English summary: update on the measures to prevent the transmission of the novel Coronavirus (SARS-CoV-2) infection through organ, tissues and cells transplantation in Italy.

With respect to the rapid epidemiologic evolution of the SARS-CoV-2 spread in our country, even though as of today, there is no evidence of SARS-CoV-2 transmission through organ, tissues and cells donation and the risk of transmission is currently unknown, the following measures are recommended:

- **Deceased organ donor**

  A specific test for investigating the presence of SARS-CoV-2 in the respiratory tract samples (preferably through BAL or oropharyngeal or nasopharyngeal swab) of the donors notified in all Italian regions, is recommended. Moreover, an EDTA blood sample is recommended in order to verify the presence of viremia, in case of confirmed positivity of the upper/lower respiratory tract sample.

  The results of the test performed on the respiratory tract samples shall be available before the organ transplant and if the donor is found positive, he or she shall be deemed unsuitable for donation.

  If the test cannot be performed, it is recommended to contact the person responsible for the second opinion on infection diseases and to notify the operational coordination department of the Italian National Transplant Centre.

  The result of the test on the donor’s blood sample is not binding in order to perform the transplant.

  In order to assess the donor’s suitability, it is possible to test a sample retrieved over a 72-hour period before the donation.

- **Living organ donor**

  A specific test for investigating the presence of SARS-CoV-2 in the respiratory tract samples (oropharyngeal or nasopharyngeal swab) taken 7 days prior to organ retrieval of all living donors across all Italian regions, is recommended.

  The test’s results shall be available before the organ retrieval and if the donor is found positive, he or she shall be deemed unsuitable for donation. The operational coordination department of the Italian National Transplant Centre and all Regional Transplant Centres involved shall be notified.

- **Deceased tissue donor**

  A specific test for investigating the presence of SARS-CoV-2 in the respiratory tract samples (oropharyngeal or nasopharyngeal swab) taken within 24 hours from the donor’s death on all
donors notified in all Italian regions, is recommended. The sample will be sent to the laboratory in the shortest time possible and no later than 24 hours after it has been collected. The test’s results on the donor’s respiratory tract samples shall be available before the tissues are released. In case of positivity, the donor shall be deemed unsuitable for donation and the operational coordination department of the Italian National Transplant Centre along with all involved Regional Transplant Centres shall be notified. For all donors notified by these regions, an EDTA blood sample is recommended in order to verify the presence of viremia, in case of positive respiratory tract samples.

- **Living tissue donor**

  A specific test for investigating the presence of SARS-CoV-2 in the respiratory tract samples (oropharyngeal or nasopharyngeal swab) taken 7 days prior to tissue retrieval of all living donors across all Italian regions, is recommended. The test’s results on the donor’s respiratory tract samples shall be available before the tissues are released. In case of positivity, the donor shall be deemed unsuitable for donation and the operational coordination department of the Italian National Transplant Centre along with all involved Regional Transplant Centres shall be notified.

- **Allogenic hematopoietic stem cells (HSC) transplant from bone marrow and peripheral blood**

  A specific test for investigating the presence of SARS-CoV-2 in the respiratory tract samples (oropharyngeal or nasopharyngeal swab) of all selected HSC donors across all Italian regions, is recommended. The test’s results shall be available before the beginning of the conditioning regimen. If a donor is found positive, he or she shall be deemed unsuitable for donation and the Italian National Transplant Centre, all involved Regional Transplant Centres and, in the case of unrelated donor, the Bone Marrow Donor Registry (IBMMDR), shall be notified. For patients starting a high-dose chemotherapy followed by autologous stem cells infusion (auto-transplant), the specific test investigating the presence of SARS-CoV-2 in the respiratory tract samples (oropharyngeal or nasopharyngeal swab) is not requested, unless the patient’s clinical conditions require otherwise.

It is also suggested to recommend transplant recipients and patients treated with immunosuppressive drugs to follow the indications listed below, in addition to those of the Ministry of Health (Novel Coronavirus, Ten measures to follow):

a) to adopt similar behaviors as those suggested during the post-transplant phase;

b) to avoid crowded places whenever possible and, if this is not feasible, recommend the use of personal protective equipment (especially face-masks).

Finally, we hope for the definition of organizational schemes which will allow the continuation of transplant activities in order to ensure the continuity of treatment and the access of transplant recipients to hospitals where the risk of transmission is minimized. The Regional Transplant Centres’ coordinators are encouraged to implement the actions foreseen, keeping all of the structures involved informed, included the Transplant Centres and the Tissue Establishments operating in the field.

We reserve the right to update the abovementioned recommendations according to the epidemiologic evolution, as well as to the acquisition of further information on SARS-CoV-2.

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