

Jean de Ville de Goyet

Il Trapianto di Fegato Pediatrico da Vivente nel Mondo

STATI GENERALI



RETE NAZIONALE
TRAPIANTI

6.7.8 NOVEMBRE

ROMA

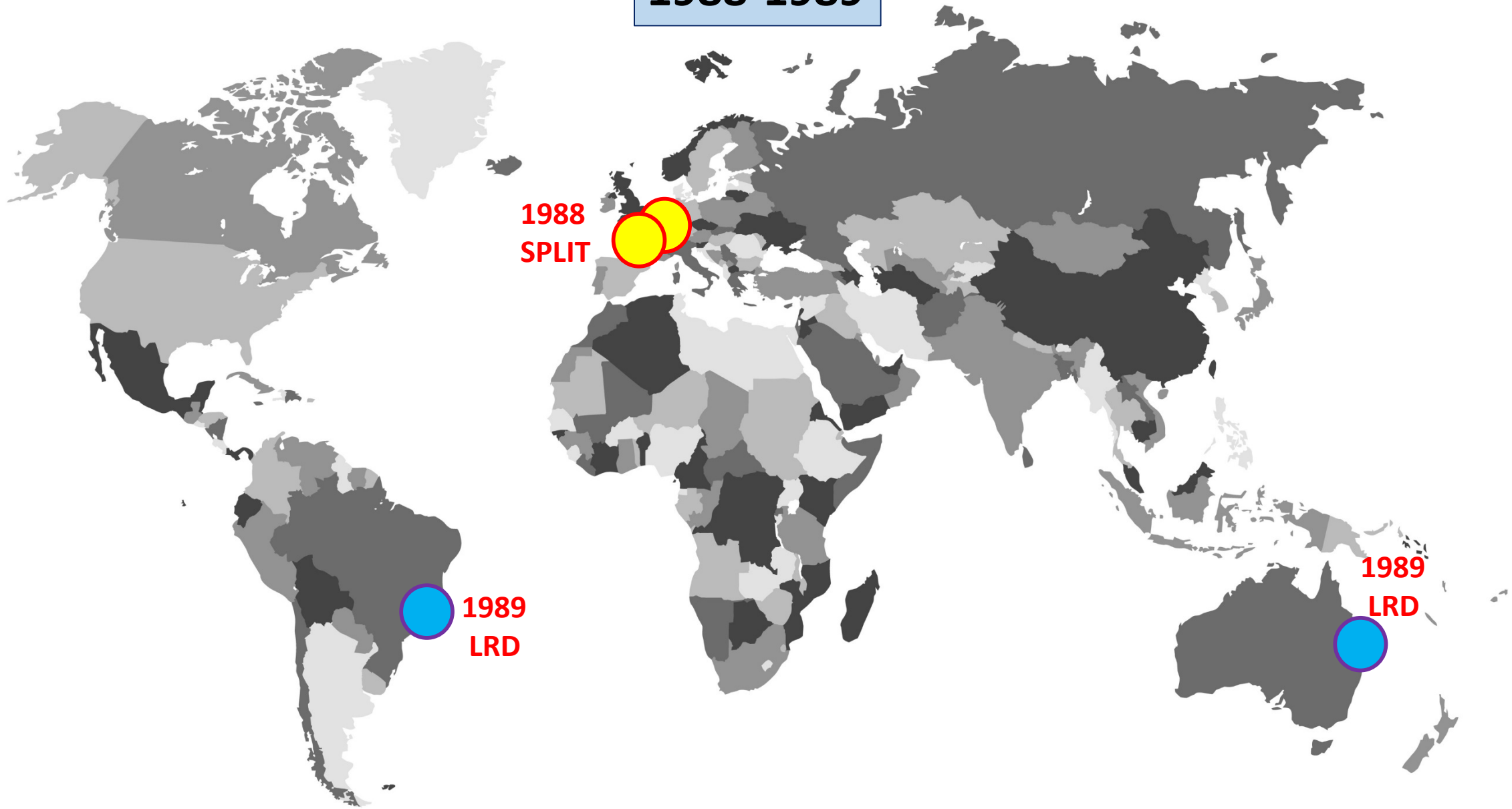
Il Trapianto di Fegato Pediatrico da Vivente

1989 - 2019

**30 ANNI
di
Sviluppo Continuo**

...

1988-1989



**1988
SPLIT**

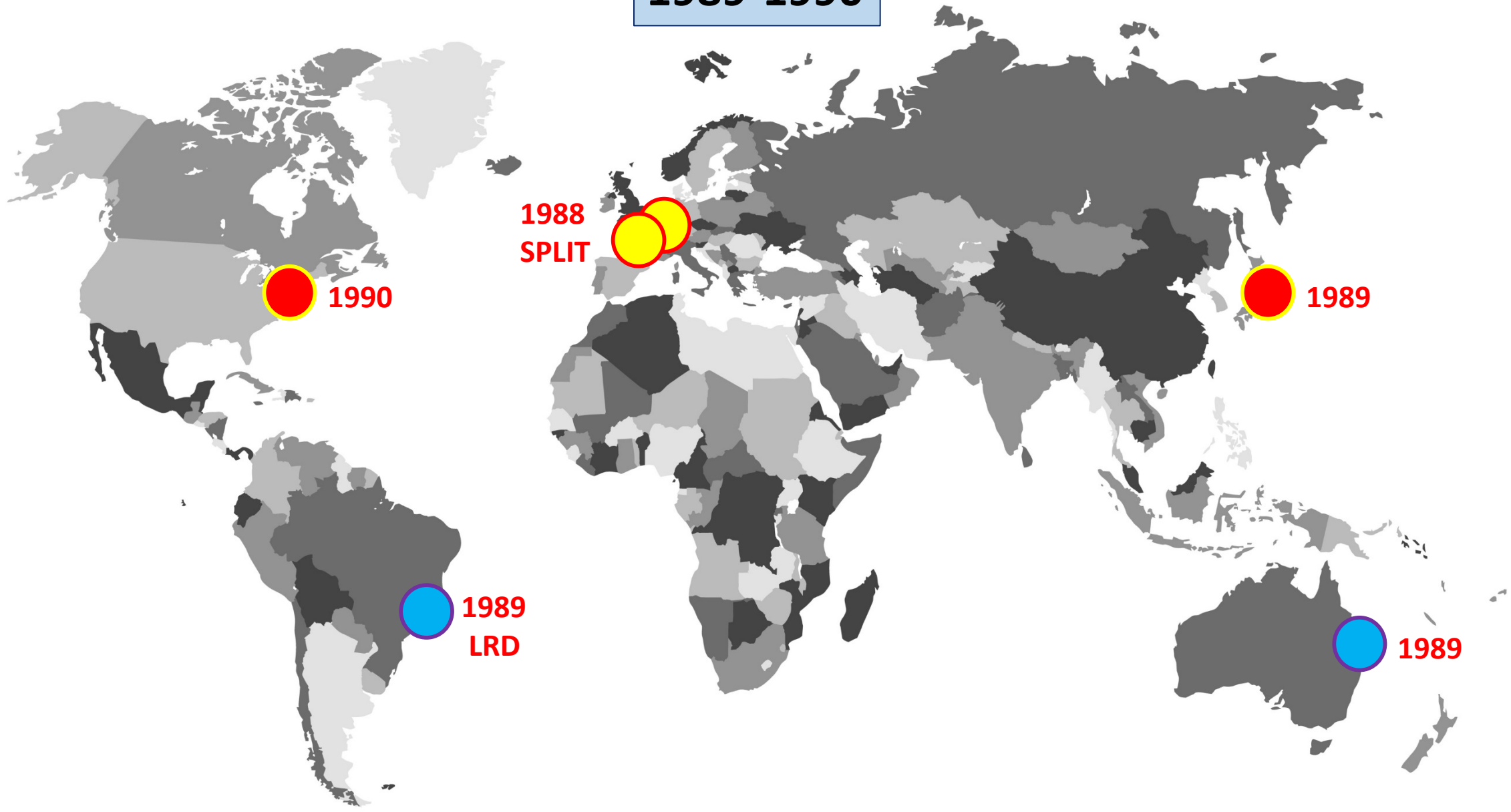


**1989
LRD**

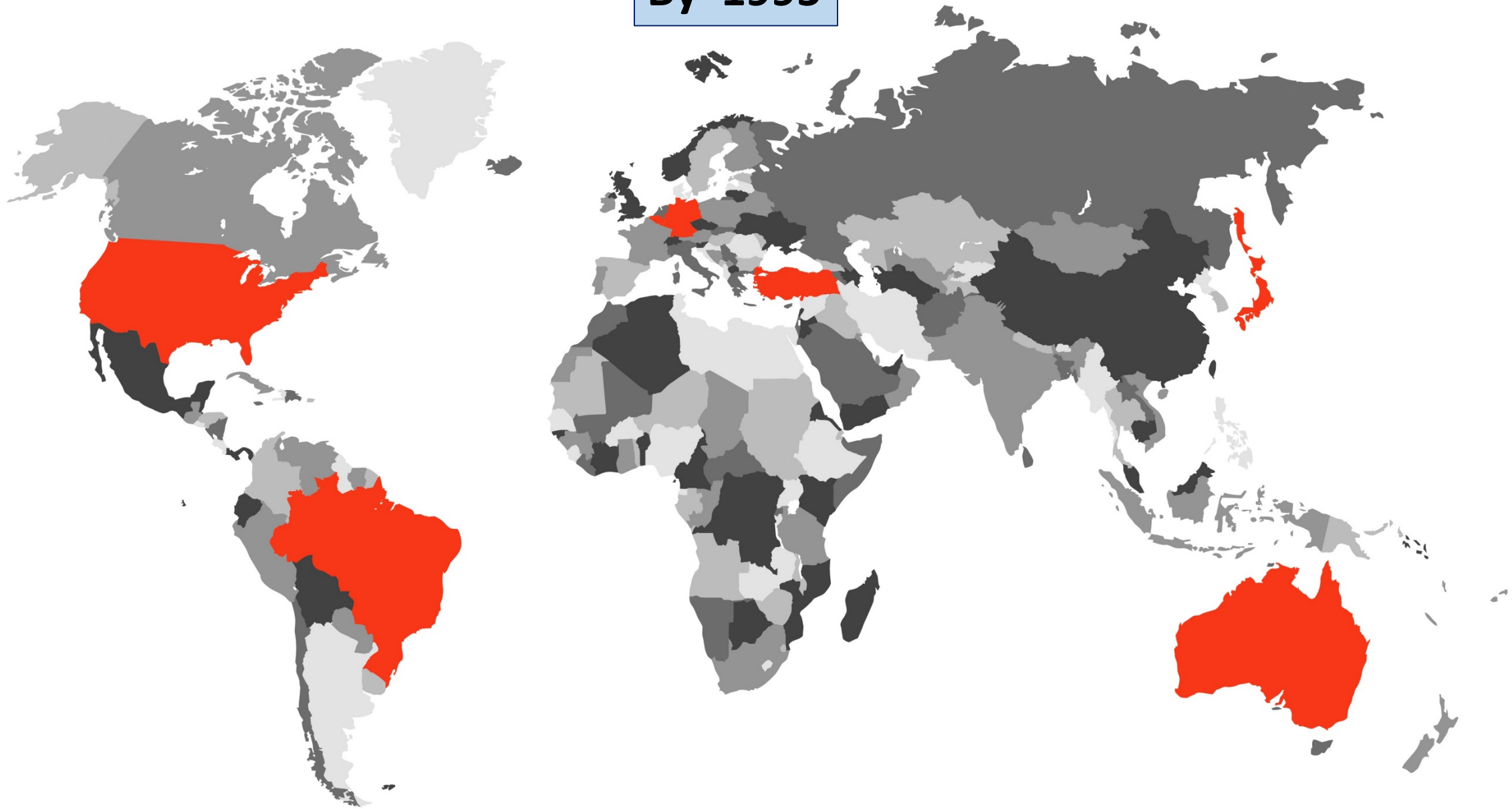


**1989
LRD**

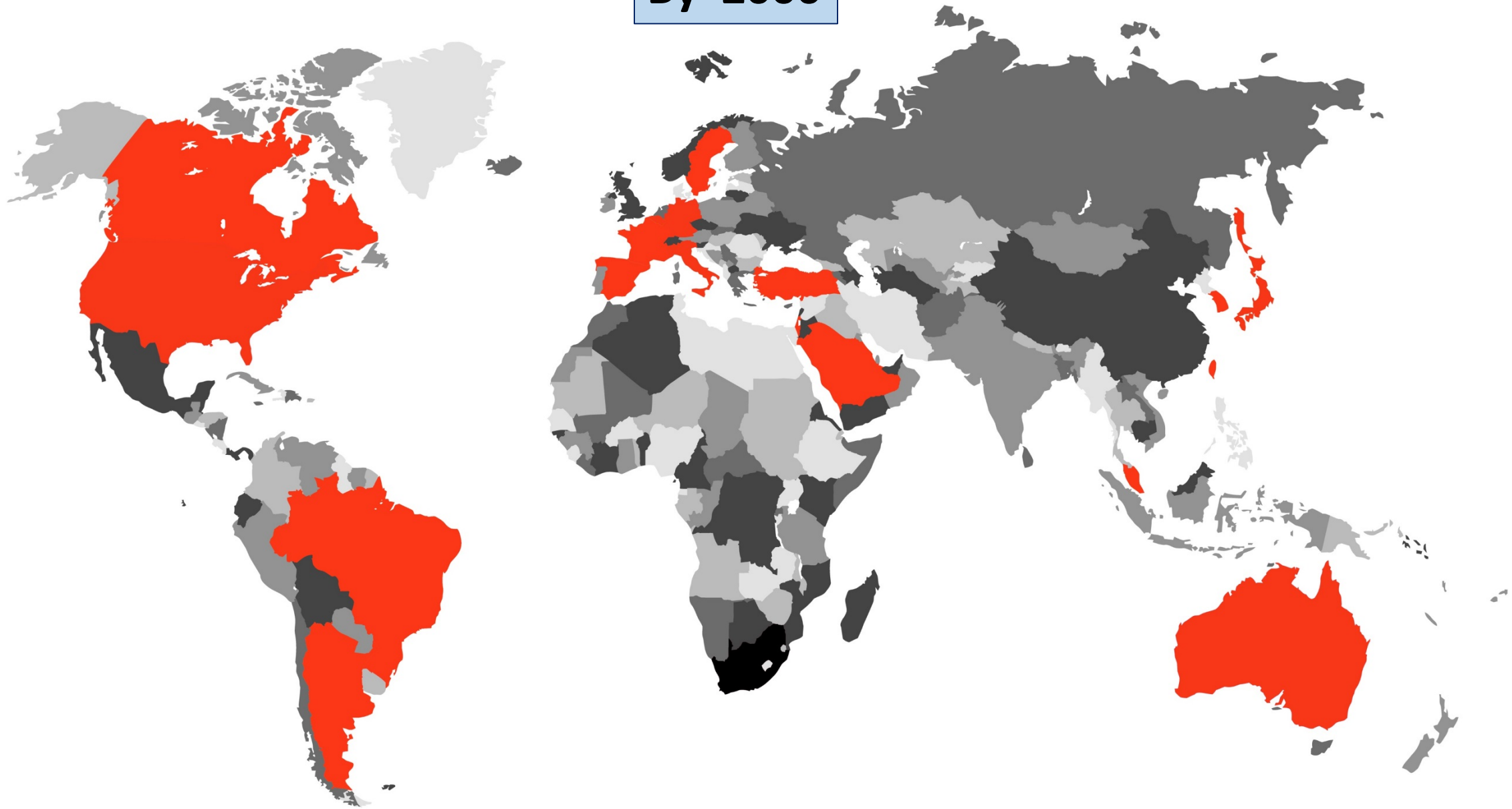
1989-1990



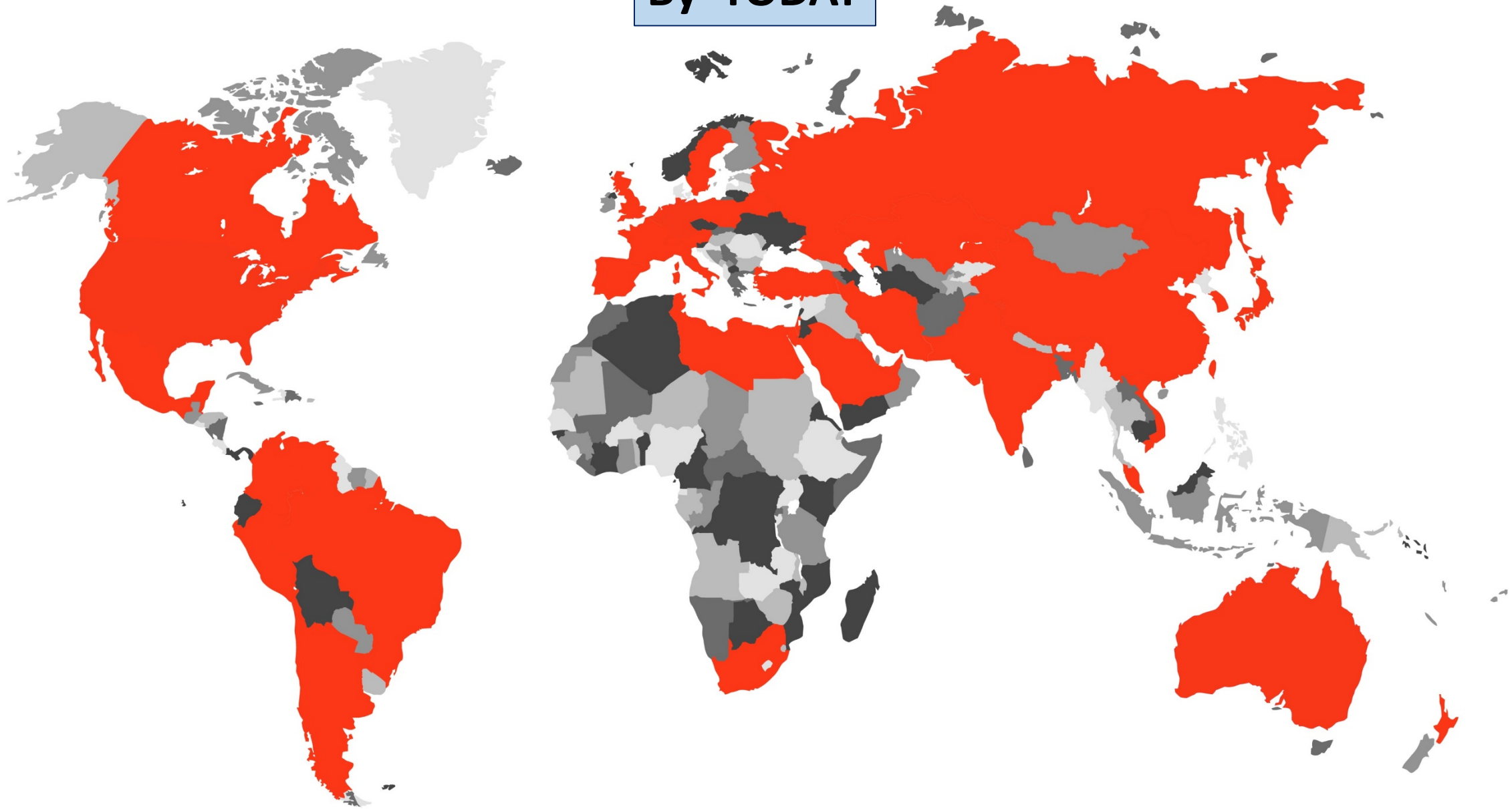
By 1995



By 2000



By TODAY



Il Trapianto di Fegato Pediatrico da Vivente nel Mondo

Uso del donatore Vivente vs Donatore deceduto

Tre tipologie di area

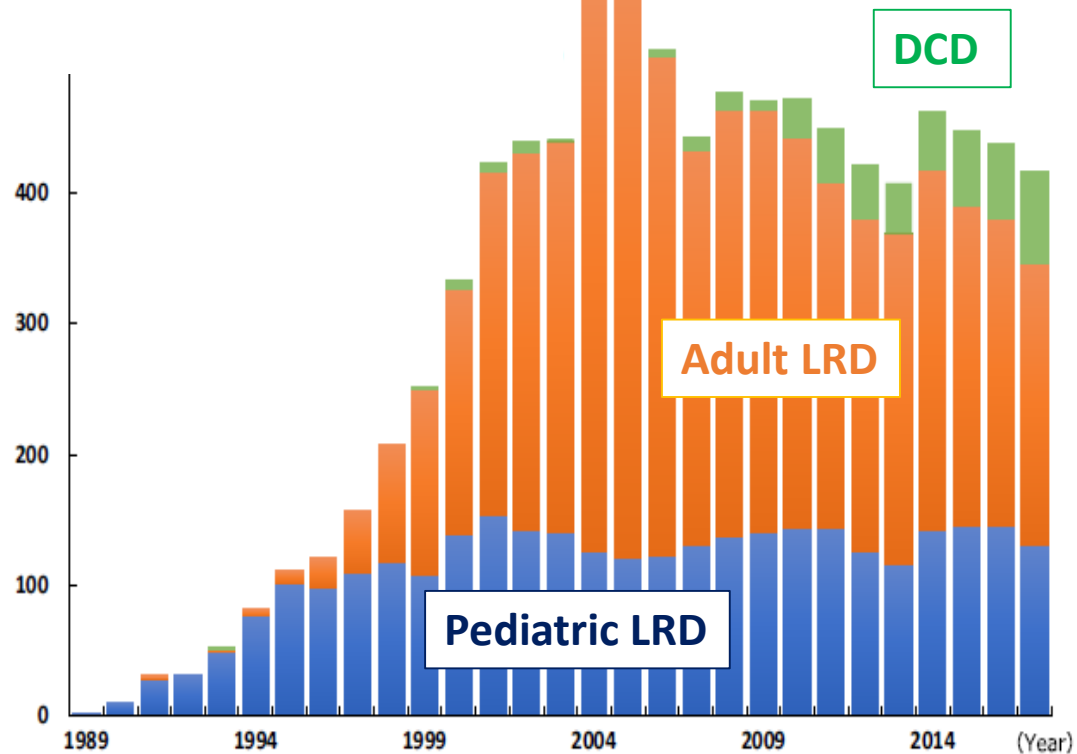
-1-

Limitata disponibilità di Donatori deceduti

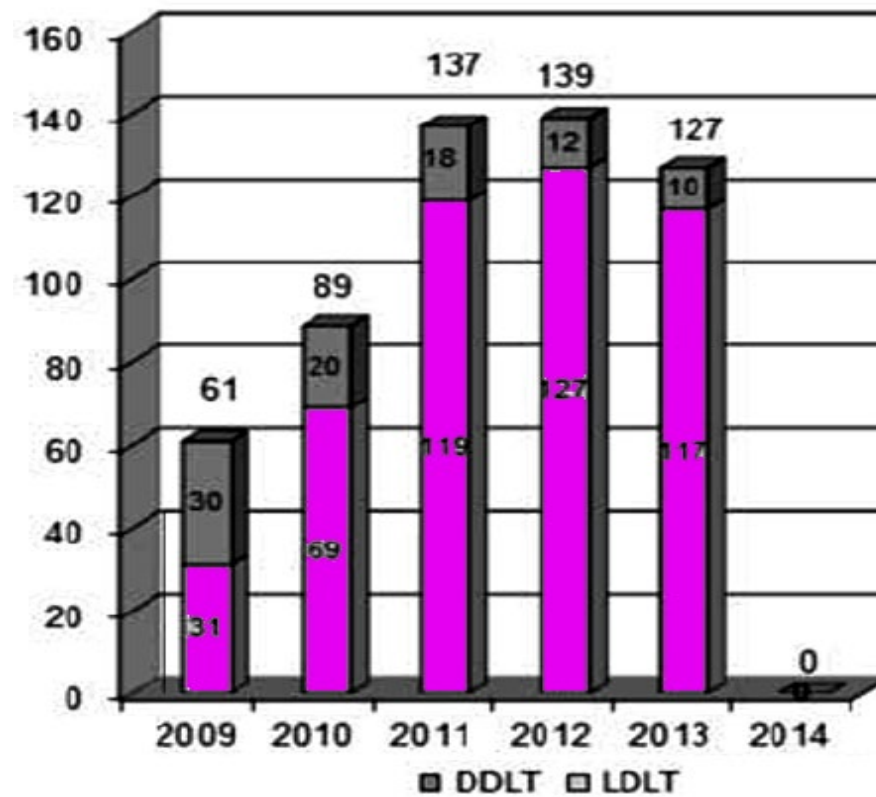
**Turchia
Latin America
Indo-Asia-Pacific**

2019

Giappone



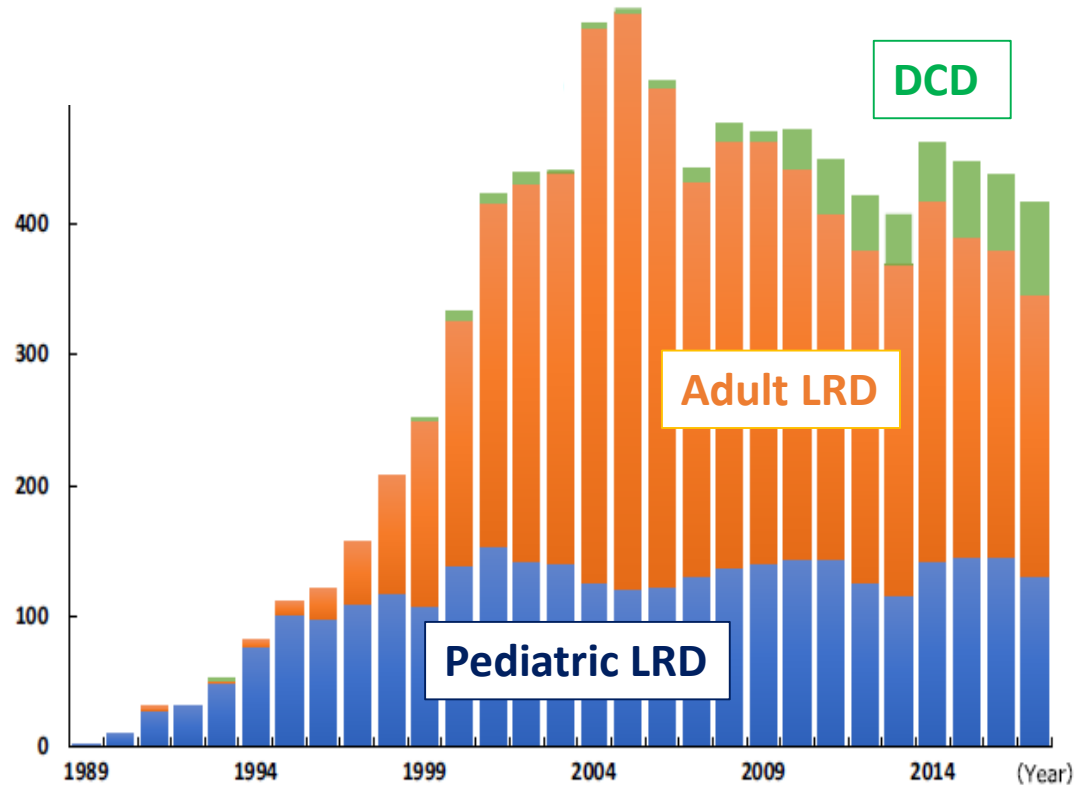
Turchia



2019

Waiting list mortality for pediatric deceased donor liver transplantation in a Japanese living-donor–dominant program. Kasahara M et al. *Pediatric Transplantation* 2019

Giappone



Giappone: 2010- 2019

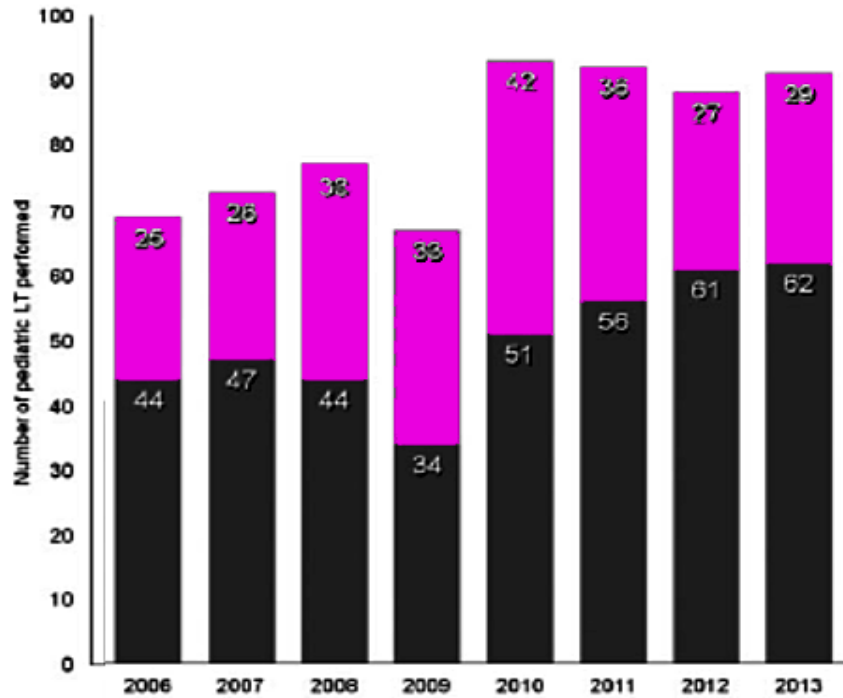
132 children
listed for DDLT

25.8% received a DD
52.3% get a LD.

waiting list mortality
3.0%

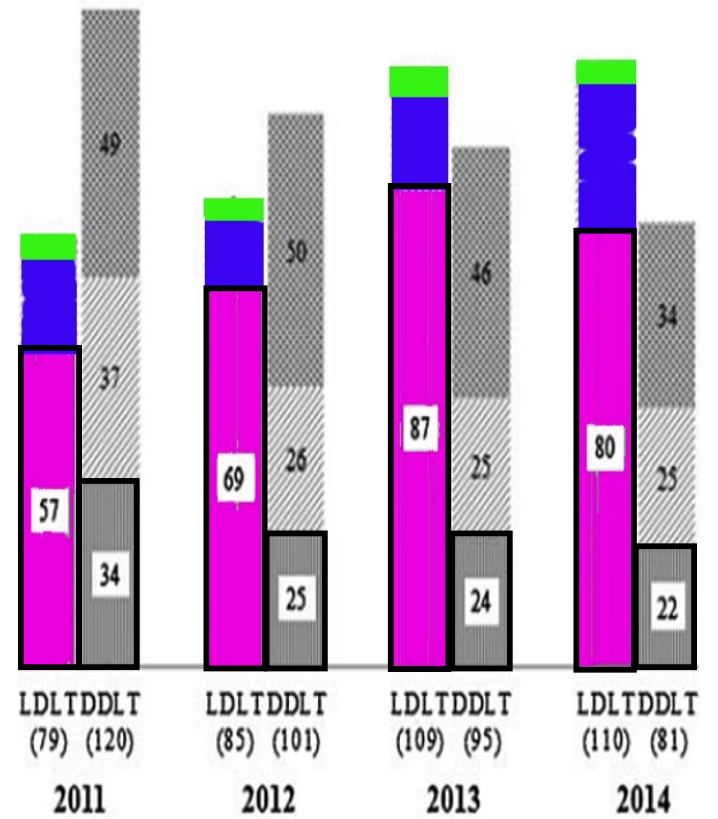
LATIN AMERICA

Argentina



Pediatric LT activity in Argentina.
Data from the national registry (INCUCAI).

Brasile



■ 0 to 2 y
 ■ >2 to 12 y
 ■ >12 to <18 y

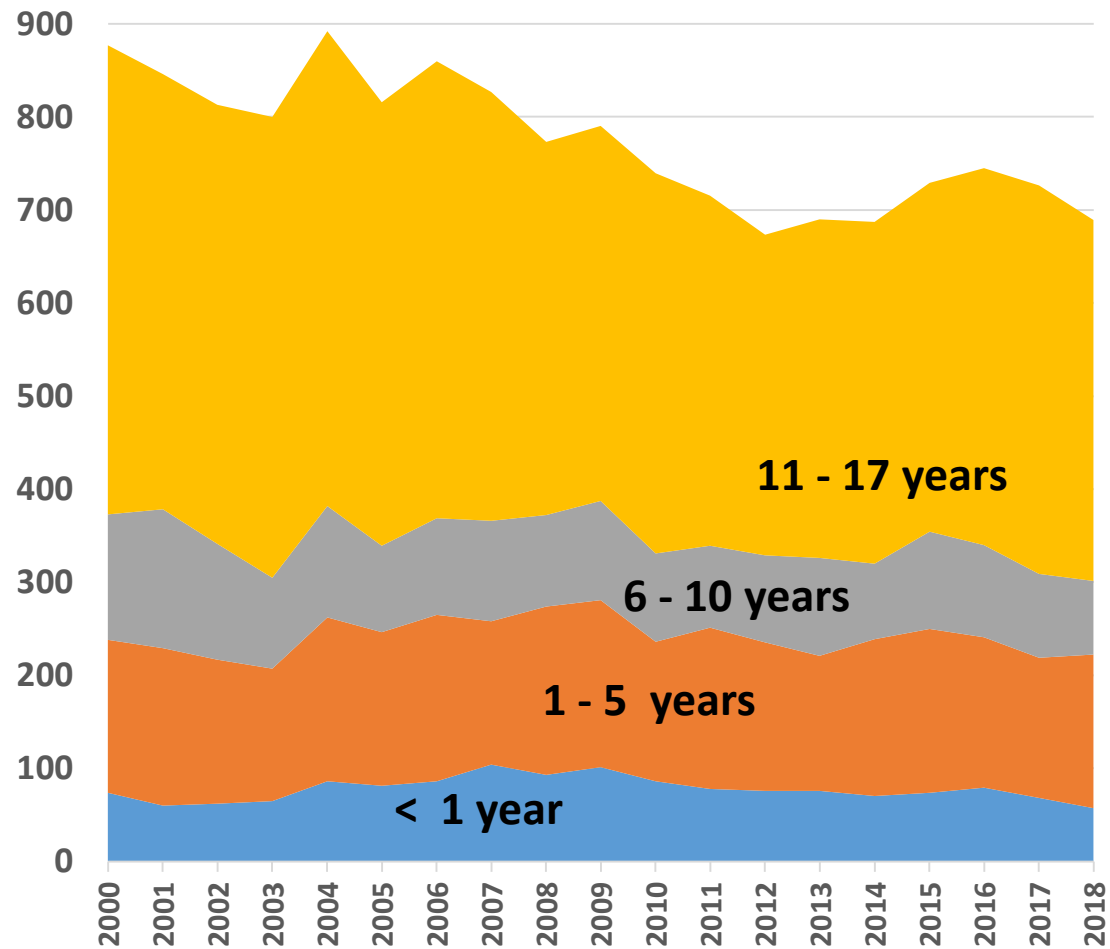
-2-

Alta disponibilità di donatori pediatrici deceduti

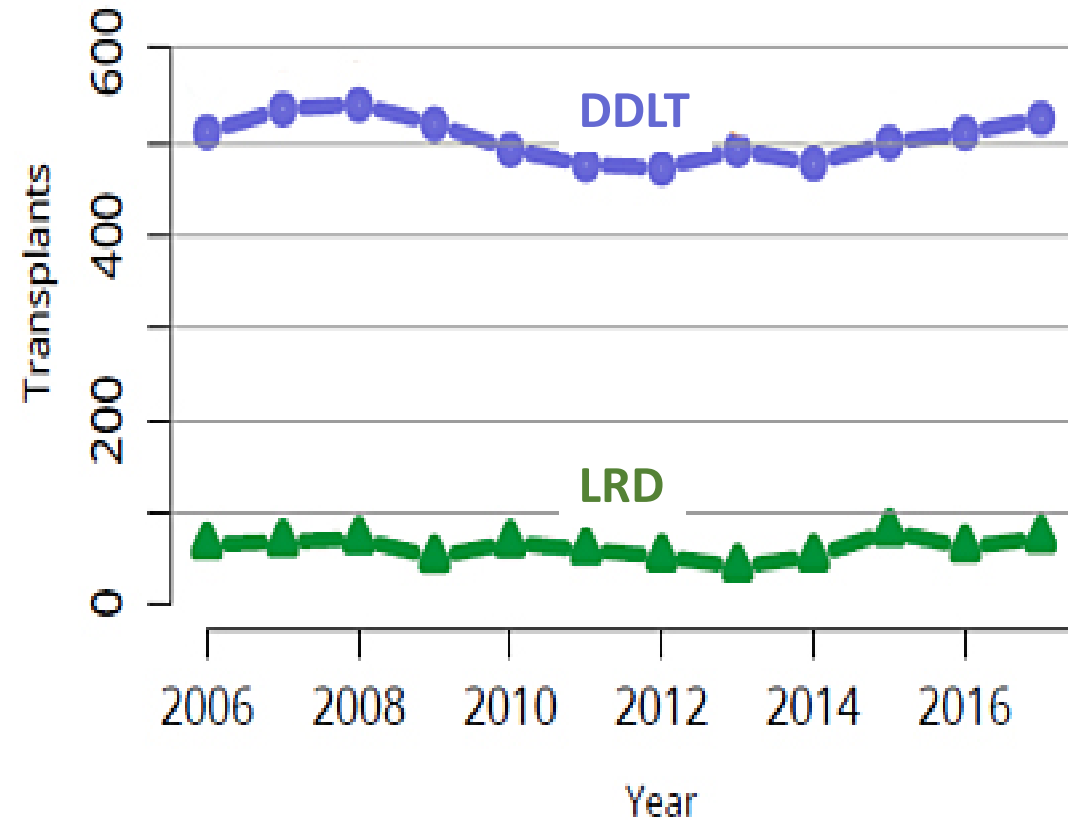
USA

OPTN UNOS Database

Deceased pediatric liver donors/Yr

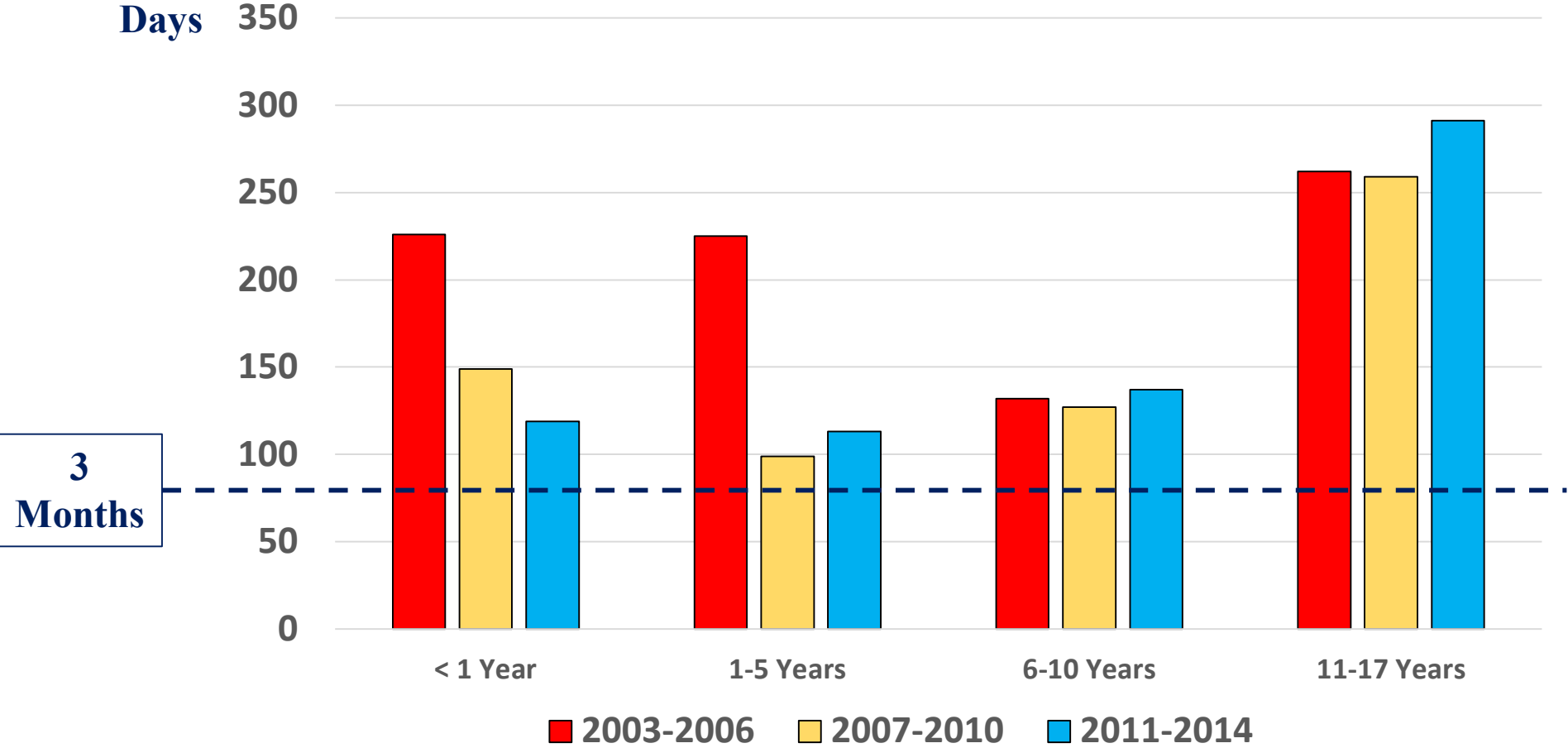


Annual Data Report: Liver 2006 - 2017

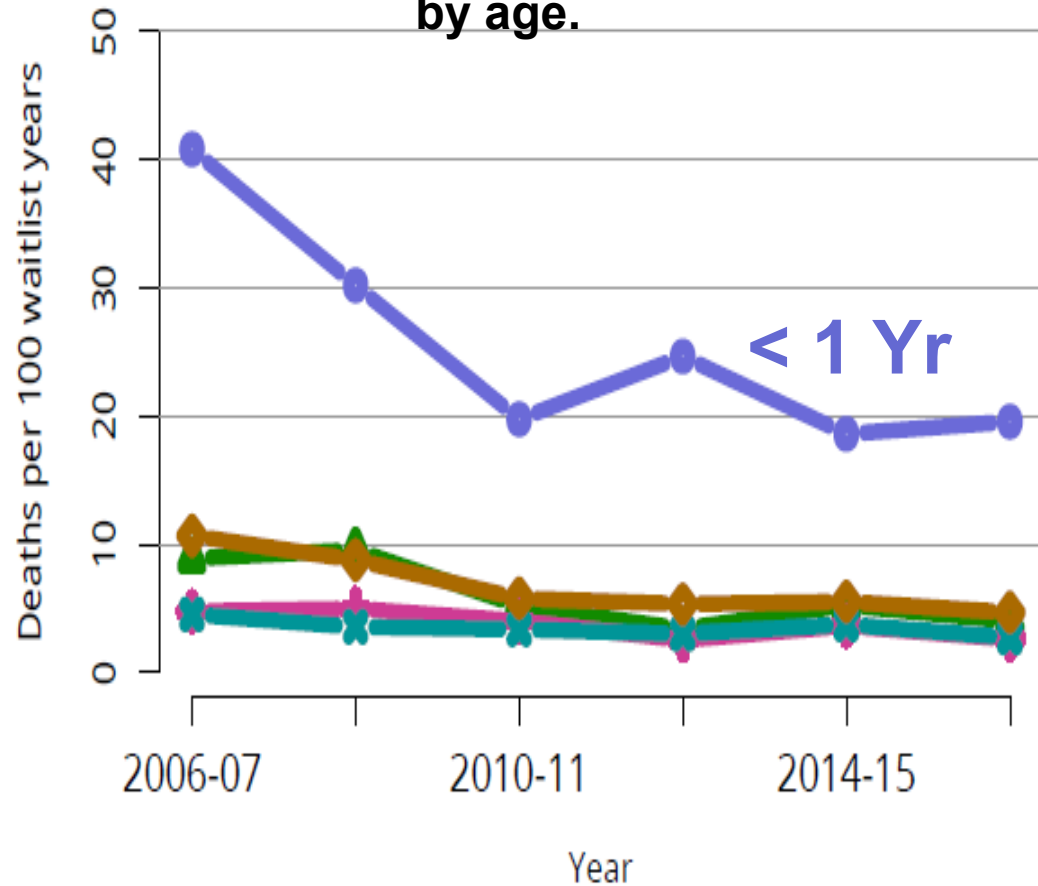


UNOS database - 2003 - 2014

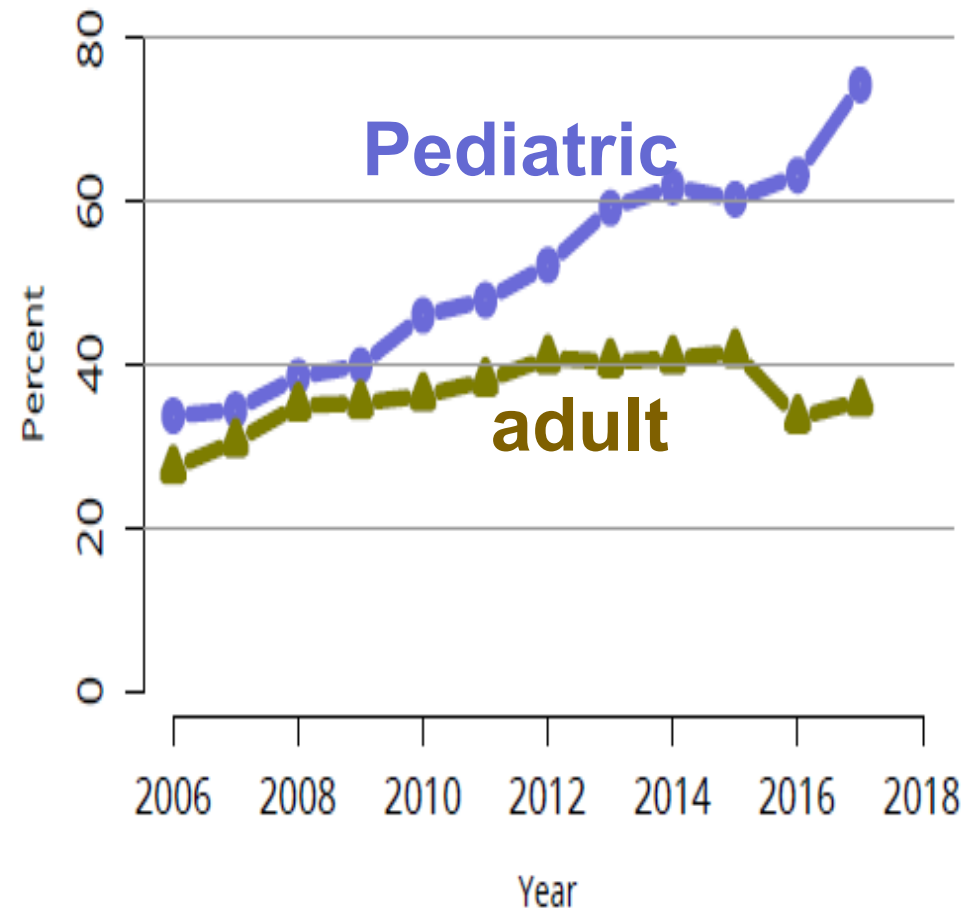
Median waiting time on list for pediatric OLT by age group and era



Pretransplant mortality rates among pediatrics waitlisted for liver transplant by age.



Percent of adult and pediatric liver transplant recipients using exceptions. Exceptions among those allocated by MELD/PELD. Denominator excludes status 1A and 1B recipients.



Il Trapianto di Fegato Pediatrico da Vivente

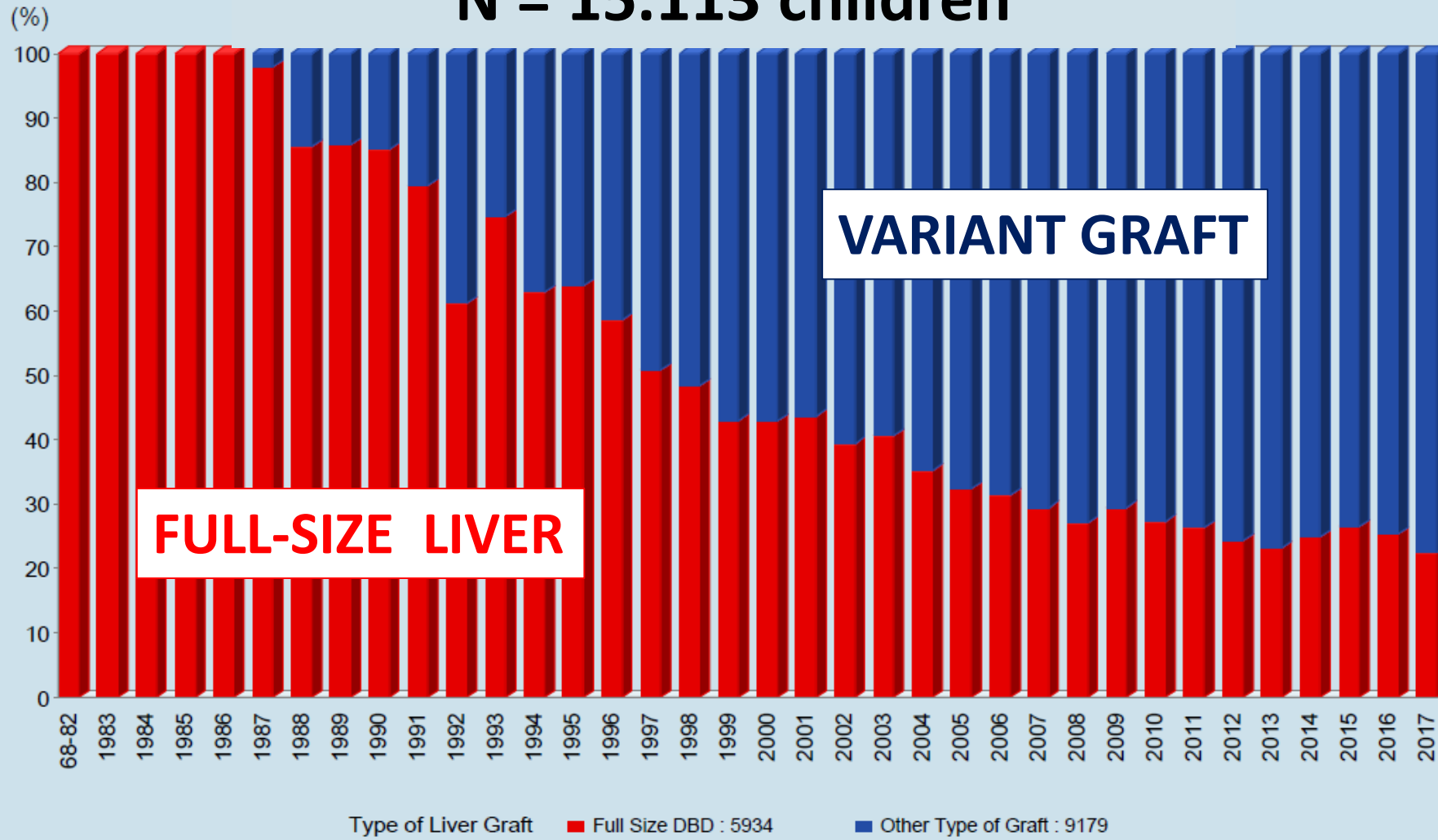
-3-

Alta attività di split

EUROPE

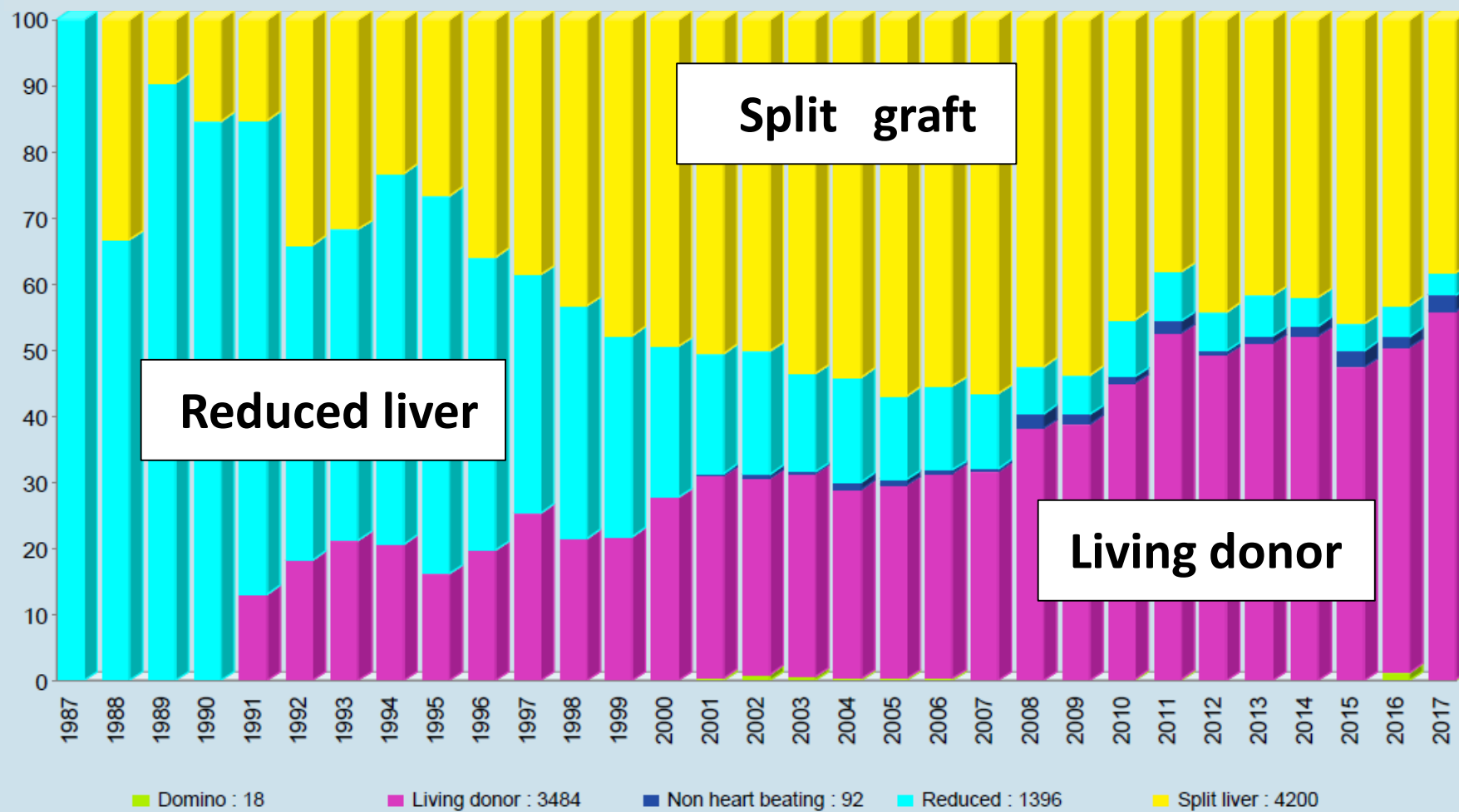
Evolution of Type of LIVER GRAFT

N = 15.113 children



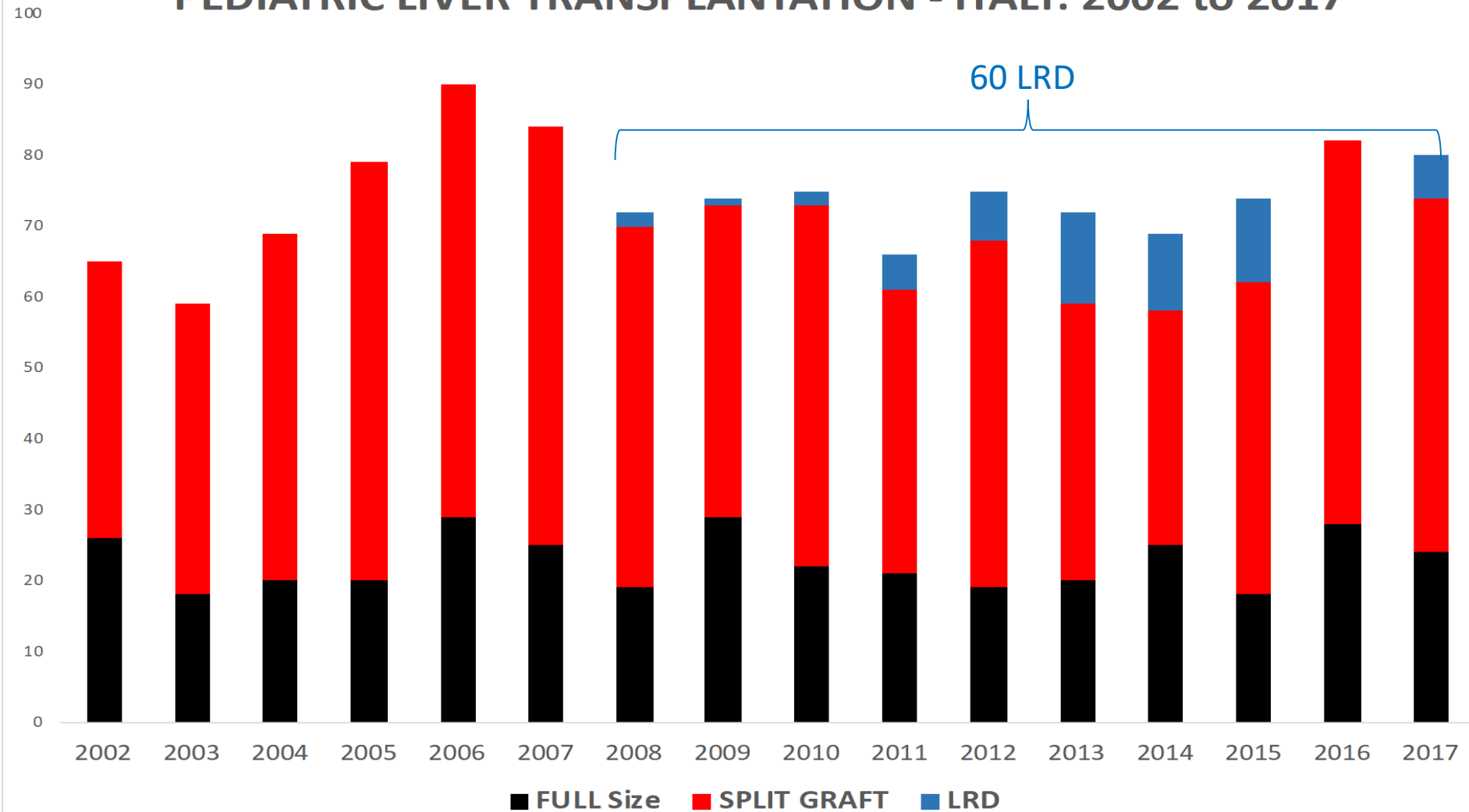
Evolution of VARIANT LIVER GRAFTS

N = 9.190 grafts



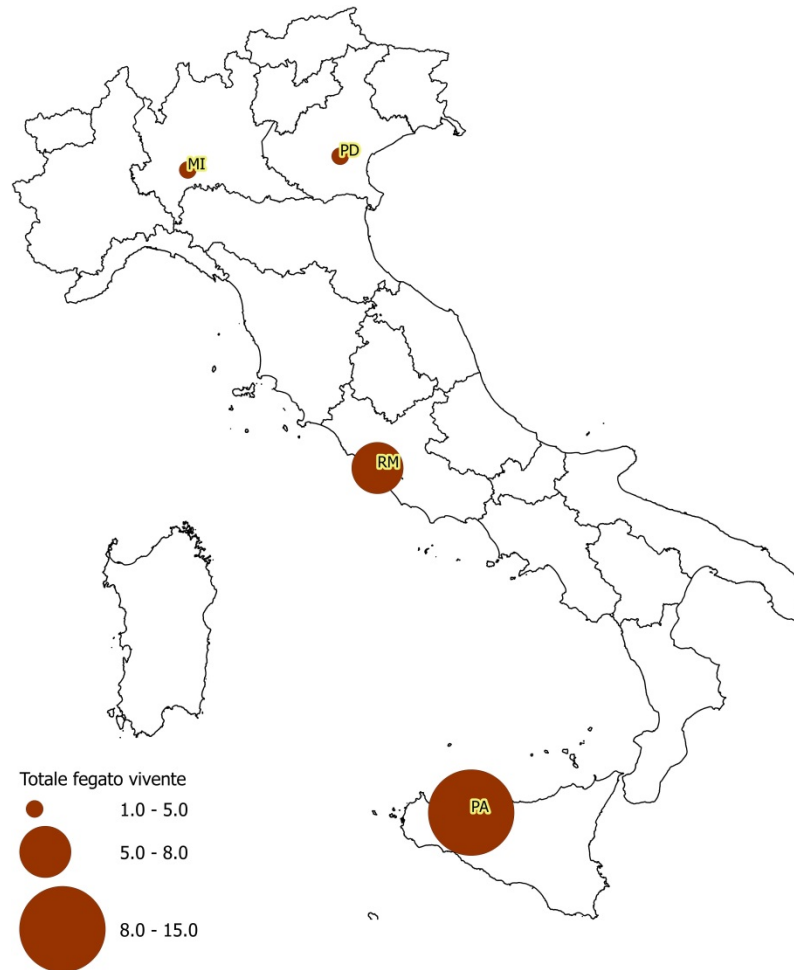
ITALY

PEDIATRIC LIVER TRANSPLANTATION - ITALY: 2002 to 2017



< 2002
n=2

TRAPIANTO PEDIATRICO di FEGATO da VIVENTE – Attività per centro trapianti



2018
n = 25 LRD

CTX	Totale
Pa Ismett	15
Rm B. Gesù	8
Padova	1
Mi Niguarda	1

Data CNT

Il Trapianto di Fegato Pediatrico da Vivente

Risultati

ROMA

6·7·8 NOVEMBRE

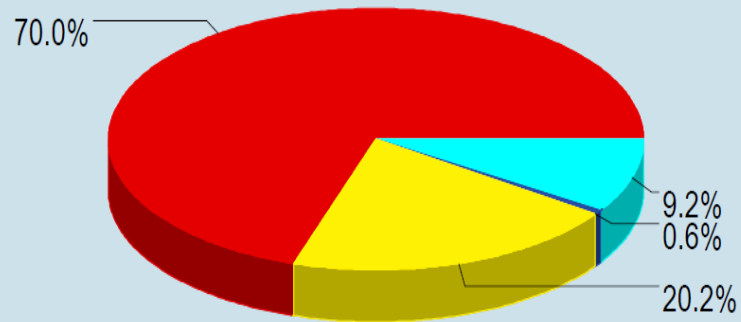
- Tipi di graft utilizzati -



Una maggiore flessibilità nell'offerta / tecnica

Tipi di graft utilizzati

REGISTRO EUROPEO
1991-2017
2042 LRD

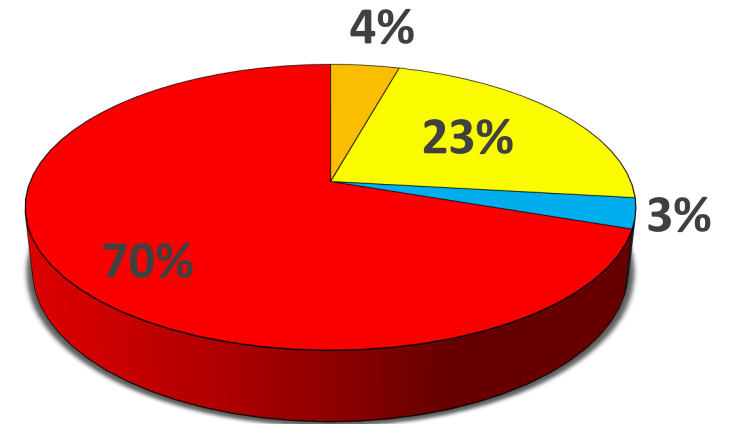


■ LLB: Left lobe (2+3) : 1430
 ■ LLV: Left liver (2+3+4) : 413
 ■ OT: Other types : 12
■ RLV: Right liver (5+6+7+8) : 187

70 % LLS
(S 2-3)

22 % LL
(S 2-3-4)

REGISTRO JAPAN
1989 to 2010
2224 LRD



■ Reduced LLS
 ■ Left Liver
■ Righth liver
 ■ LLS

Il Trapianto di Fegato Pediatrico da Vivente

**Ottima sopravvivenza
Graft e Ricevente**

... Superiore a tutt'altro ...

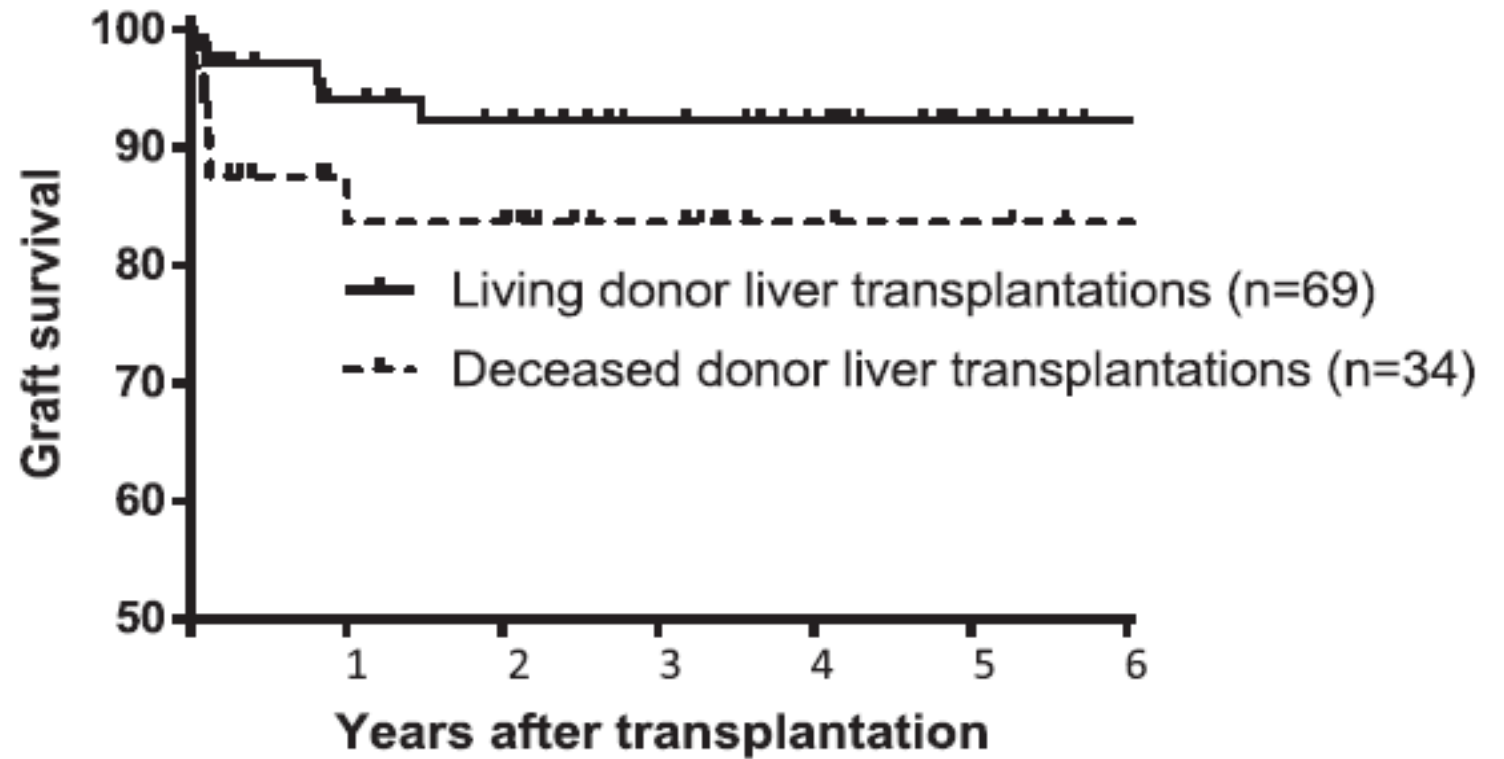
2019

Japan: 2010- 2019

132 patients listed for DDLT

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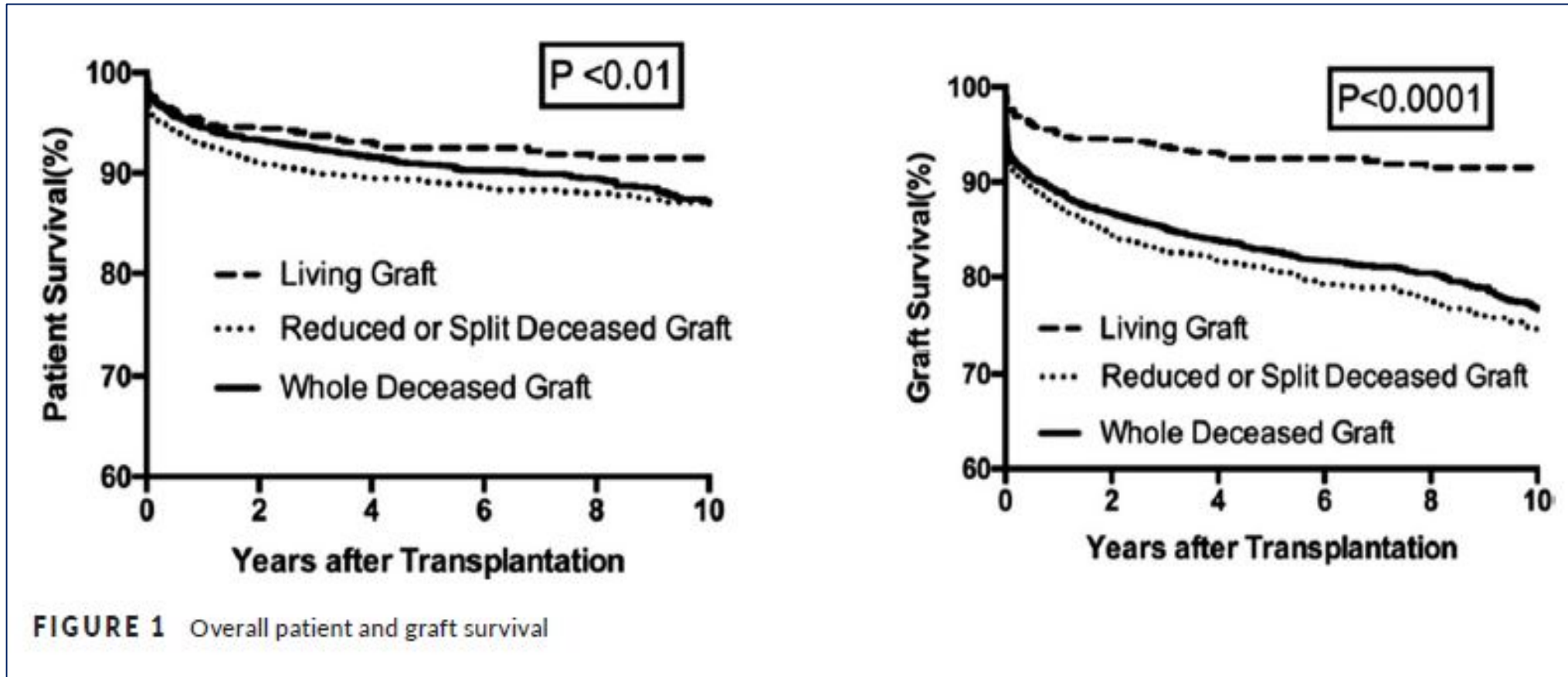


Waiting list mortality for pediatric deceased donor liver transplantation in a Japanese living-donor-dominant program. Kasahara M et al. Pediatric Transplantation 2019

2019

UNOS: 2002- 2016

6312 primary liver transplant in pediatric recipients (800 LRD)

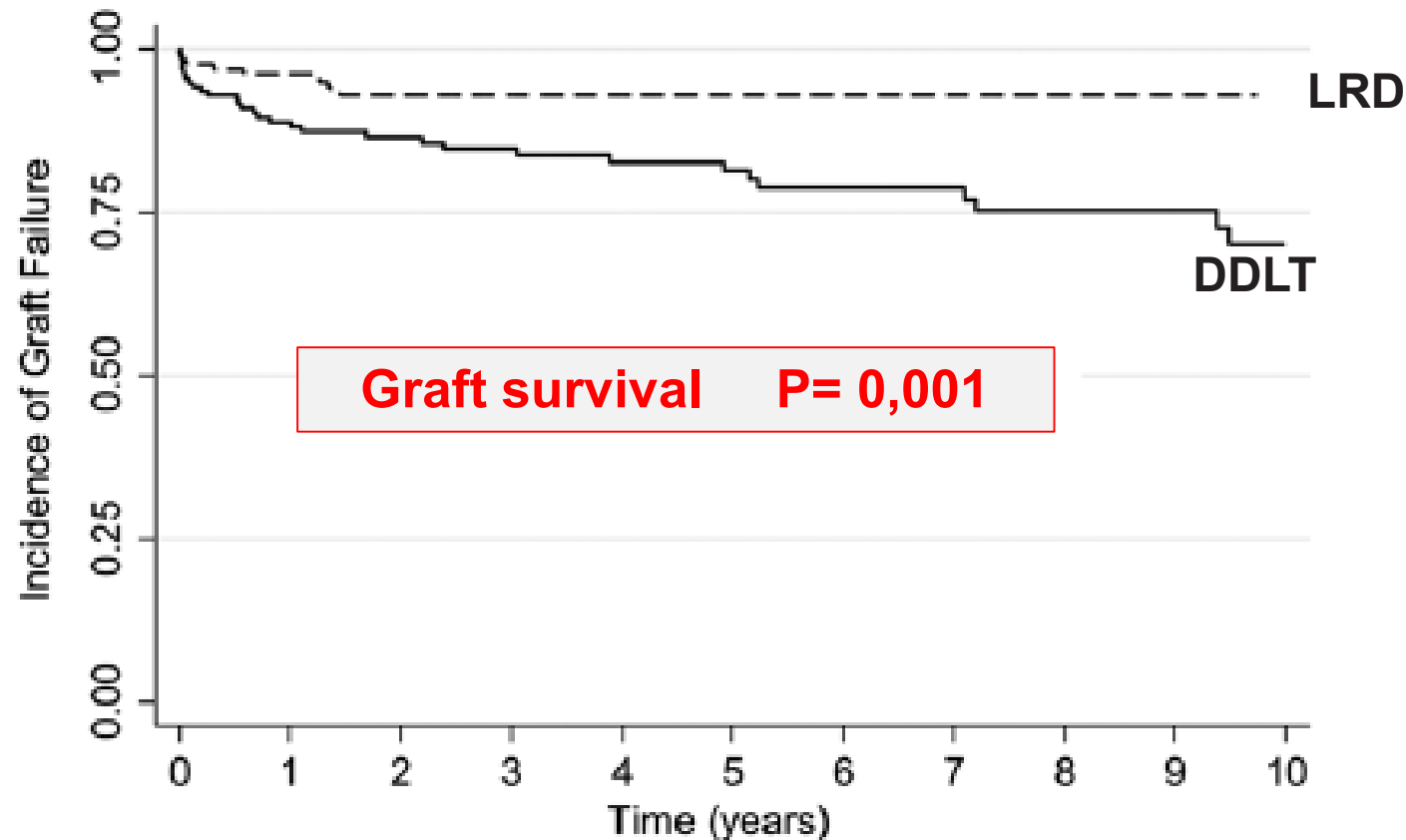


Living liver donation improves patient and graft survival in the pediatric population
Montenovo et al. - Pediatric Transplantation. 2019

2019

CANADA: 2000- 2015

135 LDLT and 158 DDLT at The Hospital for Sick Children



LRD Patient survival

1-year: 97 %
5-years: 94 %
10-years: 94 %

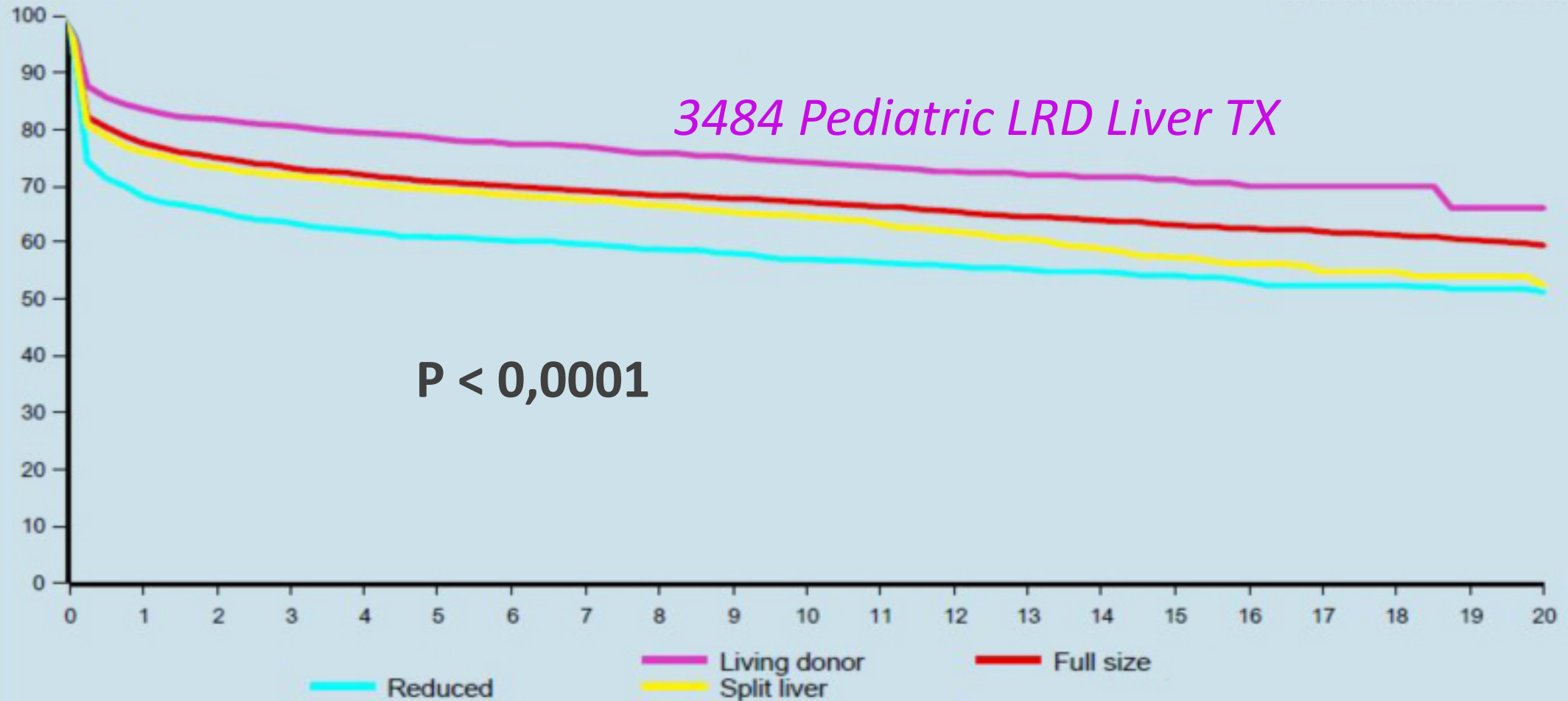
Superior Outcomes and Reduced Wait Times in Pediatric Recipients of Living Donor Liver Transplantation. Kehar M et al. Transplantation Direct 2019

REGISTRO EUROPEO

1988-2017

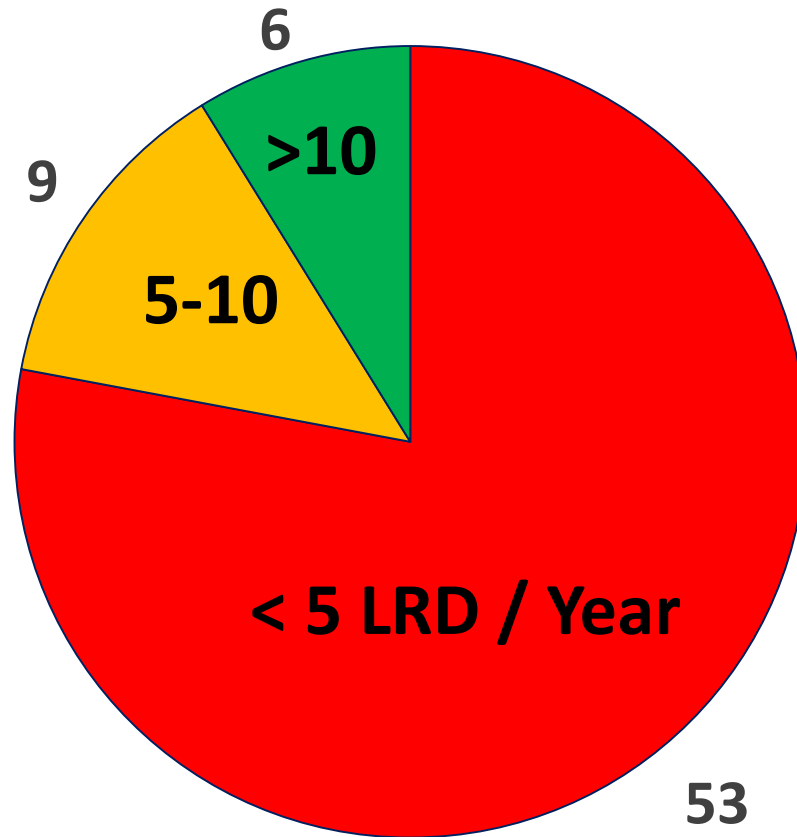
GRAFT Survival by Graft TYPE

N = 15.010 children



REGISTRO EUROPEO

1988-2017
3484 Pediatric LRD
Mean number of LRD per center/ Year



Living Donor Liver Transplantation in Children.
Surgical and Immunological Results in
250 Recipients at UCL. BRUSSELS
Gurevich et al. Ann Surg 2015

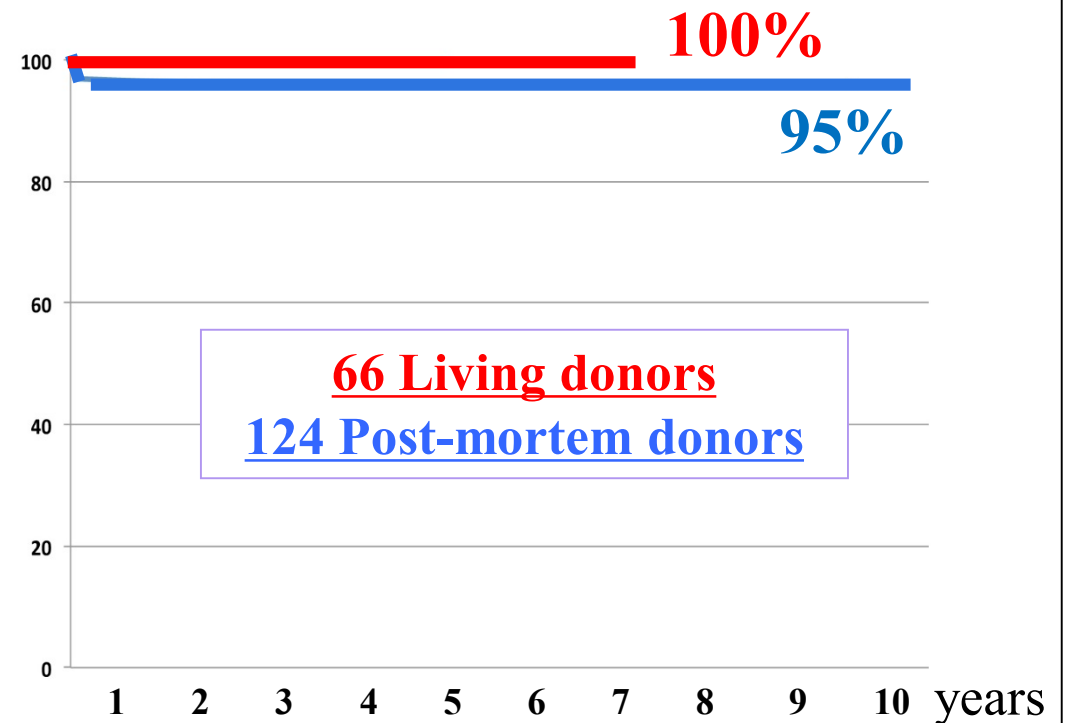
1995 - 2014
250 LRD

Patient survival

1-year: 96 %
5-years: 94 %
10-years: 93 %

Personal experience
190 First Isolated
Pediatric Liver Transplantations
2008 – 2019

Graft survival



Il Trapianto di Fegato Pediatrico da Vivente

CONCLUSIONI

ROMA

6·7·8 NOVEMBRE

Important, useful, complementary, not competitive

The Double Lane Concept



Waiting list

N

Post-mortem donors

*Higher graft offer rate
Shorter waiting time
Better condition at Tx*

N

Living donors

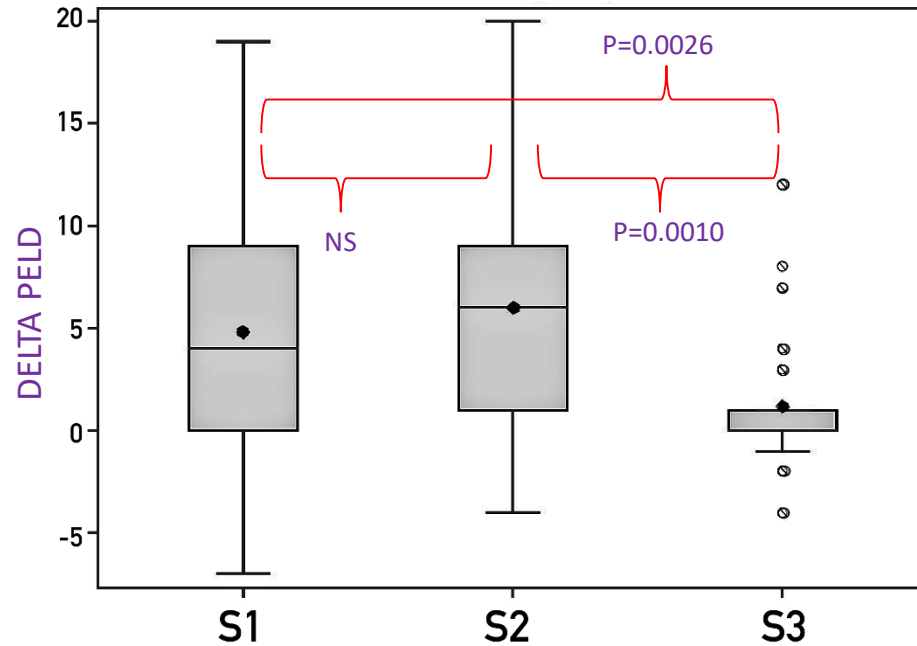
*Optimal donor
Elective Transplant
Best condition*

*Better outcome &
Overall survival*

99 OLT for Biliary Atresia – 2008/2018

49 PMD & 50 LRD

3 parallel strategies



Maximum Likelihood
Parameter Estimates

A/C: 3.794

B/C: 5.298

Group	S1		S2		S3		P
N	49		21		29		
At assessment	Mean	SD	Mean	SD	Mean	SD	
Age (months)	12.3	14.4	16.0	20.1	12.6	10.5	0.6
Weigth (Kgs)	8.1	3.8	9.6	4.7	8.8	3.8	0.6
PELD (score)	18	9	14	7	20	10	0,1

Grazie

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RETE NAZIONALE
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ROMA

