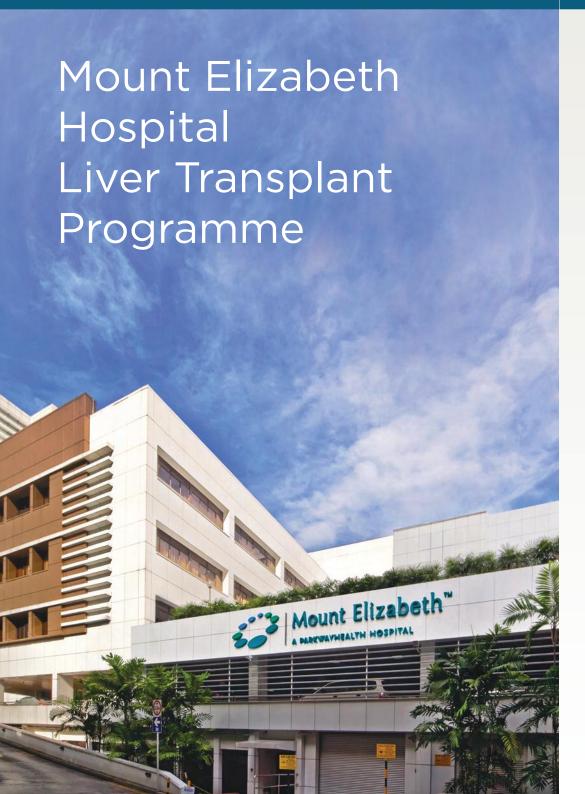


IT'S POSSIBLE.

Liver Transplant Programme





Mount Elizabeth Hospital is a tertiary hospital with 345 beds operated by IHH Healthcare. Opened since 8 December 1979, the hospital has consistently delivered clinical and service excellence to our patients.

Today, Mount Elizabeth Hospital offers a full range of medical services helmed by more than 1,500 leading specialists who are supported by highly-trained healthcare professionals. The hospital is equipped with 13 operating theatres, 2 intensive care units with 24 beds and a range of room types to cater to different needs.

Together with a team of experts for living donor transplant, we have helped many patients in need of liver and kidney transplants over the past 20 years. Reflecting our commitment to clinical and service quality, the hospital is accredited by Joint Commission International since 2006 and awarded "Hospital of the Year in Asia Pacific" by Global Health and Travel for seven consecutive years since 2016.

Awards



Hospital of the Year in Asia Pacific (2016 to 2022)

Hospital of the Year in **Singapore** (2017 to 2022)

Cardiology Service Provider of the Year in Asia Pacific (2016 to 2022)

Neurology Service Provider of the Year in Asia Pacific (2018 to 2022)

Orthopaedic Service Provider of the Year in Asia Pacific (2019)

Transplant Service Provider of the Year in Asia Pacific (2021 to 2022)

Health Screening Provider of the Year in Asia Pacific (2018 to 2019)

ENT Service Provider of the Year in Asia Pacific (2018, 2021)

Gastroenterology Service Provider of the Year in **Asia Pacific** (2018, 2020)

Oncology (Medical) Service Provider of the Year in Asia Pacific (2021)

Multi Disciplinary Oncology Service Provider of the Year in Asia Pacific (2022)

Stroke Centre of the Year in Asia Pacific (2020 to 2022)

Causes of Liver Failure

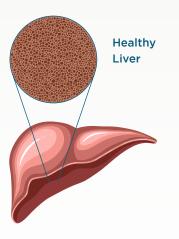
Liver failure, also known as end-stage liver disease (ESLD), may be the result of serious liver injury or liver disease.

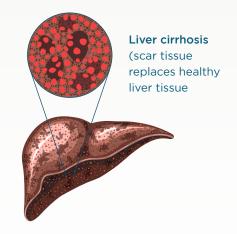
Liver failure may happen quickly or over a longer period of time, depending on whether it is acute or chronic in nature.

Acute Liver Failure

Occurs quickly, in a matter of weeks and is usually the result of medication-induced liver injury.

Chronic Liver Failure Mainly caused by scarring of the liver (cirrhosis). Liver cirrhosis may be due to viruses (Hepatitis B & C), alcoholic liver diseases, non-alcoholic liver disease, genetic disorders, and conditions involving the bile ducts.





Liver Transplantation

Liver transplantation is now the accepted standard of care for patients with end-stage liver diseases, acute liver failure and selected cases of hepatocellular carcinoma (primary liver cancer). It is a surgical procedure that replaces a patient's diseased liver with a new healthy liver either partially (live donor) or whole (cadaveric donor).

Following a liver transplant, patients will require long-term medication (immunosuppression) to prevent the body from rejecting the new organ. Advancements in immunosuppression, medical management, and surgical techniques, have led to remarkable improvements in the long term success of liver transplant.



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Types of Liver Transplant

Cadaveric Liver Transplantation

This is also known as deceased donor liver transplantation. The majority of livers that are transplanted come from brain-dead organ donors where consent is given. The donor's whole liver will be transplanted to the patient. In Asia, many people do not come forward to be an organ donor (possibly due to personal or religious reasons, or lack of awareness) which has led to a shortage of cadaver livers.

Living Donor Liver Transplant

Part of the donor's healthy liver will be removed and transplanted to the patient. This can be done because the liver has a remarkable ability to regenerate itself. Both the donor and recipient's liver will grow back to its normal size in a few months. Due to the shortage of deceased donors in Asia, living donor liver transplant has become a feasible option for patients who require liver transplantation.

Why Living Donor Liver Transplant?



Long wait time for a cadaveric donor. During this period, the patient's health may deteriorate to develop fatal complications.



It allows for the scheduling of procedure. As such, the patient with decompensated liver function can be optimised prior to the operation.



Living donor liver transplant is an important life-saving procedure for patients suffering from acute liver failure and hepatocellular carcinoma (liver cancer). It can be performed on any patient with end-stage liver disease regardless of the original cause of the disease.

The Living Donor Liver Transplant Journey





Liver patient and his/her family finds a compatible healthy living donor



Pre-transplant
Assessment:
Living donor
and recipient



Family
Conference:
Meeting with
the patient
and his/her
family



Optimising medical condition for transplant surgery



Interview and authorisation from the Transplant Ethics Committee (required by the Ministry of Health's Human Organ Transplant Act, HOTA, in Singapore)



Transplant surgery



Post-transplant
evaluation
and care with
medical team
covering
medication,
vaccinations,
blood tests,
liver scans
and nutritional
health

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Who can be a Living Donor?

There are some medical conditions that may make a donor ineligible such as an elevated body mass index (BMI), diabetes, hepatitis, certain cancers and heart or kidney disease.

Donor Selection Criteria



Be a willing adult between the ages of 21 and 50 years old



Should not have liver-related illness



Be of healthy BMI



Be a family member, friend, or close acquaintance



Be of compatible blood type with the recipient



Be in good physical and mental health



Before the procedure



You and your donor will be assessed by our transplant team to confirm your suitability to undergo a liver transplant surgery. For foreigners, your blood and other imaging tests will be repeated in Singapore to confirm your disease condition.



Your donor will also undergo stringent medical evaluation. He/she will be asked to complete a questionnaire and have his/her blood tests done to assess suitability. This is also to rule out chronic conditions such as Hepatitis B and C. Further blood, radiological and psychosocial examinations will be carried out.



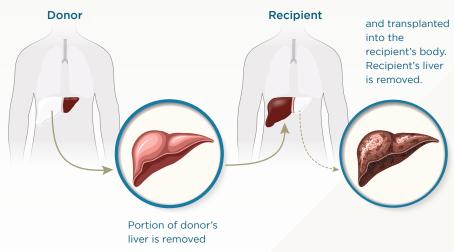
Your donor will also be assessed by a team of doctors including, cardiac and infectious disease physicians, psychiatrists, dentists and nephrologists for suitability. The transplant coordinator will inquire about his/her family, social and financial history to gather the necessary information for the ethics committee. At times, personal questions may be asked.

During the procedure

On the day of the transplant, surgeons will remove a portion of the donor liver for transplant through an incision in the abdomen. The specific part of the liver donated depends on the size of the donor liver and the needs of the recipient.

Next, surgeons remove the diseased liver and place the donated liver portion in the recipient's body, connecting the blood vessels and bile ducts to the new liver.

The transplanted liver in the recipient and the remaining liver in the donor regrow rapidly, reaching normal liver volume and function within a couple of months.



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After the procedure

After your liver transplant, you can expect to:



Stay in the intensive care unit for a few days

Doctors and nurses will monitor your condition to watch for signs of complications. They will also test your liver function frequently for signs that your new liver is working.



Spend 5 to 10 days in the hospital

Once you are stable, you will be taken to a transplant recovery ward, where a medical team will monitor your recuperation process.





Continue with frequent checkups as you recover at home

Your transplant team designs a checkup schedule for you. You may undergo blood tests a few times each week at first and then less often over time.



Take post-transplant medications

You will take a number of medications after your liver transplant. Drugs called immunosuppressants prevent your immune system from attacking your new liver. Other drugs help reduce the risk of other complications after your transplant, e.g. infection.



Expect a recovery period of six months or more before resuming normal activities

You may be able to resume normal activities or go back to work a few months after surgery. The length of recovery may depend on how ill you were before your liver transplant.

Our Transplant Team

The Mount Elizabeth Hospital Living Donor Liver Transplantation Programme is led by

Programme Director



Dr Kieron Lim

Prior to starting private practice, Dr Lim was Head of Division of Gastroenterology and Hepatology at NUH, and Medical Director of Liver Transplantation at the National University Centre for Organ Transplantation.

He graduated from St Bartholomew's and The Royal London School of Medicine (UK), and worked at the Liver Unit at The Royal Free Hospital (London) before returning to Singapore. He undertook his fellowship training in transplant hepatology at the Recanati / Miller Transplantation Institute, Icahn School of Medicine at Mount Sinai New York, USA.

Dr Lim manages common and complex gastrointestinal and liver conditions. His special interests include liver transplantation, hepatocellular carcinoma and viral hepatitis. He is a reviewer for peer reviewed journals: Transplantation, Clinical Transplantation, World Journal of Gastroenterology, Hepatobiliary & Pancreatic Diseases, and the Singapore Medical Journal.

Transplant Team

The Mount Elizabeth Hospital Living Donor Liver Transplant Team consists of a multidisciplinary specialised team that includes transplant physicians (hepatologists), surgeons, intensive care specialists, transplant coordinators, social workers, transplant nurses including other members of Allied Health Professionals and many others. This allows us to care for liver patients with even the most complicated conditions.

The team has a combined experience of managing over 300 transplant cases and works closely to support patients and their families, to achieve the best medical outcome possible.

Gastroenterology





Infe<u>ctious</u> **Diseases**



Respiratory Medicine



Dr Tan Aik Hau

Cardiology



Anaesthesiology



Dr Lim Tai Tian Dr Lim Hsien Jer

General Surgery









Dr Lee Ser Yee

Dr Chan Chung Yip Dr Wong Jen San Dr Tan Yu Meng

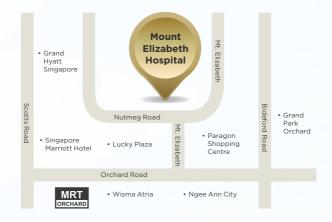
Dr Victor Lee

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Mount Elizabeth Hospital

3 Mount Elizabeth Singapore 228510



Mount Elizabeth #10-02 Mount Elizabeth Medical Centre Singapore 228510

Please contact our Parkway Patient Assistance Centre for more information about our Liver and Kidney Transplantation programmes.