

EIGHTH  
REPORT OF THE  
NATIONAL TRANSPLANT REGISTRY  
2011

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December 2014

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**Published by:**

National Transplant Registry  
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Suggested citation of this report is as follows:

Hooi LS, Lela Yasmin Mansor (Eds). Eighth Report of the National Transplant Registry Malaysia 2011. Kuala Lumpur 2014.

The electronic version of this report can be downloaded at:

<http://www.mst.org.my/ntrSite>

**Disclaimer**

There is a potential that data for previous years printed in this report are different from what were printed in previous reports. This is because analysis for this report is based on the latest dataset in the web which may have been updated by SDP.

## **Foreword**

The Council of the Malaysian Society of Transplantation is pleased to present the 8<sup>th</sup> National Transplant Registry Report which summarises the cumulative data related to organ donation & transplantation activities in Malaysia up to, and including, 31<sup>st</sup> December 2011.

The primary role of the National Transplant Registry is to document, analyse and assess organ donation and transplantation activities in Malaysia. The data generated from each organ donation and transplant procedure is collected, collated, analysed and included in the Registry. This data has been the basis for the various interventions and planning initiatives undertaken over the years to develop transplantation in this country. This registry has fostered a culture of transparency, accountability and sharing of information to further enhance and improve transplantation services in Malaysia.

The Malaysian Society of Transplantation wishes to acknowledge the crucial and extremely vital role played by the editors, Dr Hooi Lai Seong & Datin (Dr) Fadhilah Zowyah Lela Yasmin Mansor, the members of the steering committee, the experts' panel, the source data providers and the Registry Manager, Mr Naren Kumar Surendra for their enormous effort in the preparation of this report.

The National Transplant Registry would not be sustainable if not for the continued support and commitment of all transplant professionals, the Ministry of Health Malaysia and our corporate sponsors. We wish to record our immense gratitude to each and every individual who has contributed in one way or other towards the preparation and eventual successful release of this report. We hope that you will find this edition of the National Transplant Registry Report for 2011 to be both useful and informative.

We, at the Malaysian Society of Transplantation are committed to maintain the National Transplant Registry ad infinitum and work closely with all stakeholders to develop and enhance organ donations and transplantation in our country.

**Datuk (Mr) Harjit Singh MBBS; FRCSEd; FRCSI**  
**President, Malaysian Society of Transplantation**

## **ACKNOWLEDGEMENTS**

The National Transplant Registry would like to record its appreciation to everyone who have helped made this report possible.

We would especially like to thank the following:

- Director General of Health, Malaysia
- Ministry of Health, Malaysia
- Our source data providers that are the transplant surgeons, physicians and staff of all organ and tissue transplant centres and transplant follow up centres from the government, universities and private sectors, without whose commitment, hard work and timely data submission, there will be no report
- National Renal Registry for sharing the renal transplant data
- Clinical Research Centre, Hospital Kuala Lumpur
- The members of the various expert panels for their expertise and for devoting their valuable time and effort in preparing and writing the various chapters
- Roche (M) Sdn. Bhd, Novartis Corporation (M) Sdn Bhd. and Janssen-Cilag for their support in providing sponsorships
- Many others, whose names are not listed here, for their support.

## **PARTICIPATING CENTRES**

### **Discipline: Blood and Marrow Transplant**

1. Haematology Department, Hospital Pulau Pinang
2. Division of Haematology, Department of Medicine, University of Malaya Medical Centre
3. Haematology Department, Hospital Ampang
4. Haematology Department, Sime Darby Medical Centre Subang Jaya
5. Haemopoietic Stem Cell Transplant Unit, Hospital Universiti Sains Malaysia
6. Maybank BMT Centre, Universiti Kebangsaan Malaysia Medical Centre
7. Paediatric BMT Unit, Department of Paediatrics, University of Malaya Medical Centre
8. Paediatric BMT Unit, Institute of Paediatrics, Hospital Kuala Lumpur
9. Paediatric BMT Unit, Sime Darby Medical Centre Subang Jaya

### **Discipline: Bone and Tissue Transplant**

1. Bone Bank, Hospital Kuala Lumpur
2. Bone Bank, University of Malaya Medical Centre
3. Department of Orthopaedics, Hospital Universiti Sains Malaysia
4. National Tissue Bank, Universiti Sains Malaysia

### **Discipline: Cornea Transplant**

1. Ophthalmology Department, Hospital Kuala Lumpur
2. Ophthalmology Department, Hospital Melaka
3. Ophthalmology Department, Hospital Sungai Buloh
4. Ophthalmology Department, Hospital Tengku Ampuan Rahimah
5. Ophthalmology Department, Hospital Umum Sarawak
6. Ophthalmology Department, Hospital Kuala Terengganu
7. Pusat Pakar Mata Centre For Sight, Petaling Jaya
8. Tun Hussein Onn National Eye Hospital
9. Ophthalmology Department, Hospital Universiti Kebangsaan Malaysia
10. Puteri Specialist Hospital, Johor Bharu
11. Sunway Medical Centre, Petaling Jaya

### **Discipline: Heart and Lung Transplant**

1. Cardiothoracic Department, Institut Jantung Negara
2. Institut Perubatan Respiratori, Hospital Kuala Lumpur

### **Discipline: Heart Valve Transplant**

1. Cardiovascular Tissue Bank, Department of Cardiothoracic Surgery, Institut Jantung Negara

**Discipline: Liver Transplant**

1. Hepatobiliary Department, Hospital Selayang
2. Paediatric Hepatology Unit, Hospital Selayang

**Discipline: Renal Transplant**

1. Nephrology Clinic (Renal Transplant), Hospital Kuala Lumpur
2. Nephrology Clinic (Renal Transplant), Hospital Kuala Lumpur (Paed)
3. Renal Transplant Clinic, Hospital Batu Pahat
4. Renal Transplant Clinic, Hospital Bintulu
5. Renal Transplant Clinic, Hospital Duchess of Kent
6. Renal Transplant Clinic, Hospital Kemaman
7. Renal Transplant Clinic, Hospital Kluang
8. Renal Transplant Clinic, Hospital Labuan
9. Renal Transplant Clinic, Hospital Melaka
10. Renal Transplant Clinic, Hospital Mersing
11. Renal Transplant Clinic, Hospital Miri
12. Renal Transplant Clinic, Hospital Pakar Sultanah Fatimah
13. Renal Transplant Clinic, Hospital Pontian
14. Renal Transplant Clinic, Hospital Raja Permaisuri Bainun
15. Renal Transplant Clinic, Hospital Sultanah Aminah
16. Renal Transplant Clinic, Hospital Sultanah Bahiyah
17. Renal Transplant Clinic, Hospital Queen Elizabeth
18. Renal Transplant Clinic, Hospital Segamat
19. Renal Transplant Clinic, Hospital Selayang
20. Renal Transplant Clinic, Hospital Serdang
21. Renal Transplant Clinic, Hospital Taiping
22. Renal Transplant Clinic, Hospital Tawau
23. Renal Transplant Clinic, Hospital Tengku Ampuan Afzan
24. Renal Transplant Clinic, Hospital Tengku Ampuan Rahimah
25. Renal Transplant Clinic, Hospital Tuanku Ja'afar
26. Renal Transplant Clinic, Hospital Sibul
27. Renal Transplant Clinic, Hospital Sultanah Nur Zahirah
28. Renal Transplant Clinic, Hospital Raja Perempuan Zainab II
29. Nephrology Clinic (Renal Transplant), Hospital Sultan Ismail
30. Nephrology Clinic (Renal Transplant), Hospital Sultan Ismail (Paed)
31. Renal Transplant Clinic, Sarawak General Hospital
32. Renal Transplant Clinic, Universiti Kebangsaan Malaysia Hospital
33. Renal Transplant Clinic, Universiti Sains Malaysia Hospital
34. Renal Transplant Clinic, Universiti Malaya Hospital
35. Klinik Dr Choo & Liew
36. Renal Transplant Clinic, KPJ Ampang Puteri Specialist Hospital
37. Renal Transplant Clinic, Prince Court Medical Centre
38. Klinik Dr Choo & Liew
39. Renal Transplant Clinic, Sabah Medical Centre
40. Tan Medical Renal Clinic
41. Fan Medical Renal Clinic Sdn Bhd
42. Kidney Unit, Assunta Hospital
43. Renal Transplant Clinic, Timberland Medical Centre,
44. Renal Transplant Clinic, Renal Care, Ipoh Specialist Hospital

## **ABOUT THE NATIONAL TRANSPLANT REGISTRY**

The National Transplant Registry (NTR) is a Ministry of Health (MOH) supported registry whose aim is to collect information about organ and tissue transplantations in Malaysia. The information allows us to estimate the magnitude of transplant activity in the country. Such information besides being useful to transplantation practitioners, can be used in assisting the MOH, non-governmental organisations, private providers and industry in program planning and evaluation of transplantation services.

The objectives of NTR are to:

1. Determine the frequency and distribution of all types of transplantation activity in Malaysia.
2. Determine the outcomes of transplantation.
3. Determine the factors influencing outcomes of transplantation.
4. Evaluate transplantation services in the country.
5. Stimulate and facilitate research on transplantation and its management.

The NTR receives data on organ / tissue transplantation from 3 main sources:

1. The individual doctors who provide transplantation services, who voluntarily report data to the NTR. Data collection will be from seven main types of transplantation services:
  - Blood and Marrow Transplant
  - Cornea Transplant
  - Heart and Lung Transplant
  - Liver Transplant
  - Renal Transplant
  - Heart Valve Transplant
  - Bone and Tissue Transplant
2. The National Vital Registration system (Jabatan Pendaftaran Negara). Their data is useful for determining or verifying mortality outcomes of transplant patients.
3. Information Documentation Unit of the MOH, which operates the Health Management Information System (HMIS).

## **NTR SPONSORS**

- Medical Development Division, MOH
- National Transplant Coordinating Committee
- Malaysian Society Of Transplantation
- Clinical Research Centre, Hospital Kuala Lumpur

## **GOVERNANCE BOARD**

The Governance Board is established to govern the NTR and the terms of reference are as follows:

1. Provide the necessary leadership and direction for the National Transplant Registry.
2. Ensure that the vision, objectives and goals of the National Transplant Registry are clearly established and that strategies are in place for achieving them.
3. Establish policies and procedures for the proper functioning of the National Transplant Registry.
4. Seek input and feedback from all stakeholders and end users with regards to their expectations and the performance of the National Transplant Registry.
5. Secure funding and financial support for the National Transplant Registry.
6. Galvanize the commitment of all interested parties to the National Transplant Registry.
7. Receive and review the annual report from the steering committee.

Current members of the Governance Board are as follows:

### **Chairperson**

Dato' Dr Zaki Morad Mohd Zaher

### **Vice Chairperson**

Datin Dr Fadhilah Zowyah Lela Yasmin Mansor

### **Members:**

Datuk (Mr) Harjit Singh

Dr Teng Seng Chong

Tan Sri Dato' Seri Dr Mohd. Ismail Merican

Mr Rohan Malek

Dr Hooi Lai Seong

Dr Aizai Azan Abdul Rahim

Dr Suzina Sheikh Ab. Hamid

Dr Abdul Malik Hussein

Dr Tan Chwee Choon

Dato' Dr Chang Kian Meng

Dato' Dr M.Venugopal Balchand

Dr Goh Pik Pin

Dr Jamaiah Haniff

Malaysian Society of Transplantation

Medical Development Division, Ministry of Health

Malaysian Liver Foundation

Malaysian Urological Association

Malaysian Society of Nephrology

National Heart Association of Malaysia

Malaysian National Tissue Bank

Malaysian Orthopaedic Association

National Kidney Foundation of Malaysia

Malaysian Society of Haematology

Malaysian Association of Thoracic & Cardiovascular Surgeons

Clinical Research Centre, Hospital

Kuala Lumpur & Malaysian Society of Ophthalmology

Clinical Research Centre, Hospital

Kuala Lumpur

### **Secretariat:**

Ms.Leong Wei Chee



## **EXPERT PANEL**

NTR has established seven groups of Expert Panel comprising members of the medical profession and allied health with expert knowledge in these various disciplines:

- Blood and Marrow Transplant
- Cornea Transplant
- Heart and Lung Transplant
- Liver Transplant
- Renal Transplant
- Heart Valve Transplant
- Bone and Tissue Transplant

The role of the Expert Panel is:

1. To undertake quality control of the clinical registry form and the data dictionary as deemed necessary.
2. To undertake quality control of the reported data.
3. To undertake literature review on the relevant area.
4. To interpret the results generated by NTR's statisticians.
5. To write the section of the NTR report relevant to the panel's expertise.
6. To specify the data reporting procedure.
7. To facilitate access to source documents for Transplant Registry Unit (TRU) staff to do data verification.

List of Expert Panel members for each respective discipline:

### **Discipline: Blood and Marrow Transplant**

<b>Co-chairperson (Adult)</b>	Dr Alan Teh Kee Hean
<b>Co-chairperson (Paeds)</b>	Prof Dr Chan Lee Lee
<b>Members</b>	Prof Gan Gin Gin @ Gan Shiaw Sze
	Dr Hishamshah Mohd Ibrahim
	Prof Madya Dr S Fadilah Abdul Wahid
	Dr Ong Tee Chuan

### **Discipline: Cornea Transplant**

<b>Chairperson</b>	Dr Shamala Retnasabapathy
<b>Members</b>	Prof Dato' Dr Veera Ramani
	Dr Choong Yean Yaw
	Dr Michael Law Sie Haur
	Dr Thiageswari Umapathy
	Dr Chandramalar Santhirathelagan
	Associate Prof Dr Mohtar Ibrahim

**Discipline: Heart and Lung Transplant**

<b>Chairperson</b>	Mr Mohamed Ezani Hj Md. Taib
<b>Members</b>	Dato' Dr David Chew Soon Ping
	Dr Aizai Azan Abdul Rahim
	Dr Abdul Rais Sanusi
	Dr Ashari Yunus

**Discipline: Liver Transplant**

<b>Chairperson</b>	Dr Ganesalingam A/L Kanagasabai
<b>Members</b>	Dr Lim Kin Foong
	Dr Haniza Omar
	Dr Lim Chooi Bee
	Prof Dr Lee Way Seah

**Discipline: Renal Transplant**

<b>Chairperson</b>	Dr Goh Bak Leong
<b>Members</b>	Dato' Dr Zaki Morad Mohd Zaher
	Dato' Dr (Mr) Rohan Malek
	Dr Fan Kin Sing
	Dr S Prasad Menon
	Dr Lily Mushahar
	Dr Lim Soo Kun

**Discipline: Bone and Tissue Transplant**

<b>Chairperson</b>	Dr Suzina Sheikh Ab Hamid
<b>Members</b>	Dr Abdul Malik Mohamed Hussein
	Assoc Prof Dr Ahmad Hafiz Zulkifly
	Dr Thiageswari Umapathy
	Dr Ewe Teong Wan
	Dr Norimah Yusof
	Assoc Prof Dr Vivek Ajit Singh

**Discipline: Deceased (Cadaveric) Organ and Tissue Donations**

<b>Chairperson</b>	Datin Dr Fadhilah Zowyah Lela Yasmin Mansor
<b>Members</b>	Dr Hooi Lai Seong
	Dr Omar Sulaiman
	Dr Muhammed Anis Bin Abdul Wahab
	Matron Jamaliah Kario
	Staff Nurse Santi A/P Krishanan

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