

2000

Edited by
Guido G. Persijn, Bernard Cohen

CIP-GEGEVENS KONINKLIJKE BIBLIOTHEEK, DEN HAAG

Annual

Annual Report/Eurotransplant International Foundation.–Leiden:
Eurotransplant Foundation. -III., graf., tab.

Verschijnt jaarlijks

Annual report 2000 / ed. by Guido G. Persijn and Bernard Cohen
ISBN 90-71658-19-8

Trefw.: Eurotransplant Foundation; jaarverslagen.

Eurotransplant mission statement

Mission

Service organization for transplant candidates through the collaborating transplant programmes within the organization

Goals

- To achieve an optimal use of available donor organs and tissues.
- To secure a transparent and objective selection system, based upon medical criteria.
- To assess the importance of factors which have the greatest influence on transplant results.
- To support donor procurement to increase the supply of donor organs and tissue.
- To further improve the results of transplantation through scientific research.
- Promotion, support and coordination of organ transplantation in the broadest sense of terms.

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Board of Eurotransplant International Foundation

as per December 31, 2000

Prof.Dr. Y. Vanrenterghem, Leuven	chairman
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Prof.Dr. U. Frei, Berlin	on behalf of the kidney / pancreas section
Prof.Dr. J.P. van Hooff, Maastricht	on behalf of the kidney / pancreas section
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Prof.Dr. G. Laufer, Innsbruck	on behalf of the thoracic section
Prof.Dr. J. Hauss, Leipzig	on behalf of the liver section
Prof.Dr. M.J.H. Slooff, Groningen	on behalf of the liver section
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Prof.Dr. D. Latinne, Brussels (LA)	on behalf of the tissue typing section
Vacancy*	ethical advisor
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Prof.Dr. J. Lerut, Brussels (LA)	on behalf of the Belgian Transplant Society
Dr. J.A. van der Vliet, Nijmegen	on behalf of the Dutch Transplant Society
Prof.Dr. G. Offermann, Berlin	on behalf of the German Transplant Society
Dr. J. Vončina, Ljubljana	on behalf of the Slovenian Transplant Society
Prof.Dr. F.H.J. Claas, Leiden	on behalf of the Eurotransplant Reference Laboratory

*Since February 2001 Prof. Dr. P. Schotsmans has been appointed as the new ethical advisor.

TRANSPLANT CENTRES IN 2000

Centre- Centre / City Physician Surgeon Transplant coordinators / administrators
code

Renal Transplant Centres

Austria

GA	Medizinische Universitätsklinik, Graz	P. Petritsch, H. Müller	H. Holzer	M. Schweiger, V. Stadlbauer
IB	Chirurgische Universitätsklinik, Innsbruck	R. Margreiter, A. Königsrainer	C. Bösmüller, K. Lhotta	H. Feitz, P. Schobel
OE	Krankenhaus der Elisabethinen, Linz	H-J. Böhmig	H-K. Stummvoll	E. Leitner
OL	Allgemeines Krankenhaus, Linz	P. Brücke	G. Biesenbach	C. Gabriel
WD	Kinderdialyse Allgemeines Krankenhaus, Wien	F. Mühlbacher, R. Steininger	E. Balzar	M. Bodingbauer, R. Asari
WG	Universitätsklinik für Chirurgie, Wien	F. Mühlbacher, R. Steininger	W. Hörl, J. Kovarik	M. Bodingbauer, R. Asari

Belgium

AN	Universitair Ziekenhuis Antwerpen, Edegem	D. Ysebaert, T. Chapelle, G. Roeyen	M. Debroe	G. Van Beeumen, W. Van Donink
BJ	Academisch Ziekenhuis der Vrije Universiteit, Brussel	J. Lamote	D. Verbeelen	B. Amerijckx
BR	ULB, Hôpital Erasme, Bruxelles	L. De Pauw	D. Abramowicz	E. Angenon, V. Duthie, B. Van Haelewijck
GE	Universitair Ziekenhuis, Gent	J. De Roose, U. Hesse, F. Vermassen	N. Lameire	L. Colenbie, M. Van der Vennet
LA	Cliniques Universitaires St. Luc, Bruxelles	J. Squifflet, M. Mourad, J. Malaise	Y. Pirson, E. Goffin	V. Dumont, C. Lecomte, P. Vanormelingen
LE	Kinderdialyse Universitair Ziekenhuis Gasthuisberg, Leuven	W. Coosemans, J. Pirenne	R. Van Damme-Lombaerts	F. Van Gelder, D. Van Hees, S. Kimpfen
LG	Centre Hospitalier Universitaire, Liège	M. Meurisse, O. Detry	M. Beaujean	M-H. Delboulle, M-F. Hans
LM	Universitair Ziekenhuis Gasthuisberg, Leuven	W. Coosemans, J. Pirenne	Y. Vanrenterghem	F. Van Gelder, D. Van Hees, S. Kimpfen

Germany

AK	Universitätsklinikum der Rheinisch-Westfälischen TH, Aachen	G. Jakse	J. Floege	A. Homburg, D. Wilhelmis
AU	Zentralklinikum, Augsburg	H. Weiprecht	G. Schlomok	C. Schulz
BB	Ruhr Universität, Bochum	W.O. Bechstein	S. Tepel	S. Kolb
BC	Charité-Campus Virchow Klinikum der Humboldt Universität, Berlin	P. Neuhaus	U. Frei	D. Horch
BE	Universitätsklinikum Benjamin Franklin, Berlin	K. Miller	G. Offermann	E. Müller
BM	Kliniken der Freien Hansestadt, Bremen	K. Dreikorn	A. Lison	S. Tietz, Ch. Bahrs,
BO	Klinikum der Urologischen und Medizinischen Universität, Bonn	S. Müller	H-U. Klehr, T. Sauerbruch	E. Backhaus, B. Salz
DR	Technischen Universität, Dresden	M. Wirth	P. Gross	N. Hildebrandt
DU	Med. Einrichtungen der Heinrich-Heine-Universität, Düsseldorf	W. Sandmann	B. Grabensee	B. Schaepeers, S. Hinkel
ES	Universitätsklinikum, Essen	C.E. Broelsch, H. Lang	Th. Philipp	R. Abel
FD	Klinikum Fulda, Fulda	T. Kälble	W. Fassbinder	R. Werner
FM	Klinikum der Johann-Wolfgang-Goethe-Universität, Frankfurt	D. Jonas, P. Kramer	H. Geiger, E-H. Scheuermann	S. Schleede, A. Schischma
FR	Klinikum der Albert-Ludwigs-Universität, Freiburg	G. Kirste	R. Walz	M. Blümke, F. Schaub
GI	Klinikum der Justus-Liebig-Universität, Gießen	H. Grimm	R. Weimer	I. Köhler, S. Zinn
GO	Klinikum der Georg-August-Universität, Göttingen	B. Ringe	G. Müller	C. Wachsmuth
HA	Klinikum der Martin-Luther-Universität, Halle	P. Fornara	A. Hamza	E. Frey
HB	Klinikum der Ruprecht-Karls-Universität, Heidelberg	G. Staehler	O. Mehls, E. Ritz	C. Clausen
HG	Universitäts-Krankenhaus Eppendorf, Hamburg	H. Hüland	R. Stahl	K. Rohwer
HM	Nephrologisches Zentrum Niedersachsen, Hann. Münden	K. Rohwer, W. Schott	E. Quellhorst	H. Basse, F. Vogelsang
HO	Klinikum der Medizinischen Hochschule, Hannover	J. Klempner	K. Koch	C. Friedrichsohn
HS	Klinikum der Universität des Saarlandes, Homburg/Saar	M. Ziegler	H. Köhler, W. Riegel	

Centre-code	Centre / City	Surgeon	Physician	Transplant coordinators / administrators
JE	Klinikum der Friedrich-Schiller-Universität, Jena	J. Schubert	H. Sperschneider	R. Bömer
KI	Klinikum Christian-Albrechts-Universität, Kiel	F. Fändrich	H. Kraemer-Hansen	G. Schütt
KL	Klinik der Universität Köln-Lindenthal, Köln	A. Hölscher	C. Baldamus	C. Freudenhammer
KM	Städtische Krankenanstalten Köln-Merheim, Köln	A. Paul, H. Troidl	W. Ams, M. Weber	C. Freudenhammer
KS	Westfalz-Klinikum, Kaiserslautern	W. Seybold-Epting	F. Albert, U. Albert	
LP	Klinikum der Universität, Leipzig	J. Hauss	H. Achenbach	T. Weiskirchen
LU	Klinikum der Medizinischen Universität, Lübeck	M. Strik	L. Fricke	L. Fricke, E. Petersen
MA	Klinikum der Stadt, Mannheim	J. Sturm, S. Post	P. Schülle, F. van der Woude	Ch. Krenzel
MH	Klinikum Rechts der Isar der Technischen Universität, München	M. Stangl	W. Eberhardt, C. Schulz	
ML	Klinikum Großhadern der Ludwig-Maximilians-Universität, München	W. Land	G. Hillebrand	C. Schulz
MN	Klinikum der Westfälischen Wilhelms-Universität, Münster	K. Diel	S. Heidenreich	M. Mauritz-Bröcker
MR	Klinikum Lahberge der Philipps-Universität, Marburg	M. Rothmund	H. Lange, H. Ebel	U. Heck
MZ	Klinikum der Johannes-Gutenberg-Universität, Mainz	G. Otto	E. Wandel	C. Kreber-Walther
NB	Med. Einrichtungen der Universität Erlangen-Nürnberg, Nürnberg	K. Schrott	U. Kunzendorf	C. Schlüter, H. Müller-Erhard
RB	Klinikum der Universität, Regensburg	K. Jauch	B. Krämer	K. Burkhardt, H. Müller-Erhard
RO	Klinikum der Universität, Rostock	H. Seiter, R. Bast	R. Schmidt	F-P. Nitschke, A. Manecke
ST	Katharinenhospital, Stuttgart	H. Krüger, J. Teschner	C. Olbricht	M. Kalus, B. Schreiber
TU	Klinikum der Eberhard-Karls-Universität, Tübingen	R. Viebahn, N. Braun	T. Risler	C. Fischer-Fröhlich
UL	Klinikum der Universität, Ulm	D. Abendroth	S. Rettenberger, A. Michels	S. Eisenreich
WZ	Klinikum der Julius-Maximilians-Universität, Würzburg	H. Riedmiller	C. Wanner, E. Heidbreder	
Luxembourg				
LX	Centre Hospitalier de Luxembourg	S. Lamy	P. Duhoux, D. Pouthier, F. Prospert	E. Tasch, J. de Sousa
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AW	Academisch Medisch Centrum, Amsterdam	M. Idu	S. Surachno	P. Batavier, J. Popma, F. Ultee
GR	Academisch Ziekenhuis, Groningen	R. Ploeg, R. Porte, H. Hofker	J. Homan van der Heide	C. Graveland, A. Schuur, F. Sneep
LB	Leids Universitair Medisch Centrum, Leiden	J. Ringers	L. Paul	R. Dam, H. Hagensaars, M. Kruyswijk
MS	Academisch Ziekenhuis, Maastricht	E. van Heurn	J. van Hooff	O. Stroosma, J. Jonger, T. Wind, W. de Jong, M. Benders
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RD	Academisch Ziekenhuis Dijkzigt, Rotterdam	J. IJzermans	W. Weimar	R. Dam, H. Hagensaars, M. Kruyswijk
RS	Sophia Kinderziekenhuis, Rotterdam	J. Bergmeijer	J. Nauta, K. Cransberg	H. Hagensaars, M. Kruyswijk
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Slovenia				
LO	University Medical Center, Ljubljana	M. Mihelič, B. Tršinar	D. Kovač, A. Kandus	M. Čalič, E. Javanovič
Heart Transplant Centres				
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GA	Chirurgische Universitätsklinik, Graz	K-H. Tschellessnigg, A. Wasler	W. Klein	M. Schweiger, V. Stadlbauer
IB	Chirurgische Universitätsklinik, Innsbruck	H. Antretter, R. Margreiter, G. Laufer	O. Pachinger, G. Poelzl	H. Fetz, P. Schobel

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KG	Herz- und Diabeteszentrum, Karlsruhe	L. Eckel, H-G. Wollert	W. Motz	F.-P. Nitschke, A. Manecke
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KL	Klinik der Universität Köln-Lindenthal, Köln	E. de Vivie	E. Erdmann	F. Kuhn-Régnier
KR	Klinik für Herzchirurgie, Karlsruhe	H. Postval	P. Stahlhut	
KS	Westfälizklinikum, Kaiserslautern	W. Seybold-Epting	G. Glunz	M. Schmid
LP	Klinikum der Universität, Leipzig	F. Mohr	A. Rahmel	T. Weiskirchen
MD	Deutsches Herzzentrum, München	R. Lange, M. Overbeck	B. Permanetter	C. Schulz, U. Böckler
ML	Klinikum Großhadern der Ludwig-Maximilians-Universität, München	B. Reichart, P. Überfuhr	B. Meiser	C. Schulz
MN	Klinikum der Westfälischen Wilhelms-Universität, Münster	H. Scheld	C. Schmid	M. Mauritz-Bröcker
MZ	Klinikum der Johannes-Gutenberg-Universität, Mainz	W. Kasper-König	J. Meyer	C. Kreber-Walther
NB	Med. Einrichtungen der Universität Erlangen-Nürnberg	M. Weyand,	R. Tandler	C. Schlüter, H. Müller-Erhard
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TU	Klinikum der Eberhard-Karls-Universität, Tübingen	G. Ziemer, H. Aebert	V. Kühlkamp	C. Fischer-Fröhlich
WZ	Klinikum der Julius-Maximilians-Universität, Würzburg	O. Elert		S. Eisenreich

Centre- code	Centre / City	Surgeon	Physician	Transplant coordinators / administrators
The Netherlands				
RD	Academisch Ziekenhuis Dijkzigt, Rotterdam	A. Bogers, L. Maat	M. Simoons	R. Dam, H. Hageaars, M. Kruyswijk
UT	Academisch Ziekenhuis, Utrecht	A. Brutel de la Rivière, J. Lahpor	N. de Jonge	P. Batavier, J. Popma, F. Ultee
Slovenia				
LO	University Medical Center, Ljubljana	T. Gabrijelčič, T. Klokočovnik	D. Zorman, B. Vrtovec	B. Vrtovec
Lung Transplant Centres				
Austria				
IB	Chirurgische Universitätsklinik, Innsbruck	G. Laufer, L. Müller, R. Margreiter	Ch. Prior, Ch. Geltner	H. Fetz, P. Schobel
WG	Universitätsklinik für Chirurgie, Wien	W. Klepetko, W. Wisser		P. Neuhauser, J. Seweryn
Belgium				
BR	ULB, Hôpital Erasme, Bruxelles	Ph. de Franquen	M. Estenne	E. Angenon, V. Duthie, B. Van Haelewijk
LM	Universitair Ziekenhuis Gasthuisberg, Leuven	T. Lerut	G. Verleden	F. Van Gelder, D. Van Hees, S. Kimpen
Germany				
BA	Herz- & Diabeteszentrum Nordrhein-Westfalen, Bad Oeynhausen	R. Körfner, K. Minami	G. Tenderich	S. Wlost, B. Heistermann
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HS	Klinikum Universität des Saarlandes, Homburg/Saar	H. Schäfers	G. Sybrecht	C. Friedrichsohn
JE	Klinikum der Friedrich-Schiller-Universität, Jena	Th. Wahlers		R. Bömer
KI	Klinikum der Christian-Albrechts-Universität, Kiel	J. Cremer	A. Jäckle	N. Robien, G. Schütt
LP	Klinikum der Universität, Leipzig	H. Autschbach		
ML	Klinikum Großhadern der Ludwig-Maximilians-Universität, München	H. Fuerst, B. Reichart	F. Kur, W. Voglmeier	C. Schulz
MN	Klinikum der Westfälischen Wilhelms-Universität, Münster	H. Scheld	M. Semik	M. Mauritz-Bröcker
MZ	Klinikum der Johannes-Gutenberg-Universität, Mainz	E. Mayer	J. Lill	C. Kreber-Walther
The Netherlands				
GR	Academisch Ziekenhuis, Groningen	M. Erasmus, T. Ebels, J. Meuzelaar	W. van der Bij	C. Graveland, A. Schuur, F. Snee
Liver Transplant Centres				
Austria				
GA	Chirurgische Universitätsklinik, Graz	K.-H. Tschellessnigg, F. Iberer	J.-A. Kreis	M. Schweiger, V. Stadlbauer
IB	Chirurgische Universitätsklinik, Innsbruck	R. Margreiter, A. Königsrainer, B. Spechtenhauser		W. Vogel, I. Graziadei, H. Fetz, P. Schobel
WG	Universitätsklinik für Chirurgie, Wien	F. Mühlbacher, R. Steininger	A. Gangl	M. Bodingbauer, R. Asari
Belgium				
AN	Universitair Ziekenhuis Antwerpen, Edegem	D. Ysebaert, T. Chapelle, G. Roeyen	P. Michielsens	G. Van Beeumen, W. Van Donink

BR	ULB, Hôpital Erasme, Bruxelles	M. Gelin, V. Donckier	M. Adler	E. Angenon, V. Duthie, B. Van Haelewijsck,
GE	Universitair Ziekenhuis, Gent	B. De Hemptinne, U. Hesse, P. Pattyn, R. Troisi	H. Van Vierberghe, I. Colle	L. Colenbie, M. Van der Vennet
LA	Cliniques Universitaires St. Luc, Bruxelles	J.-B. Otte, R. Reding, J. Lerut	E. Sokal, O. Starhel	M. Jansen, F. Roggen
LG	Centre Hospitalier Universitaire, Liège	P. Honoré, M. Meurisse, O. Detry	J. Beleiche	M.-H. Delboulle, M.-F. Hans
LM	Universitair Ziekenhuis Gasthuisberg, Leuven	R. Aerts, W. Coosemans, J. Pirenne	J. Fevery, F. Nevens	F. Van Gelder, D. Van Hees, S. Kimpfen
Germany				
AK	Universitätsklinikum der Rheinisch-Westfälischen TH, Aachen	V. Schumpelick, R. Kasperk	S. Matern	D. Wilhelms
BO	Chirurgische Universitätsklinik, Bonn	A. Hirner, M. Wolff	T. Sauerbruch, U. Spengler	E. Backhaus, B. Salz
BC	Charité-Campus Virchow Klinikum der Humboldt Universität, Berlin	P. Neuhaus	U. Frei	D. Horsch
DU	Med. Einrichtungen der Heinrich-Heine-Universität, Düsseldorf	P. Goretzki, W. Röher		B. Schaeppers
ES	Universitätsklinikum, Essen	C. Broelsch, M. Malago		R. Abel
FM	Klinikum der Johann-Wolfgang-Goethe-Universität, Frankfurt	A. Encke, E. Hanisch, B. Markus	C. Allers	S. Schleede, A. Schischma
FR	Klinikum der Albert-Ludwigs-Universität, Freiburg	G. Kirste	H. Blum	M. Blümke, F. Schaub
GO	Klinikum der Georg-August-Universität, Göttingen	B. Ringe	G. Ramadori	
HB	Klinikum der Ruprecht-Karls-Universität, Heidelberg	Ch. Herfarth, E. Klar		E. Frey
HG	Universitäts-Krankenhaus Eppendorf, Hamburg	X. Rogiers	M. Sterneck	T. Karbe, R. Kütemeier
HO	Klinikum der Medizinischen Hochschule, Hannover	J. Klempnauer	M. Manns	H. Basse, F. Vogelsang
JE	Klinikum der Friedrich-Schiller-Universität, Jena	J. Scheele		R. Bömer
KI	Klinikum der Christian-Albrechts-Universität, Kiel	B. Kremer	H. Kraemer-Hansen	G. Schütt
KL	Klinik der Universität Köln-Lindenthal, Köln	T. Beckurts	T. Goesser	C. Freudenhammer
KM	Städtische Krankenanstalten Köln-Merheim, Köln	A. Paul	W. Ams	C. Freudenhammer
LP	Klinikum der Universität, Leipzig	J. Hauss	J. Mössner	T. Weiskirchen
MB	Klinikum Otto-von-Guericke Universität, Magdeburg	H. Lippert, J. Fahlke	S. Wolff, R. Mantke	J. Fahlke
MH	Klinikum Rechts der Isar der Technischen Universität, München	M. Stangl	V. Schusdziarra	C. Schulz
ML	Klinikum Großhadern der Ludwig-Maximilians-Universität, München	H.-G. Rau	A. Gerbes	C. Schulz
MN	Klinikum der Westfälischen Wilhelms-Universität, Münster	N. Senninger, K. Diedl		M. Mauritz-Bröcker
MZ	Klinikum der Johannes-Gutenberg-Universität, Mainz	G. Otto	A. Lohse	C. Kreber-Walther
NB	Chirurgische Klinik der Universität Erlangen-Nürnberg, Erlangen	W. Hohenberger, Th. Reck		C. Schlüter, H. Müller-Erhard
RB	Klinikum der Universität, Regensburg	K. Jauch, M. Anthuber		
RO	Klinikum der Universität, Rostock	U. Hopt, W. Schareck	S. Liebe	F.-P. Nitschke, A. Manecke
TU	Klinikum der Eberhard-Karls Universität, Tübingen	R. Viebahn	H. Becker	C. Fischer-Fröhlich
WZ	Klinikum der Julius-Maximilians-Universität, Würzburg	W. Timmermann		S. Eisenreich
The Netherlands				
GR	Academisch Ziekenhuis, Groningen	K. de Jong, P. Peeters, M. Slooff	A. van den Berg, E. Haagsma,	C. Graveland, A. Schuur, F. Sneepe
		R. Porte	I. Klompmaker, R. de Kneegt	
LB	Leids Universitair Medisch Centrum, Leiden	O. Terpstra	B. van Hoek	R. Dam, H. Hagenaars, M. Kruyswijk
RD	Academisch Ziekenhuis Dijkzigt, Rotterdam	J. IJzermans, H. Tilanus, G. Kazemier	H. Metselaar	R. Dam, H. Hagenaars, M. Kruyswijk
Slovenia				
LO	University Medical Centre, Ljubljana	D. Stamisavljevič, T. Sojar	S. Marković, S. Stepec	M. Kolman, J. Kotar

Centre- code Centre / City Surgeon Physician Transplant coordinators / administrators

Pancreas (*Islet) Transplant Centres

Austria

IB Chirurgische Universitätsklinik, Innsbruck

H. Fetz, P. Schobel

Belgium

AN Universitair Ziekenhuis Antwerpen, Edegem

G. Van Beeumen, W. Van Donink

BP* Academisch Ziekenhuis der Vrije Universiteit, Brussel

C. Hendrickx

BR ULB, Hôpital Erasme, Bruxelles

E. Angenon, V. Duthie, B. Van Haelewijsck

GE Universitair Ziekenhuis, Gent

L. Colenbije, M. Van der Vennet

LA Cliniques Universitaires St. Luc, Bruxelles

V. Dumont, C. Lecomte, P. Vanormelingen

LM Universitair Ziekenhuis Gasthuisberg, Leuven

F. Van Gelder, D. Van Hees, S. Kimpfen

Germany

BB Knappschaftskrankenhaus, Bochum

W. Bechstein

BC Charité-Campus Virchow Klinikum der Humboldt Universität, Berlin

U. Frei, A. Kahl

BO Chirurgische Universitätsklinik, Bonn

E. Backhaus, B. Salz

ES Universitätsklinikum, Essen

C. Broelsch, G. Testa

FR Klinikum der Albert-Ludwigs-Universität, Freiburg

H. Blum

GF* Klinikum der Justus-Liebig-Universität, Gießen

R. Bretzel, M. Eckhard

HB Klinikum der Ruprecht-Karls-Universität, Heidelberg

W. Stremmel

HG Universitäts-Krankenhaus Eppendorf, Hamburg

T. Karbe, R. Kitemeier

HO Klinikum der Medizinischen Hochschule, Hannover

H. Basse, F. Vogelsang

JE Klinikum der Friedrich-Schiller-Universität, Jena

H. Sperschnieder

KL Klinik der Universität Köln-Lindenthal, Köln

M. Pollok

KM Städtische Krankenanstalten Köln-Merheim, Köln

C. Freudenhammer

LP Klinikum der Universität, Leipzig

W. Arns

LU Klinikum der Medizinischen Universität, Lübeck

C. Freudenhammer

MA Klinikum der Stadt, Mannheim

L. Fricke, E. Petersen

ML Klinikum Großhadern der Ludwig-Maximilians-Universität, München

P. Schülle, F. van der Woude

MN Klinikum der Westfälischen Wilhelms-Universität, Münster

R. Landgraf

MR Klinikum Lahnberge der Philipps-Universität, Marburg

M. Mauritz-Bröcker

MZ Klinikum der Johannes-Gutenberg-Universität, Mainz

M. Rothmund, A. Hellinger

NB Chirurgische Klinik der Universität Erlangen-Nürnberg, Erlangen

C. Kreber-Walther

RB Klinikum der Universität, Regensburg

C. Schlüter, H. Müller-Erhard

RO Klinikum der Universität, Rostock

F-P. Nitschke, A. Manecke

TU Klinikum der Eberhard-Karls-Universität, Tübingen

R. Hampel

UL Klinikum der Universität, Ulm

C. Fischer-Fröhlich

WZ Klinikum der Julius-Maximilians-Universität, Würzburg

S. Rettenberger, A. Michels

C. Wanner

S. Eisenreich

The Netherlands

GR Academisch Ziekenhuis, Groningen

C. Graveland, A. Schuur, F. Sneep

LB Leids Universitair Medisch Centrum, Leiden

R. Dam, H. Hagenaars, M. Kruyswijk

MS Academisch Ziekenhuis, Maastricht

O.B. Stroosma

J. Homan van der Heide

J. de Fijter

J. van Hooff

R. Ploeg, R. Porte

J. Ringers

E. van Heurn

Tissue Typing Laboratories

ETRL Eurotransplant Reference Laboratory, Leids Universitair Medisch Centrum, Leiden, The Netherlands

Austria

GA Universitätsklinik, Abteilung für Transfusionsmedizin und Immunohämatologie, Graz
 IB Universitätsklinik, HLA Labor, Innsbruck
 OL Allgemeines Krankenhaus, Blutzentrale, Linz
 OW Allgemeines Krankenhaus, HLA Labor, Wels
 WG Institut für Blutgruppenserologie, Wien

Belgium

AN Bloedtransfusiecentrum Antwerpen, Belgische Rode Kruis, Edegem
 BJ Academisch Ziekenhuis der Vrije Universiteit, Bloedtransfusiecentrum Jette, Brussel
 BR Hôpital Erasme, Tissue typing laboratory, Bruxelles
 GE Universitair Ziekenhuis, Tissue typing laboratory, Gent
 LA Université de Louvain, Tissue typing laboratory, Bruxelles
 LG Laboratoire des Groupes Sanguins, Liège
 LM Bloedtransfusiecentrum, Belgische Rode Kruis, Leuven

Germany

AK Mikrobiologie am Universitätsklinikum der Rheinisch-Westfälischen TH, Aachen
 BA Herz- & Diabetesenzentrum Nordrhein Westfalen, Bad Oeynhausen
 BE Universitätsklinikum Benjamin Franklin, Labor für Gewebetypisierung, Berlin
 BV Charité-Campus Virchow Klinikum der Humboldt Universität, Berlin
 DU Institut für Blutgerinnung und Transfusionsmedizin, Düsseldorf
 ER Institut für Klinische Immunologie, Erlangen
 ES Universitätsklinikum, Institut für Immunologie, Essen
 FM Immunohämatologie, Blutspendedienst Hessen, Frankfurt
 FR Blutspendedienst, Labor für Gewebetypisierung, Freiburg
 GI Institut für Klinische Immunologie und Transfusionsmedizin, Gießen
 GO Klinikum der Universität, HLA Labor, Göttingen
 HA Institut für Pathologische Biochemie, Interdisziplinäres Typisierungslabor, Halle
 HB Institut für Immunologie und Serologie, Heidelberg
 HG Universitäts-Krankenhaus Eppendorf, HLA Labor, Hamburg
 HM Gemeinschaftspraxis, Kassel
 HO Klinikum der Medizinischen Hochschule, Immunohämatologie/Blutbank, Hannover
 JE Institut für Pathologische Biochemie, Interdisziplinäres Typisierungslabor, Halle
 KI Klinikum der Christian-Albrechts-Universität, HLA Labor, Kiel
 KM Institut für Transfusionsmedizin, Köln-Merheim
 KS Institut für Rechtsmedizin, Transplantationsimmunologie, Kaiserslautern
 LP Institut für Transfusionsmedizin, Leipzig
 LU Institut für Immunologie und Transfusionsmedizin, Lübeck
 ML Kinderklinik der Ludwig-Maximilians-Universität, HLA Labor, München
 MR Klinikum Lahnberge der Philipps-Universität, HLA Labor, Marburg
 MZ Klinikum der Johannes-Gutenberg Universität, HLA Labor, Mainz
 RO Klinikum der Universität, Abteilung für Transfusionsmedizin, HLA Labor, Rostock
 TU Klinikum der Eberhard-Karls-Universität, Abteilung für Transfusionswesen und Blutbank, Tübingen
 UL DRK Blutspendezentrale, Transplantationsimmunologie, Ulm

Luxembourg

LX Centre Hospitalier, HLA Lab, Luxembourg

The Netherlands

AW Centraal Laboratorium Bloedtransfusiedienst, Nederlandse Rode Kruis, Amsterdam
 GR Laboratorium voor transplantatie-immunologie, Groningen
 LB Leiden University Medical Centre, Immunohämatologie, Leiden
 MS Academisch Ziekenhuis, Laboratorium voor weefseltypering, Maastricht
 NY Academisch Ziekenhuis St. Radboud, Bloedtransfusiedienst, Nijmegen
 UT Academisch Ziekenhuis, Bloedbank, Utrecht

Slovenia

LO Tissue Typing Centre, Blood Transfusion Centre, Ljubljana

Head

F. Claas, I. Doxiadis, G. Schreuder

G. Lanzer
 D. Schönitzer
 C. Gabriel
 C. Artman
 W. Mayr

L. Steenssens, G. Mertens
 C. Demanet
 E. Dupont, M. Andrien
 B. Vandekerckhove
 M. de Bruyère, D. Latinne
 C. Bouillemme
 M-P. Emonds

K. Schweitzer, M. Kleines
 K. Kleesiek
 S. Bünte
 C. Schönemann
 B. Kuntz, J. Enczmann
 R. Wabnuth
 H. Grosse-Wilde, U. Vögele
 C. Seidl
 H. Lang
 G. Bein, A. Reil
 H. Neumeyer
 H. Machulla
 G. Opelz, J. Mytilineos
 P. Kühni, C. Löliger
 B. Kreuzig, H. Weifhaar
 H. Robin-Winn, R. Blasczyk
 H. Machulla
 E. Westphal
 M. Dörner, I. Schuntermann
 B. Thiele
 S. Schröder
 M. Müller-Steinhardt
 E. Albert
 E. Wollmer
 W. Hitzler
 D. Barz, V. Kiefel
 D. Wernet, I. Schütte
 S. Goldmann, C. Flach

F. Hentges

N. Lardy
 S. Lems
 F. Claas, G. Schreuder
 E. van den Berg-Loonen
 W. Allebes, I. Joosten
 H. Otten

M. Jers, B. Vidan-Jeras

Foreword

It is with great pleasure that we present the Annual Report 2000, which includes a large amount of data on waiting lists, organ donations and transplantations.

As in previous years, all the waiting lists grew, with the exception of the heart and heart-lung waiting lists. Once again, the total number of patients who died while awaiting a first or repeat organ transplant was higher than in the previous year. Both trends are the result of the continuing organ shortage, although the number of donors whose organs were transplanted actually rose in 2000.

We are delighted to report that Slovenia became the sixth Eurotransplant member country on January 1, 2000. Eurotransplant was finally disentangled from the Dutch Transplant Foundation on August 1, 2000.

New legislation prompted Eurotransplant to adapt some of its allocation algorithms. However, compliance with national allocation rules also led to reduced uniformity between the member states. The Board of Eurotransplant has therefore spearheaded a process of harmonization of allocation schemes and has welcomed the joint declaration on cooperation within the Eurotransplant framework signed by the six ministers of health of the Eurotransplant countries.

One of the most important changes in the allocation system in 2000 was the introduction of the new patient-oriented Eurotransplant Liver Allocation Scheme (ELAS) on July 26, 2000. Another major change was the adaptation of the kidney allocation scheme waiting time definition on April 5, 2000; the waiting time now begins on the date of the first dialysis. The admission of high-urgency liver and thoracic organ recipients to the waiting list was also agreed, subject of approval of an audit committee. The pilot of the Eurotransplant Senior Program (old-for-old kidneys) was continued and completed successfully, thus effectively enlarging the pool of available donor kidneys.

We acknowledge the special efforts of Mike Smith, Jacqueline Smits and Jan de Boer, who have worked together with us on the annual report. We would also like to take this opportunity to thank all our colleagues in Eurotransplant for their continued support. We sincerely hope that you will enjoy reading the report and will continue to join Eurotransplant in its efforts to foster organ donation and transplantation in this new millennium.

Prof. Dr. Yves Vanrenterghem
President

Dr. Bernard Cohen
Director

Dr. Guido G. Persijn
Medical Director

Leiden, August 2001

1. Report of the Board and the central office of Stichting Eurotransplant International Foundation

V.C. Diepeveen-Huijsman and G.C. Wiesenhaan-Stellingwerff, Eurotransplant International Foundation, the Netherlands

The Board of Stichting Eurotransplant International Foundation met on January 19, June 19, October 4 and October 6, 2000. Two new Board members A were elected by the Assembly, namely Prof. G. Laufer from Innsbruck in the thoracic section and Prof. D. Latinne from Brussels (LA) in the tissue typing section. After the resignation of Prof. Lackner, there existed a Board member D vacancy (representative from society / ethicist).

1.1 Policy

The joint declaration regarding cooperation within the framework of Eurotransplant, initiated by the Dutch Minister of Health, has been signed by the Health Ministers of all Eurotransplant countries.

The agreement, under which Eurotransplant became the official allocation institution for Germany, was signed with the Bundesärztekammer, the Krankenkassen and the Krankenhausgesellschaft and approved by the German Ministerium für Gesundheit.

The disentanglement between Eurotransplant International Foundation (ETI) and the Dutch Transplant Foundation (NTS) became a fact as per August 1, 2000.

Quality standards for Eurotransplant transplant programs were discussed and approved by all organ specific Advisory Committees. The UNOS regulations served as a guideline for the establishment of these Eurotransplant quality standards.

Patient oriented allocation procedures in accordance with national legislation have been topics of discussion in all organ specific Advisory Committees. Furthermore, the development of follow-up data sets for each of the organ specific Advisory Committees, non-compliance of ESP (European Senior Program) centers, justice and utility in organ allocation, pediatric renal transplantation, first date of dialysis as starting point of waiting time, combined organ transplantation, the establishment of new islet cell transplant programs and the problem of reimbursement of German laboratories for their HIT (Highly Immunized Trial) and AM (Acceptable Mismatch Program) activities have been under discussion.

The shortage of organs was topic of discussion at all Board meetings. In this respect, possibilities to expand the donor organ pool were discussed, in particular the usage of non-heart-beating donors, elderly donors, compromised donors as well as living donations.

Joint declaration regarding cooperation within the framework of Eurotransplant International Foundation

The Minister of Consumer Affairs, Public Health and Environment of the Kingdom of Belgium,
The Federal Minister of Health of the Federal Republic of Germany,
The Minister of Health of the Grand Duchy Luxembourg,
The Minister of Health, Welfare and Sport of the Kingdom of the Netherlands,
The Federal Minister of Labour, Health and Social Affairs of the Republic of Austria and
The Minister of Health of the Republic of Slovenia

issue the following joint declaration regarding cooperation within the framework of Eurotransplant International Foundation

1. Introduction

As ministers of health we express our appreciation of the activities of Eurotransplant International Foundation (ETI) in Leiden, the Netherlands. ETI is a foundation that has arisen from private initiative. We take the view:

- that the importance of international cooperation on organ transplantation within the ETI framework has been demonstrated and should be continued;
- that distribution of the allocated donor organs as fairly as possible within a transparent and objective allocation system according to medical criteria is crucial for the acceptance of transplantation medicine in the participating countries;
- that a less voluntary form of cooperation on organ exchange within the ETI framework is necessary to retain public confidence and to bring about the required strengthening in ETI's position;
- that government responsibility within the existing regulatory framework for this area is unequivocal, as witnessed also by the legislation passed in the various countries recently;
- that the time is ripe to shape government involvement, also given the background of a possible broadening in cooperation within the ETI framework;
- that there is a need for ETI to be strengthened and for a clear and unambiguous framework for ETI to operate within, as this will enable it to perform its duties responsibly.

2. Framework

Given the above, we have agreed on the following framework. It incorporates the criteria that are essential for ETI to continue to operate responsibly and has the following components:

- objective allocation system according to medical criteria;
- safety and quality requirements;
- transparency and follow-up;
- government involvement.

3. Framework details

An objective allocation system according to medical criteria

All postmortal organs that become available for implantation (donor organs) in the participating countries are - taking account of the respective domestic legislation - reported to ETI¹. Using the allocation criteria arrived at on the basis of consensus, ETI's task is to ensure optimum allocation of the donor organs.

The donor organs are allocated according to the following criteria:

- the most important factor is to maximize equality of opportunity for patients, and to do so by taking into account objective medical criteria (e.g. compatibility of organ with recipient, the expected transplantation result, medical urgency and how long a recipient has been waiting) as well as individual differences;

¹ Within the framework of the twinning agreements between the participating countries' transplantation centers and similar institutions in other countries the same principles are applied as those included in the present document.

- the allocation system must be patient oriented;
- the allocation procedures must be transparent and objective;

Procedures must ensure justified, genuine distribution across the participating countries in a manner that takes account of the solidarity principle within each country.

The objective is transparency of the medical criteria applied to transplantation and the moment of registration on the waiting list. The placing of patients on the waiting list and the determination of the criteria applied here are matters primarily for the doctors concerned and must take place in accordance with the most recent advances in medical science.

Safety and quality requirements

The state of a donor organ eligible for allocation by ETI must comply with those safety and quality requirements that can be imposed in accordance with the most recent advances in medical science. ETI must ensure that they do so comply.

Transparency and follow-up

Given the need for the allocation procedures to be transparent and objective, government in the participating countries must receive current and reliable information periodically - and, if necessary, on request - in order to facilitate monitoring of the entire organ allocation process and ensure that the allocation criteria and the safety and quality requirements are being applied.

Government involvement

This involvement will be constituted by ETI's answerability to government in the participating countries under conditions still to be elaborated; these will include a periodic evaluation of how ETI is working.

4. Action items

Given the above considerations and the need to take account of national regulatory frameworks, as well as the efforts directed at the implementation of appropriate measures to improve the existing opportunities for postmortal organ donation, we as ministers of health:

- promote the reporting within the respective domestic regulatory frameworks of all donor organs to ETI as the organization responsible - on the basis of the allocation criteria arrived at by consensus - for ensuring optimum allocation of donor organs;
- request ETI - assuming a patient oriented allocation system within the respective domestic regulatory frameworks, in cooperation with experts and in line with the most recent advances in medical science - to present to government in the participating countries a set of basic principles for organ allocation internationally;
- agree with ETI on what information, in what form, and how, government in the participating countries is to be supplied with;
- enter discussion with ETI on how to shape government involvement;
- promote discussion with and between the expert and professional organizations (in the first instance medical professional organizations) in the participating countries in order to achieve further clarity for patients eligible for transplantation;
- request that ETI, operating according to the general principles and criteria specified in this document, cooperates with experts from the participating countries and, in close consultation with them, generates directives for the twinning agreements between the transplantation centers in the participating countries and similar institutions in other countries.

Brussels, The Minister of Consumer Affairs, Public Health and Environment of the *Kingdom of Belgium*,
Magda Aelvoet

Bonn, The Federal Minister of Health of the *Federal Republic of Germany*,
Andrea Fischer

Luxembourg, The Minister of Health of the *Grand Duchy of Luxembourg*,
Georges Wohlfahrt

The Hague, The Minister of Health, Welfare and Sport of the *Kingdom of the Netherlands*,
Els Borst-Eilers

Vienna, The Federal Minister of Labour, Health and Social Affairs of the *Republic of Austria*,
Lore Hostasch

Ljubljana, The Minister of Health of the *Republic of Slovenia*,
Andrej Bručan

1.2 Central office

General:

The change into the new millennium went smooth. No serious problems with the ENIS computer system or otherwise were observed.

A restructuring of the central office occurred in 2000. Dr. Gerry Wiesenhaan was appointed as head of allocation and registration processes. She will be the first responsible person for all allocation and registration affairs. This includes the medical administrative department and the allocation office.

Quality management:

In the year 2000 a start has been made with the implementation of a quality system, in compliance with the ISO 9001:2000 criteria. This quality system describes the processes and procedures of the organization. The different procedures of the Eurotransplant organization are subdivided into different categories. In brief, these are:

Customer-related processes	Prognostic processes	General processes
Waiting list management Donor registration Allocation procedures Information supply Relation (client) management Remote users support	Recipient Follow up Education of personnel Selection of suppliers Purchase of resources	Legal requirements Strategy and policy Innovation Internal auditing Quality management

First, the customer-related processes were described. In September 2000, these procedures were all implemented and since then, the allocation office is running accordingly. Personnel was trained and is working according to the new procedures.

Several internal audits were performed to check whether the procedures were implemented by the personnel and whether they were sufficient. A group of co-workers was trained to perform internal audits.

In 2001, the different other procedures will be described and implemented. All procedures implemented will be audited internally.

Already in 2000 an internal audit was performed to check whether the system was compliant with international standards (ISO 9001:2000).

Since implementation all ET personnel was asked to give suggestions to improve the system. This resulted in about 50 textual remarks (small changes) and 30 initiatives for improvement. These initiatives will be evaluated by the quality manager. The number and nature of these initiatives suggests an understanding of this instrument to improve the quality system. After evaluation, the initiatives may result in innovation projects.

Whenever there is a deviation of the normal allocation procedure a so called 'non-conformity report' is filled out by the allocation personnel. Since implementation in September 2000, over 200 NCR's have been written. These will be evaluated by the medical staff. In some cases a letter is written to the donor or transplant center involved. In other cases personnel has been pointed on the administrative errors and incomplete data.

With the introduction of the above quality measurements, the system will reach completion in 2001. As part of the quality policy Eurotransplant will apply for certification conform the ISO 9001:2000 standard by the end of 2001.

1.3 Advisory Committees

In 2000, the various Advisory Committees met 22 times and submitted 33 recommendations. Of these recommendations, 32 were accepted and 1 was postponed. The composition of the various Advisory Committees as per December 31, 2000 was as follows:

KIDNEY ADVISORY COMMITTEE (ETKAC)

Name	As of	Remarks
Prof.Dr. U. Frei (BC)	01.1997	chairman, representative Board
Prof.Dr. G. Mayer (IB)	12.2000	representative Austria
Prof.Dr. F. Mühlbacher (WG)	09.1994	representative Austria
Dr. P. Duhoux (LX)	09.1994	representative Luxembourg
Dr. D. Abramowicz (BR)	01.2000	representative Belgium
Prof.Dr. J-P. Squifflet (LA)	04.1999	representative Belgium
Dr. U. Albert (KS)	12.1996	representative Germany
Prof.Dr. K. Dreikorn (BM)	12.1996	representative Germany
Prof.Dr. G. Kirste (FR)	07.1996	representative Germany
Prof.Dr. G. Offermann (BE)	09.1994	representative Germany
Dr. R. Hené (UT)	03.1998	representative the Netherlands
Dr. A. Hoitsma (NY)	09.1994	representative the Netherlands
Dr. D. Kovač (SLO)	12.1999	representative Slovenia
Prof.Dr. F.H.J. Claas (LB)	09.1994	representative TT section Assembly
Prof.Dr. G. Offner (HO)	09.1994	external advisor (pediatric)
Mr. Th. Wujciak (HB)	09.1994	external advisor (allocation)
Dr. G.G. Persijn (ET)	09.1994	secretary

LIVER ADVISORY COMMITTEE (ELAC)

Name	As of	Remarks
Prof.Dr. M.J.H. Slooff (GR)	09.1994	chairman, representative Board
Prof.Dr. R. Margreiter (IB)	09.1994	representative Austria
Dr. O. Detry (LG)	01.2000	representative Belgium
Prof.Dr. J-B. Otte (LA)	09.1994	representative Belgium
Prof.Dr. J. Hauss (LP)	12.1999	representative Germany
Prof.Dr. P. Neuhaus (BC)	09.1994	representative Germany
Prof.Dr. B. Ringe (GO)	09.1994	representative Germany
Dr. H.J. Metselaar (RD)	04.1995	representative the Netherlands
Dr. D. Stanisavljevič (SLO)	12.1999	representative Slovenia
Dr. G.C. Wiesenhaan-Stellingwerff (ET)	04.1998	secretary

PANCREAS ADVISORY COMMITTEE (PAC)

Name	As of	Remarks
Prof.Dr. J.P. van Hooff (MS)	06.1998	chairman, representative Board
Prof.Dr. A. Königsrainer (IB)	08.1994	representative Austria
Prof.Dr. J-P. Squifflet (LA)	08.1994	representative Belgium

Prof.Dr. W. Bechstein (BB)	12.1999	representative Germany
Prof.Dr. R.G. Bretzel (GI)	09.1996	representative Germany
Prof.Dr. W.D. Schareck (RO)	12.1999	representative Germany
Dr. J. Ringers (LB)	04.1998	representative the Netherlands
Prof.Dr. F.H.J. Claas (LB)	08.1994	representative TT section Assembly

Dr. K. Keizer (ET)	01.2000	secretary
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THORACIC ADVISORY COMMITTEE (THAC)

Name	As of	Remarks
Prof.Dr. J. Vanhaecke (LM)	10.2000	chairman, representative Board
Dr. G. Laufer (WG)	09.1994	representative Austria
Prof.Dr. K. Tscheliessnigg (GA)	09.1994	representative Austria
Dr. M. Antoine (BR)	01.2000	representative Belgium
vacancy	10.2000	representative Belgium
Prof.Dr. S. Hagl (HB)	09.1994	representative Germany
Dr. B. Meiser (ML)	01.2000	representative Germany
Prof.Dr. F. Schöndube (AK)	01.2000	representative Germany
Prof.Dr. F. Mohr (LP)	01.2000	representative Germany
Dr. A. Balk (RD)	03.1998	representative the Netherlands
vacancy	10.2000	representative the Netherlands
Dr. T. Klokočovnik (SLO)	12.1999	representative Slovenia

Dr. T. Werle (ET)	12.1999	secretary
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ORGAN PROCUREMENT COMMITTEE (OPC)

Name	As of	Remarks
Dr. J. van der Vliet	01.2000	chairman, representative Board
Dr. P. Wamser (WG)	03.1995	representative TC's Austria
Mr. P. Vanormelingen (LA)	04.1999	representative TC's Belgium
Ms. S. Tietz (HO)	01.2000	representative TC's Germany
Mr. D. Horch (BC)	01.2000	representative TC's Germany
Mr. W. Hordijk (NY)	11.1998	representative TC's the Netherlands
Dr. T. Pintar (SLO)	05.2000	representative TC's Slovenia
Prof.Dr. G. Kirste (FR)	09.1996	representative ETKAC
Dr. O. Detry (LG)	01.2000	representative ELAC
Prof.Dr. J-P. Squifflet (LA)	09.1995	representative PAC
Dr. M. Antoine (BR)	06.1998	representative ThAC
Prof.Dr. I.I.N. Doxiadis (LB)	02.1998	representative TTAC

Dr. J. de Boer (ET)	09.1995	secretary
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COMPUTER SERVICES WORKING GROUP (CSWG)

Name	As of	Remarks
Prof.Dr. F. Mühlbacher (WG)	09.1995	chairman, representative Board
Dr. R. Kramar (OW)	09.1995	representative Austria
Prof.Dr. D. Van Raemdonck (LM)	01.2000	representative Belgium
Mr. Th. Wujciak (HB)	01.2000	representative Germany
Dr. A. Hoitsma (NY)	09.1995	representative the Netherlands + ETKAC
Dr. H.J. Metselaar (RD)	06.1996	representative ELAC
Dr. S. Lems (GR)	06.1996	representative TTAC
Mr. K. Johann (DSO)	01.2000	external advisor

Mr. W. van Zwet (ET)	11.2000	secretary
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TISSUE TYPING ADVISORY COMMITTEE (TTAC)

Name	As of	Remarks
Prof.Dr. F.H.J. Claas (LB)	09.1995	chairman, representative Board
Prof.Dr. W. Mayr (WG)	09.1995	representative Austria
Prof.Dr. D. Latinne (LA)	01.2000	representative Belgium
Dr. F. Hentges (LX)	09.1995	representative Luxembourg
Dr.R. Wassmuth (ER)	01.2000	representative Germany
Prof.Dr. H. Grosse-Wilde (ES)	01.2000	representative Germany
Dr. S. Lems (GR)	09.1995	representative the Netherlands
Dr. B. Vidan-Jeras (SLO)	12.1999	representative Slovenia

Prof.Dr. I.I.N. Doxiadis (ETRL)	09.1995	secretary
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ETHICS COMMITTEE (EC)

Name	As of	Remarks
Vacancy*	10.2000	chairman, representative of the Board
Drs. M. Bos, The Hague	05.1995	representative the Netherlands
Prof.Dr. R. Reding (LA)	01.2000	representative Belgium
Prof.Dr. C. Broelsch (ES)	01.2000	representative Germany
Dr. W. Schaupp (WG)	04.1998	representative Austria
Dr. G.G. Persijn (ET)	03.2000	secretary

*Since February 2001 Prof. Dr. P. Schotsmans has been appointed as the new ethical advisor.

FINANCIAL COMMITTEE (FC)

Name	As of	Remarks
Drs. H.M.A. Schippers, The Hague	05.1995	chairman, representative Board
Mag. O. Postl (WG)	05.1995	representative Austria
Prof.Dr. D. Ysebaert (AN)	05.1995	representative Belgium
Prof.Dr. E. Nagel (AU)	09.1997	representative Germany
Dr. B. Cohen (ET)	05.1995	secretary

1.4 Recommendations approved

In the year 2000, the following recommendations have been submitted by the Advisory Committees and approved by the Board of Eurotransplant International Foundation:

Kidney Advisory Committee

RKAC01.00

Extend the ET senior program (ESP) to January 4, 2001.

RKAC02.00

Recommendation 'ischemia points':

1. The non-medical factors 'local or regional balance' are replaced by the medical factor 'local, regional or national ischemia time'.
2. The factor 'ischemia time' is calculated slightly different in the ET countries to meet the national rules:
 - GERMANY: patients receive 100 national points and 100 additional regional points if the donor is within the same region resulting in a maximum of 200 ischemia points.
 - The NETHERLANDS: all Dutch patients are considered to be within a local, regional and national region resulting in 300 points.
 - AUSTRIA, BELGIUM, LUXEMBOURG and SLOVENIA: 300 points for patients within a local and/or regional donor region and 100 within the same country.
3. The waiting time points are calculated differently for Germany and the other ET countries. German patients receive 50 points per year, patients from the other countries receive 33.33 points per year. There will be - as it is presently the case - no upper time limit for waiting points.
4. The calculation of the 'national exchange balance' is changed to achieve smoother adjustments of the national balances (the 'non-resident' rule is unchanged). This change is not related to the new BÄK rules and is a technical matter only.
5. All other ETKAS rules remain unchanged.

Liver Advisory Committee

RLAC01.00

Consider Slovenia as an independent country with its own representative in the ELAC.

RLAC02.00

Install 3 regions in Austria, each consisting of one center and install 5 regions in Belgium, each consisting of one center in the new ELAS (as accepted through RLAC03.99).

RLAC03.00

Change the AB0 blood group rule for the second half of a split liver into AB0 compatible instead of AB0 identical.

RLAC04.00

Change the coding system of the ET follow-up database by implementing the European Liver Transplant Registry (ELTR) coding system.

RLAC05.00

Auditing of T2 recipients in conformity with the procedure for HU recipients. First check of indication by the ET medical staff, in case of doubt consultation with two members of the ELAC. If the two members disagree, a third member should be consulted. The members consulted should not be from the same country as the center asking for the status change.

RLAC06.00

Change pediatric donor liver allocation in:

- first offer to national, blood group identical pediatric recipients;
- then to national, blood group compatible pediatric recipients
- and only after this to international pediatric recipients.

RLAC07.00

Change blood group rule in elective adult liver transplantation from identical allocation into:

- AB0-0 to AB0-0;
- AB0-A to AB0-A and AB0-AB;
- AB0-B to AB0-B and AB0-AB;
- AB0-AB to AB0-AB.

RLAC08.00

Put intestinal-only waiting list management and allocation under ELAC auspices.

RLAC09.00

Install a waiting list and allocation system for intestine-only recipients, being a simple waiting list and allocation system, patient oriented, according to waiting time (national recipients first).

Thoracic Advisory Committee

RThAC01.00

‘SU’ heart transplantation:

Heart transplant programs can have an adult and a pediatric patient on the ‘SU’ heart transplantation list at the same time. A pediatric patient is within this context defined as a patient under the age of 13.

RThAC03.00

Patients awaiting combined organ transplants should have a higher allocation priority as notified in the new German transplant law. This is especially mentioned for combined heart+kidney and lung+kidney transplantation. These patients should be accepted on the mandatory exchange waiting list.

RThAC04.00

Approve the signed Belgian charter of lung graft allocation. Belgium constitutes itself as a single region.

RThAC05.00

Based on unlimited access of patients to the thoracic waiting list, the ThAC proposes the following rules for heart, heart/lung and lung allocation:

1. national allocation for HU patients;
2. national allocation for elective patients;
3. international allocation for HU patients;
4. international allocation for elective patients.

RThAC06.00

In order to maintain the country balance, the ThAC proposes:

1. in case the country balance is unequal, the import country is obliged to accept HU patients from the export country to the national waiting list on an equal basis;
2. admission of HU patients is only permitted after approval by the ET thoracic auditing committee*.

* ET patients are audited by German audit committee.

RThAC07.00

Approve proposed ET guidelines - defined according to UNOS guidelines and national Belgian and German guidelines - with respect to quality of ET transplant programs.

RThAC08.00 rephrased

In the thoracic and liver allocation system, patients awaiting a combined heart+liver or lung+liver transplant should be ranked on an equal basis. The ranking order is as follows:

1. national allocation for HU patients;
2. national allocation for combined transplants;
3. national allocation for elective patients;
4. international allocation for HU patients;
5. international allocation for combined transplants;
6. international allocation for elective patients.

Patients admitted to the waiting list for combined transplants have - as before - to be audited by one representative of the respective organ Advisory Committees.

RThAC09.00 rephrased

- Transplant programs are informed on supposed violations; a copy of the violation letter is sent to the chairman of the national transplant society.
- After receipt of the centers' comment, the national health authority is notified, if this is still necessary.

Organ Procurement Committee

ROPC01.00

Upon submission of a study protocol on clinical transplantations in multiple centers, a copy will immediately be sent to the chairmen of the Advisory Committees concerned. If necessary the chairmen may consult their committee members, in which case the committee has to reply within 3 months after initial submission of the study protocol.

Computer Services Working Group

RCSWG01.00

The CSWG asks the Board to invest in the development of software to perform simulations for allocation adaptations since simulations are essential for the core business of ET. A pilot on thoracic simulations has been started. Results to be presented at annual ET meeting 2000.

RCSWG03.00

The CSWG asks the Board to put the definition of the ET follow-up data sets (profiles) on the agenda of the Board meeting of January 2001 for final discussion. The CSWG will ask the organ specific Advisory Committees to prepare this agenda point in cooperation with the international registries.

Tissue Typing Advisory Committee

RTTAC06.99 (rephrased)

Matching for HLA-DR splits (DR1 - DR16) should be introduced for the allocation of donor kidneys on January 1, 2001.

Ethics Committee

REC01.00 rephrased

Organs that - due to medical reasons - have been rejected by ET, should only be offered to other countries on the condition that the patient's physician is informed on the quality of the organ. Follow-up of these organs must be performed. Furthermore, commercial use must always be avoided.

REC02.00 (rephrased)

Living organ donation - both genetically and emotionally related - is ethically justifiable if the following basic moral and logistical principles are met:

- the donor and recipient are genetically or emotionally related;
- informed and voluntary consent of the donor is required;
- the procedure can only take place in centers with expertise;
- protocols must be available;
- no commercial interest may be involved.

REC03.00 rephrased

Altruistic non-genetically or non-emotionally related living donation may be considered on an individual basis depending on medical and psychological assessment and review by the local ethics committees and as long as it is in concordance with national legislation.

Financial Committee

RFC01.00

In order to accomplish a balanced budget proposal for the year 2000, the FC proposes to reduce the 2000 expenditure in the amount of NLG 109.713 by delaying the start of the ENIS re-design project and use the vacancy months in the estimated personnel costs for the year.

RFC02.00

Given the current proposal from the German Krankenkassen the FC proposes to sign the agreement regarding the German TPG.

RFC03.00

The FC recommends the Board to approve the 1999 Annual Accounts.

RFC04.00

The FC recommends to fund the structural costs (NLG 451.943) for the period July 1 - December 31, 2000 from the Tariff Equality Reserve and the costs for IT investment (NLG 400.000) from the Reserve Fund Reorganization.

RFC05.00

Approve the Eurotransplant budget proposal 2001.

2. Eurotransplant: donation, waiting list and transplants in 2000

2.1 Donation and donor organ availability in 2000

2.1.2 Cadaveric organ donors from the Eurotransplant region

The donation statistics only deal with cadaveric donors, of whom at least one organ has been used in a transplant. Excluded are donors, reported to and/or offered by Eurotransplant, but from whom no organ transplant was realized.

The total number of cadaveric donors, used in 2000 (N=1678), was 3.2% higher than the 1999 number (N=1626) [Table 2.1]. A sharp increase was noted for The Netherlands (+22.4%) and Belgium (+6.2%). Austria and Germany showed decreases of 4.4% and 1.2% respectively. Slovenia, participating for the first year, reported 22 donors.

In 2000, kidneys, livers, lungs and pancreata, from a higher number of donors than before, were actually used for clinical transplantation, N=+55 (+3.5%), N=+57 (+5.6%), N=+25 (+11.4%) and N=+26 (+8.4%) respectively [Table 2.2]. The availability of hearts decreased substantially, N=-75 (-10.6%).

Table 2.1 Number of cadaveric donors, from the Eurotransplant region and used for a transplant, from 1996 to 2000

Country	population (million)	1996	1997	1998	1999	2000	pmp	+/- 1999/2000
Austria	8	184	156	166	203	193	24,1	-4,9%
Belgium	10	212	225	194	241	258	25,8	7,1%
Germany	82	1012	1045	1073	1009	996	12,1	-1,3%
Luxemburg	0,4	13	5	7	8	7	17,5	-12,5%
Netherlands	16	226	216	196	165	202	12,6	22,4%
Slovenia *	2	0	0	0	0	22	11,0	
Total	118,4	1647	1647	1636	1626	1678	14,2	

* Slovenia joined the Eurotransplant Organization on January 1, 2000

Table 2.2 Number of cadaveric organ donors, from the Eurotransplant area and used for a transplant, by organ, from 1996 to 2000

Year	1996	1997	1998	1999	2000
Organ donors, total	1647	1647	1636	1626	1678
Organ donors					
Kidney	1607	1607	1595	1577	1632
Heart	773	803	746	708	633
Lung	168	169	225	220	245
Liver	934	979	962	1026	1083
Pancreas	154	220	253	308	334

Comparing 1999 and 2000, there was 3.5% increase of the usage of elderly donors (aged 56 years or more): 460 in 1999 versus 476 in 2000 [Table 2.3]. The percentages of the causes of death of the organ donors in 2000 changed as compared with 1999, namely 29% accident donors (1999: 32%), 67% natural death donors (1999: 64%) and 4% donors due to suicide (1999: 4%).

As shown in Table 2.4, the percentage of multi-organ donation amounted to 72%. Differences between the Eurotransplant countries remained: Austria (83%) and Belgium (83%) are ahead of Germany (68%) and The

Netherlands (67%). However, this difference is less pronounced for The Netherlands when the denominator ‘donor population’ is limited to the heart-beating cadaveric kidney donors, namely 83%.

In 2000, from 40 non-heart beating donors one or two kidneys were used for a transplant in The Netherlands.

2.1.3 Cadaveric organ donors from outside the Eurotransplant region

From outside the Eurotransplant region, organs from 291 donors were offered to the duty office of Eurotransplant (1999: N=336). Organs from 70 (1999: N=115) donors were actually accepted and transplanted within the Eurotransplant region [Addenda: Tables 2a and 2b].

Table 2.3 Demographic data on cadaveric donors, from the Eurotransplant region and used for a transplant, in 2000

Country	Total	Age (years)			Sex		ABO Blood group				Cause of death		
		0–15	16–55	≥56	Male	Female	A	AB	B	0	Accident	Natural	Suicide
Austria	193	6	144	43	123	70	76	8	23	86	73	106	14
Belgium	258	18	190	50	146	112	106	9	20	123	99	146	13
Germany	996	52	619	325	561	435	448	42	99	407	256	708	32
Luxemburg	7	1	4	2	6	1	2	0	1	4	6	1	0
Netherlands	202	13	135	54	97	105	74	8	20	100	45	151	6
Slovenia	22	1	19	2	15	7	10	1	6	5	6	12	4
Total	1678	91	1111	476	948	730	716	68	169	725	485	1124	69
	100%	5%	66%	28%	56%	44%	43%	4%	10%	43%	29%	67%	4%

Table 2.4 Type of organ donation in 2000

Country	Kidney donor				No-kidney donor		Cadaveric donor	
	Total	Kidney-only	Multi-organ	%MOD	Total	Total	%	
Austria	185	31	154	83%	8	193	12%	
Belgium	249	42	207	83%	9	258	15%	
Germany	969	311	658	68%	27	996	59%	
Luxemburg	7	2	5	71%	0	7	0%	
Netherlands	200	67	133	67%	2	202	12%	
Slovenia	22	4	18	82%	0	22	1%	
Total 2000	1632	457	1175	72%	46	1678	100%	
Total 1999	1577	470	1107	70%	49	1626		
Total 1998	1595	489	1106	69%	41	1636		
Total 1997	1607	471	1136	71%	40	1647		
Total 1996	1607	535	1072	67%	40	1647		
Total 1995	1585	585	1000	63%	35	1620		

In the Eurotransplant organisation, a *kidney donor* is defined as a donor from whom at least one kidney is transplanted (not just procured). A kidney donor from whom at least one non renal organ is also used in a transplant is called a multi organ donor (MOD). When only one or more non-renal organs are used the donor is classified as a *no-kidney donor*.

This category consists of donor organs, offered by other European organ exchange organizations or individual centers from outside the Eurotransplant region, in case these organs could not be used within the local organization or country. Through this international collaboration, 13 donor hearts, 32 donor livers (respectively 14 and 10 from Poland and the Slovak Republic), 26 donor kidneys (19 from Spain) and 12 donor lungs were transplanted in the Eurotransplant region. No pancreata from outside Eurotransplant were offered nor transplanted in 2000.

2.1.4 Living donor transplants

In 2000, 558 living donors donated a kidney [Table 2.7]: -21 (-3.6%) as compared to 1999.

Forty-nine times i.e. 73% more than in 1999 (N=67), a liver transplant was performed using a liver segment from a living donor (N=116). In 2000, 9 patients received the explanted native liver of a patient who got a liver transplant [‘domino’] (1999: N=3) [Table 3b pag. 70].

2.2 Active cadaveric transplant waiting lists at the end of 2000

Compared with the waiting list at the end of 1999, the waiting list for livers at the end of 2000 increased significantly: + 210 (+35%) [Table 2.5]. Substantial increases were present for the pancreas waiting list

(+9.9%) and the lung waiting list (+9%). The kidney waiting list increased with +2% (N=12524). The heart and the heart+lung waiting lists decreased substantially respectively with -19.7% and -10.9%.

2.3 Inflow on the waiting lists during 2000

Registrations concern listing for a first transplant as well as for repeat transplants [Table 2.6]. Compared with 1999, there were substantial increases of the number of registrations for a lung transplant and for a liver transplant respectively N=+56 (+12%) and N=+234 (+14.5%) in 2000. In contrast, the number of patients for heart and heart+lung transplantation declined again, mainly due to alternative therapies, respectively with N=-123 (-11.5%) and with N=-11 (-22.5%). Listing for kidney transplantation in 2000 slightly increased with 125 patients (+2.5%). The number of registrations for a pancreas transplant remained stable (N=+5).

Table 2.5 Size of the active Eurotransplant waiting list by organ as per December 31, 1996 to 2000

Year	1996	1997	1998	1999	2000	+/- 1999/2000
Organ						
Kidney	10988	11324	11976	12273	12524	2,0%
Heart +	744	744	721	609	489	-19,7%
Heart+Lung	71	66	60	46	41	-10,9%
Lung +	204	216	224	345	376	9,0%
Liver	327	374	492	593	803	35,4%
Pancreas	182	194	217	262	288	9,9%

The data included in this table provide a snapshot of the waiting lists on the last day of each calendar year. Only the patients who are actively awaiting an organ transplant have been counted. Patients with the urgency code 'Not transplantable' have been excluded. Patients waiting for a simultaneous multiple-organ transplant are registered on the waiting list of each organ awaited. Therefore, the organ-specific waiting list represents the need for organs rather than the actual number of patients.

+ excluding Heart + Lung

Table 2.6 Registrations on the Eurotransplant waiting list, by organ, from 1996 to 2000

Year	1996	1997	1998	1999	2000	+/- 1999/2000
Organ						
Kidney	4826	5045	5048	5023	5148	2,5%
Heart	1319	1310	1250	1071	948	-11,5%
Heart+Lung	71	76	61	40	31	-22,5%
Lung	219	292	341	468	524	12,0%
Liver	1393	1468	1500	1615	1849	14,5%
Pancreas	219	300	356	428	433	1,2%

2.4 Outflow from the waiting list in 2000

2.4.1 Organ transplants from non-living donors

In 2000, 5783 cadaveric donor organs were used in 5195 transplant operations [Table 2.7]. The reason that the number of organs used is higher than the number of transplant operations is due to the fact that, e.g., in 28 cases both kidneys (N=56) were used for an 'en bloc' transplant operation. The same holds true for 59 organs used for 20 heart + lung transplants (19 heart + double lungs (=38 organs) and 1 heart + 1 single lung transplant) as well as for the 425 lungs used for 91 single and 167 double lung transplants. Kidney, pancreas, lung and liver transplantations showed increases: respectively +118 (+3.8%), +28 (+9.1%), +20 (+8.4%) and +34 (+3.0%). The number of heart and heart+lung transplantations dropped substantially with respectively -85 (-12.0%) and -8 (-28.6%). In addition, 7 intestine transplants were carried out of which one was a combined transplant together with liver and pancreas. The majority of these intestine transplants were performed in Innsbruck (N=5).

2.4.2 Mortality on the waiting list and de-listing

In 2000, 1215 patients died whilst awaiting a first or repeat organ transplant, irrespective of their urgency code (1999: N=1176) [Table 2.8].

Table 2.7 Number of transplants within the Eurotransplant area, by organ, from 1996 to 2000

Year	1996	1997	1998	1999	2000
Cadaveric donors					
Transplanted organs,					
Kidney	3083	3110	3068	3055	3173
Heart	759	782	759	708	623
Heart+Lung	34	43	20	28	59
Lung	154	155	228	238	258
Liver	1032	1097	1071	1134	1168
Pancreas	154	226	258	307	335
Transplant operations,					
Total	5053	5177	5128	5139	5195
Living donors					
Kidney	246	411	526	579	558
Heart ('domino')	1	0	0	0	1
Lung (lung lobe)	0	0	0	0	0
Liver (segment or 'domino')	22	43	38	67	116

Table 2.8 Mortality on the Eurotransplant waiting list, by organ, from 1996 to 2000

Year	1996	1997	1998	1999	2000
Organ					
Kidney	545	570	550	592	618
Heart	293	294	273	229	179
Heart+Lung	28	22	27	26	4
Lung	71	89	81	90	103
Liver	200	221	212	214	279
Pancreas	9	5	19	25	32

3. Kidney: donation, waiting lists, and transplants

3.1 Kidney donors

A total of 1714 potential kidney donors were reported to the central office of Eurotransplant in 2000 (Table 3.1). No kidneys were procured from 26 of the donors and, 143 kidneys were judged to be unfit for transplantation, mostly due to medical reasons (N=134). Kidneys were transplanted from 1632 donors, which is 3.5% higher than in 1999 (N=1576).

The number of (used) kidneys per million inhabitants [kpmi] for the whole Eurotransplant area amounted to 26.4. Austria (44.3 kpmi) and Belgium (48.2 kpmi) preceded Luxembourg (35 kpmi), Germany (22.6 kpmi), the Netherlands (23.8 kpmi) and Slovenia (11 kpmi).

Characteristics of the 2000 kidney donor pool include (Table 3.2):

- The number of donors aged over 56 years rose again (+5.2%). In 2000, 466 (29% of the total number of kidney donors) as compared to the 443 in 1999 (28% of the total number of kidney donors).
- The number of pediatric kidney donors (0-15 years) remained nearly the same in 2000 (N=86) as in 1999 (N=89).
- Donor ABO blood group distribution was similar to the average distribution of the last decade, ABO types A and O having the highest frequency, namely both 43%.

Table 3.1 Use of cadaveric donor kidneys in the Eurotransplant region in 2000

Donor Eurotransplant country	Austria	Belgium	Germany	Luxembourg	Netherlands	Slovenia	2000 Total	1999 Total
Total no. of kidney donors reported	193	266	1016	7	210	22	1714	1634
Kidney donors from whom no kidneys were procured	7	4	15	0	0	0	26	13
Total no. of potentially available kidney donors	186	262	1001	7	210	22	1688	1621
Total no. of potentially available donor kidneys*	372	524	2002	14	420	44	3376	3242
No kidney available for transplant	13	19	58	0	13	1	104	65
- Donor with a single kidney	3	1	11	0	2	1	18	7
- Permission for only one kidney	0	0	0	0	0	0	0	0
- Kidneys en-bloc, pediatric as well as adult donor	5	7	13	0	3	0	28	35
- Medical reasons	5	9	31	0	8	0	53	22
- Other / unknown	0	2	3	0	0	0	5	1
	0	0	0	0	0	0		
Total no. of inspected and/or procured donor kidneys	359	505	1944	14	407	43	3272	3177
No transplantation	5	23	88	0	27	0	143	144
- Medical reasons	5	17	85	0	27	0	134	122
- Organizational reasons	0	0	1	0	0	0	1	0
- (In)direct allocation to research program	0	2	1	0	0	0	3	14
- No suitable recipients	0	4	1	0	0	0	5	0
- Unknown / other	0	0	0	0	0	0	0	8
Transplantation	354	482	1856	14	380	43	3129	3033
Kidney donors used in 2000	185	249	969	7	200	22	1632	
Kidney donors used in 1999	199	228	976	8	165		1576	
Kidney donors used in 1998	161	187	1045	7	195		1595	
Kidney donors used in 1997	154	214	1021	5	213		1607	

*_

Conversion: one donor = two kidneys, Kidneys en-bloc, used in a transplant, are counted as one kidney used and one kidney not available; the transplantation of two adult donor kidneys in the same transplant procedure is also considered one transplant.

Table 3.2 Demographics of cadaveric donors whose kidneys were transplanted in the Eurotransplant region in 2000

Country	Total	Age (years)			Sex		ABO Blood group				Cause of death		
		0–15	16–55	≥56	Male	Female	A	AB	B	O	Accident	Natural	Suicide
Austria	185	5	137	43	119	66	70	8	23	84	68	104	13
Belgium	249	17	186	46	141	108	105	7	20	117	98	139	12
Germany	969	49	601	319	549	420	440	38	97	394	252	685	32
Luxemburg	7	1	4	2	6	1	2	0	1	4	6	1	0
Netherlands	200	13	133	54	96	104	74	7	20	99	45	149	6
Slovenia	22	1	19	2	15	7	10	1	6	5	6	12	4
Total	1632	86	1080	466	926	706	701	61	167	703	475	1090	67
	100%	5%	66%	29%	57%	43%	43%	4%	10%	43%	29%	67%	4%

3.2 Waiting list

The total active kidney waiting list rose slightly by 1.7% from 12313 in 1999 to 12524 in 2000 (Table 3.3; Figure 3.1). A similar increase was seen for the total active kidney-only waiting list, albeit with major national differences: a decrease for Belgium, (-8.5%) and a slight increase for Germany (+2.0%). Austria (-1 patient) and The Netherlands (-15 patients). Luxembourg remained at the same level. Slovenia had 102 kidney patients actively waiting at the end of their first year of participation within Eurotransplant. (See also Addendum Table 6a.)

Table 3.3 Active cadaveric kidney transplant waiting list as per December 31, 2000: characteristics

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Total	750	705	9663	13	1291	102	12524	100%	12313	100%
Type of transplant										
Kidney-only	730	686	9485	13	1277	102	12293	98%	12080	98%
Kidney+heart	2	0	2	0	0	0	4	0%	2	0%
Kidney+liver	2	3	22	0	1	0	28	0%	30	0%
Kidney+lung	0	0	1	0	0	0	1	0%	1	0%
Kidney+liver+pancreas	0	0	3	0	0	0	3	0%	1	0%
Kidney+pancreas	16	16	150	0	13	0	195	2%	193	2%
Kidney+islet	0	0	0	0	0	0	0	0%	6	0%
Kidney-only waiting list	730	686	9485	13	1277	102	12293	100%	12080	100%
Age (years)										
0-15	2	8	89	0	20	1	120	1%	98	1%
16-55	492	519	6326	11	869	80	8297	67%	8152	67%
56-64	177	111	2598	2	288	21	3197	26%	3830	32%
65 +	59	48	472	0	100	0	679	6%		
ABO blood group										
A	301	217	3824	4	455	35	4836	39%	4818	40%
AB	7	10	219	0	22	1	259	2%	247	2%
B	52	48	1004	1	153	8	1266	10%	1210	10%
O	350	411	4435	8	643	57	5904	48%	5801	48%
Not yet reported	20	0	3	0	4	1	28	0%	4	0%
% PRA current										
0-5 %	529	607	8595	8	1064	77	10880	89%	10596	88%
6-84%	172	71	835	4	180	24	1286	10%	1351	11%
85-100%	17	7	48	1	30	1	104	1%	115	1%
not yet reported	12	1	7	0	3	0	23	0%	18	0%
Sequence										
First	595	547	8090	10	1012	101	10355	84%	10129	84%
Repeat	135	139	1395	3	265	1	1938	16%	1951	16%
Time waiting (dialysis) (years)										
pre-emptive	20	31	41	0	56	1	149	1%		
0-1	351	301	2287	6	405	24	3374	27%		
2-4	296	178	4748	4	632	38	5896	48%		
5+	63	176	2409	3	184	39	2874	23%		
Time waiting (registration) (years)										
0-1	504	411	4310	7	558	102	5892	48%	6163	51%
2-4	189	166	4033	4	617	0	5009	41%	4813	40%
5+	37	109	1142	2	102	0	1392	11%	1104	9%
Match-Residency										
Yes	706	535	9468	13	1276	101	12099	98%	11825	98%
No	24	151	17	0	1	1	194	2%	255	2%

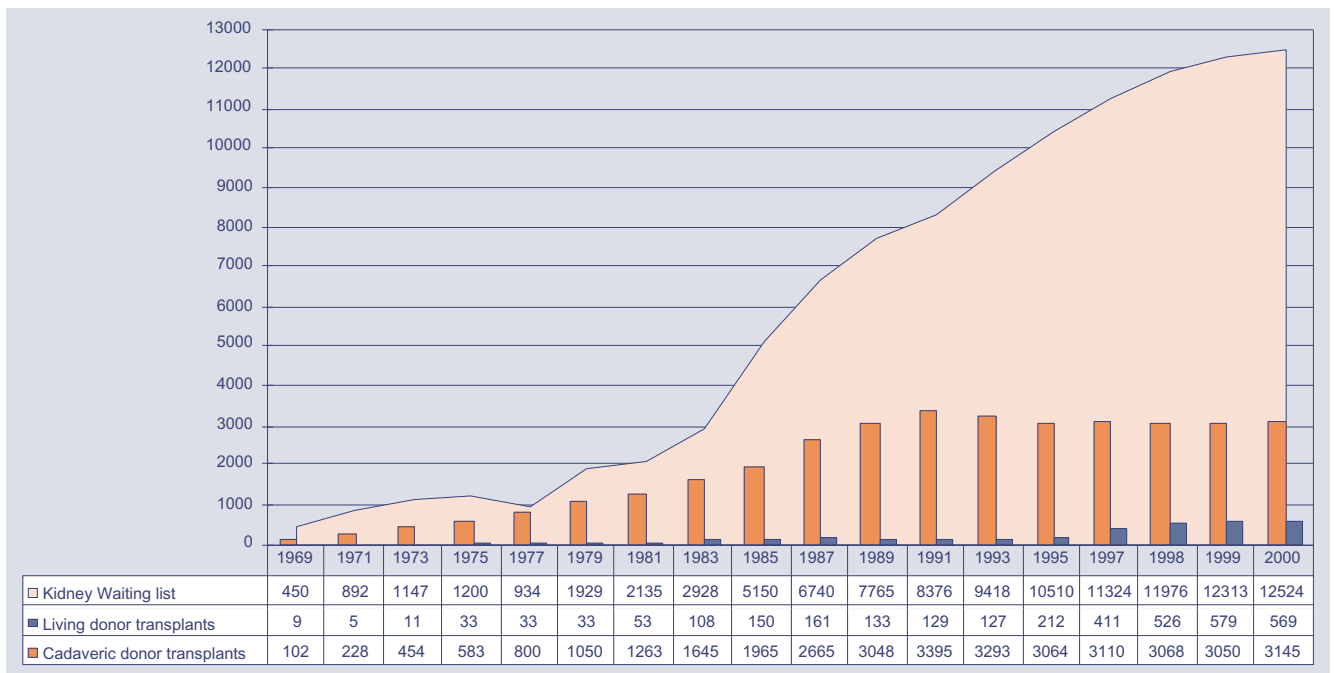


Figure 3.1 Dynamics of the Eurotransplant kidney waiting list and transplants between 1973 and 2000

Characteristics of the 2000 years' end kidney-only waiting list include (Table 3.3):

- The number of the elderly recipients (aged 56 years or more) rose slightly (1.2%). Renal transplant candidates aged 65 years or more decreased to 679 patients or 6% (1999: N=759). The number of pediatric kidney recipients rose in 2000 with +22 patients (+22.4%) to N=120 (1999: N=98). This increase was completely due to the sharp increase in Germany (+25) while the other countries showed slight decreases or remained equal.
- Kidney-only transplant candidates with ABO type O represented 50% or more of the waiting list in Belgium (60%), Luxembourg (62%), The Netherlands (50%) and Slovenia (56%). A substantial drop in O recipients was noted in Austria (48%) as compared to 1999 (52%). Germany had 47% type O recipients.
- Austria had the highest percentage of patients (25.9%) sensitized against HLA antibodies (6% or more panel reactive antibodies (PRA)). The Netherlands and Belgium had the highest number of patients awaiting a repeat transplant, namely 20.8% and 20.3% respectively.
- Non-resident transplant candidates – patients who were neither residing nor being treated in one of the six Eurotransplant countries – may be considered as resident for the allocation program (i.e. match-resident) when they are awaiting a kidney re-transplant at the same Eurotransplant transplant program where they got their immediate previous kidney transplant. The number of patients considered as non-residents for a match is decreasing in Belgium from 34% in 1998 to 27.7% (N=208) in 1999 to 22% in 2000 (N=151). Also in Austria a decrease was apparent, namely from 5.5% in 1998 to 4.1% in 1999 (N=30) to 3.3% in 2000 (N=24).
- Due to a re-definition of waiting time as per April 5, 2000, namely as of the date of first dialysis, the number of patients waiting five years or more for a kidney transplant changed completely. The data for both options for the whole year 2000 are presented in table 3.3. The new definition of waiting time i.e. from start of dialysis shows more than twice as many so-called long-waiting patients as compared to the old situation, namely 2874 patients versus 1392. According to this new definition it was of interest to note that all countries, except Austria (8.6%) and The Netherlands (14.4%) had more than 20% of these long-dialysing patients namely Luxembourg (23.1%), Germany (25.4%), Belgium (25.7%) and surprisingly Slovenia with 38.2%. Interesting is also the number of patients who are not yet on dialysis (pre-emptive patients) namely N=149, i.e. 1.0%. The Netherlands and Belgium had respectively 4.4% and 4.3% of these pre-emptive patients on their waiting list.

3.3 Inflow to the waiting list in 2000

The total number of registrations on the (cadaveric) kidney transplant waiting list in 2000 (N=4921) again showed a slight decrease (-2%) as compared to 1999 (N=5023) (Table 3.4). The increase in Belgium (N=+35) and Austria (N=+14) was counterbalanced by sharp decreases in The Netherlands (N=-121 i.e. -15%) and Germany (N=-208 i.e. -6.25%). New registrations for patients who required re-plantation accounted for 13% (1999: 14%).

Pediatric patients remained 3% of the total inflow, while again 30% was accounted by the patients aged 56 years or more. These figures are similar to the percentages in 1999. The number of senior patients, i.e. over

the age of 65 years was 361, i.e. 7%. The inflow of ABO type O patients amounted to 40% (1999: 39%), which is much lower than the current portion on the active kidney-only waiting list (48%).

3.4 Outflow from the waiting list during 2000

3.4.1 Kidney transplant activity

A total of 3145 cadaveric kidney transplants (kidney only and kidney + other organs) was performed in 2000 (+3.1%) as compared with 3050 in 1999 (Table 3.5). A further rise of the number of multi-organ kidney transplants (from 317 in 1999 to 346 in 2000) was observed.

Table 3.5 also summarizes the 2799 kidney-only transplants carried out in 2000:

- Twenty-one and a half percent of kidney-only transplants took place between donors and recipients with zero HLA-A, B, DR mismatches (1999: 20%).
- The number of pediatric patients who received transplants in 2000 (N=101 i.e. 4%) was nearly 10% lower than in 1999 (N = 130 i.e. 5%). This was due to a significant drop of 42% in Germany.
- Transplantation (kidney-only) of elderly patients, aged 65 years or more, occurred in 401 cases (14%). In 1999 and 1998 these figures were respectively 228 (8.3%) and 182 (6.5%). This is certainly due to the implementation of the Eurotransplant Senior Program ('old for old' program).
- (Long) Waiting time is an important factor in the ET Kidney Allocation System. However, in 2000 17% of the patients who had been on the waiting list for five years or more were transplanted versus 18% in 1999. Considerable national differences were observed: Austria 4.9%, Belgium 4.5%, Germany 24.6% and The Netherlands 13.6%.
- The number of non-residents transplanted remained low (N=25), following the registration stop in Belgium and the re-definition of non-resident for the purpose of the ET Kidney Allocation System (see 3.2).

Table 3.4 Cadaveric kidney transplant waiting list in 2000: inflow (registrations) and outflow

		Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Registrations		419	501	3133	7	685	176	4921	100%	5023	100%
Sequence											
	First transplant	357	430	2706	7	602	175	4277	87%	4322	86%
	Repeat transplant	62	71	427	0	83	1	644	13%	701	14%
Age (years)	0-15	3	15	104	0	33	2	157	3%	169	3%
	16-55	288	329	2074	7	445	151	3294	67%	3333	66%
	56-64	89	105	745	0	147	23	1109	23%	1521	30%
	65+	39	52	210	0	60	0	361	7%		
ABO blood group	A	178	203	1347	3	290	65	2086	42%	2161	43%
	AB	35	27	159	0	18	3	242	5%	243	5%
	B	54	47	379	2	68	23	573	12%	646	13%
	O	151	221	1234	2	263	84	1955	40%	1936	39%
	Not yet reported	1	3	14	0	46	1	65	1%	37	1%
Outflow											
Transplantation (cadaveric donor)		357	478	1871	8	387	44	3145	100%	3050	100%
ABO blood group	A	143	204	820	1	162	20	1350	43%	1347	44%
	AB	26	28	120	0	17	1	192	6%	185	6%
	B	49	38	249	3	49	9	397	13%	398	13%
	O	139	208	682	4	159	14	1206	38%	1119	37%
	Not yet reported	0	0	0	0	0	0	0	0%	1	0%
	Total	357	478	1871	8	387	44	3145	100%	3050	100%
Age (years)	0-15	2	14	60	0	27	0	103	3%	131	4%
	16-55	227	327	1180	6	253	41	2034	65%	1906	62%
	56-64	81	89	364	2	66	3	605	19%	1013	33%
	65 +	47	48	267	0	41	0	403	13%		
	Total	357	478	1871	8	387	44	3145	100%	3050	100%
Mortality on the waiting list		52	35	419	0	111	1	618		592	
De-listing		32	62	342	0	100	3	539		482	
	Unknown	0	0	37	0	0	0	37			
	Better patient/no txp.	1	0	6	0	1	0	8			
	Other	11	20	106	0	73	3	213			
	Poor patient/no txp.	18	19	190	0	25	0	252			
	Transplanted (outside ET)	2	23	3	0	1	0	29			
	Wrong listing/adm. error	0	1	0	0	0	0	1			

Table 3.5 Kidney transplants in2000: characteristics

		Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Cadaveric donor kidney transplants		357	478	1871	8	387	44	3145	100%	3050	100%
Type of transplant											
	Kidney-only	324	440	1616	8	367	44	2799	89%	2733	90%
	Kidney+heart	0	1	3	0	0	0	4	0%	4	0%
	Kidney+lung	0	0	0	0	0	0	0	0%	1	0%
	Kidney+liver	4	7	21	0	2	0	34	1%	25	1%
	Kidney+liver+pancreas	0	0	2	0	0	0	2	0%	0	0%
	Kidney+pancreas	29	30	226	0	18	0	303	10%	282	9%
	Kidney+heart+liver	0	0	0	0	0	0	0	0%	1	0%
	Kidney+islet	0	0	3	0	0	0	3	0%	4	0%
Kidney-only transplants		324	440	1616	8	367	44	2799	100%	2733	100%
Kidney-only transplants											
HLA-A,B,DR mismatch	0	43	47	434	0	73	4	601	21%	548	20%
	1	23	30	73	1	28	1	156	6%	180	7%
	2	72	134	329	4	103	10	652	23%	659	24%
	3	117	172	402	2	112	22	827	30%	868	32%
	4	48	48	244	1	45	7	393	14%	344	13%
	5	18	8	100	0	5	0	131	5%	104	4%
	6	3	1	32	0	1	0	37	1%	30	1%
	Unknown	0	0	2	0	0	0	2	0%		
Age (years)	0-15	2	14	58	0	27	0	101	4%	130	5%
	16-55	197	294	948	6	234	41	1720	61%	1609	59%
	56-64	79	84	344	2	65	3	577	21%	994	36%
	65 +	46	48	266	0	41	0	401	14%		
ABO blood group	A	124	191	708	1	152	20	1196	43%	1219	45%
	AB	24	26	105	0	17	1	173	6%	166	6%
	B	47	34	209	3	48	9	350	13%	352	13%
	O	129	189	594	4	150	14	1080	39%	995	36%
	not recorded	0	0	0	0	0	0	0	0%	1	0%
% PRA prior to transplant	0-5%	232	382	1424	7	304	24	2373	85%	2358	86%
	6-84%	86	53	171	1	52	19	382	14%	337	12%
	85-100%	6	5	19	0	10	1	41	1%	38	1%
	Unknown	0	0	2	0	1	0	3	0%		
Time waiting (registration) (years)	0-1	161	312	568	2	132	44	1219	44%	1113	41%
	2-4	147	108	651	5	185	0	1096	39%	1139	42%
	5+	16	20	397	1	50	0	484	17%	481	18%
Sequence	First	261	365	1315	8	301	44	2294	82%	2243	82%
	Repeat	63	75	301	0	66	0	505	18%	490	18%
Match-residency	Yes	320	419	1616	8	367	44	2774	99%	2726	100%
	No	4	21	0	0	0	0	25	1%	7	0%
Special kidney transplant groups											
	High urgency	7	0	29	0	6	0	42	2%	42	2%
	Non-heart-beating donor	3	4	0	0	77	0	84	3%	76	3%
	Acceptable Mismatch	0	1	2	0	14	0	17	1%	25	1%
	Highly Immunized Trial	6	2	25	0	3	0	36	1%	44	2%
	En bloc, pediatric donor	4	8	6	0	2	0	20	1%	22	1%
	En bloc, adult donor	1	2	7	0	1	0	11	0%	10	0%
	Eurotransplant Senior Program	23	8	208	0	13	0	252	9%	222	8%
	Eurotransplant Senior Program; en bloc	0	0	3	0	0	0	3	0%	6	0%
Origin	Local-regional	214	222	943	4	254	11	1648	59%	1800	66%
	National	22	53	430	0	0	0	505	18%	442	16%
	Other ET countries	84	163	225	4	113	33	622	22%	466	17%
	Outside ET region	4	2	18	0	0	0	24	1%	25	1%
Living donor kidney transplants- Kidney Only											
		Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total		1999 Total	
Type of donor	total	37	13	346	0	173	0	569	100%	579	100%
	Living related	22	9	220	0	135	0	386	68%	381	66%
	Father	8	6	42	0	31	0	87	15%	74	13%
	Mother	5	3	91	0	26	0	125	22%	138	24%
	Sibling	7	0	66	0	62	0	135	24%	137	24%
	Other relatives	2	0	21	0	16	0	39	7%	32	6%
	Living unrelated	15	4	126	0	38	0	183	32%	198	34%
	Partner	9	3	112	0	31	0	155	27%	170	29%
	Other	6	1	14	0	7	0	28	5%	28	5%
Age (years)	0-15	1	3	19	0	13	0	36	6%	33	6%
	16-55	27	10	264	0	124	0	425	75%	445	77%
	56-64	7	0	56	0	24	0	87	15%	101	17%
	65+	2	0	7	0	12	0	21	4%		
Sequence	First	33	13	311	0	156	0	513	90%	528	91%
	Repeat	4	0	35	0	17	0	56	10%	51	9%
Total kidney transplant activity (all)		394	491	2217	8	560	44	3714		3629	

- Transplants, realized with kidneys procured from non-heart-beating (NHB) donors, increased to 84 (1999: 76) thanks to the major efforts done in The Netherlands. From 41 Dutch donors 80 kidneys were transplanted of which 77 in The Netherlands, 1 in Austria and 2 in Belgium. Belgium reported 2 NHB donors of which 4 kidneys were used.

In addition, 53 ‘highly immunized’ (i.e. currently and / or historically) patients received transplants (1999: 69). Of these, 36 patients received kidneys via the Highly Immunized Trial (HIT) protocol (1999:N=44), and 17 patients via the Acceptable Mismatch program (1999:N=25).

Transplant activities and kidney exchange are shown in detail in the Addenda. A good balance between national kidney procurement and transplantation was maintained throughout the year, while permitting an average local/regional kidney-only transplant rate of 59% (1648/2799) (1999: 66%). It should be noted that The Netherlands is considered as one region.

3.4.2 Mortality on the waiting list and de-listing

In 2000, a total of 618 patients died while on the waiting list (Table 3.4). (1999: N=592)

In addition, a further 539 patients (1999: N=482) were removed from the waiting list for various reasons, e.g. too poor condition, received living donor transplant, transplanted outside Eurotransplant, or no longer interested.

3.5 Living donor kidney transplants

Living donor kidney transplantation showed a slight drop of 1.7% for the first time since years: 569 donors in 2000 versus 579 donors in 1999; as such, it represents 16.9% of the total Eurotransplant kidney-only transplant activity (Table 3.5). The number of living related remained nearly the same in 2000, namely N=386 (1999: N=381) while the number of living unrelated donor kidney transplants dropped from 198 in 1999 to 183 in 2000. This drop was only seen in so-called ‘Partner’ transplants, namely from 170 in 1999 to 155 in 2000.

A survey of the living donor kidney transplant activity by country and by centre is also present in the Addenda. (Table 3b).

4. Thoracic organs: donation, waiting lists, and transplants

4.1 Thoracic organ donors

4.1.1 Heart donors

Table 4.1 gives an overview of the fate of cadaveric hearts from the 1101 potential donors reported to the central office of Eurotransplant in 2000. Of the hearts accepted for transplantation, 34% (N=322) were discarded for heart transplantation during procurement. Hearts from a total of 633 donors were transplanted, which represents a sharp decrease of 11% as compared to 1999. Hearts from 20 donors were used for combined heart+lung transplants.

Only 6% of heart donors (N=35) were aged over 55 years compared with 28% and 19% of kidney and liver donors, respectively (Table 4.2).

4.1.2 Lung donors

Table 4.3 summarizes the fate of lungs from the 527 potential lung donors reported to the central office of Eurotransplant in 2000 (1999: N=465). Upon inspection, 21% (N=49) of donor lungs were found to be unsuitable for transplantation (1999:5%). Lungs from 245 donors were transplanted (1999: N=220). Single lungs from 66 donors were transplanted and a total of 159 double lung transplantations were performed. In 20 cases, both lungs were used for 2 single lung transplants. There were 20 patients who received a combined heart + lung. Table 4.4. shows that 4% of the lungs used for a transplant were from donors over the age of 56. (1999:7%)

4.2 Waiting lists

The number of heart transplant candidates on the active waiting list on December 31, 2000 (N=489) decreased again by nearly 20% as compared with the 1999 year's end waiting list (N=609)(Table 4.5; Figure 4.1).

The heart+lung waiting list dropped for the fifth year in a row (-9%)(N=42), while the lung-only waiting list increased in 2000 with 7.5% (N=373) (Tables 4.6, 4.7; Figure 4.2).

Table 4.1 Use of cadaveric donor hearts in the Eurotransplant region in 2000

Donor Eurotransplant country	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	1999 Total
Total no. of heart donors reported	136	187	630	6	127	15	1101	1072
No donor hearts procured	22	28	85	1	9	1	146	159
- No time for selection / offer withdrawn	0	0	0	0	0	0	0	1
- Consent withdrawn	1	0	3	0	0	0	4	2
- Medical reasons	18	22	66	1	6	0	113	84
- No suitable recipient due to donor size	0	0	2	0	0	0	2	0
- No suitable recipient due to donor blood group	0	0	0	0	0	0	0	0
- No eligible/transplantable recipients	0	0	0	0	0	0	0	8
- Centre out of capacity or recipient unfit	0	0	0	0	0	0	0	0
- Transport problems / other organizational reasons	0	0	0	0	0	0	0	0
- Organizational reasons	0	2	5	0	0	1	8	5
- Cardiovascular instability of donor	0	0	0	0	0	0	0	0
- Indirect allocation to research program	1	2	5	0	2	0	10	18
- Direct allocation to research program	2	1	4	0	1	0	8	10
- Other / unknown	0	1	1	0	0	0	2	31
Donor heart inspection/procurement:	114	159	545	5	118	14	955	913
No transplantation	26	43	176	4	70	3	322	205
- Organ unsuitable for transplantation	0	0	0	0	0	0	0	29
- No back-up recipient	0	0	1	0	0	0	1	0
- Organizational reasons	0	0	1	0	0	0	1	1
- (In)direct allocation to research program	21	39	155	4	65	3	287	163
- Medical reasons	5	4	19	0	5	0	33	0
- Unknown / other	0	0	0	0	0	0	0	12
Transplantation	88	116	369	1	48	11	633	708
- Donor for heart+lung	4	7	7	0	2	0	20	26
- Donor for heart	84	109	362	1	46	11	613	682

Table 4.2 Demographics of cadaveric donors whose hearts were transplanted in the Eurotransplant region in 2000

Country	Total	Age (years)			Sex		ABO Blood group				Cause of death		
		0-15	16-55	≥56	Male	Female	A	AB	B	O	Accident	Natural	Suicide
Austria	88	3	83	2	52	36	38	1	11	38	39	44	5
Belgium	116	10	98	8	71	45	47	4	11	54	62	44	10
Germany	369	26	323	20	223	146	180	11	45	133	148	200	21
Luxemburg	1	0	1	0	1	0	0	0	0	1	1	0	0
Netherlands	48	4	39	5	22	26	16	1	6	25	12	35	1
Slovenia	11	0	11	0	7	4	7	0	2	2	5	3	3
Total	633	43	555	35	376	257	288	17	75	253	267	326	40
	100%	7%	88%	6%	59%	41%	45%	3%	12%	40%	42%	52%	6%

Table 4.3 Use of cadaveric donor lungs in the Eurotransplant region in 2000

Donor Eurotransplant country	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	1999 Total
Total no. of lung donors reported	77	89	280	1	68	12	527	465
No donor lung procured	35	34	176	1	41	8	295	234
- No time for selection / offer withdrawn	0	1	0	0	0	0	1	1
- Consent withdrawn	0	0	2	0	0	0	2	1
- Medical reasons	26	29	158	0	36	7	256	165
- No suitable recipient due to donor size	0	0	0	0	0	0	0	0
- No suitable recipient due to donor blood group	0	0	0	0	0	0	0	0
- No eligible/transplantable recipients	6	0	6	1	2	1	16	12
- Centre out of capacity or recipient unfit	0	0	0	0	0	0	0	0
- Transport problems/other organizational reasons	0	0	0	0	0	0	0	0
- Organizational reasons	3	3	9	0	3	0	18	18
- Cardiovascular instability of donor	0	0	0	0	0	0	0	0
- Other / unknown	0	1	1	0	0	0	2	37
Donor lung inspection/procurement: (either one or two lungs per donor)	42	55	104	0	27	4	232	231
No transplantation	10	10	26	0	2	1	49	11
- Medical reasons	9	9	25	0	2	0	45	1
- Organ unsuitable for transplantation	0	0	0	0	0	0	0	7
- No back-up recipient	0	0	0	0	0	0	0	0
- Organizational reasons	1	0	0	0	0	0	1	1
- Unknown / other	0	1	1	0	0	1	3	2
Donors used for transplantation	44	54	114	0	29	4	245	220
- Donor for heart+lung	4	7	7	0	2	0	20	26
- Donor for double lung	24	39	70	0	23	3	159	139
- Donor for single lung	8	6	28	0	3	1	46	30
- Donor for two single lungs	8	2	9	0	1	0	20	25

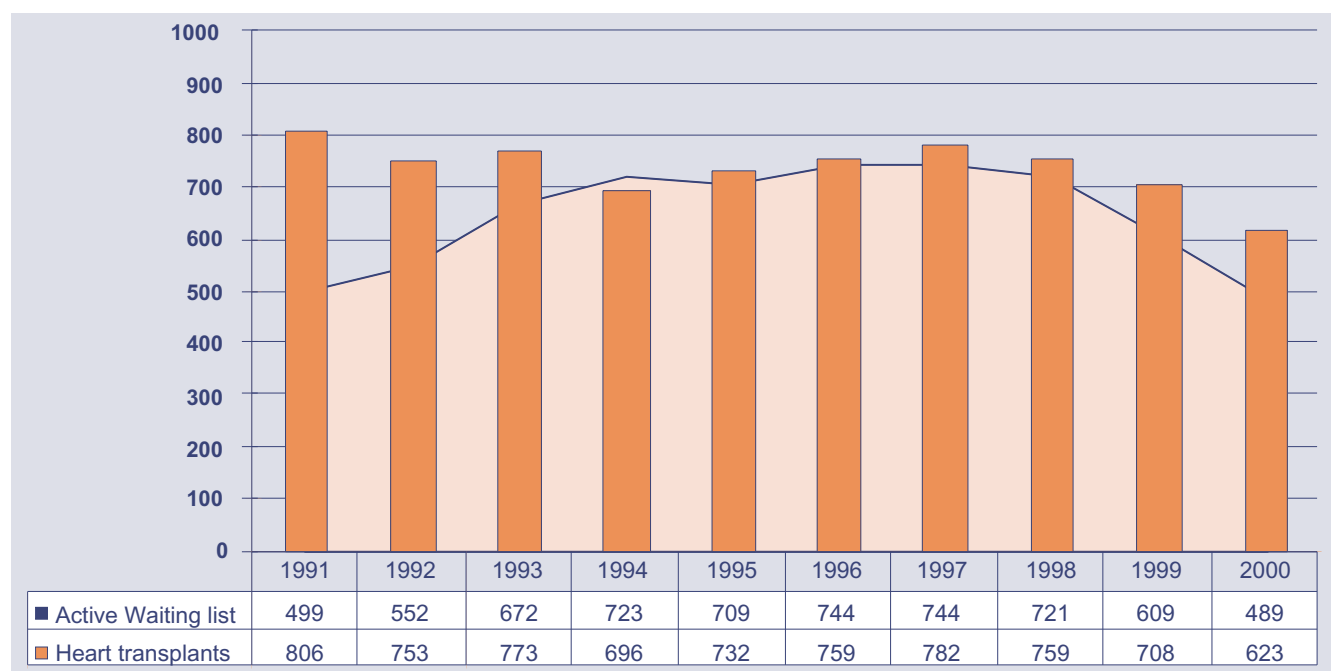


Figure 4.1 Dynamics of the Eurotransplant heart waiting list and heart transplants between 1992 and 2000

Table 4.4 Demographics of cadaveric donors whose lungs were transplanted in the Eurotransplant region in 2000

Country	Total	Age (years)			Sex		ABO Blood group				Cause of death		
		0-15	16-55	≥56	Male	Female	A	AB	B	O	Accident	Natural	Suicide
Austria	45	1	41	3	22	23	22	0	3	20	15	26	4
Belgium	54	1	49	4	26	28	24	2	3	25	26	26	2
Germany	113	6	105	2	71	42	63	4	10	36	47	61	5
Luxemburg	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands	29	3	24	2	5	24	9	0	4	16	3	26	0
Slovenia	4	0	4	0	3	1	2	0	1	1	1	2	1
Total	245	11	223	11	127	118	120	6	21	98	92	141	12
	100%	4%	91%	4%	52%	48%	49%	2%	9%	40%	38%	58%	5%

Table 4.5 Active heart transplant waiting list as per 31 December 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Number		44	30	381	27	7	489	100%	609	100%
Number per million inhabitants		5,5	3,0	4,6	1,7	3,5	4,1		5,2	
Type of transplant	Heart-only	42	30	379	27	7	485	99%	607	100%
	Heart+kidney	2	0	2	0	0	4	1%	2	0%
Age (years)	0-5	1	0	5	0	0	6	1%	8	1%
	6-15	2	1	0	0	0	3	1%	3	0%
	16-55	27	17	180	21	4	249	51%	291	48%
	56+	14	12	196	6	3	231	47%	307	50%
ABO blood group	A	20	20	144	18	4	206	42%	268	44%
	AB	1	0	13	0	1	15	3%	12	2%
	B	6	2	45	3	0	56	11%	52	9%
	O	17	8	179	6	2	212	43%	277	45%
Sequence	First	43	27	376	27	7	480	98%	604	99%
	Repeat	1	3	5	0	0	9	2%	5	1%
Time waiting (Registration) (months)	0-5	25	25	222	13	3	288	59%	271	44%
	6-11	11	3	84	5	2	105	21%	175	29%
	12-23	4	2	62	9	2	79	16%	122	20%
	24+	4	0	13	0	0	17	3%	41	7%

Table 4.6 Active heart+lung transplant waiting list as per 31 December 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Number		6	3	31	2	0	42	100%	46	100%
Number per million inhabitants		0,8	0,3	0,4	0,1	0,0	0,4		0,4	
Type of transplant	Heart+lung	6	3	31	2	0	42	100%	46	100%
	Heart+lung+liver	0	0	0	0	0	0	0%	0	0%
Age (years)	6-15	0	1	0	0	0	1	2%	3	7%
	16-55	6	2	29	2	0	39	93%	41	89%
	56+	0	0	2	0	0	2	5%	2	4%
ABO blood group	A	4	0	10	1	0	15	36%	19	41%
	AB	0	0	1	0	0	1	2%	2	4%
	B	0	1	1	0	0	2	5%	2	4%
	O	2	2	19	1	0	24	57%	23	50%
Sequence	First	6	3	31	2	0	42	100%	45	98%
	Repeat	0	0	0	0	0	0	0%	1	2%
Time waiting (Registration) (months)	0-11	4	3	12	2	0	21	50%	18	39%
	12-23	0	0	4	0	0	4	10%	13	28%
	24+	2	0	15	0	0	17	40%	15	33%

Table 4.7 Active lung transplant waiting list as per 31 December 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Number		20	27	270	60	0	377	100%	350	100%
*Number per million inhabitants		2,5	2,7	3,3	3,8	0	3,2		3,0	
Type of transplant	Lung-only	20	26	267	60	0	373	99%	345	99%
	Double	9	17	198	43	0	267	71%	250	71%
	Double or single	10	0	0	12	0	22	6%	20	6%
	Single left	0	3	18	0	0	21	6%	14	4%
	Single right	1	0	28	5	0	34	9%	41	12%
	Either single	0	6	23	0	0	29	8%	20	6%
	Lung+liver	0	1	2	0	0	3	1%	4	1%
	Lung+kidney	0	0	1	0	0	1	<1%	1	<1%
Lung Only Waiting List										
Age (years)	0-5	0	0	0	0	0	0	0%	0	0%
	6-15	3	2	2	1	0	8	2%	11	3%
	16-55	14	19	195	50	0	278	75%	265	77%
	56+	3	5	70	9	0	87	23%	69	20%
ABO blood group	A	5	7	109	19	0	140	38%	153	44%
	AB	0	1	9	5	0	15	4%	11	3%
	B	0	1	21	4	0	26	7%	21	6%
	O	15	17	128	32	0	192	51%	160	46%
Sequence	First	20	25	258	60	0	363	97%	330	96%
	Repeat	0	1	9	0	0	10	3%	15	4%
Time waiting (registration) (months)	0-5	10	14	107	13	0	144	39%	166	48%
	6-11	6	6	54	14	0	80	21%	92	27%
	12-23	4	5	74	24	0	107	29%	57	17%
	24+	0	1	32	9	0	42	11%	30	9%

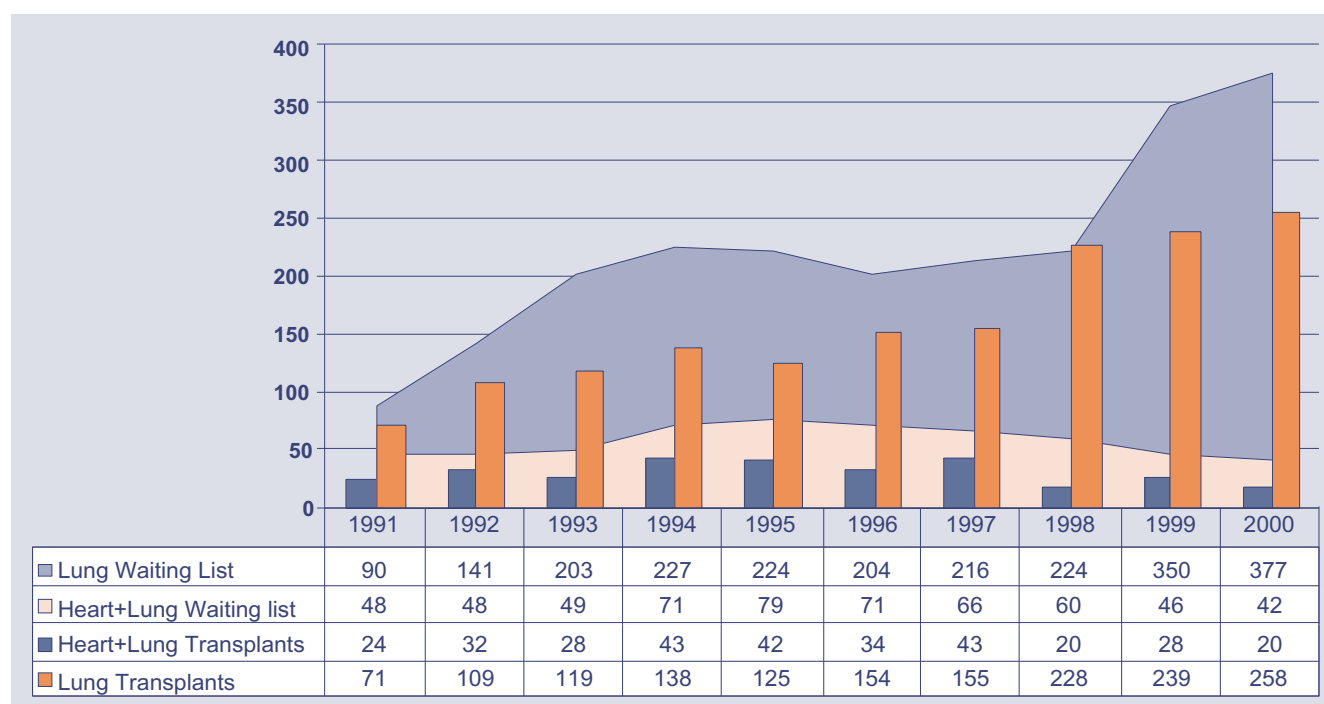


Figure 4.2 Dynamics of the Eurotransplant active heart+lung waiting list and heart+lung transplants and Eurotransplant active lung waiting list and cadaveric lung transplants between 1992 and 2000

Table 4.8 Heart transplant waiting list in 2000: inflow (registrations) and outflow

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Registrations	Total	120	114	640	60	10	944	100%	1071	100%
	Per million inhabitants	15	11,4	7,8	3,8	5,0	8,0		9,2	
Sequence	First transplant	118	109	627	59	10	923	98%	1048	98%
	Repeat transplant	2	5	13	1	0	21	2%	23	2%
Age (years)	0-5	3	0	25	2	0	30	3%	47	4%
	6-15	5	2	16	2	0	25	3%	21	2%
	16-55	57	66	338	34	8	503	53%	530	49%
	56-64	48	30	229	20	2	329	35%	473	44%
	65+	7	16	32	2	0	57	6%		
ABO blood group	A	57	53	276	22	6	414	44%	474	44%
	AB	9	4	37	2	1	53	6%	52	5%
	B	13	13	86	9	0	121	13%	114	11%
	O	41	44	241	27	3	356	38%	431	40%
Outflow										
Total		87	84	407	39	7	624	100%	708	100%
Transplantation	Living (domino)	1	0	0	0	0	1		0	
Transplantation	Cadaver	86	84	407	39	7	623	100%	708	100%
ABO blood group	A	34	37	194	14	5	284	46%	324	46%
	AB	6	4	24	2	0	36	6%	47	7%
	B	10	7	50	5	1	73	12%	97	14%
	O	36	36	139	18	1	230	37%	240	34%
Age (years)	0-5	2	0	8	0	0	10	2%	21	3%
	6-15	2	2	13	2	0	19	3%	17	2%
	16-55	33	46	192	18	5	294	47%	323	46%
	56-64	41	25	166	16	2	250	40%	347	49%
	65+	8	11	28	3	0	50	8%		
Mortality on the waiting list		16	10	141	14	2	183	100%	229	100%
ABO blood group	A	8	5	66	4	1	84	46%	101	44%
	AB	2	1	6	0	0	9	5%	12	5%
	B	1	1	14	3	0	19	10%	27	12%
	O	5	3	55	7	1	71	39%	89	39%
Age (years)	0-5	0	0	9	2	0	11	6%	17	7%
	6-15	0	0	2	0	0	2	1%	3	1%
	16-55	5	6	70	7	2	90	49%	89	39%
	56-64	9	3	51	4	0	67	37%	120	52%
	65+	2	1	9	1	0	13	7%		
De-listing		25	10	208	1	0	244	100%	167	100%

Characteristics of the heart waiting list include:

- Differences of heart waiting list size are enormous between the ET countries, in particular when expressed per million inhabitants (pmi), e.g. the Netherlands 1.7 pmi versus Austria 5.5 pmi. Slovenia was in between with 3.5 pmi.
- Patients with ABO blood group type O made up 43% of the heart waiting list, a decrease of 2% as compared to 1999. An increase of 2% was noted in blood group B patients now consisting of 11% of the waiting list.
- Patients aged over 56 years (N=231) made up 47% of the total heart waiting list, a decrease of 3% as compared with 1999 (N=307).
- In Austria and Germany, a considerable number of patients have already accrued a waiting time of at least 1 year and sometimes even more than 2 years!

Characteristics of the heart+lung waiting list include:

- 50% (N=21) of the patients had been waiting for one year or more by the end of 2000 (1999: 61%).

Characteristics of the lung waiting list include:

- The Netherlands had the highest number of patients on the lung transplant waiting list: 3.8 patients per million inhabitants.
- Most patients on the lung waiting list (N=267 i.e. 71%) were awaiting double lung transplantation as in 1999 (N=250 i.e. 72%).

Forty percent (N=149) of the patients had been on the waiting list for one year or more at the end of 2000, especially in Germany (N=106) and in The Netherlands (N=33).

4.3 Inflow to the thoracic waiting list in 2000

The number of new registrations for a heart transplantation dropped again in 2000 with 12% (N=127) to 944 patients. (1999:1071). Especially Germany registered fewer patients, namely 154 patients (1999: N=794). Austria and Belgium showed small increases of respectively 12 and 13 patients. Slovenia participated for the first year with 10 patients. Pediatric patients comprised 6% (N=55) of the total inflow, while 41% was accounted for by the patients aged 56 years or more of which 6% (N=57) was over the age of 65 years. The number of neonates and small infants registered in Germany was nearly halved in 2000 (N=25 (1999: N=47)). The ABO type A again had a higher influx (44%) than the ABO type O (38%) (Table 4.8).

The annual number of registrations for a heart+lung transplant is only 30 (-25%). Ten less than in 1999! (Table 4.9).

Table 4.9 Heart+lung transplant waiting list in 2000: inflow (registrations) and outflow

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Registrations	Total	4	4	21	1	0	30	100%	40	100%
Outflow										
Transplantation		2	6	11	1	0	20	100%	28	100%
ABO blood group	A	2	3	5	1	0	11	55%	14	50%
	AB	0	1	1	0	0	2	10%	0	0%
	B	0	1	1	0	0	2	10%	4	14%
	O	0	1	4	0	0	5	25%	10	36%
Age (years)	0-5	0	0	1	0	0	1	5%	1	4%
	6-15	0	0	1	0	0	1	5%	5	18%
	16-55	2	6	9	0	0	17	85%	21	75%
	55-64	0	0	0	1	0	1	5%	1	4%
	65+	0	0	0	0	0	0	0%		
Mortality on the waiting list		0	0	4	0	0	4	100%	26	100%
ABO blood group	A	0	0	2	0	0	2	50%	12	46%
	AB	0	0	0	0	0	0	0%	1	4%
	B	0	0	0	0	0	0	0%	3	12%
	O	0	0	2	0	0	2	50%	10	38%
Age (years)	6-15	0	0	0	0	0	0	0%	3	12%
	16-55	0	0	4	0	0	4	100%	19	73%
	56 +	0	0	0	0	0	0	0%	4	15%
De-listing		0	0	2	0	0	2	100%	10	100%

For the first time an 8% drop in the number of registrations for a lung transplant was observed (N=-37%). In 2000, 431 new patients were registered as compared to the 468 in 1999. All countries, except Belgium (+3) showed decreases. The number of children registered decreased from 21 in 1999 to 7 in 2000!

4.4 Outflow from the waiting list in 2000

4.4.1 Thoracic organ transplant activities

Heart transplants decreased by 12% (N=623) compared with 1999 (N=708) (Tables 4.8 and 4.11). Only 1 so-called 'domino' heart transplant was performed. The number of heart retransplants remained the same in 2000 namely 2% (N=15). In 2000, again fewer heart transplants were carried out in neonates and small infants (N=10), (1999: N=21) a procedure mainly carried out in Germany (N=8). Fifty patients over the age of 65 years received a heart transplant. Sixty percent of recipients (N=374) underwent heart transplantation within six months after registration on the waiting list (1999: 54%).

Eight less heart+lung transplants were performed in 2000 (N=19) as compared with 1999 (Table 4.9 and 4.12). One patient received a combined heart, lung and liver transplant. Only two pediatric patients underwent a heart + lung transplant in 2000 (1999 N=6).

Table 4.10 Lung transplant waiting list in 2000: inflow (registrations) and outflow

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Registrations	Total	66	50	279	36	0	431	100%	468	100%
	Per million inhabitants	8,3	5	3,4	2,3	0	3,6		4,0	
Sequence	First transplant	59	49	264	36	0	408	95%	439	94%
	Repeat transplant	7	1	15	0	0	23	5%	29	6%
Age (years)	0-5	0	0	0	0	0	0	0%	0	0
	6-15	2	1	4	0	0	7	2%	21	4%
	16-55	43	35	192	33	0	303	70%	340	73%
	56-64	20	13	80	3	0	116	27%	107	23%
	65+	1	1	3	0	0	5	1%		
ABO blood group	A	37	20	122	12	0	191	44%	205	44%
	AB	2	1	16	4	0	23	5%	27	6%
	B	4	2	25	5	0	36	8%	48	10%
	O	23	27	116	15	0	181	42%	188	40%
Outflow	Transplantation	58	37	147	16	0	258	100%	239	100%
Age (years)	0-5	0	0	0	0	0	0	0%	0	0%
	6-15	2	0	3	0	0	5	2%	6	3%
	16-55	34	28	102	16	0	180	70%	170	71%
	56-64	20	8	40	0	0	68	26%	63	26%
	65+	2	1	2	0	0	5	2%		
ABO blood group	A	32	17	86	5	0	140	54%	111	46%
	AB	2	3	8	1	0	14	5%	18	8%
	B	3	3	11	2	0	19	7%	31	13%
	O	21	14	42	8	0	85	33%	79	33%
Mortality on the waiting list		5	6	80	12	0	103	100%	90	100%
Age (years)	0-5	0	0	1	0	0	1	1%	0	0%
	6-15	0	0	3	0	0	3	3%	4	4%
	16-55	1	5	50	10	0	66	64%	70	78%
	56+	4	1	26	2	0	33	32%	16	18%
ABO blood group	A	4	0	41	7	0	52	50%	27	30%
	AB	0	1	3	1	0	5	5%	2	2%
	B	1	1	4	2	0	8	8%	5	6%
	O	0	4	32	2	0	38	37%	56	62%
De-listing		2	1	17	5	0	25	100%	9	100%
	Better patient/no txp.	0	0	7	0	0	7	28%		
	Other	0	0	4	3	0	7	28%		
	Poor patient/no txp.	2	1	5	2	0	10	40%		
	Wrong listing/adm. error	0	0	1	0	0	1	4%		

Forty percent (N=8) of the heart+lung transplants waited longer than a year for their heart+lung transplants (Table 4.12).

Austria (-10%) and The Netherlands (-1) performed less lung transplants while Belgium (+9) and Germany (+21) showed increases: an overall rise of 7.5% (N= 258) in 2000 versus (N=239) in 1999 (Tables 4.10 and 4.13). The number of children receiving a lung transplant was 5 (1999: N=6). Five transplanted patients were 65 years or older.

With the exception of patients in the Netherlands (50%), about 72% (Germany) or more (Austria (95%) and Belgium (84%)) of the patients underwent lung transplantation within one year (N=199; 77%) (Table 4.13).

Transplant activities and exchange of thoracic donor organs are shown in detail in the Addenda.

4.4.2 Mortality on the waiting list and de-listing

The mortality of patients on the heart transplant waiting list (N=183) was in 2000 20% less than in 1999 (N=229) (Table 4.8). Eleven neonates and small infants died before receiving a transplant. De-listing from the heart waiting list occurred in 244 cases (1999: 167). An increase of 46%!

Table 4.9 shows that 4 patients, all adults, died in 2000 while awaiting a heart+lung transplant.

One hundred and three patients of which 4 children died while awaiting lung transplantation in 2000 (Table 4.10) (1999: N=90).

Table 4.11 Heart transplants in 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Cadaveric heart transplants		86	84	407	39	7	623	100%	708	100%
Type of transplant	Heart-only	86	83	404	39	7	619	99%	702	99%
	Heart+kidney	0	1	3	0	0	4	1%	4	1%
	Heart+kidney+liver	0	0	0	0	0	0	0%	1	0%
	Heart+liver	0	0	0	0	0	0	0%	1	0%
Age (years)	0-5	2	0	8	0	0	10	2%	21	3%
	6-15	2	2	13	2	0	19	3%	17	2%
	16-55	33	46	192	18	5	294	47%	323	46%
	56+	49	36	194	19	2	300	48%	347	49%
ABO blood group	A	34	37	194	14	5	284	46%	324	46%
	AB	6	4	24	2	0	36	6%	47	7%
	B	10	7	50	5	1	73	12%	97	14%
	O	36	36	139	18	1	230	37%	240	34%
Sequence	First	84	83	396	38	7	608	98%	691	98%
	Repeat	2	1	11	1	0	15	2%	17	2%
Time waiting (months)	0-5	60	79	204	28	3	374	60%	384	54%
	6-11	11	5	73	7	4	100	16%	160	23%
	12-23	13	0	86	3	0	102	16%	115	16%
	24+	2	0	44	1	0	47	8%	49	7%

Table 4.12 Heart+lung transplants in 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Heart+lung transplants		2	6	11	1	0	20	100%	28	100%
Type of transplant	Heart+lung	2	5	11	1	0	19	95%	27	96%
	Heart+lung+liver	0	1	0	0	0	1	5%	1	4%
Age (years)	0-5	0	0	1	0	0	1	5%	0	0%
	6-15	0	0	1	0	0	1	5%	6	21%
	16-55	2	6	9	0	0	17	85%	21	75%
	56+	0	0	0	1	0	1	5%	1	4%
ABO blood group	A	2	3	5	1	0	11	55%	14	50%
	AB	0	1	1	0	0	2	10%	0	0%
	B	0	1	1	0	0	2	10%	4	14%
	O	0	1	4	0	0	5	25%	10	36%
Sequence	First	2	6	11	1	0	20	100%	28	100%
	Repeat	0	0	0	0	0	0	0%	0	0%
Time waiting (months)	0-11	2	3	6	1	0	12	60%	13	46%
	12-23	0	2	4	0	0	6	30%	11	39%
	24+	0	1	1	0	0	2	10%	4	14%

Table 4.13 Lung transplants: characteristics in 2000

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Lung transplants		58	37	147	16	0	258	100%	239	100%
Type of transplant	Lung-only	58	37	146	15	0	256	99%	234	98%
	Lung+liver	0	0	1	1	0	2	1%	4	2%
	Lung+kidney	0	0	0	0	0	0	0%	1	0%
Type of transplant	Double	30	27	98	13	0	168	65%	156	65%
	Single left	13	2	22	1	0	38	15%	39	16%
	Single right	15	8	27	2	0	52	20%	44	18%
Age (years)	0-5	0	0	0	0	0	0	0%	0	0%
	6-15	2	0	3	0	0	5	2%	6	3%
	16-55	34	28	102	16	0	180	70%	171	72%
	56-64	20	8	40	0	0	68	26%	62	26%
	65+	2	1	2	0	0	5	2%		
ABO blood group	A	32	17	86	5	0	140	54%	111	46%
	AB	2	3	8	1	0	14	5%	18	8%
	B	3	3	11	2	0	19	7%	31	13%
	O	21	14	42	8	0	85	33%	79	33%
Sequence	First	55	36	139	16	0	246	95%	221	92%
	Repeat	3	1	8	0	0	12	5%	18	8%
Time waiting (months)	0-5	45	20	70	4	0	139	54%	156	65%
	6-11	10	11	36	4	0	61	24%	38	16%
	12-23	2	6	32	5	0	45	17%	32	13%
	24+	1	0	9	3	0	13	5%	13	5%

5. Liver: donation, waiting lists and transplants

5.1 Liver donors

Table 5.1 shows the fate of livers from the 1446 (1999: N=1360) potential liver donors reported to the central office of Eurotransplant in 2000: 83% of donor livers were accepted (1999: 82%). Most of the donor livers which were not procured (N=248) were rejected for medical reasons (N=238). One hundred and fifteen procured livers were discarded in 2000 (10%) while this was 8% in 1999 (N=93/ 1119). The total number of donors whose livers were transplanted increased: +11% (N=1139) as compared with 1999 (N=1026). One hundred and thirteen livers were divided ('splitted') and transplanted into two recipients. (1999: N=106) In 2000, nearly the same number of livers were transplanted from donors ≥ 56 years (N= 208) (1999:N=210). Also similar numbers of pediatric donor livers were reported and transplanted in 2000 (N=76) as compared to 1999 (N=79) (Table 5.2).

Table 5.1 Use of cadaveric donor livers in the Eurotransplant region in 2000

Donor Eurotransplant country	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	1999 Total
Total no. of liver donors reported	181	240	846	5	154	20	1446	1360
No donor liver procured:	22	33	171	1	19	2	248	241
- No time for selection or offer withdrawn	0	0	0	0	0	0	0	0
- Consent withdrawn	0	0	0	0	0	0	0	1
- Medical reasons	19	32	165	1	19	2	238	183
- No suitable recipient due to donor size	0	0	0	0	0	0	0	0
- No suitable recipient due to donor blood group	0	0	0	0	0	0	0	0
- No eligible/transplantable recipients	0	0	1	0	0	0	1	2
- Centre out of capacity or recipient unfit	0	0	0	0	0	0	0	0
- Transport problems or other organizational reasons	0	0	0	0	0	0	0	0
- Cardiovascular instability of donor	0	0	0	0	0	0	0	0
- Other / unknown	3	1	5	0	0	0	9	55
Donor liver inspection/procurement:	159	207	675	4	135	18	1198	1119
No transplantation	11	12	85	0	6	1	115	93
- Organ unsuitable for transplantation	0	0	0	0	0	0	0	33
- No back-up recipient	0	0	0	0	0	0	0	1
- Organizational reasons	0	0	0	0	0	0	0	1
- Medical reasons	3	10	42	0	3	0	58	0
- Indirect allocation to research program	0	1	0	0	0	0	1	0
- Unknown / other	8	1	43	0	3	1	56	58
Transplantation	156	199	630	4	132	18	1139	1026
- split liver	17	8	80	0	6	2	113	106
- whole liver	139	191	550	4	126	16	1026	920
Donors used in txp	148	195	590	4	129	17	1083	973

Table 5.2 Demographics of cadaveric donors whose livers were transplanted in the Eurotransplant region in 2000

Country	Total	Age (years)			Sex		ABO Blood group				Cause of death		
		0-15	16-55	≥ 56	Male	Female	A	AB	B	O	Accident	Natural	Suicide
Austria	148	7	116	25	92	56	60	5	17	66	56	81	11
Belgium	195	18	144	33	105	90	81	8	13	93	84	100	11
Germany	590	40	430	120	329	261	275	26	60	229	173	399	18
Luxemburg	4	1	2	1	3	1	1	0	0	3	3	1	0
Netherlands	129	9	92	28	54	75	46	6	13	64	27	101	1
Slovenia	17	1	15	1	10	7	10	0	5	2	5	8	4
Total	1083	76	799	208	593	490	473	45	108	457	348	690	45
	100%	7%	74%	19%	55%	45%	44%	4%	10%	42%	32%	64%	4%

Table 5.3 Active cadaveric liver transplant waiting list as per 31 December 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Number		61	80	600	60	2	803	100%	593	100%
Number per million inhabitants		7,6	8,0	7,3	3,8	1,0	6,8		5,1	
Type of transplant										
	Liver-only	58	77	572	59	2	768	96%	558	94%
	Liver+kidney	2	3	22	1	0	28	3%	29	5%
	Liver+lung	0	0	0	0	0	0	0%	4	1%
	Liver+pancreas	1	0	3	0	0	4	0%	1	0%
	Liver+pancreas+kidney	0	0	3	0	0	3	0%	1	0%
	Liver+heart+lung	0	0	0	0	0	0	0%	0	0%
Age (years)	0-5	1	5	9	0	0	15	2%	12	2%
	6-15	1	6	8	0	0	15	2%	11	2%
	16-55	29	42	373	48	2	494	62%	385	65%
	56+	30	27	210	12	0	279	35%	185	31%
ABO blood group	A	25	26	263	21	2	337	42%	238	40%
	AB	4	2	26	0	0	32	4%	20	3%
	B	14	9	91	11	0	125	16%	94	16%
	O	18	43	220	27	0	308	38%	241	41%
Sequence	First	60	73	571	59	2	765	95%	563	95%
	Repeat	1	7	29	1	0	38	5%	30	5%
Time waiting (registration) (months)	0-2	43	45	211	26	0	325	40%	238	40%
	3-5	11	22	187	23	2	245	31%	119	20%
	6-11	6	12	142	9	0	169	21%	129	22%
	12+	1	1	60	2	0	64	8%	107	18%

5.2 Waiting list

The number of patients on the active waiting list as per December 31, 2000 increased spectacularly with 35% (N=803) as compared with 1999 (N=593) (Table 5.3; Figure 5.1).

The waiting list showed the following (Table 5.3):

- All ET countries except The Netherlands (3.8 pmi) and Slovenia (1.0 pmi) have more than 5 liver patients per million inhabitants on the waiting list.
- The pediatric liver transplant waiting list size increased from: N=23 in 1999 to N=30 in 2000.
- ABO blood group type O patients decreased to 38% of the total active waiting list (1999: 41%; 1998: 49%) but in absolute numbers the number increased from N=241 in 1999 to N=308 in 2000.
- Five percent (N=38) was awaiting a re-transplant on December 31, 2000.
- Twenty-nine % of patients were waiting for six months or more (1999: 40%).

5.3 Inflow to the liver waiting list in 2000

Fourteen percent (N=+229) increase in registrations for a liver transplantation was noted in 2000 (N=1844). (Table 5.4). The number of patients requiring a repeat liver transplant remained the same in 2000 with N=206 as compared to 1999 (N=203).

Pediatric patients comprised nearly 9% of the total inflow in 2000 (N=162) (1999: N=133), while nearly 33% was accounted by the patients aged 56 years or more (N=602) of which 86 patients were over the age of 65 years.

The inflow of ABO type O patients amounted to 39%, which is comparable to the 38% at the current active liver waiting list.

Nearly 40% of the registrations for a repeat liver transplant were HU requests (N=82/206).

In 2000, a new liver urgency criteria system was developed comparable to the UNOS liver system. The highest number of patients on the waiting list registered for a first transplant is assigned to urgency code T (46%).

While on the waiting list, liver transplant candidates are assigned medical urgency codes that are used to prioritize them in the liver allocation procedure. The codes are:

Code HU: high urgency Patients with de novo hepatic failure ranging from acute to fulminant onset, including rapidly progressive Wilson's disease and Budd-Chiari disease, patients in need of a repeat transplant due to an irreversible life-threatening graft failure (within 14 days of the previous transplant), patients with severe hepatic trauma, and anhepatic patients. Patients with liver tumours are not eligible for an HU request.

If a patient is on the HU waiting list, the offer and exchange of a donor liver is mandatory.

Code CO: combined organ Patients in need of a multi-organ liver transplant, except for liver-kidney transplants. If a patient is on the CO waiting list, the offer and exchange of a donor liver is mandatory.

Code T2: Chronic liver disease with acute deterioration Patients with an end-stage liver disease not eligible for HU but in urgent need of a liver transplant. The patient has to be hospitalized due to chronic liver failure with a life expectancy of less than 29 days without transplantation, has to have a Child-Turcotte-Pugh score of 10 or more with at least one of the defined complications.

Code T3: Chronic liver disease with complications Patients with an end-stage liver disease with a Child-Turcotte-Pugh score of 10 or more, or with a score of 7 and at least one of the defined complications.

Code T4: Chronic liver disease without complications Patients with an end-stage liver with a Child-Turcotte-Pugh score of 7 or more, including all other indications for liver transplantation. Recipient is at home, but needing constant medical care. Short hospitalizations for intercurrent reasons do not change the status.

Code NT: not transplantable This code is assigned to patients with a temporary contraindication to liver transplant.

5.4 Outflow from the liver waiting list in 2000

5.4.1 Liver transplant activities

In 2000, 1168 cadaveric liver transplants were carried out being + 3% than in 1999 (N=1132) (Table 5.5).

Other points to note are:

- Split-liver transplants remained around 10% in 2000 (N=113) (1999: N=106) of the total liver transplant activity.
- Fifty-seven percent of the pediatric liver recipients transplanted were younger than six years of age (N=64) (1999: 61%).
- A slight decrease (-2%) of transplanted patients older than 56 years was noted, namely 364 in 2000 versus 372 in 1999. Fifty-three patients of 65 years or older received a liver transplant.
- Repeat liver transplants constituted 12% of the total number of transplants in 2000 (N=136) (1999: N=129 i.e. 11%).
- In 2000, 32% of recipients (N=380) had to wait longer than 6 months as compared to 25% in 1999 (N=277).

Transplant activities and liver exchange by country and by centre are shown in detail in the Addenda.

5.4.2 Mortality on the waiting list and de-listing

The number of liver transplant candidates who were removed from the waiting list because they died prior to transplantation amounted to 279 in 2000 (Table 5.4). Eleven children, of whom 8 small infants died awaiting a liver transplant. Furthermore, 38% (105 / 279) of the patients who died before receiving a liver transplant had blood group O. This figure was even higher in blood group A patients namely 43% (N=120).

In 2000, 107 patients were removed from the waiting list for a variety of reasons. They were either too poor transplant candidates, or they recovered. (1999: N=111).

5.5 Living donor liver transplants

The number of living donor liver transplants performed in 2000 rose with 81% to N=116 (1999: N=64). The vast majority (70%) were between genetically related individuals (85 / 116). See table 3b Addenda). The most active programmes of living-related liver transplantation were Essen (N=21), Berlin (N=15), Hannover (N=13) Brussels (LA) (N=11), Gent (N=7), and Hamburg (N=6). Nine domino liver transplants were performed in 2000 using the native liver of a patient who underwent a liver transplant due to familial amyloid neuropathy. Twenty-two living unrelated liver transplants were carried out in 2000 (1999: N=12). Most of these were performed in Berlin (N=11) and Hannover (N=5).

Twice as many mothers (N=26) donated liver segments to their children as compared to fathers (N=13) (Table 5.5). In 2000, the majority of patients who received a living donor transplant was not younger than sixteen years of age anymore (N=37). In 2000, 42 patients between 16-55 years and 37 patients > 56 years of age received a living liver transplant (1999: resp. 18 and 17). Even 5 patients over the age of 65 years received a living liver transplant.

Table 5.4 Liver transplant waiting list in 2000: inflow (registrations) and outflow

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Registrations	Total	209	269	1196	159	11	1844	100%	1615	100%
	Per million inhabitants	26,1	26,9	14,6	9,9	5,5	15,6		13,9	
Type of transplant										
	Liver-only	200	261	1157	155	11	1784	97%	1575	98%
	Liver+kidney	6	5	25	3	0	39	2%	27	2%
	Liver+lung	0	1	1	1	0	3	0%	5	0%
	Liver+pancreas	3	2	8	0	0	13	1%	3	0%
	Liver+pancreas+kidney	0	0	5	0	0	5	0%	4	0%
	Liver+heart+lung	0	0	0	0	0	0	0%	1	0%
Sequence										
	First transplant	193	239	1057	138	11	1638	89%	1412	87%
	Repeat transplant	16	30	139	21	0	206	11%	203	13%
Medical urgency first	HU-first	4	16	61	11	0	92	5%	132	8%
	T_LIV	97	124	550	64	9	844	46%		
	T2_LIV	14	25	60	10	0	109	6%		
	T3_LIV	58	49	221	30	0	358	19%		
	T4_LIV	20	25	165	23	2	235	13%		
Medical urgency repeat	HU-repeat	6	12	55	9	0	82	4%	97	6%
	T_LIV	3	8	46	7	0	64	3%		
	T2_LIV	4	4	17	2	0	27	1%		
	T3_LIV	3	5	13	3	0	24	1%		
	T4_LIV	0	1	8	0	0	9	0%		
Age (years)	0-5	2	23	68	9	0	102	6%	82	5%
	6-15	5	18	33	4	0	60	3%	51	3%
	16-55	116	140	699	114	11	1080	59%	974	60%
	56-64	72	66	348	30	0	516	28%	508	31%
	65+	14	22	48	2	0	86	5%		
ABO blood group	A	82	108	538	57	8	793	43%	706	44%
	AB	15	7	67	5	1	95	5%	93	6%
	B	33	27	155	24	1	240	13%	228	14%
	0	79	127	436	73	1	716	39%	588	36%
Outflow	Transplantation (cadaveric donor)	147	194	691	126	10	1168	100%	1132	100%
Age(years)	0-5	1	12	42	9	0	64	5%	65	6%
	6-15	4	12	25	7	0	48	4%	42	4%
	16-55	86	104	412	80	10	692	59%	653	58%
	56-64	49	51	184	27	0	311	27%	372	33%
	65+	7	15	28	3	0	53	5%		
ABO blood group	A	56	85	315	38	7	501	43%	500	44%
	AB	7	8	35	7	1	58	5%	65	6%
	B	24	20	87	19	1	151	13%	145	13%
	O	60	81	254	62	1	458	39%	422	37%
Mortality on the waiting list		43	30	197	8	1	279	100%	214	100%
Age(years)	0-5	1	2	5	0	0	8	3%	9	4%
	6-15	1	1	1	0	0	3	1%	2	1%
	16-55	22	13	116	6	1	158	57%	137	64%
	56+	19	14	75	2	0	110	39%	66	31%
ABO blood group	A	17	9	91	3	0	120	43%	85	40%
	AB	4	1	9	0	0	14	5%	16	7%
	B	5	5	29	0	1	40	14%	21	10%
	O	17	15	68	5	0	105	38%	92	43%
De-listing	Unknown	9	14	71	13	0	107	100%	111	100%
	Better patient/no txp.	0	0	12	0	0	12	11%		
	Other	6	5	21	3	0	35	33%		
	Poor patient/no txp.	0	2	16	3	0	21	20%		
	Poor patient/no txp.	1	6	22	7	0	36	34%		
	Transplanted (outside ET)0		1	0	0	0	1	1%		
Wrong listing/adm. error	2	0	0	0	0	2	2%			

Table 5.5 Liver transplants in 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Slovenia	2000 Total	%	1999 Total	%
Cadaveric liver transplants		147	194	691	126	10	1168	100%	1132	100%
Type of transplant										
	Liver whole	130	177	579	115	10	1011	87%	989	87%
	Liver split	12	8	85	8	0	113	10%	106	9%
	Liver split+kidney	0	0	3	0	0	3	0%	1	0%
	Liver+kidney	4	7	18	2	0	31	3%	24	2%
	Liver+pancreas	1	1	3	0	0	5	0%	5	0%
	Liver+pancreas+intestines	0	0	0	0	0	0	0%	0	0%
	Liver+pancreas+kidney	0	0	2	0	0	2	0%	0	0%
	Liver+lung	0	0	1	1	0	2	0%	4	0%
	Liver+kidney+heart	0	0	0	0	0	0	0%	1	0%
	Liver+lungs+heart	0	1	0	0	0	1	0%	1	0%
	Liver+heart	0	0	0	0	0	0	0%	1	0%
Urgency code										
	HU-first	6	18	70	10	0	104	9%	101	9%
	HU-repeat	6	5	54	9	0	74	6%	71	6%
	Transplantable								960	85%
	T_LIV	75	105	355	63	6	604	52%		
	T2_LIV	14	32	78	13	0	137	12%		
	T3_LIV	37	29	107	23	3	199	17%		
	T4_LIV	9	4	27	8	1	49	4%		
	U_LIV	0	1	0	0	0	1	0%		
Age (years)										
	0-5	1	12	42	9	0	64	5%	65	6%
	6-15	4	12	25	7	0	48	4%	42	4%
	16-55	86	104	412	80	10	692	59%	653	58%
	56-64	49	51	184	27	0	311	27%	372	33%
	65+	7	15	28	3	0	53	5%		
ABO blood group										
	A	56	85	315	38	7	501	43%	500	44%
	AB	7	8	35	7	1	58	5%	65	6%
	B	24	20	87	19	1	151	13%	145	13%
	O	60	81	254	62	1	458	39%	422	37%
Sequence										
	First	135	182	600	105	10	1032	88%	1003	89%
	Repeat	12	12	91	21	0	136	12%	129	11%
Patients		136	182	619	109	10	1056		1057	
Time waiting (months)										
	0-2	77	113	300	61	5	556	48%	607	54%
	3-5	39	42	119	31	2	233	20%	248	22%
	6-11	28	28	144	24	3	227	19%	187	17%
	12+	3	11	129	10	0	153	13%	90	8%
Living donor liver transplants		4	22	90	0	0	116	100%	64	100%
Relationship										
	Father	2	3	8	0	0	13	11%	15	23%
	Mother	1	7	18	0	0	26	22%	15	23%
	Other relatives	0	9	37	0	0	46	58%	29	45%
	Unrelated	0	1	21	0	0	22	8%	2	3%
	Unknown	0	0	0	0	0	0	1%		
	Domino	1	2	6	0	0	9	0%	3	5%
Age (years)										
	0-5	2	10	19	0	0	31	27%	25	39%
	6-15	1	1	4	0	0	6	5%	4	6%
	16-55	1	4	37	0	0	42	36%	18	28%
	56-64	0	6	26	0	0	32	28%	17	27%
	65+	0	1	4	0	0	5	4%		
ABO blood group										
	A	3	8	36	0	0	47	41%	26	41%
	AB	0	1	2	0	0	3	3%	1	2%
	B	0	2	10	0	0	12	10%	7	11%
	O	1	11	42	0	0	54	47%	30	47%
Sequence										
	First	4	22	88	0	0	114	98%	63	98%
	Repeat	0	0	2	0	0	2	2%	1	2%
Total liver transplant activity		151	216	781	126	10	1284	100%	1196	100%

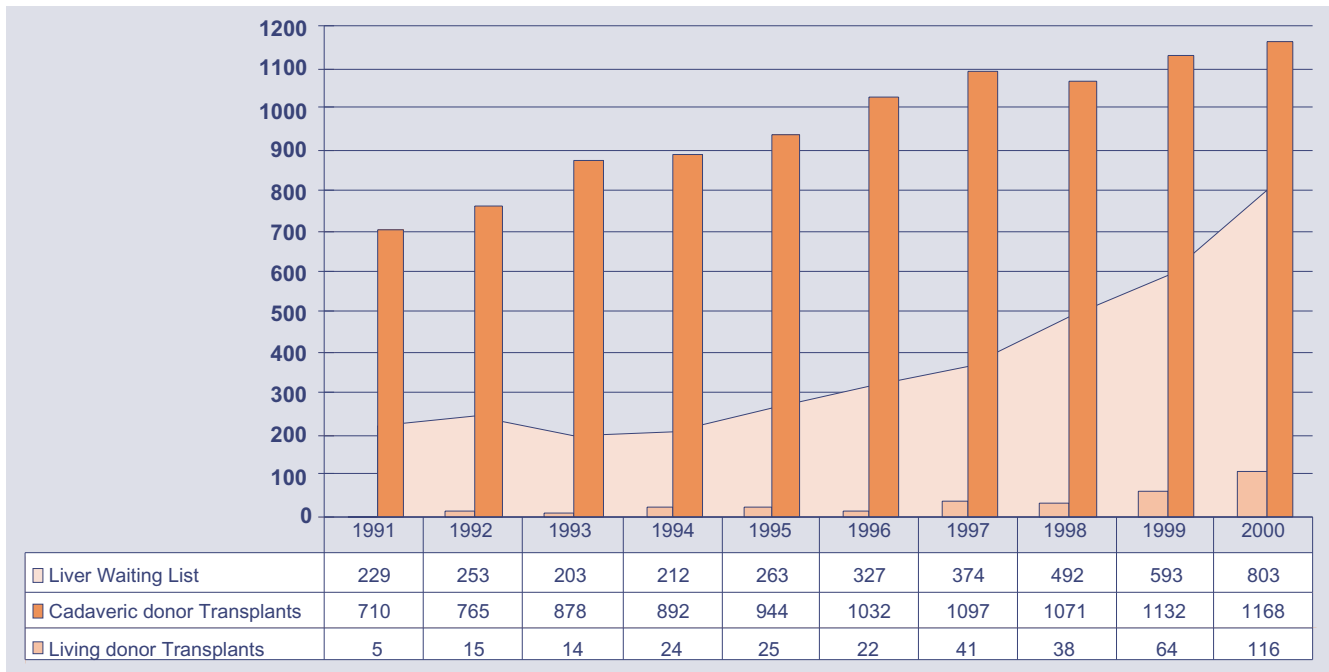


Figure 5.1 Dynamics of the Eurotransplant liver waiting list and liver transplants between 1992 and 2000

5.6 Liver high urgency programme

Similar to 1999, High Urgency (HU) liver requests in 2000 constituted approximately 9% of the total number of entries on the waiting list (N=174/1844) (Tables 5.4). In 1999 this figure for HU registrations was 14% (N=229). Following the adaptation of the eligibility criteria for a HU repeat transplantation which now required a graft failure within 14 days after the previous transplant, the number of requests for HU repeat transplants was 82 in 2000 (1999: N=97).

The number of patients receiving a transplant, while on the HU waiting list, was 178 in 2000. (1999: N=172).

6. Pancreas: donation, waiting lists, and transplants

6.1 Pancreas donors

In 2000, 835 pancreas donors were reported to the central office of Eurotransplant (Table 6.1). Nearly 40% (330/835) of the reported pancreata were not procured, primarily (94% N=310) due to medical reasons. Of the remaining 505 pancreata, 334 were used for clinical transplantations either as a whole pancreas transplantation (N=331) or islet transplantation (N=3). Table 6.2 presents demographic data of donors of which the pancreas was used for clinical pancreas transplantation. The majority of the donors (92%) is aged between 16-55 years (N=307) as to be expected.

Table 6.1 Use of donor pancreases in the Eurotransplant region in 2000

Donor country	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	2000 Total	1999 Total
Total no. of pancreas donors reported	85	148	487	5	92	18	835	795
No pancreas donor procurement:	44	49	201	2	30	4	330	247
- No time for selection or offer withdrawn	0	0	1	0	0	0	1	2
- Consent withdrawn	0	0	1	0	0	0	1	2
- Medical reasons	39	42	193	2	30	4	310	219
- No suitable recipient: size or blood group	0	0	0	0	0	0	0	0
- No eligible transplantable recipients	0	1	1	0	0	0	2	5
- Centre/bank out of capacity or recipient unfit	0	0	0	0	0	0	0	0
- Transplant problems or other organizational reasons	0	0	0	0	0	0	0	0
- Organizational reasons	4	4	3	0	0	0	11	18
- Donor cardiovascular instability	0	0	0	0	0	0	0	1
-(in)direct allocation to research program	0	2	0	0	0	0	2	0
- Other	1	0	2	0	0	0	3	0
Pancreas donor inspection/procurement:	41	99	286	3	62	14	505	548
No transplantation/research	10	43	77	1	34	6	171	240
- Organ unsuitable for transplantation / assigned to research program	10	41	42	1	27	4	125	166
- Unknown	0	0	0	0	0	0	0	7
- Not suitable for research	0	0	0	0	1	0	1	67
- No back-up recipient (positive cross-match)	0	0	0	0	0	0	0	0
- Medical reasons	0	2	34	0	6	2	44	0
- Organizational reasons	0	0	1	0	0	0	1	0
Total no. of pancreases used	31	56	209	2	28	8	334	308
Whole pancreas transplantation in 2000	31	56	206	2	28	8	331	301
- Islet transplants	0	0	3	0	0	0	3	6

Table 6.2 Demographics of cadaveric donors whose pancreases were transplanted transplant in the Eurotransplant region in 2000

Country	Total	Age (years)			Sex		ABO Blood group				Cause of death		
		0-15	16-55	≥56	Male	Female	A	AB	B	O	Accident	Natural	Suicide
Austria	31	0	31	0	18	13	14	1	1	15	14	16	1
Belgium	56	6	50	0	28	28	22	2	4	28	33	19	4
Germany	209	17	190	2	114	95	93	7	22	87	82	119	8
Luxemburg	2	0	2	0	1	1	1	0	0	1	1	1	1
Netherlands	28	2	26	0	8	20	8	2	1	17	6	21	0
Slovenia	8	0	8	0	5	3	6	0	0	2	3	1	4
Total	334	25	307	2	174	160	144	12	28	150	139	177	18
	100%	7%	92%	1%	52%	48%	43%	4%	8%	45%	42%	53%	5%

Table 6.3 Active pancreas transplant waiting list as per December 31, 2000: characteristics

		Austria	Belgium	Germany	Netherlands	2000 Total	%	1999 Total	%
Number		33	32	209	15	289	100%	262	100%
Type of transplant	Pancreas+kidney	16	16	150	13	195	67%	186	71%
	Islet or β cell+kidney	0	0	0	0	0	0%	6	2%
	Pancreas+liver+kidney	0	0	3	0	3	1%	1	0%
	Pancreas+liver	1	0	3	0	4	1%	1	0%
	Pancreas-only	16	16	53	2	87	30%	32	12%
	Islet or β cell-only	0	0	0	0	0	0%	36	14%
Pancreas+kidney waiting list		16	16	150	13	195	100%	193	100%
Age (years)	11-15	0	0	1	0	1	1%	1	1%
	16-40	9	5	72	7	93	48%	90	47%
	41+	7	11	77	6	101	52%	102	53%
ABO blood group	A	3	7	49	6	65	33%	48	25%
	AB	1	0	1	0	2	1%	3	2%
	B	4	0	9	2	15	8%	38	20%
	O	8	9	90	5	112	57%	104	54%
	Not yet reported	0	0	1	0	1	1%		
% PRA current	0-5%	10	15	140	11	176	90%	181	94%
	6-84%	5	1	7	2	15	8%	11	6%
	85-100%	1	0	1	0	2	1%	0	0%
	Not yet reported	0	0	2	0	2	1%	1	1%
Time waiting (registration) as pancreas+kidney (months)	0-5	8	7	63	3	81	42%	85	44%
	6-11	5	5	60	6	76	39%	56	29%
	12-23	2	2	26	4	34	17%	26	13%
	24+	1	2	1	0	4	2%	26	13%

6.2 Waiting list

The overall number of patients on the active waiting list for a pancreas transplant increased by 10% (N=289) compared with 1999 (N=262); the pancreas (/kidney) waiting list increased with 9 patients (total N=195). In 2000, an unexpected growth of the waiting list for a pancreas-only transplant was observed, namely, 87 patients in 2000 versus 32 in 1999 (Table 6.3). Interesting to note that no patients awaiting islets or β -cell transplants only were on the waiting list as per December 31, 2000. (In 1999: N=36).

The characteristics of the total pancreas+kidney waiting list on December 31, 2000 (N=195) are shown in Table 6.3:

- A high number of ABO blood group type O patients was present (N=112 i.e. 57%). The number of blood group B patients dropped to 15 in 2000 (1999: N=38) while the number of blood group A patients increased from 48 in 1999 to 65 in 2000.
- Seventeen patients had a current panel reactive antibody (PRA) level of 6% or more, of which 2 had even more than 85% PRA.
- Waiting times of one year or more were noted for 19% of all ET patients (38 /195). In 1999 this was still 27% (52 / 193).

6.3 Inflow to the pancreas waiting list during 2000

The number of registrations for a pancreas transplant in 2000 was slightly higher (N=433) than in 1999 (N=428) (Table 6.4).

The vast majority of registrations remained for pancreas+kidney transplants namely N=355) (82%), exactly equal to the 1999 situation. Interesting to note is the registration of 45 patients for a pancreas-only transplant in 2000 (1999: N=50), the majority in Germany, namely 32 patients. Surprisingly, in 2000 16 patients were reported for a combined liver+pancreas (1999: N=3). Eleven patients were considered for an islet-only transplant (1999: N=7). Four percent of the pancreas patients (N=15) were registered for a re-transplant.

Table 6.4 Pancreas transplant waiting list in 2000: inflow (registrations) and outflow

		Austria	Belgium	Germany	Netherlands	2000		1999	
						Total	%	Total	%
Registrations	Total	46	45	302	40	433	100%	428	100%
Type of transplant	Pancreas+kidney	35	31	253	36	355	82%	355	83%
	Islet+kidney	1	0	1	0	2	0%	9	2%
	Pancreas+liver+kidney	0	0	3	0	3	1%	2	0%
	Pancreas+liver	4	2	10	0	16	4%	3	1%
	Pancreas-only	6	3	32	4	45	10%	50	12%
	Islet-only	0	9	2	0	11	3%	7	2%
	Pancreas+liver+kidney+intestines	0	0	1	0	1	0%	2	0%
	Pancreas+kidney	35	31	253	36	355	100%	355	100%
Sequence	First pancreas transplant	34	31	241	34	340	96%	337	95%
	Repeat pancreas transplant	1		12	2	15	4%	18	5%
Age (years)	0-15	0	0	0	0	0	0%	2	1%
	16-40	19	15	128	17	179	50%	191	54%
	41+	16	16	125	19	176	50%	162	46%
ABO blood group	unknown	0	0	0	8	8	2%	2	1%
	A	15	18	116	14	163	46%	126	35%
	AB	3	1	14	0	18	5%	15	4%
	B	4	1	27	3	35	10%	53	15%
	O	13	11	96	11	131	37%	159	45%
Outflow	Transplantation	30	37	247	20	334	100%	306	100%
	Mortality on the waiting list	2	3	25	2	32	100%	25	100%
Age (years)	16-40	1	1	7	1	10	40%	12	48%
	41+	1	2	18	1	22	88%	13	52%
ABO blood group	A	1	2	12	1	16	64%	10	40%
	AB	0	1	0	0	1	4%	1	4%
	B	1	0	4	0	5	20%	2	8%
	O	0	0	9	1	10	40%	12	48%
De-listing	Unknown	2	1	30	6	39	100%	31	
	Better patient/no txp.	0	0	12	0	12	31%		
	Other	0	0	1	0	1	3%		
	Poor patient/no txp.	1	0	10	4	15	38%		
	Wrong listing/ adm. error	0	0	7	1	8	21%		
		1	1	0	1	3	8%		

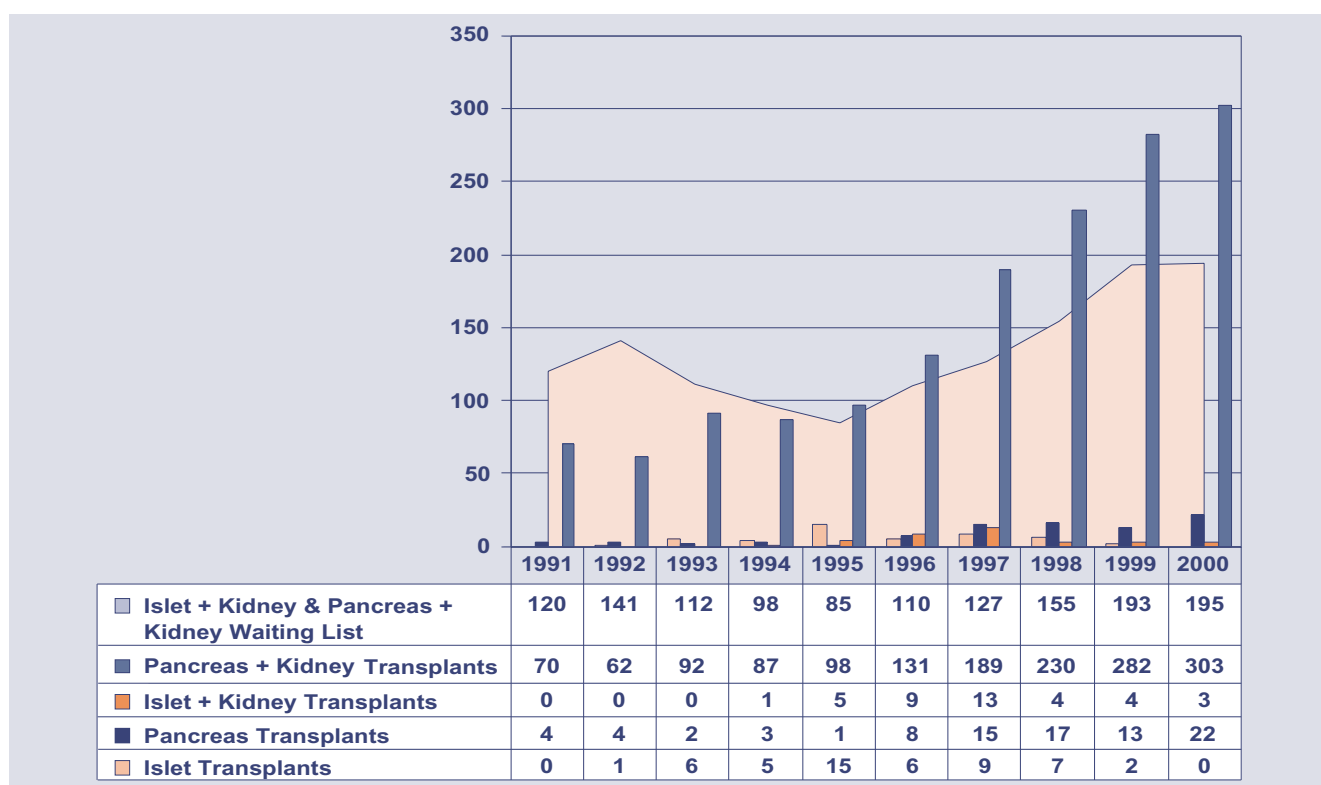


Figure 6.1 Dynamics of the Eurotransplant pancreas+kidney and islet+kidney waiting list, pancreas+kidney, islet+kidney, pancreas and islet-only transplants between 1992 and 2000

6.4 Outflow from the pancreas waiting list in 2000

6.4.1 Pancreas transplant activities

For the fifth year in a row, the number of pancreas+kidney transplants substantially rose from 120 transplants in 1995 to 303 in 2000 (Table 6.5, figure 6.1). Pancreas-only, pancreas+liver, islet-only, and islet+kidney transplants constituted approximately 10% of the total pancreas transplant activity. In 2000, also two patients received a combined liver + pancreas + kidney transplantation.

Table 6.5 shows the characteristics of the pancreas+kidney transplants carried out in 2000 (N=303), and the following points can be noted:

- Four percent (N=11) of the transplanted patients belong to the category of immunized patients (PRA > 6%).
- Forty-five percent had accrued a waiting time of 1 year or more (N=128).
- Good HLA-A, B, DR matches happened only occasionally. Only 5 combinations with 0 or 1 HLA-A, B, DR mismatch.

6.4.2 Mortality on the waiting list and de-listing

Thirty-two patients died on the pancreas waiting list in 2000 (1999:N=25) (Table 6.4), practically all dying within the first year after registration.

Thirty-nine patients were removed from the list when they failed to meet the pancreas(+kidney) transplant criteria or they were no longer eligible for a pancreas transplant but were still eligible for a kidney transplant.

Table 6.5 Pancreas transplants in 2000: characteristics

		Austria	Belgium	Germany	Netherlands	Total	2000 %	1999 Total	1999 %
Number		30	38	247	20	335	100%	306	100%
Type of transplant	Ki Pa **	29	30	226	18	303	90%	282	92%
	Liv Pa	1	1	3	0	5	1%	4	1%
	Pa	0	7	13	2	22	7%	13	4%
	islet	0	0	0	0	0	0%	2	1%
	Ki islet	0	0	3	0	3	1%	4	1%
	Liv Pa intestines	0	0	0	0	0	0%	1	0%
	Ki Pa Li	0	0	2	0	2	1%	0	0%
**Belgium including one donor from 1999 - used in 2000 for ki pa									
Pancreas+kidney transplants		29	30	226	18	303	100%	282	100%
HLA-A, B, DR mismatch	0	0	0	2	0	2	1%	0	0%
	1	0	0	3	0	3	1%	6	2%
	2	1	1	24	3	29	10%	17	6%
	3	9	14	46	0	69	23%	55	20%
	4	12	6	65	7	90	30%	91	32%
	5	5	8	66	4	83	27%	77	27%
	6	2	1	20	4	27	9%	36	13%
Age (years)	0-15	0	0	2	0	2	1%		
	16-40	16	17	108	5	146	48%	150	53%
	41+	13	13	116	13	155	51%	132	47%
ABO blood group	A	16	10	97	8	131	43%	113	40%
	AB	2	2	13	0	17	6%	17	6%
	B	2	3	38	1	44	15%	42	15%
	O	9	15	78	9	111	37%	110	39%
% PRA prior to transplant	0-5%		25	29	216	18	288	95%	261
93%	6-84%	1	1	9	0	11	4%	19	7%
	85-100%	0	0	0	0	0	0%	1	0%
	No data available	3	0	1	0	4	1%	1	0%
Time waiting as pancreas+kidney (months)	0-5	23	13	78	0	114	40%	104	37%
	6-11	5	12	39	5	61	22%	119	42%
	12-23	1	5	75	10	91	32%	45	16%
	24+	0	0	34	3	37	13%	14	5%

7 Histocompatibility Testing

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7.1 Introduction

The ongoing task of the Eurotransplant Reference Laboratory (ETRL) is the improvement and maintenance of the quality of HLA typing, serologically and with the help of molecular techniques, screening for transplantation relevant antibodies, and crossmatching within Eurotransplant and its collaborating centers. This task is addressed by organising proficiency testing programmes (External Proficiency Testing Exercises) for the Tissue Typing Centers (TTC) affiliated to Eurotransplant. Furthermore, the ETRL initiates studies, as the use of flow cytometry crossmatches, and promotes discussions for possible new recommendations with the help of the Tissue Typing Advisory Committee (TTAC). In addition, in the past 15 years the ETRL has addressed the problem of highly sensitised patients, by organising and promoting both the Acceptable Mismatch (AM) and the Highly Immunised Tray/Trial (HIT) programs. Furthermore, visits to the affiliated TTC belong to its duties. A 24 hours a day, 7 days a week duty for all transplantation relevant immunological aspects within Eurotransplant rounds up the tasks of the ETRL.

7.2 Eurotransplant Proficiency Testing Schemes

The Proficiency Testing Schemes applied in 2000 to determine the individual performance of the TTC=s are reported below:

7.2.1 External Proficiency Testing on HLA typing

In 2000, 16 cell suspensions were sent out to the TTC. Each participant received eight samples for analysis and was asked to report the results before a certain deadline. For the analysis of the results a 75 % consensus rule was used. This rule has been introduced by the European Federation for Immunogenetics (EFI) and facilitated the acceptance for possible discrepancies. A consensus was obtained for all HLA-A, B and DR “broad” antigens. The results, based on the report of the ‘broad’ (B) and split (S) HLA specificities are summarised in Table 7.1.

Table 7.1: External Proficiency Testing Exercises on HLA typing

Locus	Total Typings	N Discrepant	% Discrepancy
		B / S*	B / S*
HLA-A	392	2 / 2	0.5 / 0.5
HLA-B	392	0 / 3	0.0 / 0.8
HLA-DR	392	1 / 1	0.3 / 0.3

B = HLA typing on the basis of ‘broad’ specificities

S = HLA typing on the basis of ‘split’ specificities

Since the majority of the laboratories perform in addition to the serological typing also a molecular of the same sample, it is clear that the introduction of molecular typing for HLA-A, B and for HLA-DR has resulted in an increase of reliability of the typing results within Eurotransplant.

7.2.2 External Proficiency Testing Exercises on molecular typing

For the External Proficiency Testing on molecular typing two sets of 10 DNA samples each (DNA#15 and DNA#16) were sent to the participants. The DNA was isolated from either spleen cells of organ donors, peripheral blood cells from healthy blood donors, or cell lines. Rare alleles and haplotypes were included. The ETRL received results from the majority of the participants with regard to the HLA-A,B specificities (35 for the Exercise #15 and 37 for the Exercise #16) and almost all participants for the HLA-DR specificities, 49 and 48 participants respectively. The results are summarised in Table 7.2.

Table 7.2: External Proficiency Testing Exercise on molecular typing

Locus	Total Typings	N Discrepant	% Discrepancy
HLA-A	720	26	3.6
HLA-B	720	13	1.8
HLA-DR	970	7	0.7

These results indicate that molecular typing for the HLA-A and HLA-B specificities still can be improved. However, a closer look to the results revealed that almost all discrepancies occurred in a few individual laboratories. These participants had a high incidence of clerical errors due to mixture of samples, misreading, and misreporting of the results. It seems that the organisational set up of a participant is a determining factor. For example, performing HLA-A,B and HLA-DR typing in separate locations contribute to errors. Furthermore, still some participants use the nomenclature in a wrong way.

7.2.3 External Proficiency Testing on Crossmatching

As in the past, TTC participating in this Proficiency Testing Exercise were asked to perform crossmatches using the cells provided for the Proficiency Testing Exercise on serological typing and the sera of four different Eurotransplant patients selected by the ETRL. The TTC used the local crossmatch techniques to simulate the day-to-day practice. In total 32 sera had to be crossmatched per TTC. For the final analysis 977 crossmatches without dithiothreitol (DTT) and 931 crossmatches with DTT were evaluated (Table 7.3).

Table 7.3. External Proficiency Testing Exercise on crossmatching

Comparison between the periods 2000 and the period 1999 with respect to the concordance in the report of the different TTC	without DTT		with DTT	
	2000	1999	2000	1999
All TTC agreed	19	20	27	22
One TTC disagreed	7	14	9	14
Two TTC's disagreed	11	9	6	8
>2 TTC's disagreed	27	21	22	20

* DTT (dithiothreitol) destroys antibodies of the IgM type

The results of the Exercise for the period 1999-2000 are similar to those described in the past years.

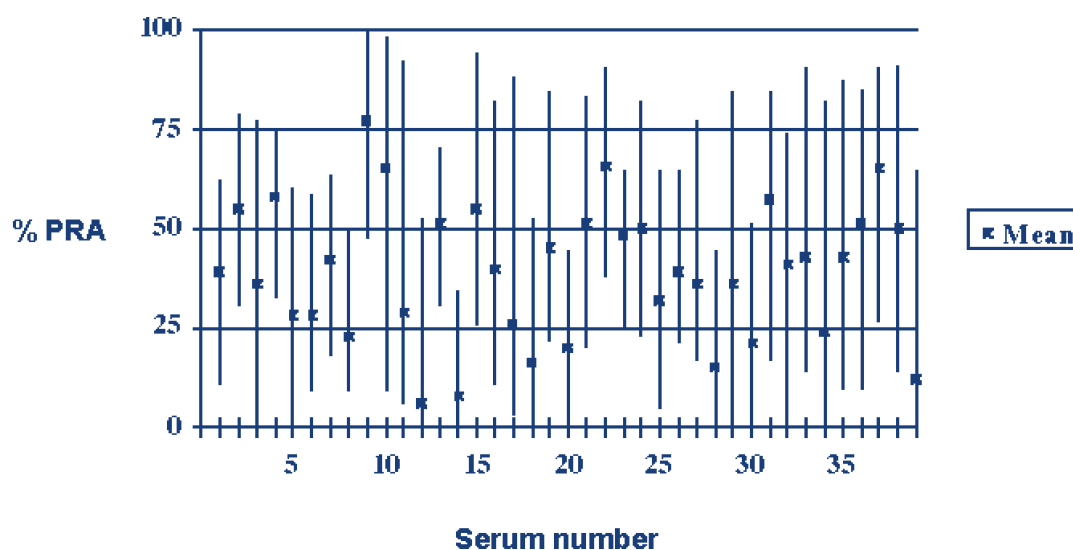


Figure 7.1 The mean value and its variation of the % PRA

7.2.4 External Proficiency Testing Exercise on Screening

For the External Proficiency Testing Exercises on screening the participants received in regular intervals serum samples from the ETRL and were asked to test them in their usual screening procedures. In total 16 sera were sent, usually obtained from multiparous women, where in the majority of the cases the HLA types of the partner and the child were known. The participating TTC were asked to screen them in the routine antibody screening technique. The panel size used by the participants ranged between 30 and 100 HLA typed cells. Although ELISA based techniques are widely used, almost all participants reported data based on the 'classical' complement dependent cytotoxicity.

The results obtained are in line with previous observations. A high concordance was observed in case of IgG HLA class I specific antibodies, while HLA antibodies of the IgM type were several times defined as being negative (probably loss of activity during shipment, or use of IgG based ELISA tests). The most intriguing result was that the definition of the % PRA value differs significantly from participant to participant (see Figure 7.1). This result points to the fact that the % PRA value is not a valuable parameter for allocation procedures. This point has to be discussed in depth within the community of Eurotransplant.

7.3 Programmes for the highly immunised patients in Eurotransplant

As reported repeatedly, two programs are currently available for highly immunised patients: the Acceptable Mismatch Programme (AM) and the Highly Immunised Tray/Trial (HIT). Both programmes are organised and controlled by the ETRL. They are open for all patients of Eurotransplant. Information for participation can be obtained from the ETRL or the Eurotransplant Administration. At present the cumulative chance for a highly sensitised patient to receive a transplant within 21 months is 15% in the standard Eurotransplant allocation system (ETKAS), for the HIT 31% and for the AM program 58%. The exact numbers of patients transplanted in each program are presented elsewhere in this Annual Report.

7.4 Eurotransplant Serum Sets

The era of the send out of serum sets for HLA-DR, DQ ended in the year 2000, because of the wide introduction of molecular techniques. The same will also be done for the serum sets for HLA-A, B, C in the near future. We take here the opportunity to once more thank all co-operating HLA laboratories within and outside Eurotransplant for making valuable typing sera available to the ETRL and the Eurotransplant community.

7.5 Other activities

The Annual Tissue Typers Meeting was held October 5, 2000 in Leiden. One hundred and thirty members of the different Tissue Typers Centers were present. The participants of the meeting were informed about the discussions within the Tissue Typing Advisory Committee, the introduction of electronic communication via the ETRL (e-mail, internet) between the centers and the ETRL and finally the translation of molecular typing results into the so-called matching determinants. Furthermore, the lay-out of a flow cytometry study was presented. The results of this workshop will be collected in the summer of 2001 and presented during the Tissue Typers Meeting on September 27, 2001.

Seventh Extra Mural Meeting

The seventh Extra Mural Meeting was held in Kaiserslautern, Germany, on February 18, 2000. There, the participants were informed about the link between serological and molecular typing results. Amongst others also the relevance of ELISA based antibody screening and the introduction of the HLA-DR split matching in the allocation algorithm was discussed. Finally, the different programs (AM and HIT) were once more presented to the participating members of the Eurotransplant TTC.

7.5.1 Tissue Typing Advisory Committee

The fruitful interaction between the ETRL and the TTAC continued also through 2000. It should be noted that the TTAC makes both the agenda and a summary of the minutes available to all TTC. All centers have therefore the opportunity to react on the different discussion points. Throughout 2000, the TTAC discussed the introduction of DNA typing results for HLA-A, B, C in ENIS, the link of screening results to the unacceptable antigens, and the introduction of HLA-DR splits in the matching algorithm. By recommendation of the Board, Eurotransplant requires an accreditation of the European Federation for Immunogenetics in order to accept any transplantation relevant immunogenetical results, e.g. typing and screening for anti-HLA specific antibodies.

8. Publications and Presentations in 2000

The names of authors who work at the Eurotransplant central office or Eurotransplant Reference Laboratory are *in Italic*.

8.1 Publications

Cohen B, Persijn GG, Vanrenterghem Y

Commerce in transplantation: how does it affect European legislation?

In: *Clinical Transplantation*, 2000, 14: 28-31

Cohen B, Persijn GG

Eurotransplant: key international role

In: *Proceedings 2nd Slovenian congress of Nephrology with international participation. Celebrating 30 years of dialysis and renal transplantation in Slovenia*, 2000, 13-18

Cransberg K, Gool van JD, Davin JC, Jong de MCJW, Darby M, Boendermaker ME, Meester De JMJ, Stijnen Th, Wolff ED, Nauta J

Pediatric renal transplantation in the Netherlands

In: *Pediatric Transplantation*, 2000, 4: 72-81

Deng MC, Meester De JMJ, Smits JMA, Heinecke J, Scheld HH

Effect of receiving a heart transplant: analysis of a national cohort entered on to a waiting list, stratified by heart failure severity

In: *British Medical Journal*, 2000 (9), 540-544

Haase-Kromwijk BJJM, Persijn GG

The Dutch Donor Registry: early experience

In: *Organs and Tissues*, 2000, 1: 25-28

Hauser IA, Persijn GG

Organ donation and justice in organ allocation

In: *Kidney and Blood Pressure Research*, 2000; 23: 188-190

Koelman CA, Van Beelen E, Witvliet MD, Doxiadis IIN, Claas FHJ

Determination of acceptable mismatches in highly sensitized patients by sHLA-ELISA inhibition

In: *Transplantation*, 2000, 69: 656-660

Koelman CA, Vaessen LMB, Balk AHMM, Weimar W, Doxiadis IIN, Claas FHJ

Donor derived soluble HLA plasma levels can not be used to monitor graft rejection in heart transplant recipients

In: *Transplant International*, 2000, 8: 57-64

Kuhlmann U, Lenhard R, Persijn GG, Lange H

HLA incompatibility and cold ischemia period as risk factors for renal allograft survival

In: *Transplantationsmedizin*, 2000 (12), 58-69

Meester De JMJ, Persijn GG, Claas FHJ, Frei U

In the queue for a cadaver donor kidney transplant: new rules and concepts in the Eurotransplant International Foundation

In: *Nephrology Dialysis Transplantation*, 2000, 15: 333-338

Persijn GG, Smits JMA, Frei U

Three years experience with the new Eurotransplant Kidney Allocation System.

Letter to the editor.

In: *The Lancet*, 2000, 355, 71

GG Persijn, B. Cohen
Eurotransplant Annual Report 1999

Persijn GG
The founding of ESOT - the historian's first report
In: *Transplant International*, 2000, 13: 160-161

Persijn GG (co-author) and member Select Committee Council of Europe
Preliminary international figures on 1999 organ donation and transplantation activities
In: *Organs and Tissues*, 2000, 1: 5-10

Persijn GG, Smits JMA, Boer de J, Wiesenhaan GC, Meester De JMJ
Orgaandonatie en orgaantransplantatie bij kinderen in de periode 1989-1998
In: *Tijdschrift voor Kindergeneeskunde*, 2000; 68 (4): 164-168

Smits JMA, Houwelingen van HC, Meester De J, Cessie le S, Persijn GG, Claas FHJ, Frei U
Permanent detrimental effect of nonimmunological factors on long-term renal graft survival. A parsimonious model of time-dependency
In: *Transplantation*, 2000; 70: 317-322

Stobbe I, Meer-Prins van der EMW, Lange de P, Oudshoorn M, Meester De JMJ, Doxiadis IIN, Claas FHJ
Cross-reactive group matching does not lead to a better allocation and survival of donor kidneys
In: *Transplantation*, 2000; 70: 157-161

Stobbe I, Van der Meer-Prins PMW, De Lange P, Oudshoorn M, Doxiadis IIN, Claas FHJ
In vitro CTL precursor frequencies do not reflect a beneficial effect of cross-reactive group (CREG) matching
In: *Human Immunology*, 2000, 61: 879-883

Völker-Dieben HJ, Claas FHJ, Schreuder GMT, Schipper RF, Pels E, Persijn GG, Smits J, D'Amato J
Beneficial effect of HLA-DR matching on the survival of corneal allografts
In: *Transplantation*, 2000; 70: 640-648

Wiesenhaan-Stellingwerff G
Leverallocatie in Nederland
In: *OLTimer*, juni 2000: 8-9

Wight C, Cohen B, Roels L, Miranda B
Donor Action: a quality assurance program for intensive care units that increases organ donation
In: *Journal of Intensive Care Medicine*, 2000, 15: 104-114

8.2 Posters

Scandinavian Transplantation Society, XX Congress, May 11 - 12, 2000, Helsinki - Finland
The results of the Dutch Donor Registry
Haase-Kromwijk BJJM

American Society of Transplantation, May 13-17, 2000, Chicago - U.S.A.
Pediatric liver transplantation: 10 years Eurotransplant experience.
Wiesenhaan-Stellingwerff GC, Smits JMA, Boer de J, Persijn GG, Slooff MJH

Improving outcome of cardiac transplantation: ISO-risk donor profiles in decision making.
Meester De JMJ, Smits JMA, Deng MC, Rutgrink E, Persijn GG, Haverich A

The XVIII International Congress of the Transplantation Society, August 27 - September 1, 2000, Rome - Italy

Efficiency of special programs for highly sensitised patients within Eurotransplant
Doxiadis IIN, Meester De JMJ, Persijn GG, Claas FHJ

The results of the Dutch Donor Register
Haase-Kromwijk BJJM, Sieber MH, Zeguers R, Spijkerboer R, Persijn GG

Improving outcome of cardiac transplantation using ISO-risk donor profiles
Meester De JMJ, Smits JMA, Deng MC, Rutgrink E, Persijn GG, Haverich A

Prognostic factors in pediatric renal transplants
Persijn GG, Smits JMA, Frei U

Effects of vasopressor application to brain-dead donors on graft survival in solid organ transplantation
Schnuelle P, Berger S, Boer de J, Persijn GG, Woude van der FJ

9. Jahrestagung der Deutschen Transplantationsgesellschaft, October 26-28, 2000, Regensburg - Germany

Serum creatinine at time of brain death predicts long term renal graft outcome
Smits JMA

8.3 Oral Presentations

Presentations by B. Cohen:

West Midland Regional Meeting, February 1, 2000, Birmingham, United Kingdom
Eurotransplant and organ donation programmes

Israel Transplant Society Meeting, April 14, 2000, Tel Aviv, Israel
Benefits of the Eurotransplant Allocation System - Israel Transplant Society

Deutsche Transplantations Gesellschaft, June 27, 2000, Mainz, Germany
Einführung der Richtlinien für die Organvermittlung durch Eurotransplant

2nd Slovenian Congress of Nephrology, September 27 - 30, 2000, Ljubljana, Slovenia
First results of the collaboration between Slovenia Transplant and Eurotransplant

Eurotransplant Meeting 2000, October 5 - 6, 2000, Leiden, Netherlands
Directors Report

Presentations by I.I.N. Doxiadis:

8. Kongreß der Deutschen Gesellschaft für Immungenetik, September 26-28, 2000, Ulm, Germany
Babylonisches Wirrwarr: serologisches vs. DNA Nomenklatur

European Medical Scientific Symposium on Organ Transplantation, November 11, 2000, Amsterdam, The Netherlands
Immunology of Transplantation

Tissue Typing Meeting, November 30, 2000, Halle, Germany
Allokation von Organen im Eurotransplant Verbund

Presentations by G.G. Persijn:

Eurotransplant Winter Meeting, 19 - 22 January, 2000, Fügen, Austria
An update of the Eurotransplant Senior Program

Symposium 1000th transplantation UZ Gent, February 16 - 18, 2000, Gent, Belgium
Orgaantransplantatie binnen Eurotransplant

1st International Course on Split Liver Transplantation, March 2 - 3, 2000, Hamburg - Germany
The impact of split liver transplantation in Eurotransplant

Walter-Brendel-Kolleg für Transplantationsmedizin. Forum zum Unterricht in den Grundlagen der Organtransplantation. 7. Kurs, March 12 - 14, 2000, Wildbad Kreuth, Tegernsee, Germany
Organverteilung nach den Regeln von Eurotransplant

The Hungarian Transplantation Society - First Transplantation Forum, March 31 - April 1, 2000, Eger-Hungary

Donor and transplantation activity in Eurotransplant and Austria

International Symposium on 400 Years Japanese - Dutch Relationship, April 22, 2000, Osaka - Japan

Forum: Beginning of new Dutch learning - transmission of life

10th Anniversary meeting Niigata Society of Organ Transplantation and Regenerative Medicine, April 23 - 26, 2000, Niigata, Japan

Organ transplantation: 30 years Eurotransplant experience

The XIIth International Congress on Psychonephrology, June 2-3, 2000, Yokohama, Japan

The results of the Dutch donor register

First Congress of the International Transplant Association, August 23 - 25, 2000, Venice - Italy

- Pediatric liver transplantation: 10 years registry report
- Prognostic factors in pediatric renal transplantation

The XVIII International Congress of the Transplantation Society, August 27 - September 1, 2000, Rome - Italy

- The new Eurotransplant Kidney Allocation System: an evaluation
- Pediatric liver transplantation: 10 years registry report

Kongress für Nephrologie, September 2 - 5, 2000, Vienna, Austria

Organ donation and justice in organ allocation

2nd Slovenian Congress of Nephrology, September 27 - 30, 2000, Ljubljana, Slovenia

Kidney allocation in Eurotransplant 1996 - 2000

Eurotransplant Meeting, October 6, 2000, Leiden, The Netherlands

Update Eurotransplant Senior Program

ETCO 2000 Meeting, October 13 - 15, 2000, Stuttgart, Germany

What can be improved in the Eurotransplant region?

Congress of the Rumanian Transplant Society, October 19 - 21, 2000, Bucharest, Romania

- Eurotransplant - state of the art anno 2000
- The Eurotransplant Kidney Allocation System 1996-2000
- The Eurotransplant Senior Program

2nd Congress of the Hungarian Transplantation Society, November 16 - 18, 2000, Sopron, Hungary

Eurotransplant anno 2000. Kidney allocation and the old-for-old program

Spatenstich OP-Erweiterung Nephrologisches Zentrum Niedersachsen, November 22, 2000, Hannover-Münden, Germany

Perspektiven der Weiterentwicklung des Transplantationswesens im Eurotransplant Bereich

Annual meeting Mexican Institute for Nephrological Research, December 7 - 10, 2000, Acapulco, Mexico

Eurotransplant: state of the art concerning organ donation and allocation anno 2000

Presentations by J.M.A. Smits:

International Society for Clinical Biostatistics, September 5 - 7, 2000, Trento - Italy

Empirical bayes methods for estimating center specific heart transplant failure rates

ETCO 2000 Meeting, October 13 - 15, 2000, Stuttgart, Germany

- Serum creatinine at time of brain death predicts long term renal graft outcome
- Old-for-old-renal allocation: an answer to organ shortage?

9. Jahrestagung der Deutschen Transplantationsgesellschaft, October 26-28, 2000, Regensburg - Germany

Old-for-old renal allocation: an answer to organ shortage?

Presentations by Th.R. Werle:

7. Jahrestagung der Dialysepatienten Deutschland, May 2000, Wiesbaden, Germany

Allokation der vermittlungspflichtigen Organe

23. Sitzung der Bundesärztekammer, May 22, 2000, Berlin, Germany

Unterschiede zwischen den aktuellen ET Allokationsregeln und den neuen Richtlinien des TPG

Education Permanente Eurotransplant, May 2000, Leiden, The Netherlands

Donormanagement

9. Jahrestagung der Deutschen Transplantationsgesellschaft, October 26-28, 2000, Regensburg, Germany

- Veränderungen in der Allokation
- First results of the German Audit Committee
- Prinzipien der Organvergabe

Presentations by G.C. Wiesenhaan:

The 6th International Liver Transplantation Society Congress, June 21-23, 2000, Buenos Aires, Argentina

Pediatric liver transplantation: 10 years Eurotransplant experience.

Presentations by E. de Buijzer:

The Turkish Transplantation Society's Congress, October 24 - 28, 2000, Istanbul, Turkey

Eurotransplant: Current and future issues



Addenda

Due to adjustments in computerized data recording and analysis methods in the year 2000, some minor discrepancies between various reporting categories have occurred. These differences, when present, are less than 0.15%

Table 1 Number of patients active on the waiting list on December 31, 2000, stratified by organ, per country and center

Country	Center	Kidney	Kidney+ Pancreas	Pancreas	Heart	Heart+ Lung	Lung	Liver
Austria	GA	93	2	0	12	2	1	5
	IB	216	12	17	9	1	7	29
	OE	88	0	0	0	0	0	0
	OL	46	0	0	0	0	0	0
	OW	0	0	0	0	0	0	0
	WD	1	0	0	0	0	0	0
	WG	286	2	0	23	3	12	27
	TOTAL	730	16	17	44	6	20	61
Belgium	AN	31	3	0	0	0	0	2
	AS	0	0	0	3	0	0	0
	BJ	13	0	0	0	0	0	0
	BP	0	0	13	0	0	0	0
	BR	189	2	1	7	3	6	11
	GE	97	4	2	3	0	0	13
	LA	112	2	0	8	0	4	33
	LE	6	0	0	0	0	0	0
	LG	42	2	0	7	0	0	9
	LM	196	3	1	2	0	17	12
	TOTAL	686	16	17	30	3	27	80
Germany	AK	80	0	0	2	0	0	3
	AU	44	0	0	0	0	0	0
	BA	0	0	0	49	8	2	0
	BB	280	14	5	0	0	0	0
	BC	601	16	3	0	0	0	75
	BD	0	0	0	48	1	16	0
	BE	332	0	0	0	0	0	0
	BH	0	0	0	1	0	0	0
	BM	204	0	0	0	0	0	0
	BO	114	1	0	0	0	0	15
	DR	113	0	0	12	0	9	0
	DU	333	0	0	4	0	0	0
	ES	292	3	0	7	0	16	59
	FD	29	0	0	5	0	0	0
	FM	281	0	0	11	0	11	15
	FR	317	5	1	7	0	0	17
	GI	138	1	25	8	0	0	0
	GO	121	0	0	7	0	0	24
	HA	159	0	0	3	0	0	0
	HB	301	4	0	21	0	6	18
	HG	278	2	0	2	0	0	69
	HM	327	0	0	0	0	0	0
	HO	709	14	1	29	11	111	78
	HS	127	0	0	3	0	24	0
	JE	181	4	3	12	1	3	43
	KG	0	0	0	3	0	0	0
	KI	110	0	0	34	4	30	19
	KK	10	0	0	0	0	0	0
	KL	140	0	2	15	0	0	4
	KM	326	2	0	0	0	0	5
	KR	0	0	0	3	0	0	0
	KS	169	0	0	1	0	0	0
	LP	88	2	2	17	1	0	23
LU	325	2	0	0	0	0	0	
MA	141	3	0	0	0	0	0	
MB	0	0	0	0	0	0	4	
MD	0	0	0	16	0	0	0	
MH	222	0	0	0	0	0	6	
ML	424	25	8	26	1	28	18	
MN	372	5	1	19	4	3	9	
MR	129	6	0	0	0	0	0	
MZ	140	7	0	1	0	11	34	
NB	317	9	0	12	0	0	13	
RB	166	1	0	3	0	0	8	
RO	172	18	4	0	0	0	14	
ST	284	0	0	0	0	0	0	
TU	137	5	1	0	0	0	23	
UL	240	3	0	0	0	0	0	
WZ	212	1	0	0	0	0	4	
	TOTAL	9485	153	56	381	31	270	600
Luxemburg	LX	13	0	0	0	0	0	0
Netherlands	AW	240	0	0	0	0	0	0
	GR	321	2	2	0	2	60	21
	LB	147	10	0	0	0	0	18
	MS	127	1	0	0	0	0	0
	NY	142	0	0	0	0	0	0
	RD	185	0	0	16	0	0	21
	RS	10	0	0	0	0	0	0
	UT	97	0	0	11	0	0	0
	UW	8	0	0	0	0	0	0
	TOTAL	1277	13	2	27	2	60	60
Slovenia	LO	102	0	0	7	0	0	2
Eurotransplant	TOTAL	12293	198	92	489	42	377	803

12491

Table 2a Cadaveric donor activities in 2000, stratified by type of donation, per country and center

Donor country	Donor center	Total number of donors reported			KIDNEY DONOR			NO-KIDNEY DONOR
		Total	No transplant	Transplant	TOTAL	KI only	MOD	
Austria	GA	23	0	23	3	20	87%	0
	IB	66	4	62	9	52	85%	1
	OE	0	0	0	0	0	0%	0
	OL	23	0	23	3	20	87%	0
	OW	0	0	0	0	0	0%	0
	WG	97	12	85	16	62	79%	7
	TOTAL		209	16	193	31	154	83%
Belgium	AN	26	1	25	6	19	76%	0
	AS	10	0	10	1	9	90%	0
	BJ	11	0	11	8	3	27%	0
	BR	38	3	35	11	24	69%	0
	GE	32	5	27	1	24	96%	2
	LA	65	9	56	8	46	85%	2
	LG	21	0	21	1	20	95%	0
	LM	77	4	73	6	62	91%	5
TOTAL		280	22	258	42	207	83%	9
Germany	AK	1	0	1	0	1	100%	0
	BB	12	2	10	2	8	80%	0
	BC	18						
	BM	17	1	16	5	10	67%	1
	BO	15	0	15	1	13	93%	1
	BW	43	0	43	21	21	50%	1
	BY	65	0	65	21	44	68%	0
	DR	18	0	18	11	7	39%	0
	DU	23	0	23	9	13	59%	1
	ES	37	16	21	5	16	76%	0
	FD	3	1	2	1	1	50%	0
	FM	13	2	11	4	6	60%	1
	FR	22	2	20	10	10	50%	0
	GI	4	0	4	1	3	75%	0
	GO	9	2	7	4	3	43%	0
	HA	18	0	18	5	13	72%	0
	HB	12	1	11	2	9	82%	0
	HG	28	3	25	3	22	88%	0
	HO	66	10	56	20	36	64%	0
	HS	14	0	14	2	12	86%	0
	JE	27	4	23	2	20	91%	1
	KI	16	1	15	4	10	71%	1
	KL	8	0	8	1	7	88%	0
	KM	8	1	7	1	6	86%	0
	KS	7	0	7	4	3	43%	0
	LP	36	1	35	14	21	60%	0
	LU	12	1	11	5	5	50%	1
	MA	13	1	12	5	4	44%	3
	MB	1	0	1	0	1	100%	0
	MI	36	0	36	9	26	74%	1
	ML	47	1	46	13	33	72%	0
	MN	31	1	30	11	19	63%	0
	MR	3	0	3	0	3	100%	0
MZ	11	0	11	3	8	73%	0	
NB	33	1	32	10	20	67%	2	
ND	68	1	67	16	46	74%	5	
NO	35	1	34	7	27	79%	0	
NW	47	1	46	18	26	59%	2	
OS	39	0	39	19	20	51%	0	
RB	12	0	12	4	8	67%	0	
RO	22	0	22	5	17	77%	0	
ST	2	0	2	1	1	50%	0	
TU	25	0	25	7	16	70%	2	
UL	12	0	12	6	6	50%	0	
VB	59	3	56	14	41	75%	1	
WB	7	0	7	3	4	57%	0	
WZ	17	0	17	2	12	86%	3	
TOTAL		1072	58	996	311	658	68%	27
Luxemburg	LX	7	0	7	2	5	71%	0
The Netherlands	AW	35	1	34	9	24	73%	1
	GR	31	1	30	6	24	80%	0
	LB	20	0	20	8	12	60%	0
	MS	30	7	23	14	9	39%	0
	NY	41	0	41	13	27	68%	1
	RD	23	0	23	2	21	91%	0
	RS	1	0	1	0	1	100%	0
	UT	29	0	29	15	14	48%	0
UW	1	0	1	0	1	100%	0	
TOTAL		211	9	202	67	133	67%	2
Slovenia	LO	22	0	22	4	18	82%	0
TOTAL		22	0	22	4	18	82%	0
Eurotransplant, Total		1801	105	1678	457	1175	72%	46
Czech Republic		10	2	8	1	1	50%	6
Denmark		3	3	0	0	0	0%	0
Finland		66	66	0	0	0	0%	0
France		27	24	3	1	0	0%	2
Greece		6	4	2	1	0	0%	1
Italy		11	9	2	0	0	0%	2
Norway		8	7	1	0	0	0%	1
Poland		20	4	16	0	1	100%	15
Romania		3	1	2	0	0	0%	2
Slovak Republic		10	0	10	0	0	0%	10
Spain		60	45	15	12	0	0%	3
Sweden		17	13	4	0	0	0%	4
Switzerland		33	28	5	1	0	0%	4
United Kingdom/Ireland		17	15	2	0	0	0%	2
From outside Eurotransplant, Total		291	221	70	16	2	11%	52

Table 2b Cadaveric donor activities in 2000, stratified by organ used in a transplant, per country and per center

Donor Country	Donor Center	Kidney Donor	Kidneys	Heart Donor	Lung Donor	Liver Donor	Pancreas Donor
Austria	GA	23	44	17	1	15	6
	IB	62	121	21	13	51	9
	OE	0	0	0	0	0	0
	OL	23	43	13	9	20	8
	OW	0	0	37	0	0	0
	WG	85	154	0	22	62	8
	TOTAL	193	362	88	45	148	31
Belgium	AN	25	49	9	3	19	9
	AS	10	20	6	3	9	1
	BJ	11	22	1	0	2	2
	BR	35	67	8	10	20	7
	GE	27	48	15	2	24	7
	LA	56	108	26	10	41	10
	LG	21	41	14	3	20	5
	LM	73	134	37	23	60	15
	TOTAL	258	489	116	54	195	56
Germany	AK	1	2	1	0	1	1
	BB	10	19	3	1	8	4
	BM	16	29	4	0	10	4
	BO	15	28	8	2	13	7
	BW	43	80	13	1	20	6
	BY	65	125	18	11	39	11
	DR	18	33	5	1	6	2
	DU	23	42	8	2	12	3
	ES	21	42	6	1	15	5
	FD	2	4	1	0	0	0
	FM	11	19	2	3	5	2
	FR	20	40	10	1	10	2
	GI	4	8	2	0	3	3
	GO	7	14	2	2	3	1
	HA	18	34	10	2	11	1
	HB	11	21	6	0	9	4
	HG	25	50	12	2	20	5
	HO	56	109	18	10	31	6
	HS	14	27	4	0	10	2
	JE	23	42	12	3	19	10
	KI	15	28	6	2	10	4
	KL	8	16	5	1	6	3
	KM	7	14	5	0	4	2
	KS	7	14	2	2	3	2
	LP	35	67	13	2	18	10
	LU	11	20	4	0	3	1
	MA	12	18	4	0	6	2
	MB	1	2	0	0	1	0
	MI	36	67	9	4	26	5
	ML	46	90	18	16	29	10
	MN	30	57	8	2	14	6
	MR	3	6	1	0	2	1
	MZ	11	21	2	0	8	3
NB	32	56	12	5	21	3	
ND	67	121	24	14	43	15	
NO	34	61	22	8	21	13	
NW	46	83	8	2	24	14	
OS	39	76	15	0	16	8	
RB	12	23	5	0	8	2	
RO	22	41	11	2	14	4	
ST	2	4	1	0	0	0	
TU	25	45	11	0	15	1	
UL	12	24	5	1	4	2	
VB	56	105	23	8	34	13	
WB	7	14	1	0	3	0	
WZ	17	28	9	2	12	6	
	TOTAL	996	1869	369	113	590	209
Luxemburg	LX	7	14	1	0	4	2
The Netherlands	AW	34	61	9	4	24	6
	GR	30	58	8	6	22	4
	LB	20	35	2	2	11	4
	MS	23	44	7	2	9	1
	NY	41	77	9	3	28	6
	RD	23	46	7	7	20	3
	RS	1	2	0	0	1	0
	UT	29	58	6	5	13	4
	UW	1	2	0	0	1	0
	TOTAL	202	383	48	29	129	28
Slovenia	LO	22	43	11	4	17	8
Eurotransplant, Total		1678	3160	633	245	1083	334
Czech Republic		0	0	0	3	3	0
France		1	2	1	1	0	0
Greece		1	2	0	1	0	0
Israel		0	0	0	0	1	0
Italy		0	0	1	0	0	0
Norway		0	0	1	0	1	0
Poland		1	2	1	1	14	0
Romania		0	0	2	0	0	0
Spain		12	19	3	0	0	0
Slovak Republic		0	0	1	1	10	0
Sweden		0	0	2	1	1	0
Switzerland		1	1	1	2	2	0
United Kingdom		0	0	0	2	0	0
From outside Eurotransplant, Total		16	26	13	12	32	0

Table 3a Transplant activities [cadaveric donor] in 2000, stratified by organ, per country and per center

Country	Center	Kidney	Kidney+ (excluding pancreas)	Pancreas* Pancreas	Heart	Heart+ Lung	Lung	Liver
Austria	GA	39	0	0	13	0	0	12
	IB	96	29	1	21	0	12	64
	OE	27	0	0	0	0	0	0
	OL	11	0	0	0	0	0	0
	WD	1	0	0	0	0	0	0
	WG	154	0	0	52	2	46	71
	TOTAL	328	29	1	86	2	58	147
Belgium	AN	34	2	0	4	0	0	0
	AS	0	0	0	10	0	0	0
	BJ	12	0	0	0	0	0	0
	BP	0	0	6	0	0	0	0
	BR	68	6	0	8	3	11	20
	GE	66	11	1	6	0	0	37
	LA	113	2	0	14	0	9	61
	LE	1	0	0	0	0	0	0
	LG	25	0	0	16	0	0	20
	LM	129	9	1	26	3	17	56
	TOTAL	448	30	8	84	6	37	194
Germany	AK	8	0	0	3	0	0	2
	AU	3	0	0	0	0	0	0
	BA	0	0	0	68	2	2	0
	BB	46	32	4	0	0	0	0
	BC	104	21	1	0	0	0	86
	BD	0	0	0	53	0	19	0
	BE	50	0	0	0	0	0	0
	BH	0	0	0	7	0	0	0
	BM	30	0	0	0	0	0	0
	BO	20	3	0	0	0	0	21
	BV	0	0	0	0	0	0	0
	DR	25	0	0	21	1	5	0
	DU	59	0	0	4	0	0	0
	ES	49	2	0	2	0	7	56
	FD	1	0	0	1	0	0	0
	FM	53	0	0	8	0	11	15
	FR	55	8	0	12	0	0	19
	GI	23	4	1	11	0	0	0
	GO	19	0	0	7	0	0	11
	HA	36	0	0	7	0	0	0
	HB	52	1	1	21	0	0	18
	HG	41	3	0	10	0	0	61
	HM	45	0	0	0	0	0	0
	HO	126	21	2	26	2	49	101
	HS	21	0	0	2	0	10	0
	JE	58	10	4	8	0	4	39
	KG	0	0	0	4	0	0	0
	KI	18	0	0	11	0	3	19
	KK	0	0	0	0	0	0	0
	KL	22	7	0	8	0	0	13
	KM	43	12	0	0	0	0	9
	KR	0	0	0	2	0	0	0
	KS	24	0	0	2	0	0	0
	LP	50	11	2	16	1	2	37
	LU	57	4	0	0	0	0	0
	MA	15	2	0	0	0	0	0
	MB	0	0	0	0	0	0	8
	MD	0	0	0	7	0	0	0
	MH	30	0	0	0	0	0	10
	ML	72	31	1	37	4	23	36
MN	59	4	0	27	1	2	16	
MR	17	7	0	0	0	0	0	
MZ	20	6	0	3	0	10	36	
NB	69	2	0	8	0	0	23	
RB	39	3	0	10	0	0	13	
RO	30	19	0	0	0	0	10	
ST	48	0	0	0	0	0	0	
TU	25	9	0	0	0	0	27	
UL	49	7	0	0	0	0	0	
WZ	29	2	0	1	0	0	5	
	TOTAL	1640	231	16	407	11	147	691
Luxemburg	LX	8	0	0	0	0	0	0
	TOTAL	8	0	0	0	0	0	0
Netherlands	AW	54	0	0	0	0	0	0
	GR	67	3	2	0	1	16	59
	LB	33	14	0	0	0	0	24
	MS	54	1	0	0	0	0	0
	NY	61	0	0	0	0	0	0
	RD	40	0	0	20	0	0	43
	RS	5	0	0	0	0	0	0
	UT	48	0	0	19	0	0	0
UW	7	0	0	0	0	0	0	
	TOTAL	369	18	2	39	1	16	126
Slovenia	LO	44	0	0	7	0	0	10
	TOTAL	44	0	0	7	0	0	10
Eurotransplant, Total		2837	308	27	623	20	258	1168
		3145						

Table 3b Transplant activities [living donor] in 2000, stratified by organ, per country and per center

Country	Center	Kidney			Liver			
		Living Related	Living Unrelated	Total	Living Related	Living Unrelated	Domino	Total
Austria	IB	7	5	12	3	0	1	4
	OE	1	1	2	0	0	0	0
	OL	1	0	1	0	0	0	0
	WD	1	0	1	0	0	0	0
	WG	12	9	21	0	0	0	0
	TOTAL	22	15	37	3	0	1	4
Belgium	AN	1	0	1	0	0	0	0
	BR	4	1	5	0	0	1	1
	GE	2	0	2	7	1	0	8
	LA	1	3	4	11	0	1	12
	LE	0	0	0	0	0	0	0
	LM	1	0	1	1	0	0	1
	TOTAL	9	4	13	19	1	2	22
Germany	AK	4	2	6	0	0	0	0
	BB	3	2	5	0	0	0	0
	BC	17	7	24	15	11	0	26
	BE	4	3	7	0	0	0	0
	BM	3	1	4	0	0	0	0
	BO	1	0	1	0	0	0	0
	DR	1	0	1	0	0	0	0
	DU	13	7	20	0	0	0	0
	ES	15	6	21	21	2	1	24
	FD	1	2	3	0	0	0	0
	FM	2	4	6	0	0	0	0
	FR	15	6	21	0	0	0	0
	GI	4	5	9	0	0	0	0
	GO	2	0	2	3	1	0	4
	HA	1	1	2	0	0	0	0
	HB	8	4	12	0	0	1	1
	HG	4	1	5	6	0	0	6
	HM	10	6	16	0	0	0	0
	HO	27	6	33	13	5	2	20
	HS	1	0	1	0	0	0	0
	JE	3	5	8	5	2	0	7
	KI	0	0	0	0	0	1	1
	KL	8	1	9	0	0	0	0
	KM	7	4	11	0	0	0	0
	KS	0	2	2	0	0	0	0
	LP	2	2	4	0	0	0	0
	LU	8	4	12	0	0	0	0
	MA	1	3	4	0	0	0	0
	MH	5	4	9	0	0	0	0
	ML	6	11	17	0	0	0	0
	MN	10	4	14	0	0	0	0
	MR	1	0	1	0	0	0	0
MZ	2	1	3	0	0	1	1	
NB	10	7	17	0	0	0	0	
RB	5	0	5	0	0	0	0	
RO	0	0	0	0	0	0	0	
ST	9	7	16	0	0	0	0	
TU	2	3	5	0	0	0	0	
UL	5	3	8	0	0	0	0	
WZ	0	2	2	0	0	0	0	
	TOTAL	220	126	346	63	21	6	90
Luxemburg	LX	0	0	0	0	0	0	0
Netherlands	AW	14	6	20	0	0	0	0
	GR	17	5	22	0	0	0	0
	LB	21	3	24	0	0	0	0
	MS	14	3	17	0	0	0	0
	NY	27	12	39	0	0	0	0
	RD	27	9	36	0	0	0	0
	RS	3	0	3	0	0	0	0
	UT	6	0	6	0	0	0	0
	UW	6	0	6	0	0	0	0
	TOTAL	135	38	173	0	0	0	0
Slovenia	LO	0	0	0	0	0	0	0
Eurotransplant	TOTAL	386	183	569	85	22	9	116

Table 4 Organ exchange of the Eurotransplant countries, based upon the transplant activities in 2000

Table 4a Survey of donor kidney exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	ET	Others ^a available	Total	Difference
Austria	268	10	64	1	15			0	358	4
Belgium	28	311	106	6	31	3		6	491	-6
Germany	46	132	1598		68	22		3	1869	17
Luxemburg		8	6					0	14	-6
Netherlands	12	17	74	1	271	8		0	383	7
Slovenia	4	4	19		5	11		0	43	1
Total Eurotransplant	358	482	1867	8	390	44	3149	9	3149	-26
Others ^b	4	3	19	0	0	0	26		26	26
Total transplanted	362	485	1886	8	390	44	3175	10	3185	0

a. Transplant country: Others:Czech Republic(1), Poland(2), Sweden(4), Switzerland(2)

b. Donor country: Others:France (2), Greece(2), Poland (1),Spain (19),Switzerland (1),Czech Republic (1)

Table 4b Survey of donor heart exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	ET	Others ^a available	Total	Difference
Austria	78	2	8	0	0	0		0	88	0
Belgium	1	86	29	0	0	0		0	116	-26
Germany	3	2	360	1	0	0		3	369	49
Luxemburg	0	0	1	0	0	0		0	1	-1
Netherlands	1	0	8	39	0	0		0	48	-41
Slovenia	2	0	2	0	7	7		0	18	-11
Total Eurotransplant	85	90	408	40	7	7	637	3	640	-10
Others ^b	3	0	10	0	0	0	13	0	13	10
Total transplanted	88	90	418	40	7	7	650	3	653	0

a. Transplant country:Italy(1), United Kingdom(2)

b. Donor country:France(1), Italy(1), Norway(1), Poland(1), Romania(2), Slovakia(1), Spain(3),Sweden(2), Switzerland(1)

Table 4c Survey of donor heart+lung exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Netherlands	ET	Others ^a	Total available	Difference
Austria	2	1	1	0		0	4	-2
Belgium	0	5	2	0		0	7	-1
Germany	0	0	7	0		0	7	4
Netherlands	0	0	1	1		0	2	-1
Total Eurotransplant	2	6	11	1	20	0	20	0
Others ^b	0	0	0	0	0	0	0	0
Total transplanted	2	6	11	1	20	0	20	0

a. Transplant country:Others:

b. Donor country: Others:

Table 4d Survey of donor double lungs exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Netherlands	Slovenia	ET	Others ^a	Total available	Difference
Austria	20	0	3	1	0		0	24	5
Belgium	2	24	11	2	0		0	39	-12
Germany	0	2	66	2	0		0	70	28
Netherlands	2	1	12	8	0		0	23	-10
Slovenia	1	0	2	0	0		0	3	3
Total Eurotransplant	25	27	94	13	0	159	0	159	-8
Others ^b	4	0	4	0	0	8		8	8
Total transplanted	29	27	98	13	0	167	0	167	0

a. Transplant country:Other:

b. Donor country: Others: Czech Republic(2),France(1),Greece(1), Slovakia(1),Switzerland(2), United Kingdom(1)

Table 4e Survey of donor single lung exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Netherlands	ET	Others ^a	Total available	Difference
Austria	17	2	5	0		0	24	4
Belgium	1	5	4	0		0	10	0
Germany	4	3	36	1		2	46	3
Netherlands	1	0	2	2		0	5	-2
Slovenia	1	0	0	0		0	1	-1
Total Eurotransplant	24	10	47	3	84	2	86	-6
Others ^b	4	0	2	0	6	0	6	6
Total transplanted	28	10	49	3	90	2	92	0

a. Transplant country: Other: United Kingdom(2)

b. Donor country: Czech Republic(2), Poland(2), Sweden(1), United Kingdom(1)

Table 4f Survey of donor liver exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Netherlands	Slovenia	ET	Others ^a	Total available	Difference
Austria	108	4	23	2	0		0	137	-2
Belgium	6	149	31	4	0		1	191	-5
Germany	14	23	494	16	3		1	551	52
Luxemburg	0	3	1	0	0		0	4	4
Netherlands	1	5	24	95	0		0	125	-7
Slovenia	2	2	5	1	6		0	16	-6
Total Eurotransplant	131	186	578	118	9	1022	2	1024	-30
Others ^b	4	0	25	0	1	0	0	30	30
Total transplanted	135	186	603	118	10	1052	2	1054	0

a. Transplant country: Others: Spain(1), United Kingdom(1)

b. Donor country: Others: Czech Republic(3), Italy(1), Norway(1), Poland(13), Slovak Republic(9), Sweden(1), Switzerland(2)

Table 4g Survey of donor split liver exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Netherlands	ET	Others ^a	Total available	Difference
Austria	12	0	4	0		0	16	-4
Belgium	0	6	2	0		0	8	0
Germany	0	2	75	3		0	80	8
Netherlands	0	0	1	5		0	6	2
Slovenia	0	0	2	0		0	2	-2
Total Eurotransplant	12	8	84	8	112	0	112	4
Others ^b	0	0	4	0	4	0	4	-4
Total transplanted	12	8	88	8	116	0	116	0

a. Transplant country:

b. Donor country: Others: Poland(2), Slovakia (2)

Table 4h Survey of donor pancreas+kidney and islet+kidney exchange in 2000

Transplant country Donor country	Austria	Belgium	Germany	Netherlands	ET	Total available	Difference
Austria	26	0	4	0		30	-1
Belgium	2	29	17	3		51	-21
Germany	0	0	191	0		191	41
Luxemburg	0	1	1	0		2	-2
Netherlands	0	0	13	14		27	-9
Slovenia	1	0	6	1		8	-8
Total Eurotransplant	29	30	232	18		309	0

* including a Ki Pa (in Belgium) where Pa txp registered in 1999 and Ki txp registered in 2000

Table 5 Organ exchange in cadaveric donor transplantation, in 1999, between the Eurotransplant transplant programs

*How to read the Tables 5a-h

1. Country
- 2a. Transplant region or center, at which the organ-specific transplants were performed
- 2b. Donors centers and/or transplant centers within the transplant region (center codes, see page 8-14)
3. Donors
- 3a. *Reported*, total number of organ-specific donors reported to Eurotransplant, of whom organs were transplanted in 2000
- 3b. *Not used*, number of organ-specific donors not used
- 3c. *Single organ*, number of organ-specific donors of whom only one kidney or one lung was used
- 3d. *Two single organs*, number of donors from whom the 2 lungs have been used in 2 different recipients.
4. Organs used Total, total number of organs which have been used in a transplant which took place in 1999
5. Destination of organs
- 5a. *Outside country*, number of organs shipped outside the donor country
- 5b. *Same country*, number of organs shipped to another center outside the region but in the same country
- 5c. *Same region*, number of organs shipped to another center in the region
- 5d. *Local center*, number of organs used at the local center
6. Origin of transplanted organs
- 6a. *Local center*, number of organs transplanted at the local center
- 6b. *Same region*, number of organs, received from another center from the same region
- 6c. *Same country*, number of organs, received from another center outside the region but from the same country
- 6d. *Outside country*, number of organs, received from outside the donor country
7. Transplants Total, total number of organ transplants performed during 2000
8. Exchange balance, difference between Organs used Total and Transplants Total, i.e. net import:export balance
'+' means, more import than export
'-' means, more export than import

The *programs in italic* represent the individual donor and/or transplant centers in a transplant region. Transplant regions reflect the status at December 31, 2000.

Table 5a Survey of donor kidney exchange in 2000

1	2a	2b	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8
Country	Region	Center code	Kidneys used	Destination / Origin							Kidney transplants Total	Exchange balance
			Total	Outside country	Same country	Same region	Local center	Same region	Same country	Outside country		
Austria	Graz	GA	44	10	12	0	22	0	1	16	39	-5
	Innsbruck	IB	120	35	7	0	78	0	27	20	125	5
	Upper Austria	OE	0	0	0	0	0	12	5	10	27	27
		OL	41	14	11	12	4	0	1	6	11	-30
	Vienna	WD	0	0	0	0	0	0	0	1	1	1
		WG	150	30	11	0	109	0	7	38	154	4
TOTAL			355	89	41	12	213	12	41	91	357	2
Belgium/ Luxemburg	BBR	BR	67	33	6	0	28	0	18	28	74	7
		AN	49	18	13	7	11	11	5	9	36	-13
		BJ	23	10	5	7	1	6	0	5	12	-11
		LG	41	16	10	11	4	8	4	9	25	-16
	Bel_2	LX	14	14	0	0	0	0	0	8	8	-6
		AS	20	6	1	13	0	0	0	0	0	-20
		GE	47	17	2	13	15	16	15	31	77	30
	BLA	LE	0	0	0	0	0	0	1	0	1	1
		LM	132	47	13	15	57	25	16	40	138	6
		LA	108	31	20	0	57	0	11	47	115	7
TOTAL			501	192	70	66	173	66	70	177	486	-15
Germany	Baden W.	BW	78	15	14	49	0	0	0	0	0	-78
		FR	40	4	12	2	22	13	17	11	63	23
		HB	21	2	9	3	7	13	21	12	53	32
		MA	18	5	4	3	6	4	3	4	17	-1
		ST	4	0	1	1	2	28	9	9	48	44
		TU	45	6	9	21	9	10	11	4	34	-11
		UL	23	4	2	3	14	14	19	9	56	33
	Bayern	AU	0	0	0	0	0	1	1	1	3	3
		BY	125	33	37	55	0	0	0	0	0	-125
		MH	0	0	0	0	0	20	7	3	30	30
		ML	90	11	19	13	47	21	18	17	103	13
		NB	56	3	13	7	33	21	12	5	71	15
		RB	23	1	7	5	10	17	9	6	42	19
		WZ	28	3	7	10	8	10	12	1	31	3
	Mitte	FD	4	2	1	1	0	1	0	0	1	-3
		FM	19	0	7	0	12	24	10	7	53	34
		GI	8	1	5	0	2	8	10	7	27	19
		HS	27	9	8	6	4	4	8	5	21	-6
		KS	14	2	3	6	3	9	9	3	24	10
		MI	66	14	17	35	0	0	0	0	0	-66
		MR	6	0	1	1	4	10	9	1	24	18
	Nord	MZ	23	3	8	6	6	8	10	2	26	3
		WB	14	3	2	9	0	0	0	0	0	-14
		BM	28	0	14	6	8	12	9	2	31	3
		GO	13	2	4	2	5	0	10	4	19	6
		HG	50	4	19	10	17	8	16	3	44	-6
		HM	0	0	0	0	0	30	10	5	45	45
		HO	107	11	16	24	56	40	27	24	147	40
	Nord-Ost	KI	28	3	8	6	11	3	3	1	18	-10
		LU	20	0	1	2	17	17	16	11	61	41
		ND	120	22	38	60	0	0	0	0	0	-120
		BC	0	0	0	0	0	68	34	23	125	125
		BD	0	0	0	0	0	0	0	0	0	0
		BE	0	0	0	0	0	28	17	5	50	50
		NO	61	12	19	30	0	0	0	0	0	-61
	NRW	RO	41	6	15	4	16	10	16	7	49	8
		VB	102	12	18	72	0	0	0	0	0	-102
		AK	2	0	2	0	0	3	4	1	8	6
		BB	21	1	2	2	16	24	25	13	78	57
		BO	28	4	13	6	5	4	9	5	23	-5
		DU	42	6	6	8	22	14	15	8	59	17
		ES	41	4	7	13	17	7	20	7	51	10
	Ost	KK	0	0	0	0	0	0	0	0	0	0
		KL	14	1	2	10	1	12	11	5	29	15
		KM	15	3	1	4	7	23	15	10	55	40
		MN	55	5	24	11	15	20	19	10	64	9
		NW	80	8	19	53	0	0	0	0	0	-80
DR		33	8	9	9	7	6	5	7	25	-8	
HA		34	2	9	6	17	9	6	4	36	2	
JE		42	3	10	7	22	23	11	12	68	26	
LP		67	8	16	11	32	12	6	11	61	-6	
MB		2	1	1	0	0	0	0	0	0	-2	
OS	74	17	40	17	0	0	0	0	0	-74		
TOTAL			1852	264	499	609	480	609	499	285	1873	21
Netherlands	NAW	AW	61	28	0	15	18	19	0	17	54	-7
		GR	57	15	0	15	27	16	0	27	70	13
		LB	35	10	0	11	14	17	0	16	47	12
		MS	44	7	0	9	28	13	0	14	55	11
		NY	77	19	0	18	40	7	0	15	62	-15
		RD	46	16	0	13	17	10	0	13	40	-6
		RS	2	1	0	1	0	1	0	4	5	3
		UT	57	15	0	11	31	8	0	8	47	-10
		UW	2	1	0	1	0	3	0	4	7	5
		TOTAL			381	112	0	94	175	94	0	118
Slovenia	SLO	LO	43	32	0	0	11	0	0	33	44	1
	TOTAL			43	32	0	0	11	0	0	33	44
Eurotransplant TOTAL			3132	689	610	781	1052	781	610	704	3147	15
From/To outside ET TOTAL			25	0	0	0	0	0	0	10	10	-15
TOTAL			3157	689	610	781	1052	781	610	714	3157	0

Table 5b Survey of donor heart exchange in 1999

1	2a	2b	3a	3b	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8
Country	Region	Centre code	Donors Report Total	Donors Not Used	Hearts Used Total	Destination / Origin							Heart transplants Total	National Exchange Balance
						Outside country	Same country	Same region	Local centre	Same region	Same country	Outside country		
Austria	AGA	GA	23	7	16	3	4	0	9	0	3	1	13	-3
	AIB	IB	32	12	20	1	2	0	17	0	3	1	21	1
	Vienna	OL	17	6	11	0	1	10	0	0	0	0	0	-11
		WG	51	14	37	4	3	0	30	10	4	8	52	15
TOTAL			123	39	84	8	10	10	56	10	10	10	86	2
Belgium/ Luxemburg	BBR	BR	18	12	6	2	3	0	1	0	7	0	8	2
		AN	12	4	8	5	2	0	1	1	2	0	4	-4
		BJ	3	2	1	0	1	0	0	0	0	0	0	-1
		LG	20	7	13	0	6	1	6	0	9	1	16	3
	Bel_2	LX	5	4	1	1	0	0	0	0	0	0	0	-1
		AS	8	3	5	2	0	2	1	8	1	0	10	5
		GE	21	6	15	5	3	5	2	3	1	0	6	-9
	BLA	LM	54	18	36	7	7	8	14	4	7	1	26	-10
		LA	32	7	25	7	8	0	10	0	3	1	14	-11
	TOTAL			173	63	110	29	30	16	35	16	30	3	84
Germany	Baden W.	BW	28	15	13	2	11	0	0	0	0	0	0	-13
		FR	11	1	10	0	3	2	5	5	1	1	12	2
		HB	7	1	6	1	0	0	5	10	5	1	21	15
		KR	0	0	0	0	0	0	0	1	0	1	2	2
		MA	6	2	4	0	1	3	0	0	0	0	0	-4
		ST	3	2	1	0	0	1	0	0	0	0	0	-1
	Bayern	TU	16	5	11	0	3	8	0	0	0	0	0	-11
		UL	7	2	5	0	3	2	0	0	0	0	0	-5
		BY	29	13	16	0	5	11	0	0	0	0	0	-16
		MD	0	0	0	0	0	0	0	5	2	0	7	7
		ML	28	12	16	0	3	3	10	12	12	3	37	21
		NB	16	4	12	0	2	7	3	4	1	0	8	-4
	Mitte	RB	6	1	5	0	0	4	1	7	2	0	10	5
		WZ	11	2	9	0	5	4	0	1	0	0	1	-8
		BH	0	0	0	0	0	0	0	2	5	0	7	7
		FD	1	0	1	0	0	1	0	1	0	0	1	0
		FM	5	3	2	0	2	0	0	3	4	1	8	6
		GI	2	0	2	0	1	1	0	3	5	3	11	9
	Nord	HS	6	2	4	0	3	1	0	0	2	0	2	-2
		KS	3	1	2	0	2	0	0	0	2	0	2	0
		MI	18	9	9	0	2	7	0	0	0	0	0	-9
		MR	2	1	1	0	1	0	0	0	0	0	0	-1
		MZ	5	3	2	0	0	1	1	2	0	0	3	1
		WB	1	0	1	0	1	0	0	0	0	0	0	-1
	Nord-Ost	BM	10	6	4	0	3	1	0	0	0	0	0	-4
		GO	2	0	2	0	1	1	0	2	4	1	7	5
		HG	14	2	12	0	7	1	4	3	3	0	10	-2
		HO	28	10	18	2	8	0	8	7	7	4	26	8
		KI	9	3	6	0	3	1	2	3	6	0	11	5
		LU	6	2	4	0	2	2	0	0	0	0	0	-4
	NRW	ND	43	20	23	0	14	9	0	0	0	0	0	-23
		BD	0	0	0	0	0	0	0	27	16	10	53	53
		KG	0	0	0	0	0	0	0	1	3	0	4	4
		NO	24	3	21	0	9	12	0	0	0	0	0	-21
		RO	17	7	10	2	7	1	0	0	0	0	0	-10
		VB	34	11	23	0	8	15	0	0	0	0	0	-23
	Ost	AK	1	0	1	0	0	1	0	3	0	0	3	2
		BA	0	0	0	0	0	0	0	12	35	21	68	68
		BB	4	1	3	0	1	2	0	0	0	0	0	-3
		BO	11	3	8	1	2	5	0	0	0	0	0	-8
		DU	14	6	8	0	0	5	3	0	0	1	4	-4
		ES	9	3	6	0	0	5	1	1	0	0	2	-4
KL		4	0	4	0	0	2	2	6	0	0	8	4	
KM		6	0	6	1	1	4	0	0	0	0	0	-6	
MN		16	8	8	0	0	1	7	10	9	1	27	19	
NW		17	9	8	0	1	7	0	0	0	0	0	-8	
TOTAL	DR	8	3	5	0	1	4	0	11	7	3	21	15	
	HA	11	1	10	0	2	8	0	5	1	1	7	-3	
	JE	18	6	11	0	5	4	2	5	0	1	8	-3	
	LP	23	10	13	0	4	6	3	8	4	1	16	3	
	OS	24	9	15	0	9	6	0	0	0	0	0	-15	
	TOTAL			564	202	361	9	136	159	57	160	136	54	407
Netherlands	NRD/NUT	AW	19	11	8	1	0	7	0	0	0	0	0	-8
		GR	20	12	8	1	0	7	0	0	0	0	0	-8
		LB	6	5	1	0	0	1	0	0	0	0	0	-1
		MS	11	4	7	2	0	5	0	0	0	0	0	-7
		NY	20	11	9	2	0	7	0	0	0	0	0	-9
		RD	16	9	7	1	0	1	5	15	0	0	20	13
		UT	1	1	0	0	0	0	0	0	0	0	0	0
		UW	10	4	6	1	0	1	4	14	0	1	19	13
TOTAL			103	57	46	8	0	29	9	29	0	1	39	-7
Slovenia	SLO	LO	15	4	11	4	0	0	7	0	0	0	7	-4
	TOTAL		15	4	11	4	0	0	7	0	0	0	7	-4
Eurotransplant TOTAL			978	365	612	58	176	214	164	215	176	68	623	10
From/To outside ET TOTAL			67	54	13	13	0	0	0	0	0	3	3	-10
TOTAL			1045	419	625	71	176	214	164	215	176	71	626	0

Table 5c Survey of donor heart+lung exchange in 2000

1	2a	2b	3a	3b	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8	
Country	Region	Centre code	Donors Report Total	Donors Not Used	Heart/Lung Used Total	Destination / Origin								He/Lu transplants Total	National Exchange Balance
						Outside country	Same country	Same region	Local centre	Same region	Same country	Outside country			
Austria	AGA	GA	2	1	1	1	0	0	0	0	0	0	0	-1	
	AIB	IB	4	3	1	1	0	0	0	0	0	0	0	-1	
	AWG	OL	5	3	2	0	0	2	0	0	0	0	0	-2	
		OW	7	7	0	0	0	0	0	2	0	0	2	2	
	TOTAL		18	14	4	2	0	2	0	2	0	0	2	-2	
Belgium/ Luxemburg	BBR	BR	2	0	2	0	1	0	1	0	2	0	3	1	
	Bel_1	AN	6	5	1	0	1	0	0	0	0	0	0	-1	
		BJ	1	1	0	0	0	0	0	0	0	0	0	0	
		LG	2	1	1	1	0	0	0	0	0	0	0	-1	
	Bel_2	LX	1	1	0	0	0	0	0	0	0	0	0	0	
		AS	1	0	1	1	0	0	0	0	0	0	0	-1	
		LM	6	5	1	0	0	0	1	0	1	1	3	2	
	BLA	LA	6	5	1	0	1	0	0	0	0	0	0	-1	
	TOTAL		25	18	7	2	3	0	2	0	3	1	6	-1	
Germany	Baden W. Bayern	HB	1	1	0	0	0	0	0	0	0	0	0	0	
		BY	12	10	2	0	2	0	0	0	0	0	0	-2	
		ML	6	4	2	0	0	0	2	0	1	1	4	2	
		NB	1	1	0	0	0	0	0	0	0	0	0	0	
		WZ	4	4	0	0	0	0	0	0	0	0	0	0	
	Mitte	FM	0	0	0	0	0	0	0	0	0	0	0	0	
		HS	1	1	0	0	0	0	0	0	0	0	0	0	
		KS	1	1	0	0	0	0	0	0	0	0	0	0	
		MI	3	3	0	0	0	0	0	0	0	0	0	0	
		WB	1	1	0	0	0	0	0	0	0	0	0	0	
	Nord	BM	1	1	0	0	0	0	0	0	0	0	0	0	
		GO	1	1	0	0	0	0	0	0	0	0	0	0	
		HG	1	1	0	0	0	0	0	0	0	0	0	0	
		HO	6	6	0	0	0	0	0	1	1	0	2	2	
		KI	1	1	0	0	0	0	0	0	0	0	0	0	
	Nord-Ost	ND	2	1	1	0	0	1	0	0	0	0	0	-1	
		BD	0	0	0	0	0	0	0	0	0	0	0	0	
		NO	4	3	1	0	1	0	0	0	0	0	0	-1	
		RO	1	0	1	0	1	0	0	0	0	0	0	-1	
		VB	7	7	0	0	0	0	0	0	0	0	0	0	
	NRW	BA	0	0	0	0	0	0	0	0	0	2	2	2	
		BO	1	1	0	0	0	0	0	0	0	0	0	0	
		DU	2	2	0	0	0	0	0	0	0	0	0	0	
		ES	8	8	0	0	0	0	0	0	0	0	0	0	
		KL	0	0	0	0	0	0	0	0	0	0	0	0	
	Ost	MN	2	2	0	0	0	0	0	0	0	1	1	1	
		NW	6	6	0	0	0	0	0	0	0	0	0	0	
DR		3	3	0	0	0	0	0	0	1	0	1	1		
HA		2	2	0	0	0	0	0	0	0	0	0	0		
JE		1	1	0	0	0	0	0	0	0	0	0	0		
LP		0	0	0	0	0	0	0	0	1	0	1	1		
OS		3	3	0	0	0	0	0	0	0	0	0	0		
	TOTAL		82	75	7	0	4	1	2	1	4	4	11	4	
Netherlands	NGR	AW	7	6	1	1	0	0	0	0	0	0	0	-1	
		GR	5	5	0	0	0	0	0	1	0	0	1	1	
		LB	5	4	1	0	0	1	0	0	0	0	0	-1	
		NY	2	2	0	0	0	0	0	0	0	0	0	0	
		RD	3	3	0	0	0	0	0	0	0	0	0	0	
		UT	2	2	0	0	0	0	0	0	0	0	0	0	
	TOTAL		24	22	2	1	0	1	0	1	0	0	1	-1	
Slovenia	SLO	LO	1	1	0	0	0	0	0	0	0	0	0	0	
	TOTAL		1	1	0	0	0	0	0	0	0	0	0	0	
EurotransplantTOTAL			150	130	20	5	7	4	4	4	7	5	20	0	
From/To outside ET TOTAL			19	19	0	0	0	0	0	0	0	0	0	0	
TOTAL			169	149	20	5	7	4	4	4	7	5	20	0	

Table 5d Survey of donor double lungs exchange in 2000

1	2a	2b	3a	3b	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8
Country	Region	Centre code	Donors Report Total	Donors Not Used	Lungs Used Total	Destination / Origin							Lung transplants Total	National Exchange Balance
						Outside country	Same country	Same region	Local centre	Same region	Same country	Outside country		
Austria	AGA	GA	4	4	0	0	0	0	0	0	0	0	0	0
	AIB	IB	13	3	10	1	1	0	8	0	1	1	10	0
	AWG	OL	7	4	3	0	1	2	0	0	0	0	0	-3
		WG	20	9	11	3	0	0	8	2	1	8	19	8
	TOTAL		44	20	24	4	2	2	16	2	2	9	29	5
Belgium/ Luxemburg	BBR Bel_1	BR	8	1	7	4	0	0	3	0	6	1	10	3
		AN	4	2	2	2	0	0	0	0	0	0	0	-2
		BJ	1	1	0	0	0	0	0	0	0	0	0	0
		LG	2	1	1	1	0	0	0	0	0	0	0	-1
	BGE	LX	0	0	0	0	0	0	0	0	0	0	0	0
		GE	5	3	2	0	2	0	0	0	0	0	0	-2
		LA	9	2	7	0	4	0	3	0	0	1	4	-3
	BLM	AS	4	2	2	1	0	1	0	0	0	0	0	-2
		LM	27	9	18	7	2	0	9	1	2	1	13	-5
	TOTAL		60	21	39	15	8	1	15	1	8	3	27	-12
Germany	Baden W.	BW	3	3	0	0	0	0	0	0	0	0	0	0
		FR	1	1	0	0	0	0	0	0	0	0	0	0
		HB	1	1	0	0	0	0	0	0	0	0	0	0
		TU	2	2	0	0	0	0	0	0	0	0	0	0
		UL	3	2	1	1	0	0	0	0	0	0	0	-1
	Bayern	BY	12	7	5	0	5	0	0	0	0	0	0	-5
		ML	15	7	8	1	2	0	5	3	2	2	12	4
		NB	4	1	3	0	1	2	0	0	0	0	0	-3
		RB	1	1	0	0	0	0	0	0	0	0	0	0
		WZ	6	4	2	0	1	1	0	0	0	0	0	-2
	Mitte	FM	3	0	3	1	1	0	1	1	3	2	7	4
		GI	1	1	0	0	0	0	0	0	0	0	0	0
		HS	1	1	0	0	0	0	0	0	2	1	3	3
		KS	2	0	2	0	0	2	0	0	0	0	0	-2
		MI	5	4	1	0	0	1	0	0	0	0	0	-1
	Nord	MZ	2	2	0	0	0	0	0	2	1	1	4	4
		BM	1	1	0	0	0	0	0	0	0	0	0	0
		GO	2	0	2	0	2	0	0	0	0	0	0	-2
		HG	4	2	2	1	0	1	0	0	0	0	0	-2
		HO	12	7	5	0	3	0	2	7	12	16	37	32
	Nord-Ost	KI	4	2	2	0	0	2	0	1	1	0	2	0
		ND	15	5	10	0	5	5	0	0	0	0	0	-10
		BC	0	0	0	0	0	0	0	0	0	0	0	0
		BD	0	0	0	0	0	0	0	6	3	8	17	17
		NO	14	8	6	0	4	2	0	0	0	0	0	-6
	NRW	RO	1	1	0	0	0	0	0	0	0	0	0	0
		VB	9	4	5	0	1	4	0	0	0	0	0	-5
		BA	0	0	0	0	0	0	0	0	2	0	2	2
		BB	1	0	1	0	1	0	0	0	0	0	0	-1
		BO	1	0	1	0	1	0	0	0	0	0	0	-1
		DU	3	2	1	0	1	0	0	0	0	0	0	-1
		ES	3	2	1	0	0	1	2	3	1	7	6	6
		KL	1	0	1	0	1	0	0	0	0	0	0	-1
		KM	2	2	0	0	0	0	0	0	0	0	0	0
		MN	3	2	1	0	1	0	0	0	1	0	1	0
Ost	NW	5	3	2	0	0	2	0	0	0	0	0	-2	
	DR	2	1	1	0	0	1	0	0	0	1	1	0	
	HA	3	2	1	0	0	1	0	0	0	0	0	-1	
	JE	2	1	1	0	0	0	1	0	2	0	3	2	
	LP	4	2	2	0	2	0	0	2	0	0	2	0	
	OS	5	5	0	0	0	0	0	0	0	0	0	0	
	TOTAL		159	89	70	4	32	24	10	24	32	32	98	28
Netherlands	NGR	AW	9	7	2	2	0	0	0	0	0	0	0	-2
		GR	10	4	6	2	0	0	4	4	0	5	13	7
		LB	1	0	1	1	0	0	0	0	0	0	0	-1
		MS	3	1	2	2	0	0	0	0	0	0	0	-2
		NY	4	1	3	2	0	1	0	0	0	0	0	-3
		RD	8	3	5	3	0	2	0	0	0	0	0	-5
		UT	6	2	4	3	0	1	0	0	0	0	0	-4
TOTAL		41	18	23	15	0	4	4	4	0	5	13	-10	
Slovenia	SLO	LO	10	7	3	3	0	0	0	0	0	0	-3	
	TOTAL		10	7	3	3	0	0	0	0	0	0	-3	
EurotransplantTOTAL			314	155	159	41	42	31	45	31	42	49	167	8
From/To outside ET TOTAL			24	16	8	8	0	0	0	0	0	0	0	-8
TOTAL			338	171	167	49	42	31	45	31	42	49	167	0

Table 5e Survey of donor single lung exchange in 2000

1	2a	2b	3a	3c	3d	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8
Country	Region	Centre code	Donors Report Total	1 Single Lung Donor	2 Single Lung Donor	Lungs Used Total	Destination / Origin							Lung transplants Total	National Exchange Balance
							Outside country	Same country	Same region	Local centre	Same region	Same country	Outside country		
Austria	AGA	GA	0	0	0	0	0	0	0	0	0	0	0	0	0
	AIB	IB	2	1	1	3	0	1	0	2	0	0	0	2	-1
	AWG	OL	3	1	2	5	1	0	4	0	0	0	0	0	-5
		WG	11	6	5	16	6	0	0	10	4	1	11	26	10
TOTAL			16	8	8	24	7	1	4	12	4	1	11	28	4
Belgium/ Luxemburg	BBR	BR	1	1	0	1	1	0	0	0	0	0	1	1	0
	Bel_1	AN	1	0	0	0	0	0	0	0	0	0	0	0	0
		BJ	1	1	0	1	1	0	0	0	0	0	0	0	-1
		LG	1	1	0	1	1	0	0	0	0	0	0	0	0
	BGE	GE	2	2	0	2	0	0	0	2	0	1	2	5	3
	BLM	LM	5	2	2	6	3	1	0	2	0	0	2	4	-2
TOTAL			10	6	2	10	5	1	0	4	0	1	5	10	0
Germany	Baden W.	BW	1	1	0	1	1	0	0	0	0	0	0	0	-1
		FR	2	1	0	1	0	1	0	0	0	0	0	0	-1
		HB	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bayern	BY	5	2	2	6	0	2	4	0	0	0	0	0	-6
		ML	6	5	1	7	1	2	0	4	5	1	1	11	4
		NB	2	1	1	3	1	1	1	0	0	0	0	0	-3
	Mitte	FM	0	0	0	0	0	0	0	0	2	2	0	4	4
		HS	1	0	0	0	0	0	0	0	0	2	5	7	7
		MI	3	2	1	4	1	0	3	0	0	0	0	0	-4
	Nord	MZ	0	0	0	0	0	0	0	0	1	5	0	6	6
		HO	5	5	0	5	1	2	1	1	1	5	5	12	7
		KI	0	0	0	0	0	0	0	0	1	0	0	1	1
	Nord-Ost	ND	4	2	1	4	1	2	1	0	0	0	0	0	-4
		BC	0	0	0	0	0	0	0	0	0	0	0	0	0
		BD	0	0	0	0	0	0	0	0	0	0	2	2	2
	NRW	NO	2	1	0	1	1	0	0	0	0	0	0	0	-1
		RO	1	1	0	1	0	1	0	0	0	0	0	0	-1
		VB	3	2	1	4	2	2	0	0	0	0	0	0	-4
		BA	0	0	0	0	0	0	0	0	0	0	0	0	0
		BO	1	1	0	1	0	1	0	0	0	0	0	0	-1
		DU	1	0	1	2	0	2	0	0	0	0	0	0	-2
	Ost	ES	0	0	0	0	0	0	0	0	0	0	0	0	0
		KL	0	0	0	0	0	0	0	0	0	0	0	0	0
		MN	1	1	0	1	0	0	0	1	0	0	0	1	0
		DR	0	0	0	0	0	0	0	0	1	2	0	3	3
		HA	1	1	0	1	0	1	0	0	0	0	0	0	-1
		JE	3	1	1	3	1	1	1	0	0	1	0	1	-2
LP		0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL			42	27	9	45	10	18	11	6	11	18	13	48	3
Netherlands	NGR	AW	1	1	0	1	1	0	0	0	0	0	0	0	-1
		GR	0	0	0	0	0	0	0	0	2	0	1	3	3
		RD	2	1	1	3	1	0	2	0	0	0	0	0	-3
		UT	1	1	0	1	1	0	0	0	0	0	0	0	-1
TOTAL			4	3	1	5	3	0	2	0	2	0	1	3	-2
Slovenia	SLO	LO	1	1	0	1	1	0	0	0	0	0	0	0	-1
		TOTAL			1	1	0	1	1	0	0	0	0	0	0
Eurotransplant TOTAL			73	45	20	85	26	20	17	22	17	20	30	89	4
From/To outside ET TOTAL			13	2	2	6	6	0	0	0	0	0	2	2	-4
TOTAL			86	47	22	91	32	20	17	22	17	20	32	91	0

Table 5f Survey of donor whole liver exchange in 2000

1	2a	2b	3a	3b	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8	
Country	Region	Centre code	Donors Report Total	Donors Not Used	Livers Used Total	Destination / Origin							Liver transplants Total	National Exchange Balance	
						Outside country	Same country	Same region	Local centre	Same region	Same country	Outside country			
Austria	AGA	GA	23	8	15	5	4	0	6	0	1	5	12	-3	
	AIB	IB	56	8	48	11	4	0	33	0	14	9	56	8	
	AOL	OL	21	1	19	4	15	0	0	0	0	0	0	-19	
	AWG	WG	69	11	56	10	4	0	42	0	12	13	67	11	
	TOTAL		169	28	138	30	27	0	81	0	27	27	135	-3	
Belgium/ Luxemburg	BBR Bel_1	BR	30	11	19	8	6	0	5	0	10	4	19	0	
		AN	22	3	19	4	12	3	0	0	0	0	0	-19	
		BJ	4	2	2	1	1	0	0	0	0	0	0	-2	
		LG	22	2	20	6	4	0	10	3	3	4	20	0	
	Bel_2	LX	5	1	4	4	0	0	0	0	0	0	0	-4	
		AS	9	0	9	0	2	7	0	0	0	0	0	-9	
		LM	79	19	60	11	17	0	32	7	11	6	56	-4	
	BGE	GE	28	4	24	2	6	0	16	0	13	8	37	13	
	BLA	LA	51	13	38	10	8	0	20	0	19	15	54	16	
	TOTAL		250	55	195	46	56	10	83	10	56	37	186	-9	
Germany	Baden W.	BW	29	9	20	5	6	9	0	0	0	0	0	-20	
		FR	10	0	10	1	0	3	6	3	1	9	19	9	
		HB	9	0	9	0	1	3	5	11	1	1	18	9	
		MA	6	0	6	0	0	6	0	0	0	0	0	-6	
		ST	2	2	0	0	0	0	0	0	0	0	0	0	
		TU	17	3	14	0	4	0	10	11	3	3	27	13	
		UL	5	1	4	0	0	4	0	0	0	0	0	-4	
	Bayern	BY	47	9	38	3	19	16	0	0	0	0	0	-38	
		MH	0	0	0	0	0	0	0	8	1	1	10	10	
		ML	35	10	25	3	3	5	14	12	4	3	33	8	
		NB	26	5	21	0	6	6	9	10	2	1	22	1	
		RB	8	0	8	0	1	4	3	6	1	2	12	4	
		WZ	15	3	12	1	3	6	2	1	0	2	5	-7	
		FD	2	2	0	0	0	0	0	0	0	0	0	0	
	Mitte	FM	6	1	5	1	1	0	3	9	1	2	15	10	
		GI	3	0	3	0	1	2	0	0	0	0	0	-3	
		HS	13	3	10	1	1	8	0	0	0	0	0	-10	
		KS	5	2	3	0	2	1	0	0	0	0	0	-3	
		MI	32	7	25	2	11	12	0	0	0	0	0	-25	
		MR	3	1	2	0	1	1	0	0	0	0	0	-2	
		MZ	10	2	9	2	0	0	7	18	8	3	36	27	
		WB	6	3	3	0	0	3	0	0	0	0	0	-3	
		Nord	BM	17	7	10	0	0	10	0	0	0	0	0	-10
			GO	6	3	3	0	1	1	1	5	3	2	11	8
	HG		19	5	14	2	3	1	8	9	10	10	37	23	
	HO		46	18	28	3	3	4	18	24	23	19	84	56	
	KI		13	3	10	1	0	4	5	5	6	3	19	9	
	LU		6	3	3	1	0	2	0	0	0	0	0	-3	
	ND		61	22	39	12	6	21	0	0	0	0	0	-39	
	Nord-Ost	BC	0	0	0	0	0	0	0	43	16	17	76	76	
		NO	30	10	20	4	6	10	0	0	0	0	0	-20	
		RO	15	3	12	1	1	6	4	0	4	2	10	-2	
	NRW	VB	53	21	32	0	5	27	0	0	0	0	0	-32	
		AK	1	0	1	0	0	1	0	0	1	1	2	1	
		BB	7	0	7	1	1	5	0	0	0	0	0	-7	
		BO	14	2	12	2	3	0	7	3	5	5	20	8	
		DU	19	7	12	0	1	11	0	0	0	0	0	-12	
		ES	19	7	12	2	3	0	7	19	6	9	41	29	
		KL	6	1	5	0	0	1	4	7	1	1	13	8	
		KM	7	2	5	1	2	2	0	5	3	1	9	4	
		MN	21	8	13	0	5	2	6	3	4	2	15	2	
		NW	33	11	22	3	4	15	0	0	0	0	0	-22	
	Ost	DR	10	5	5	1	2	2	0	0	0	0	0	-5	
		HA	16	5	11	1	1	9	0	0	0	0	0	-11	
		JE	19	4	15	0	1	1	13	1	7	6	27	12	
		LP	29	11	18	2	0	0	16	14	0	5	35	17	
		MB	1	0	1	0	0	0	1	5	2	0	8	7	
		OS	28	14	14	1	5	8	0	0	0	0	0	-14	
		TOTAL		785	235	551	57	113	232	149	232	113	110	604	53
	Netherlands	NAW	AW	27	4	23	7	16	0	0	0	0	0	-23	
		NGR	GR	27	5	22	5	10	0	7	0	36	11	54	32
		NLB	LB	15	4	11	2	5	0	4	0	15	4	23	12
		NMS	MS	9	0	9	3	6	0	0	0	0	0	-9	
		NNY	NY	30	3	27	5	22	0	0	0	0	0	-27	
		NRD	RD	23	4	19	4	8	0	7	0	26	8	41	22
NRS		RS	1	0	1	1	0	0	0	0	0	0	-1		
NUT		UT	16	3	12	3	9	0	0	0	0	0	0	-12	
NUW		UW	1	0	1	0	1	0	0	0	0	0	0	-1	
TOTAL			149	23	125	30	77	0	18	0	77	23	118	-7	
Slovenia	SLO	LO	19	3	16	10	0	0	6	0	0	4	10	-6	
	TOTAL		19	3	16	10	0	0	6	0	0	4	10	-6	
Eurotransplant TOTAL			1372	344	1025	173	273	242	337	242	273	201	1053	28	
From/To outside ET TOTAL			69	39	30	30	0	0	0	0	0	2	2	-28	
TOTAL			1441	383	1055	203	273	242	337	242	273	203	1055	0	

Table 5g Survey of donor split liver exchange in 2000

1	2a	2b	3a	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8
Country	Region	Centre code	Donors Report Total	Livers Used Total	Destination / Origin							Liver transplants Total	National Exchange Balance
					Outside country	Same country	Same region	Local centre	Same region	Same country	Outside country		
Austria	AIB	IB	3	6	1	1	0	4	0	4	0	8	2
	AWG	WG	5	10	3	4	0	3	0	1	0	4	-6
	TOTAL			8	16	4	5	0	7	0	5	0	12
Belgium/ Luxemburg	BBR	BR	1	2	0	2	0	0	0	1	0	1	-1
	BLA	LA	3	6	2	1	0	3	0	2	2	7	1
	TOTAL			4	8	2	3	0	3	0	3	2	8
Germany	Baden W. Bayern	TU	1	2	0	2	0	0	0	0	0	0	-2
		BY	1	2	1	1	0	0	0	0	0	0	-2
		ML	4	8	0	4	2	0	1	0	3	0	-5
		NB	0	0	0	0	0	0	0	1	0	0	1
	Mitte Nord	RB	0	0	0	0	0	0	0	1	0	0	1
		MI	1	2	0	2	0	0	0	0	0	0	-2
		HG	6	12	0	0	0	12	3	6	3	24	12
		HO	3	6	0	1	0	5	4	6	2	17	11
	Nord-Ost	ND	4	8	1	0	7	0	0	0	0	0	-8
		BC	0	0	0	0	0	0	7	0	3	10	10
		NO	1	2	0	0	2	0	0	0	0	0	-2
		RO	2	4	2	1	1	0	0	0	0	0	-4
	NRW	VB	2	4	0	0	4	0	0	0	0	0	-4
		BB	1	2	1	0	1	0	0	0	0	0	-2
		BO	1	2	0	1	0	1	0	0	0	1	-1
		ES	3	6	0	1	0	5	4	3	3	15	9
	Ost	KM	0	0	0	0	0	0	1	0	0	1	1
		MN	1	2	0	1	1	0	1	0	0	1	-1
		NW	2	4	0	0	4	0	0	0	0	0	-4
		DR	1	2	0	0	2	0	0	0	0	0	-2
		JE	4	8	0	0	8	2	0	2	0	12	4
LP		0	0	0	0	0	0	2	0	0	2	2	
OS		2	4	0	2	2	0	0	0	0	0	-4	
TOTAL			40	80	5	16	26	33	26	16	13	88	8
Netherlands	NAW	AW	1	2	0	2	0	0	0	0	0	0	-2
	NGR	GR	0	0	0	0	0	0	0	2	3	5	
	NLB	LB	0	0	0	0	0	0	0	1	0	1	
	NNY	NY	1	2	0	2	0	0	0	0	0	0	-2
	NRD	RD	1	2	1	0	0	1	0	1	0	2	0
	TOTAL			3	6	1	4	0	1	0	4	3	8
Slovenia	SLO	LO	1	2	2	0	0	0	0	0	0	0	-2
	TOTAL			1	2	2	0	0	0	0	0	0	-2
Eurotransplant TOTAL			56	112	14	28	26	44	26	28	18	116	-4
From/To outside Eurotransplant TOTAL			2	4	4	0	0	0	0	0	0	0	-4
TOTAL			58	116	18	28	26	44	26	28	18	116	0

Table 5h Survey of donor kidney exchange for pancreas+kidney & islet+kidney transplantation in2000

1	2a	2b	4	5a	5b	5c	5d/6a	6b	6c	6d	7	8	
Country	Region	Centre code	Pancreas Kidneys Used Total	Outside country	Same country	Destination/Origin Same region	Local centre	Same region	Same country	Outside country Total	Pancreas Kidney transplants	National Exchange Balance	
Austria	AGA	GA	6	0	6	0	0	0	0	0	0	-6	
	AIB	IB	9	2	0	0	7	0	19	3	29	20	
	AOL	OL	8	1	7	0	0	0	0	0	0	-8	
	AWG	WG	7	1	6	0	0	0	0	0	0	-7	
	TOTAL		30	4	19	0	7	0	19	3	29	-1	
Belgium/ Luxemburg	BAN	AN	8	3	4	0	1	0	0	1	2	-6	
	BBJ	BJ	1	1	0	0	0	0	0	0	0	-1	
	BBR	BR	7	4	2	0	1	0	5	0	6	-1	
	BGE	GE	5	1	1	0	3	2	6	0	11	6	
	BLA	LA	10	5	4	0	1	0	0	0	1	-9	
	BLG	LG	5	2	3	0	0	0	0	0	0	-5	
	BLM	LM	14	6	1	2	5	0	4	0	9	-5	
	LLX	LX	2	2	0	0	0	0	0	0	0	-2	
	TOTAL		52	24	15	2	11	2	15	1	29	-23	
Germany	Baden W.	BW	6	0	0	6	0	0	0	0	0	-6	
		FR	2	0	0	0	2	3	3	0	8	6	
		HB	3	0	3	0	0	0	0	1	1	-2	
		MA	2	0	0	0	2	0	0	0	2	0	
		TU	1	0	0	0	1	2	5	1	9	8	
		UL	2	0	0	0	2	1	2	2	7	5	
	Bayern	AU	0	0	0	0	0	0	0	0	0	0	
		BY	11	0	3	8	0	0	0	0	0	0	-11
		ML	10	0	4	0	6	9	9	7	31	21	
		NB	3	0	0	3	0	1	1	0	2	-1	
		RB	2	0	0	0	2	1	0	0	3	1	
		WZ	5	0	3	2	0	2	0	0	2	-3	
	Mitte	FM	1	0	1	0	0	0	0	0	0	0	
		GI	3	0	1	0	2	1	1	0	4	1	
		HS	1	0	0	1	0	0	0	0	0	-1	
		KS	2	0	1	1	0	0	0	0	0	-2	
		MI	4	0	0	4	0	0	0	0	0	-4	
		MR	1	0	0	0	1	2	4	0	7	6	
	Nord	MZ	3	0	2	0	1	3	2	0	6	3	
		BM	4	0	3	1	0	0	0	0	0	-4	
		GO	1	0	1	0	0	0	0	0	0	-1	
		HG	5	0	5	0	0	2	1	0	3	-2	
		HO	5	0	1	0	4	7	6	4	21	16	
		KI	4	0	2	2	0	0	0	0	0	-4	
	Nord-Ost	LU	1	0	1	0	0	3	1	0	4	3	
		ND	13	0	4	9	0	0	0	0	0	-13	
		BC	0	0	0	0	0	12	5	4	21	21	
		NO	12	0	2	10	0	0	0	0	0	-12	
		RO	4	0	2	0	2	7	8	2	19	15	
		VB	13	0	4	9	0	0	0	0	0	-13	
	NRW	AK	1	0	1	0	0	0	0	0	0	0	
		BB	4	0	0	0	4	13	7	8	32	28	
		BO	6	0	3	3	0	0	1	2	3	-3	
		DU	3	0	3	0	0	0	0	0	0	-3	
		ES	5	0	2	1	2	0	0	0	2	-3	
		KL	2	0	0	2	0	2	2	3	7	5	
		KM	2	0	0	1	1	5	3	3	12	10	
MN		6	0	3	1	2	1	1	1	5	-1		
NW		13	0	0	13	0	0	0	0	0	-13		
Ost		DR	2	0	0	2	0	0	0	0	0	0	
	HA	1	0	0	1	0	0	0	0	0	-1		
	JE	6	0	3	0	3	5	1	1	10	4		
	LP	9	0	3	0	6	3	0	2	11	2		
	OS	7	0	2	5	0	0	0	0	0	0		
	TOTAL		191	0	63	85	43	85	63	41	232	41	
Netherlands	NAW	AW	6	3	0	3	0	0	0	0	0	-6	
	NGR	GR	3	0	0	1	2	1	0	3	0		
	NLB	LB	4	2	0	0	2	8	0	4	14	10	
	NMS	MS	1	0	0	1	0	1	0	0	1	0	
	NNY	NY	6	3	0	3	0	0	0	0	0	-6	
	NRD	RD	3	2	0	1	0	0	0	0	0	-3	
	NUT	UT	4	3	0	1	0	0	0	0	0	-4	
	TOTAL		27	13	0	10	4	10	0	4	18	-9	
Slovenia	SLO	LO	8	8	0	0	0	0	0	0	0	-8	
	TOTAL		8	8	0	0	0	0	0	0	0	-8	
Eurotransplant	TOTAL		308	49	97	97	65	97	97	49	308	0	
TOTAL			308	49	97	97	65	97	97	49	308	0	

Table 6 Active waiting list and Transplants [cadaveric donor], by organ, per country

Table 6a Kidney: Active waiting list and Transplants [cadaveric donor]

	Austria		Belgium		Germany		Luxemburg		Netherlands		Slovenia		Eurotransplant	
	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants
1981	237	114	260	154	1342	677	0	2	296	316	-	-	2135	1263
1982	272	141	300	139	1554	812	10	2	383	313	-	-	2519	1407
1983	337	108	354	194	1844	996	8	5	385	342	-	-	2928	1645
1984	486	224	446	206	2475	1232	18	3	459	370	-	-	3884	2035
1985	701	229	527	220	3261	1220	19	7	642	289	-	-	5150	1965
1986	779	263	616	241	3720	1584	13	2	723	378	-	-	5851	2468
1987	862	316	595	344	4488	1585	16	3	779	417	-	-	6740	2665
1988	1010	272	663	342	4826	1736	17	5	917	371	-	-	7433	2726
1989	992	384	703	380	5100	1917	21	1	949	366	-	-	7765	3048
1990	985	409	710	372	5091	1979	16	10	879	401	-	-	7681	3171
1991	927	389	714	378	5836	2195	17	7	882	426	-	-	8376	3395
1992	868	306	814	330	6437	2034	21	3	883	428	-	-	9023	3101
1993	816	380	923	362	6735	2107	13	8	931	436	-	-	9418	3293
1994	794	338	952	374	7446	1894	17	4	948	387	-	-	10157	2997
1995	819	293	1008	322	7673	2045	17	9	993	395	-	-	10510	3064
1996	839	347	1016	410	8112	1887	16	14	1005	425	-	-	10988	3083
1997	834	310	932	405	8546	1970	11	6	1001	419	-	-	11324	3110
1998	826	325	890	361	9067	1997	16	6	1177	379	-	-	11976	3068
1999	742	381	771	427	9441	1895	13	6	1306	346	-	-	12273	3055
2000	750	357	705	478	9663	1871	13	8	1291	387	102	44	12524	3145

Table 6b Heart: Active waiting list and Transplants

	Austria		Belgium		Germany		Netherlands		Slovenia		Eurotransplant	
	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants
1991	70	64	44	154	367	545	18	43	-	-	499	806
1992	79	84	66	124	383	501	24	44	-	-	552	753
1993	129	105	57	130	456	493	29	45	-	-	671	773
1994	111	91	61	115	520	443	31	47	-	-	723	696
1995	121	108	50	101	501	475	37	48	-	-	709	732
1996	145	104	37	107	536	488	26	60	-	-	744	759
1997	103	92	39	106	575	531	27	53	-	-	744	782
1998	86	94	32	96	581	528	22	41	-	-	721	759
1999	62	93	21	91	496	481	30	43	-	-	609	708
2000	44	86	30	84	381	407	27	39	7	7	489	623

Table 6c Heart+Lung: Active waiting list and Transplants

	Austria		Belgium		Germany		Netherlands		Eurotransplant	
	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants	Waiting List	Trans-plants
1991	5	4	13	10	30	10	0	0	48	24
1992	5	6	8	9	35	17	0	0	48	32
1993	7	5	8	10	34	13	0	0	49	28
1994	5	4	22	7	44	32	0	0	71	43
1995	3	0	20	19	55	23	1	0	79	42
1996	2	1	11	10	57	22	1	1	71	34
1997	1	3	18	9	45	31	2	0	66	43
1998	3	1	8	5	47	14	2	0	60	20
1999	5	1	3	5	38	20	0	2	46	28
2000	6	2	3	6	31	11	2	1	42	20

Table 6d Lung: Active waiting list and Transplants

	Austria		Belgium		Germany		Netherlands		Eurotransplant	
	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants
1991	7	18	5	9	61	35	17	9	90	71
1992	8	26	8	20	106	45	19	18	141	109
1993	24	33	14	14	135	58	30	14	203	119
1994	18	33	17	19	152	66	40	20	227	138
1995	17	29	12	16	148	60	47	20	224	125
1996	15	29	21	19	119	86	49	20	204	154
1997	21	30	18	26	115	89	62	10	216	155
1998	21	61	14	33	136	117	53	17	224	228
1999	22	70	23	29	242	126	58	17	345	242
2000	20	58	27	37	270	147	60	16	377	258

Table 6e Liver: Active waiting list and Transplants [cadaveric donor]

	Austria		Belgium		Germany		Netherlands		Slovenia		Eurotransplant	
	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants
1991	28	59	39	164	141	411	21	42	-	-	229	676
1992	35	66	39	144	161	490	18	65	-	-	253	765
1993	26	91	48	143	113	578	16	66	-	-	203	878
1994	29	96	46	146	121	575	16	75	-	-	212	892
1995	30	110	35	142	175	594	23	98	-	-	263	944
1996	33	132	55	135	209	689	30	76	-	-	327	1032
1997	47	131	44	139	256	738	27	89	-	-	374	1097
1998	42	133	63	139	354	699	33	100	-	-	492	1071
1999	56	143	65	176	425	718	47	95	-	-	593	1132
2000	61	147	80	194	600	691	60	126	2	10	803	1168

Table 6f Pancreas+Kidney and Islet+Kidney: Active waiting list and Transplants

	Austria		Belgium		Germany		Netherlands		Eurotransplant	
	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants	Waiting List	Transplants
1991	12	8	9	8	94	43	5	11	120	70
1992	12	13	20	8	100	30	9	11	141	62
1993	10	14	19	15	77	44	6	19	112	92
1994	5	12	21	12	66	47	6	17	98	88
1995	5	6	12	19	62	67	6	11	85	103
1996	17	7	20	13	61	103	12	17	110	140
1997	21	21	20	15	82	148	4	18	127	202
1998	16	29	22	16	109	175	8	16	155	236
1999	13	27	21	32	152	208	14	19	200	286
2000	16	29	16	30	153	231	13	18	198	308

Table 7 Registrations on the waiting list, by organ, per country**Table 7a Kidney: registrations on the waiting list**

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	Eurotransplant
1993	509	630	3303	7	715	-	5164
1994	405	506	3392	7	749	-	5059
1995	422	543	3210	15	696	-	4886
1996	458	486	3170	12	700	-	4826
1997	427	440	3385	1	792	-	5045
1998	418	422	3366	9	833	-	5048
1999	405	466	3341	5	806	-	5023
2000	419	501	3133	7	685	176	4921

Table 7b Heart: registrations on the waiting list

	Austria	Belgium	Germany	Netherlands	Slovenia	Eurotransplant
1993	181	157	966	64	-	1368
1994	154	156	843	65	-	1218
1995	181	137	823	67	-	1208
1996	178	130	941	70	-	1319
1997	154	132	950	74	-	1310
1998	137	120	945	48	-	1250
1999	108	101	794	68	-	1071
2000	120	114	640	60	10	944

Table 7c Heart/lung: registrations on the waiting list

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1993	8	14	56	0	78
1994	6	27	60	0	93
1995	1	22	57	1	81
1996	1	12	57	1	71
1997	3	21	51	1	76
1998	3	10	46	2	61
1999	5	5	28	2	40
2000	4	4	21	1	30

Table 7d Lung: registrations on the waiting list

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1993	43	23	128	29	223
1994	27	24	139	33	223
1995	38	17	127	44	226
1996	27	36	118	38	219
1997	51	27	175	39	292
1998	74	36	200	31	341
1999	79	47	299	43	468
2000	66	50	279	36	431

Table 7e Liver: registrations on the waiting list

	Austria	Belgium	Germany	Netherlands	Slovenia	Eurotransplant
1993	107	200	688	72	-	1067
1994	122	202	706	84	-	1114
1995	157	175	797	111	-	1240
1996	174	193	921	105	-	1393
1997	186	167	1011	104	-	1468
1998	173	195	1013	119	-	1500
1999	192	229	1061	133	-	1615
2000	209	269	1196	159	11	1844

Table 8 Mortality on the waiting list, by organ, per country**Table 8a Kidney: mortality on the waiting list**

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	Eurotransplant
1996	64	41	351	0	89	-	545
1997	53	26	363	3	125	-	570
1998	61	30	374	1	84	-	550
1999	50	39	397	0	106	-	592
2000	52	35	419	0	111	1	618

Table 8b Heart: mortality on the waiting list

	Austria	Belgium	Germany	Netherlands	Slovenia	Eurotransplant
1996	30	17	228	18	-	293
1997	41	14	225	14	-	294
1998	28	18	219	8	-	273
1999	15	10	192	12	-	229
2000	16	10	141	14	2	183

Table 8c Heart+lung: mortality on the waiting list

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1996	0	7	21	0	28
1997	0	4	18	0	22
1998	0	8	19	0	27
1999	2	2	20	2	26
2000	0	0	4	0	4

Table 8d Lung: mortality on the waiting list

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1996	15	5	38	13	71
1997	6	7	63	13	89
1998	10	7	49	15	81
1999	5	9	61	15	90
2000	5	6	80	12	103

Table 8e Liver: mortality on the waiting list

	Austria	Belgium	Germany	Netherlands	Slovenia	Eurotransplant
1996	22	25	137	16	-	200
1997	27	30	151	13	-	221
1998	35	29	142	6	-	212
1999	21	30	151	12	-	214
2000	43	30	197	8	1	279

Table 9 Living donors used for a transplant, by organ, per country**Table 9a Kidney transplants : living donors**

	Austria	Belgium	Germany	Luxemburg	Netherlands	Eurotransplant
1981	2	21	19	0	11	53
1982	0	36	28	0	24	88
1983	0	33	43	0	32	108
1984	3	41	43	1	24	112
1985	9	42	56	2	41	150
1986	12	38	44	3	43	140
1987	35	33	51	1	41	161
1988	34	32	35	1	37	139
1989	27	31	44	0	31	133
1990	14	14	37	0	40	105
1991	6	21	59	0	43	129
1992	15	10	56	0	60	141
1993	7	6	58	0	56	127
1994	12	12	78	0	66	168
1995	12	20	83	0	97	212
1996	18	18	130	0	81	247
1997	24	17	279	0	91	411
1998	49	26	343	0	108	526
1999	39	26	380	0	134	579
2000	37	13	346	0	173	569

Table 9b Heart transplants: living donors

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1991	0	0	0	0	0
1992	0	0	0	0	0
1993	0	0	0	0	0
1994	0	0	2	0	2
1995	0	0	0	0	0
1996	0	1	0	0	1
1997	0	0	0	0	0
1998	0	0	0	0	0
1999	0	0	0	0	0
2000	1	0	0	0	1

Table 9c Lung transplants: living donors

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1991	0	0	0	0	0
1992	0	0	0	0	0
1993	0	0	0	0	0
1994	0	0	0	0	0
1995	0	0	1	0	1
1996	0	0	0	0	0
1997	0	0	0	0	0
1998	0	0	0	0	0
1999	2	0	0	0	2
2000	0	0	0	0	0

Table 9d Liver transplants: living donors

	Austria	Belgium	Germany	Netherlands	Eurotransplant
1991	0	0	5	0	5
1992	0	0	15	0	15
1993	0	2	12	0	14
1994	0	13	11	0	24
1995	0	16	9	0	25
1996	0	12	10	0	22
1997	2	17	24	0	43
1998	1	12	25	0	38
1999	7	16	41	0	64
2000	4	22	90	0	116

Table 10 Cadaveric donors used for a transplant, by organ, per country**Table 10a Donor kidneys: cadaveric donors**

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	Eurotransplant
1981	114	154	677	2	316	-	1263
1982	141	139	812	2	313	-	1407
1983	108	194	996	5	342	-	1645
1984	224	206	1232	10	370	-	2042
1985	207	211	1259	8	270	-	1955
1986	232	271	1571	8	375	-	2457
1987	321	371	1585	4	417	-	2698
1988	295	377	1643	8	370	-	2693
1989	391	409	1847	6	361	-	3014
1990	432	369	1885	14	406	-	3106
1991	396	404	2189	10	431	-	3430
1992	311	350	2012	12	443	-	3128
1993	397	403	2070	18	426	-	3314
1994	329	428	1857	8	376	-	2998
1995	321	375	1914	4	436	-	3050
1996	350	399	1897	26	423	-	3095
1997	305	404	1963	10	414	-	3096
1998	318	358	1992	13	379	-	3060
1999	389	441	1867	16	320	-	3033
2000	362	489	1869	14	383	43	3160

Table 10b Heart donors: cadaveric donors

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	Eurotransplant
1991	108	156	472	4	92	-	832
1992	88	115	495	4	69	-	771
1993	107	123	482	7	65	-	784
1994	90	121	452	1	60	-	724
1995	96	117	468	0	65	-	746
1996	95	108	478	10	82	-	773
1997	85	126	508	3	81	-	803
1998	93	105	482	4	62	-	746
1999	93	119	441	3	52	-	708
2000	88	116	369	1	48	11	633

Table 10c Lung donors: cadaveric donors

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	Eurotransplant
1991	18	16	54	1	12	-	101
1992	22	24	85	1	11	-	143
1993	30	32	65	1	13	-	141
1994	27	30	72	0	24	-	153
1995	27	34	67	0	16	-	144
1996	33	33	76	1	25	-	168
1997	29	30	90	0	20	-	169
1998	37	33	123	0	32	-	225
1999	45	38	113	1	23	-	220
2000	45	54	113	0	29	4	245

Table 10d Liver donors: cadaveric donors

	Austria	Belgium	Germany	Luxemburg	Netherlands	Slovenia	Eurotransplant
1991	95	133	375	4	84	-	691
1992	94	111	416	3	87	-	711
1993	118	130	488	4	103	-	843
1994	115	143	457	2	110	-	827
1995	94	134	483	1	113	-	825
1996	113	145	535	7	134	-	934
1997	109	174	548	3	145	-	979
1998	119	142	582	4	115	-	962
1999	143	183	591	6	103	-	1026
2000	148	195	590	4	129	17	1083

Balance sheet and exploitation result of Stichting Eurotransplant International Foundation

Balance sheet

Assets	31.12.2000 x nlg. 1000	31.12.2000 x euro 1000	31.12.1999 x nlg. 1000	31.12.1999 x euro 1000
Fixed assets	1.628	739	293	133
Short term receivables	4.904	2.225	5.084	2.308
Liquid assets	4.662	2.116	5.781	2.623
	<u>11.194</u>	<u>5.080</u>	<u>11.158</u>	<u>5.064</u>
Liabilities	31.12.2000 x nlg. 1000	31.12.2000 x euro 1000	31.12.1998 x nlg. 1000	31.12.1998 x euro 1000
Equity	519	236	519	236
Reserve funds	2.693	1.222	2.960	1.343
Short term liabilities	7.982	3.622	7.679	3.485
	<u>11.194</u>	<u>5.080</u>	<u>11.158</u>	<u>5.064</u>

Statement of income and charges

Income	2000 x nlg. 1000	2000 x euro 1000	1999 x nlg. 1000	1999 x euro 1000
Registration fees	6.858	3.112	6.146	2.789
Miscellaneous	355	161	316	143
	<u>7.213</u>	<u>3.273</u>	<u>6.462</u>	<u>2.932</u>
Charges	2000 x nlg. 1000	2000 x euro 1000	1999 x nlg. 1000	1999 x euro 1000
Salaries	4.342	1.970	3.921	1.779
General expenses	1.399	635	1.403	637
Medical expenses	261	119	266	121
Transport	103	47	147	67
Housing	324	147	271	123
Depreciation	566	257	364	165
Miscellaneous	185	84	166	76
	<u>7.180</u>	<u>3.259</u>	<u>6.538</u>	<u>2.968</u>
Exploitation - balance	33 7.213	14 3.273	-76 6.462	-36 2.932

Accounting policies

Current assets and liabilities

These are stated at nominal value. For doubtful accounts a provision has been made.

Exploitation balance

The exploitation balance is defined as the difference between income and charges based on the above mentioned policies.

Auditor's opinion

We have audited the financial statements of Stichting Eurotransplant International Foundation for the year ended December 31, 2000 from which the summarized financial statements were derived, in accordance with relevant auditing standards. In our report dated May 31, 2001 we expressed an unqualified opinion on the financial statements from which the summarized financial statements were derived. These financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

In our opinion, the accompanying summarized financial statements are consistent, in all material aspects, with the financial statements from which they were derived.

For a better understanding of the Foundation's financial position and the results of its operations for the period and the scope of our audit, the summarized financial statements should be read in conjunction with the financial statements from which the summarized financial statements were derived and our audit report thereon.

Leiden, 13 May, 2001

Deloitte & Touche