

Transplantation Activities at Baskent University during the COVID-19 Period

8th Congress of the
Iranian Society
for
Organ Transplantation
(8th ISOT Congress)

13-14 January, 2021

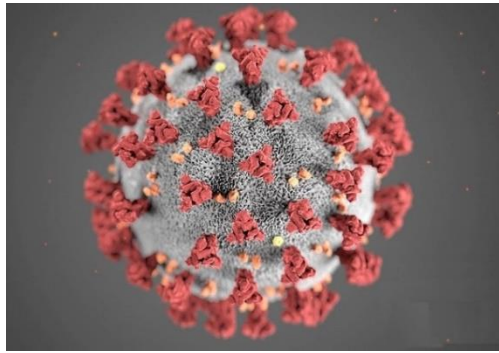
**Mehmet Haberal, MD, FACS (Hon), FICS (Hon),
FASA (Hon), FIMSA (Hon), Hon FRCS (Glasg)**

*Founder and Founder President, Baskent University
President of Executive Supreme Board, Baskent University
Chair of Division of Transplantation, Baskent University
Distinguished Fellow, Royal Society of Medicine
Immediate Past-President, The Transplantation Society
Founder and President, Turkish Transplantation Society
Founder and Past President, Middle East Society for Organ Transplantation
Founder and President, Turkic World Transplantation Society
Founder and Editor-in-Chief, Experimental and Clinical Transplantation*



**BAŞKENT
UNIVERSITY**





COVID-19 PANDEMIC

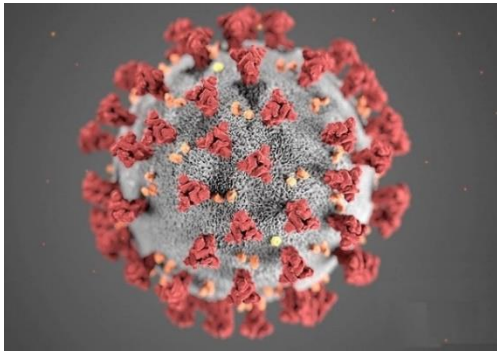
First reported in
December 2019 in
Wuhan, China

Officially declared as a
pandemic on March
11, 2020 by WHO

COVID-19 is affecting **218**
countries and
territories around the
world.

- Most people experience mild to moderate respiratory illness and recover without requiring special treatment.
- However, older people and those with underlying medical problems, like cardiovascular disease, diabetes, chronic respiratory disease, and cancer, are more likely to develop serious illness.





COVID-19 UPDATE*

As of December 31, 2020

➤ Coronavirus Cases:

83,066,659

➤ Deaths:

1,812,188

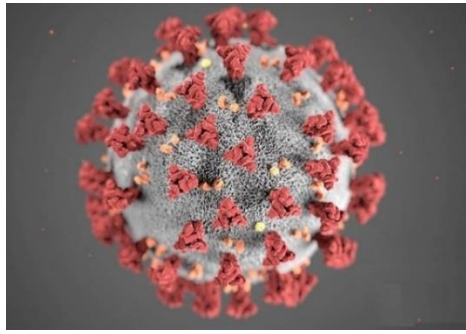
➤ Recovered:

58,868,485

***Worldometer:**

December 31, 2020





COVID-19 TURKEY UPDATE*

As of December 31, 2020

In Turkey, the first case was reported on **March 11, 2020**:

Coronavirus Cases:

2,194,272

Deaths:

20,642

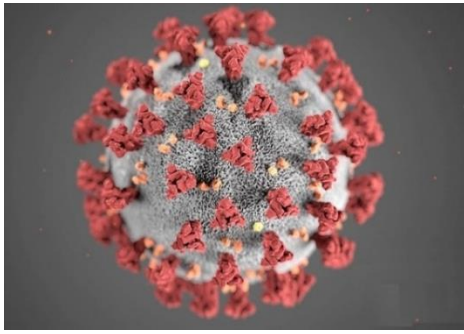
Recovered:

2,078,629

***Worldometer:**

December 31, 2020





Impact of Covid-19 on Donation & Transplantation

Beginning of this year, when the Covid-19 pandemic has first started, it had the immediate effect of severely reducing living and deceased organ donation and transplantation activity worldwide.

Our early experience showed that neither hemodialysis nor transplant patients have got infected with Covid-19 higher than the normal population.^{1, 2, 3, 4, 5}

While it seems obvious that life saving transplant activity should not be stopped, it should be tailored with careful selection of both donors and recipients within **transparency** and considering **ethical and legal aspects**.

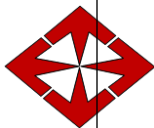
¹*Exp Clin Transplant. 2020;18(2):139-140*

²*Exp Clin Transplant. 2020;18(3):270-274*

³*Exp Clin Transplant. 2020;18(3):275-283.*

⁴*Exp Clin Transplant. 2020;18(5):564-571*

⁵*Exp Clin Transplant. 2020;18(6):689-695*



BASKENT UNIVERSITY EXPERIENCE

Donor Evaluation Protocol of Baskent University

Donor Evaluation Protocol of Baskent University Division of Transplantation

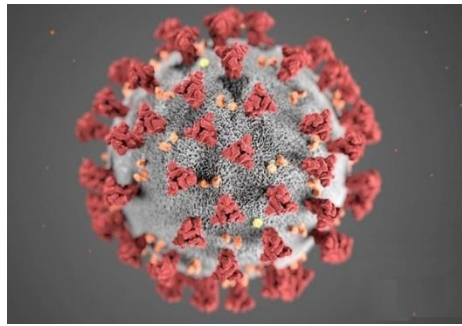
Social evaluation

1. Recipient candidate must be a relative (up to the 4th degree) or spouse of recipient.
2. Donor candidate must be ≥ 18 years old.

Medical evaluation

- | | |
|--------|--|
| Step 1 | Physical and psychosocial evaluation <ol style="list-style-type: none">a) Information about procedureb) Complete medical historyc) Physical examinationd) Laboratory tests (blood group test, basic biochemical tests, serology for hepatitis)e) Radiological evaluation (abdominal ultrasonography-guided, chest radiography) |
| Step 2 | Triphasic abdominal computed tomography |
| Step 3 | Assessment of the general operative risk <ol style="list-style-type: none">a) Pulmonary function test, echocardiography, stress testb) Consultations (cardiology, pulmonology, hepatology, psychiatry for routine evaluation; if necessary, other department consultations may be requested) |
| Step 4 | Magnetic resonance cholangiography |
| Step 5 | Liver biopsy |





BASKENT UNIVERSITY EXPERIENCE

As a result of our findings, we decided to continue our transplant activities in a controlled manner at our centers located in 3 different cities:

From March 1, 2020 to
December 30, 2020

69 kidney transplants (58 adults, 11 pediatrics) from
67 living related and 2 deceased donors:

*68 patients alive with normal kidney function
1 patient died due to cardiac problem*

21 liver transplants (8 adults, 13 pediatrics) from 20
living related and 1 deceased donors:

*20 patients alive with normal liver function
1 patient died due to cardiac oxalosis*



Results of Liver and Kidney Transplantation at Baskent University Hospitals

March 1, 2020 – December 30, 2020

7
COUNTRIES

- BULGARIA
- JORDAN
- KENYA
- KUWAIT
- KYRGYZSTAN
- RUSSIA
- SOMALI

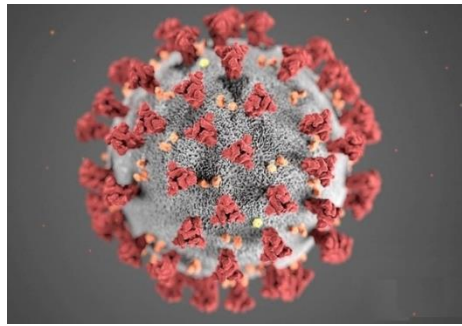
5 KIDNEY TRANSPLANTS

5 LIVER TRANSPLANTS

TURKEY

- **64 KIDNEY TRANSPLANTS**
- **16 LIVER TRANSPLANTS**





BASKENT UNIVERSITY EXPERIENCE

From March 1, 2020 to
December 30, 2020

- Kidney and Liver transplant patients should be warned in terms of personal hygiene and closely monitored by organ transplant centers.
- PCR tests should be carried out twice before transplantation for all organ transplant recipients and donors
- If there is an indication for hospitalization, they should be followed in an isolated unit, and no aggressive changes should be made to immunosuppressive doses unless necessary.
- During this period, no patients died due to Covid-19, only one patient has got infected with Covid-19 and has recovered.



Kidney Transplantation at Baskent University Hospitals

Characteristics of Kidney Transplant Recipients During COVID-19 Pandemic (N = 69)

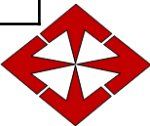
Adult	n=58
Pediatric	n=11
Age	35.8 (range; 6 to 67)
Gender	M: 49 F: 20
Donor type	Deceased: 2 Living Related: 67
Length of hospitalization (days)	8.1 (range; 3 to 18 days)
Etiology	Hypertension: n=15 VUR: n=5 DM: n=6 PKD: n=4 FSGS: n= 4 MPGN: n=2 Unknown: n=23 Others: n=10



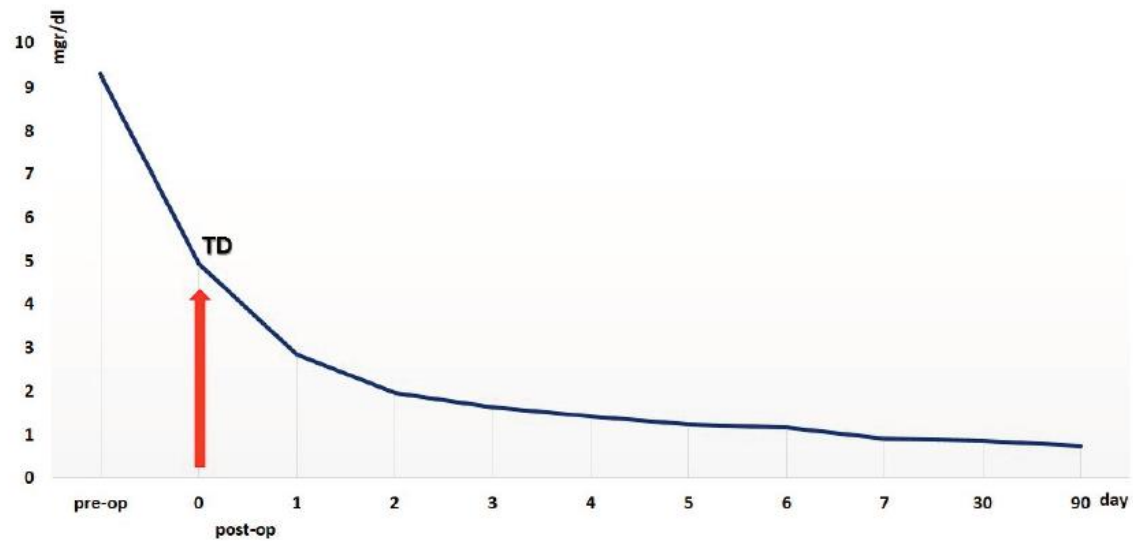
Kidney Transplantation at Baskent University Hospitals

Characteristics of Kidney Transplant Donors During COVID-19 Pandemic

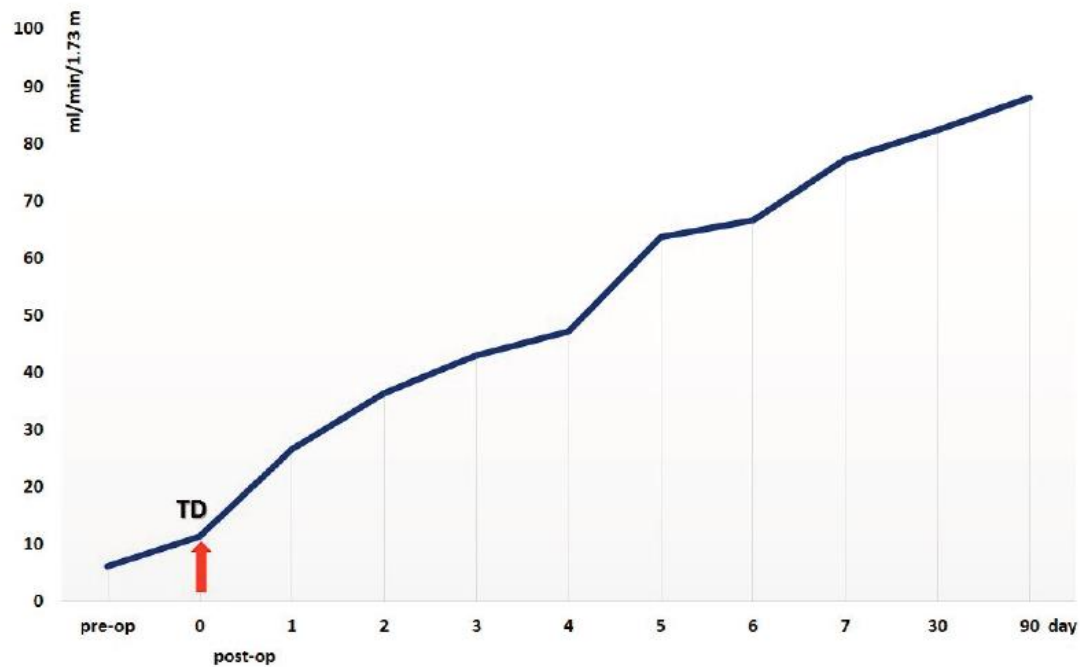
Age (years)	44.4 yo (range; 22 to 61)
Gender	M: 31 F: 38
Length of hospitalization (days)	3.4 (range: 1 to 8 days)
Degree of relation	Spouse (n=25) Sibling (n=17) Mother (n=10) Father (n=9) Aunt (n=2) Deceased (n=2) Son (n=2) Cousin (n=1) Nephew (n=1)



Mean Serum Creatinine Values of Kidney Transplant Recipients



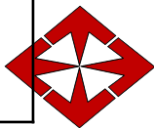
Mean Glomerular Filtration Rates of Kidney Transplant Recipients



Liver Transplantation at Baskent University Hospitals

Characteristics of Liver Transplant Recipients During COVID-19 Pandemic (N = 21)

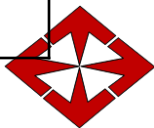
Adult	N = 8
Pediatric	N = 13
Age	35.8 (range; 6 to 67)
Gender	M = 14 F = 7
Donor type	Deceased: 1 Living Related: 20
Length of hospitalization (days)	17.1 (range, 6-36 days)
Etiology	Biliary atresia: n=6 Wilson's disease: n=1 Alcoholic Cirrhosis: n=1 PFIC: n=4 Cryptogenic Cirrhosis: n=4 Oxalosis: n=2 Hepatitis B (HCC): n=2



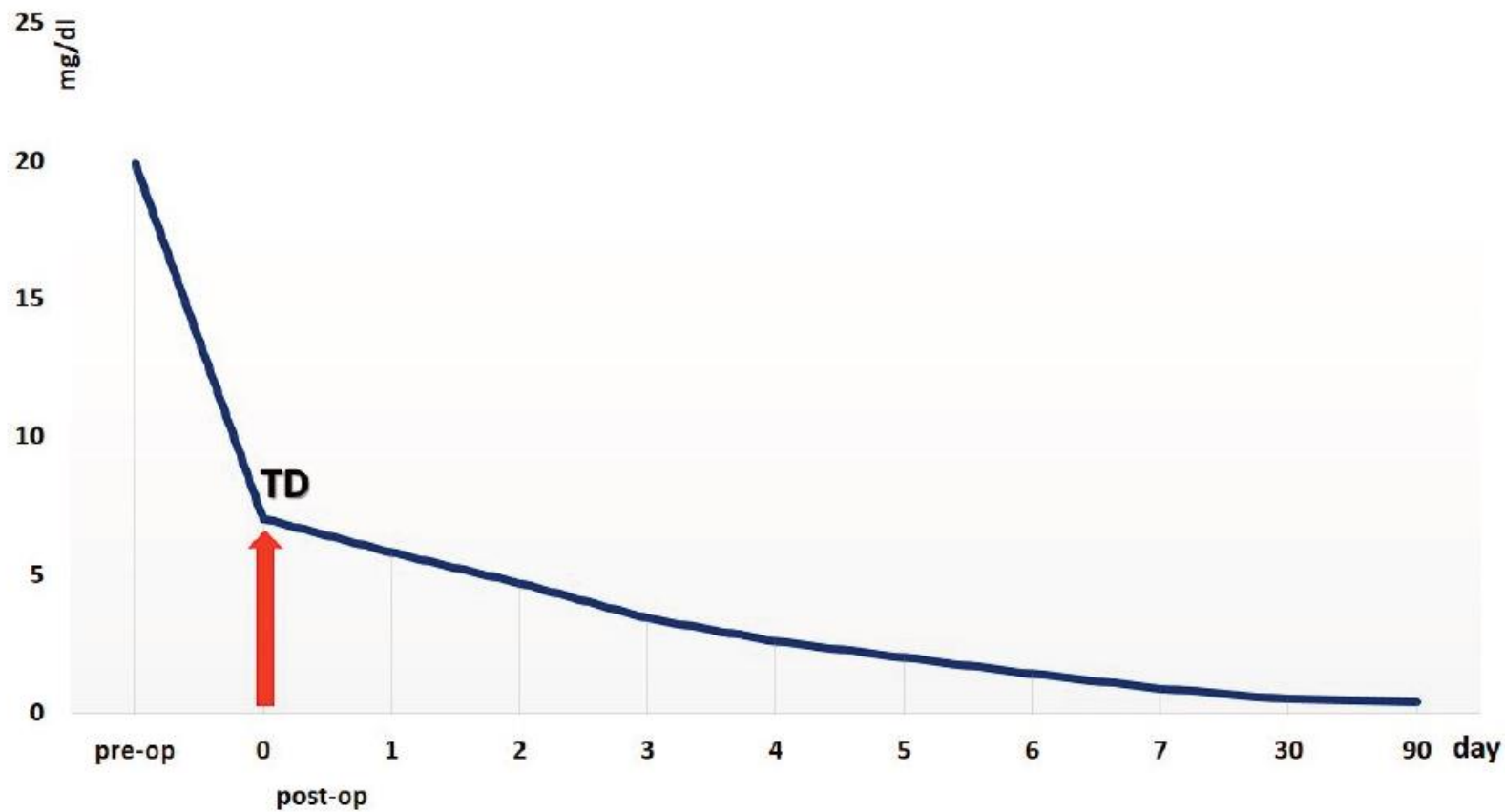
Liver Transplantation at Baskent University Hospitals

Characteristics of Liver Transplant Donors During COVID-19 Pandemic

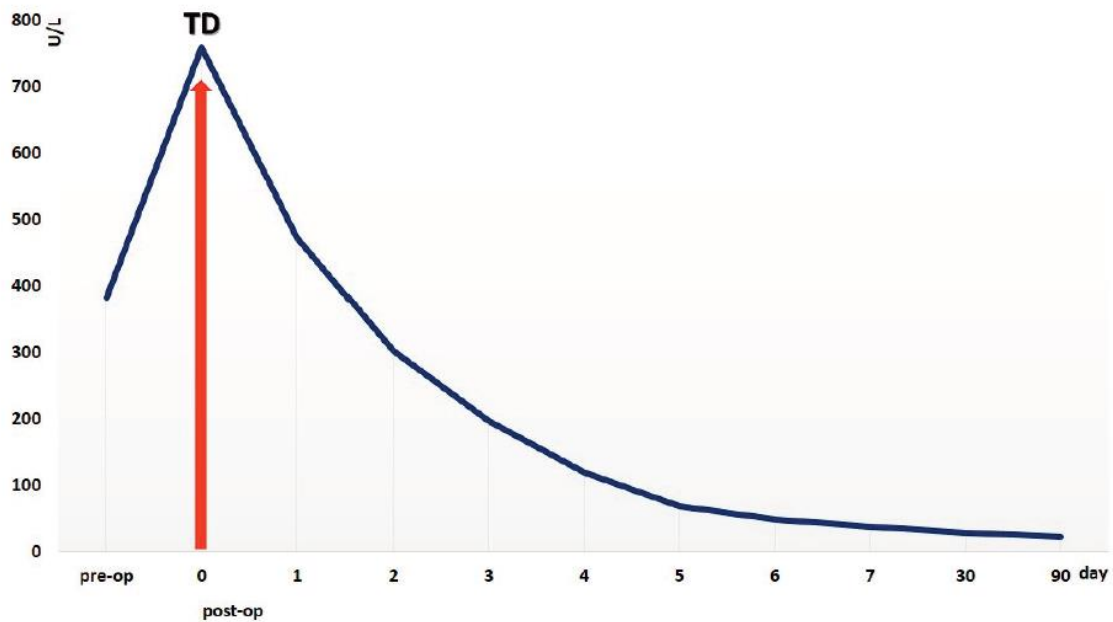
Age (years)	33.1 yo (range; 21 to 57)
Gender	M = 12 F = 9
Length of hospitalization (days)	4.3 days (range, 3 to 6 days)
Degree of relative	Mother: n=8 Father: n=3 Deceased: n=1 Brother: n=3 Uncle: n=2 Aunt: n=1 Spouse: n=2



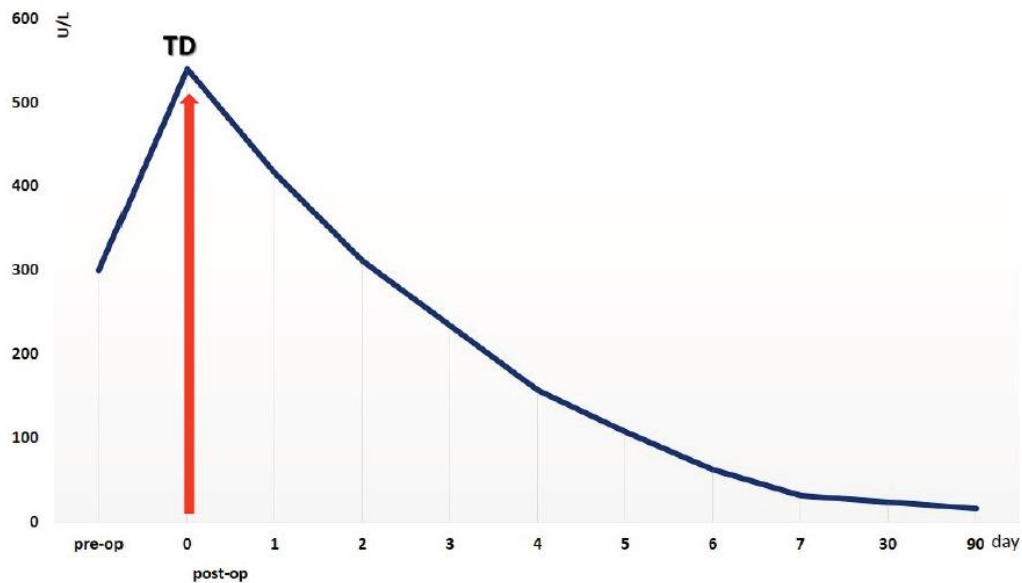
Mean Total Bilirubin Values of Liver Transplant Recipients

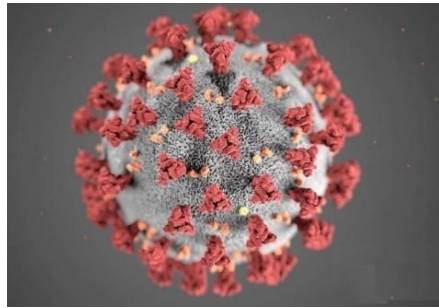


Mean Aspartate Aminotransferase Values of Liver Transplant Recipients



Mean Alanine Aminotransferase Values of Liver Transplant Recipients





Meeting the Growing Needs for Organs

*Despite The Covid-19 pandemic, it is the responsibility of the international community to ensure that demand for organs is met within **transparency**, **ethical** and **legal boundaries**.*

Acceptable Sources of Organs

Living-Related

Spouses and In-Laws

Organ Exchange

Deceased Donation



The most important problem in transplantation today is

Deceased Organ Donation

Therefore, the main goal should be to promote organ donation from deceased donors and fight against living unrelated transplantation especially during the Covid-19 period.

This is the most efficient way to eliminate commercial transplantation and transplant tourism



SOME OF OUR TRANSPLANT PATIENTS AT BASKENT UNIVERSITY





JORDAN

Patient: Lujain Fayez - 4 yrs old
Biliary Atresia, LL lobe Tx

Donor: Father, Fayez Jarob'a, 34 yrs old





RUSSIA

Patient: Sergey Globa
50 yrs old, Alcoholic Chirosis, R Lobe Tx

Donor: Brother, Andrei Globa, 46 yrs old





JORDAN

Patient: Sham Abdala
1.5 yrs old, Biliary atresia,
LL segment tx

Donor: Mother, Nour Mahmoud Abedai,
46 yrs old





TURKEY

Patient: Zeynep Pembe Çelik
5 months old, Biliary atresia,
LL segment tx

Donor: Uncle, Veysel Bilal Aslankara, 46 yrs old





TURKEY

Patient: Muhammed Can Gölyeri, 16 yrs old
Congenital hepatic fibrosis and Polycystic kidney disease, LL liver tx

Liver Tx Donor: Mother, Melek Gölyeri, 38 yrs old
Kidney Tx Donor: Father, Ercan Gölyeri, 39 yrs old



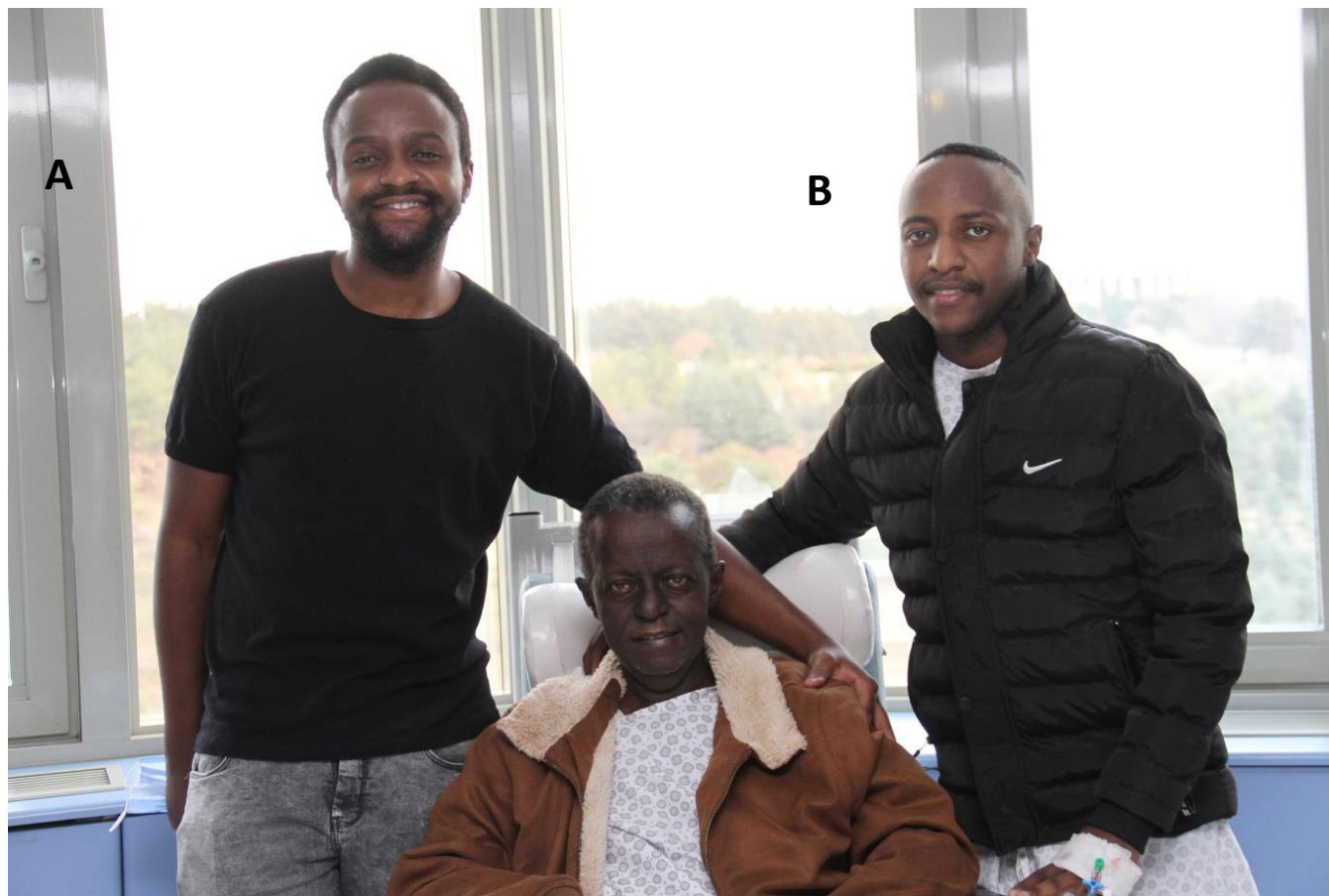


BULGARIA

Patient: Selahtin Erdinch Mustafa, 15 yrs old,
FSGS, Kidney Tx

Donor: Mother, Mukaddes Selahtin, 33 yrs old





REPUBLIC OF KENYA

Patient: Simon Mutaka Muasya, 57 yrs old,
Criptogenic Chirrosis + Hepatorenal Syndrome,
R lobe liver tx (Son), Kidney tx (Son)

Donor A: Son, Kelvin Mutaya Muasya, 24 yrs old, R Lobe Liver Tx

Donor B: Son, Tony Musau Muasya, 23 yrs old, Kidney Tx



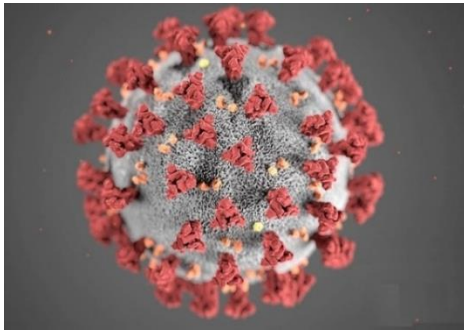


KYRGYZSTAN

Patient: Kamila Torobekova,
8 yrs old
Unknown etiology, kidney tx

Donor: Father, Ilkham Murkamilov,
37 yrs old





CONCLUSION

Our findings show that neither hemodialysis nor transplant patients have got infected with Covid-19 higher than the normal population.^{1, 2, 3, 4, 5}

While it seems obvious that life saving transplant activity should not be stopped, it should be tailored with careful selection of both donors and recipients within **transparency** and considering **ethical and legal aspects**.

¹*Exp Clin Transplant.* 2020;18(2):139-140

²*Exp Clin Transplant.* 2020;18(3):270-274

³*Exp Clin Transplant.* 2020;18(3):275-283.

⁴*Exp Clin Transplant.* 2020;18(5):564-571

⁵*Exp Clin Transplant.* 2020;18(6):689-695



Baskent University

Medical & Research Centers

Ankara Hospital - Ankara



Ankara Hospital Outpatient Clinics - Ankara



Ankara Hospital Outpatient Clinics Ümitköy- Ankara



Ümitköy Dialysis Center - Ankara



Yenikent Dialysis Center - Ankara



Alanya Medical and Research Center - Alanya



Ayaş Physical Therapy, Rehabilitation Center-Ankara



Yapraklı Psycho, Social Rehabilitation Center -Ankara



Women's and Children's Health Center -Ankara



Adana Dr. Turgut Noyan Medical and Research Center - Adana



Adana Medical and Research Center Seyhan Hospital - Adana



Adana Medical and Research Center Kışla Hospital-Adana



Alanya-Oba Outpatient Clinics-Alanya



Baskent University

Medical & Research Centers

İskenderun Dialysis Center -
İskenderun



İstanbul Medical and
Research Center - İstanbul



İstanbul Dialysis Center -
İstanbul



Zübeyde Hanım Medical and
Research Center - İzmir



İzmir Çiğli Outpatient
Clinics - İzmir



Konya Medical and
Research Center - Konya



Şanlıurfa Dialysis Center -
Şanlıurfa



Zile Dialysis Center -
Tokat



Yalova Dialysis Center -
Yalova



Zonguldak Dialysis Center -
Zonguldak



Karadeniz Ereğli Dialysis
Center - Zonguldak



Çiğdem Dialysis Center
Ankara



Baskent University Experimental Animal Breeding Center



First Location



Second Location



Final Location



Donate Life



Thank you...