F Renal and Pancreas Organ Transplantation

F1.000 If deceased donor transplants are performed, personnel for the required histocompatibility testing must be available 24 hours a day, seven days a week.

F2.000 HLA Typing

F2.100 Prospective typing of donors and recipients for HLA-A, B, Bw4, Bw6, and DR antigens is mandatory.

F2.200 Prospective typing of donors and recipients for HLA-C, and DQ antigens and for DR51, DR52, DR53, is highly recommended.

F3.000 Antibody Screening

F3.100 Laboratories must have a policy in place to evaluate the extent of sensitization of each patient at the time of initial evaluation and following potentially sensitizing events, based on the antibody characteristics that are clinically relevant to each transplant center's protocols.

F3.200 Laboratories must have a program to periodically screen serum samples from each patient for antibody to HLA antigens. The laboratory must have a documented policy establishing the frequency of screening serum samples and must have data to support this policy. It is recommended that samples be collected monthly.

F3.300 It is highly recommended that serum samples be tested for antibody to HLA antigens and that 1) information about antibody specificity be considered when evaluating the patient for transplant and, 2) that serum samples having defined class I and/or class II specificities be used in crossmatch testings.

F3.400 It is highly recommended that the HLA class I and class II specificity of antibodies be identified and reported and be distinguished from antibodies to non-HLA antigens.

F4.000 Crossmatching

F4.100 The laboratory must be capable of performing a prospective crossmatch and must do so when requested by a physician or other authorized individuals. Histocompatibility laboratories must have a joint written policy with their transplant program(s) on transplant candidate crossmatching strategies.

F4.200 Techniques

F4.210 Although the laboratory may use the basic complement-dependent microlymphocytotoxicity test for determining donor-recipient compatibility, it must also use a crossmatching technique with increased sensitivity.

F4.220 Crossmatches must be performed with potential donor T lymphocytes. It is recommended that crossmatches be performed with B lymphocytes using a method that distinguishes between reactions with T and reactions with B lymphocytes.

F4.230 The laboratory must have and adhere to a written policy determining the serum(s) used in the final crossmatch. The relevance of the policy must be supported by published data or data generated in the laboratory. The policy must consider or include historic and current sensitizing events.

F4.300 Samples

F4.310 Sera must be tested at a dilution that is optimal for each assay.

F4.320 The laboratory must have a policy for storage and maintenance of recipient sera. The policy must define the samples to be retained and the duration of storage.