## SEARCHING FOR AN UNRELATED COMPATIBLE STEM CELL DONOR FOR PATIENTS ON BONE MARROW TRANSPLANT LIST.

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Allo-transplantation of hematopoietic stem cells from a compatible unrelated donor is one of the options for the treatment of patients with hematological that do not have a matched donor in the family. Graft success is influenced by many factors, the most important being the degree of HLA, type of the disease and disease stage, age etc. During the last 24 months, at RNDVCSH has been registered a continuous increase of search activities in order to find the best donor for each patient on the waiting list. Thus, only in our laboratory, we have recorded in 2015, an increase of 66% regarding the number of patients that are looking for an unrelated donor and an increase of over 80% in the number of extensive and /or verification testing. Although the selection rate for TE / TV of potential compatible donors has remained constant over the last 24 months (34-30% national donors versus 66-70% donor international donors), during 2015 we have noticed a significant increase, from 19 % to 30% of national donors who, after testing high resolution, have been find at least 90% compatible and have been accepted for donation by Romanian Bone Marrow Transplant Centers. Regarding the category of donors found 100% compatible, the percentage was definitely favorable to the national donors: 66% national donors versus 49% international donors validated. Despite all these encouraging results, it should be mentioned that for approx. 40% of patients tested in our lab it has not been yet identified an acceptable donor. It is about patients with rare phenotypes / HLA alleles. It is widely recognized and accepted that the highest chance of identifying a compatible unrelated donor is in the geographical area / population that the patient belongs. Definitely the continued increasing of the number of national donor registered and tested will help to identify more and more national donors for our patients.