The transplantation might be in some cases the last chance to save life of the patient. This therapeutical approach is used in those organs, which are not replaceable by any alternative way. The main problem, which was not solved yet, is a rejection reaction induced in the body of the recipient, where the diferences between HLA antigens of the donor and recipient play a key role. Precise laboratory examination of the patient on waiting list before the transplantation is one of the essential factors affecting the outcome of the transplanted graft and its recipient.