among different recipients. The "STCS-allograft-twin study" deals precisely with this situation and compares the success of transplantation within all recipient pairs who originate from the same deceased donor and analyzes in detail all situations in which, for example, one kidney in one recipient functioned longer than that in the another recipient. The unique possibility of this study is that we can find out which recipient factors determine why one transplant was successful, but the other less, or why both were not successful or both were successful. The results of this study will help us to better understand the success factors of kidney transplantation and has the potential to help patients with end-stage renal disease.

What does the abbreviation "STCS" mean? STCS stands for Swiss Transplant Cohort Study. Many transplant patients in Switzerland already know the STCS. The STCS is a cohort study that includes all patients with solid organ transplantations in Switzerland. Since 2008, the STCS records every transplant patient in Switzerland, collects important data on the transplantation procedure, transplant recipients and the success of transplantation over a very long period of time after transplantation. The STCS is funded by all Swiss transplant centers, supported by a large number of transplant experts and supported by the Swiss National Science Foundation (SNSF). By the end of 2016, the STCS centers had recorded 4023 patients with 4187 transplants and a total of 4392 transplanted organs. More than 90% of all transplanted patients provided informed consent and authorized the STCS to work scientifically with their data. The STCS is very grateful to their patients for their support. The "STCS-allograft-twin study" is an important research project conducted within the framework of the STCS, which serves the understanding and management of the kidney transplantation in Switzerland.