

# ELTR: December 2019

POWARS : Children: SPECIFIC ANALYSES

**POWARS : Children: SUMMARY OF UPDATED DATA**

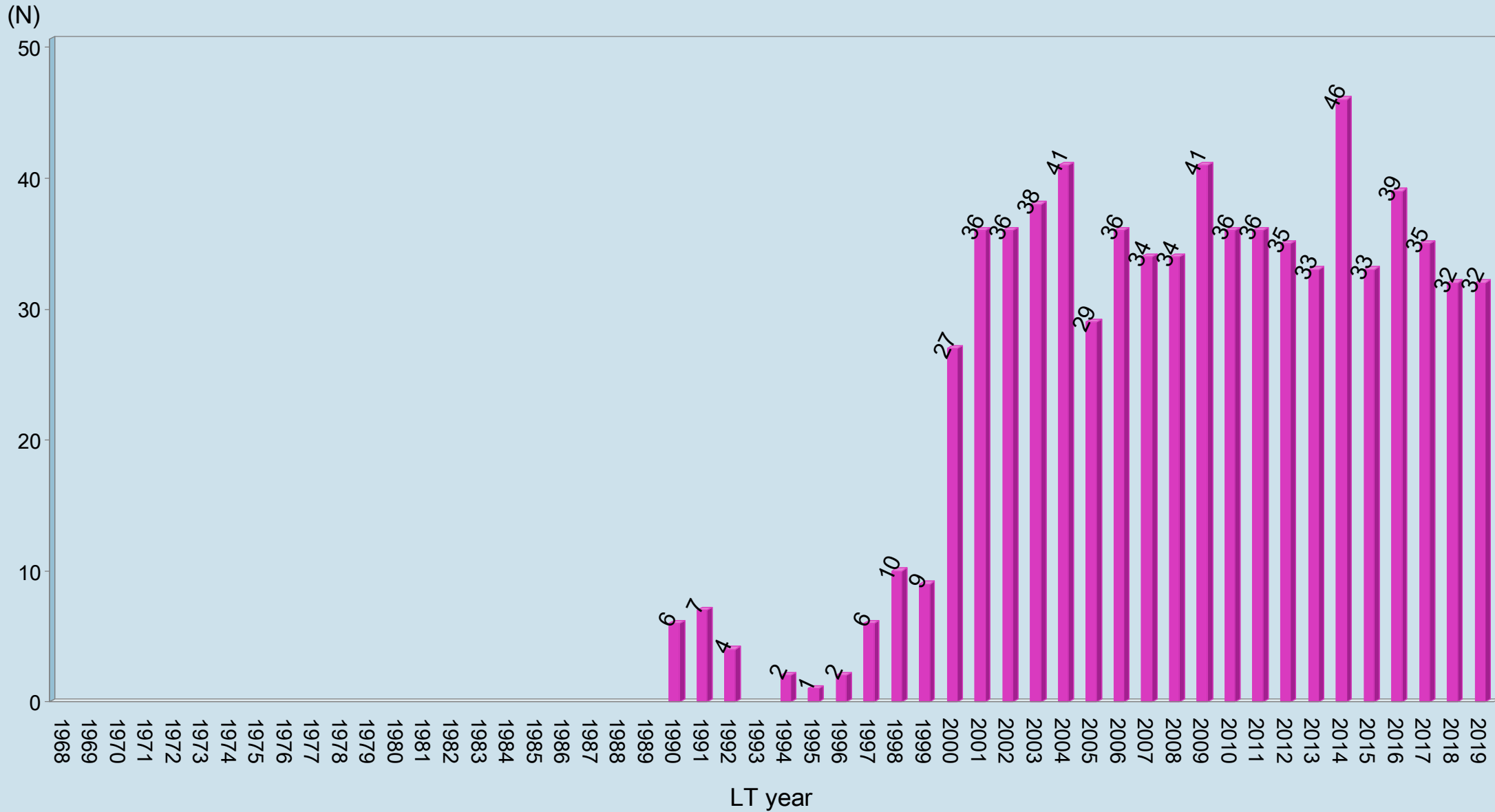
# Children : List of the ELTR Centers in your country

Country	City	Institution	Main investigator	First LT	Last LT	Children LT patients	Children LTs	
Poland	04 736 Warsaw	Children S Memorial Health Institute	Piotr Kalicinski	01/03/1990	18/12/2019	696	756	
	Warsaw	Medical University Of Warsaw Banacha	Krzysztof Zieniewicz	03/10/1999	23/03/2018	9	10	
	Warsaw	Medical University Of Warsaw Nowogrodka	Andrzej Chmura	01/06/1991	27/06/2009	5	5	
<b>Poland</b>						<b>710</b>	<b>771</b>	
<b>3 registered centers</b>								
<b>3 registered centers in ELTR</b>						<b>710</b>	<b>771</b>	

POWARS : Children : EVOLUTION OF LT IN EUROPE

# POWARS : Liver Transplantation Period

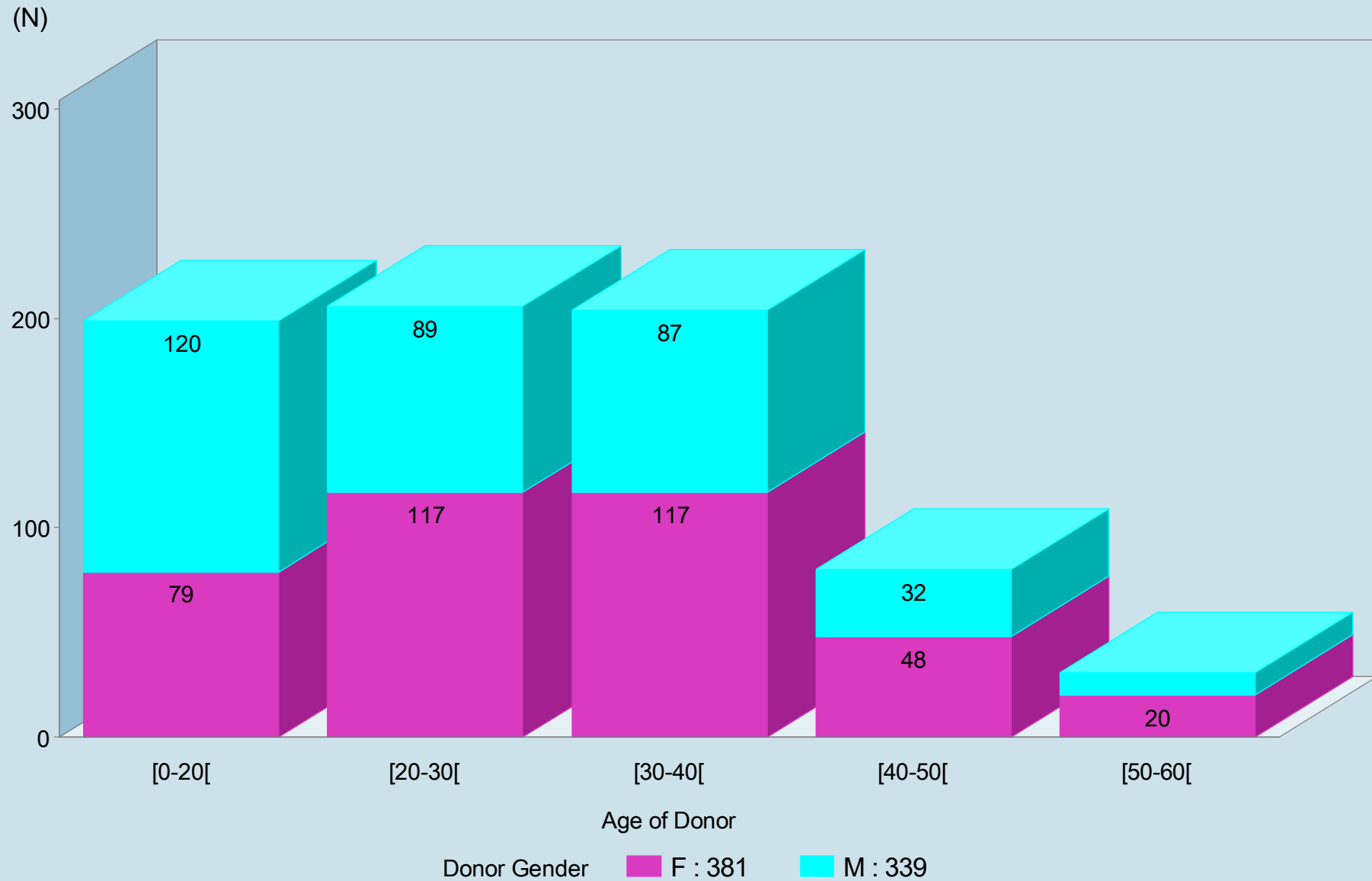
N = 756 Children (1968-2019)



**POWARS : Children : DONOR DATA**

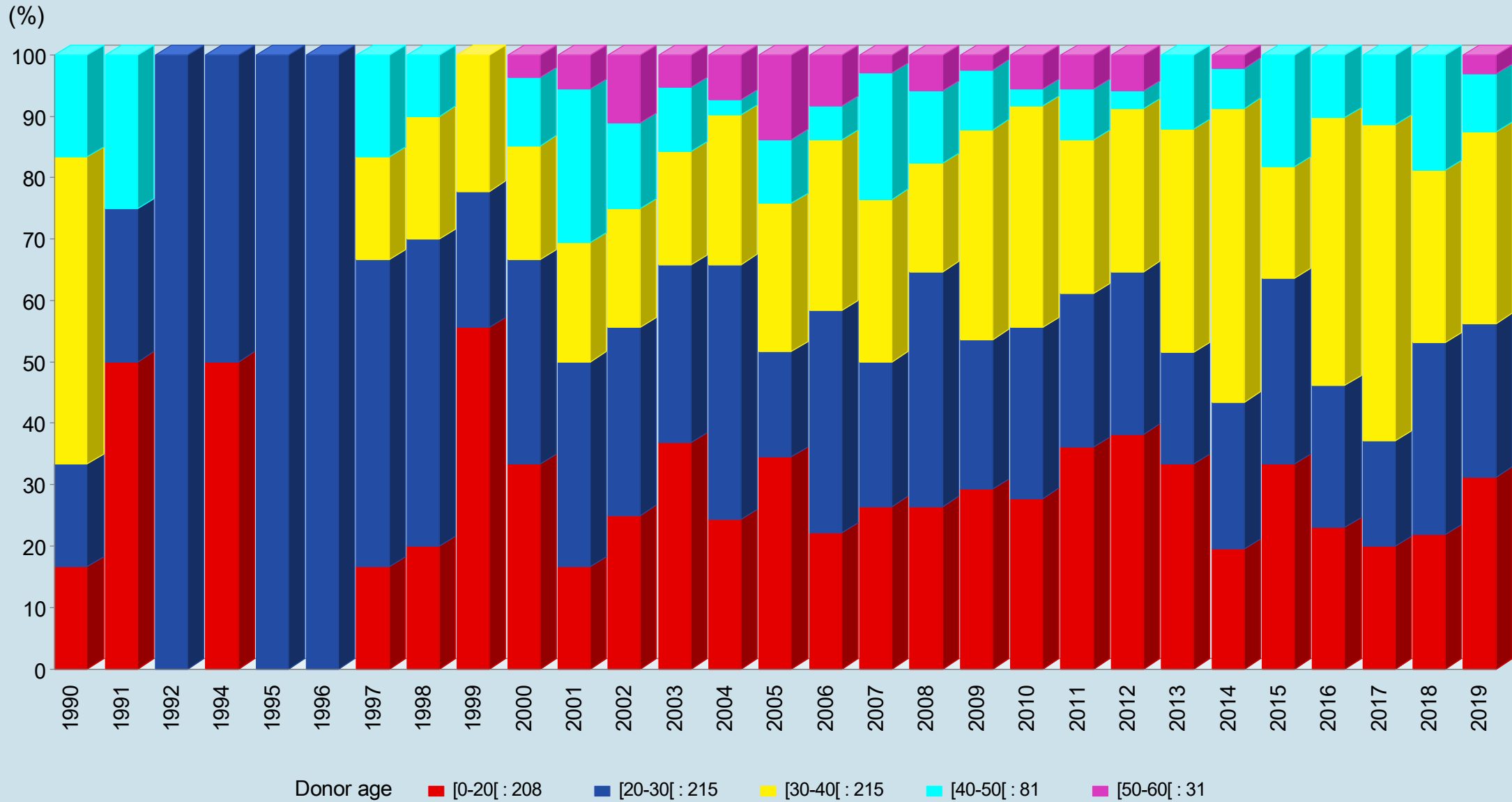
# POWARS : Donors Demography

N = 720 Children (1968-2019)



# POWARS : Evolution of Donor age

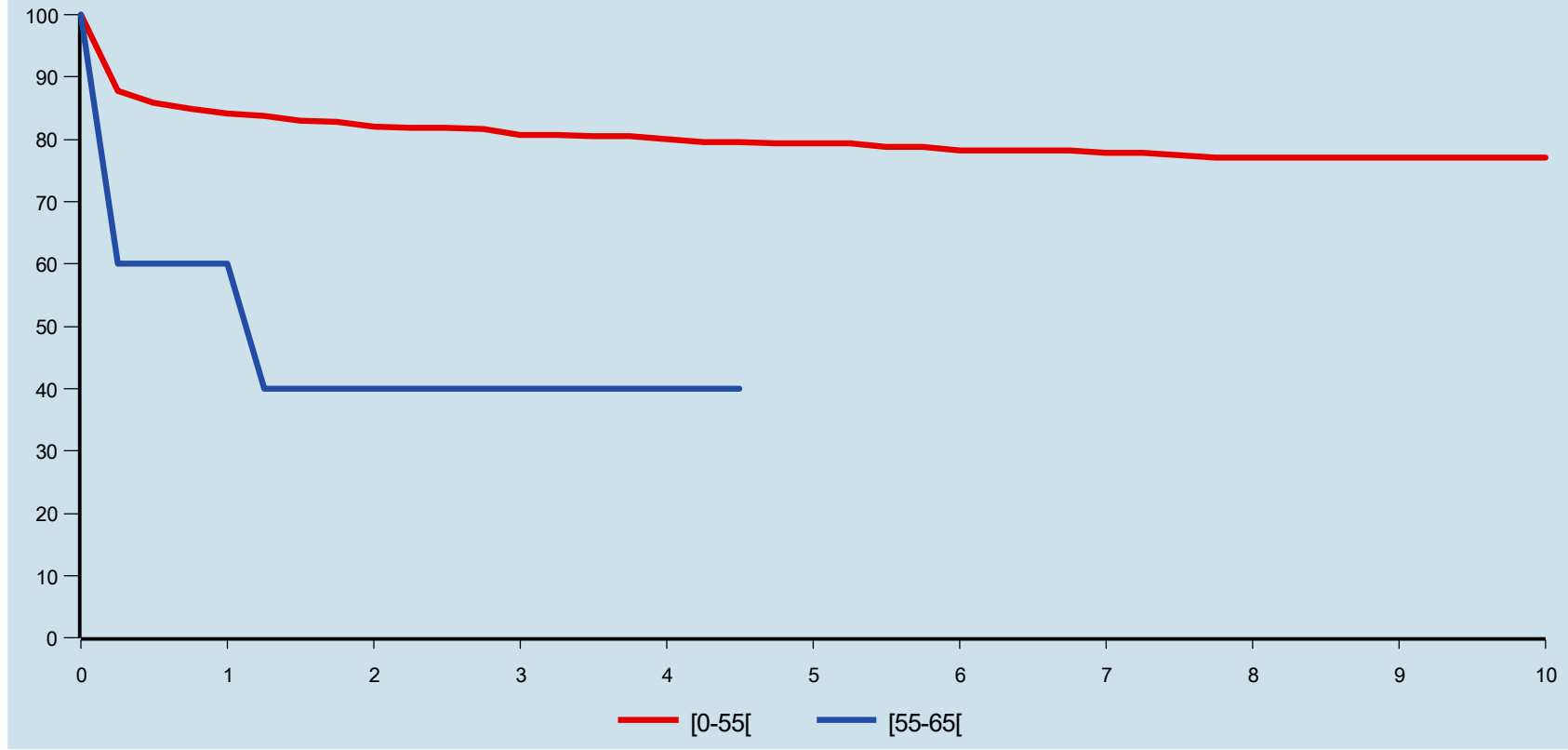
Children : N = 750





# POWARS : Graft Survival vs Donor Age

N = 749 Children (1988-2019)



Details : Log rank p

**proba**

[0-55[ [55-65[ <0.0001

Survival %

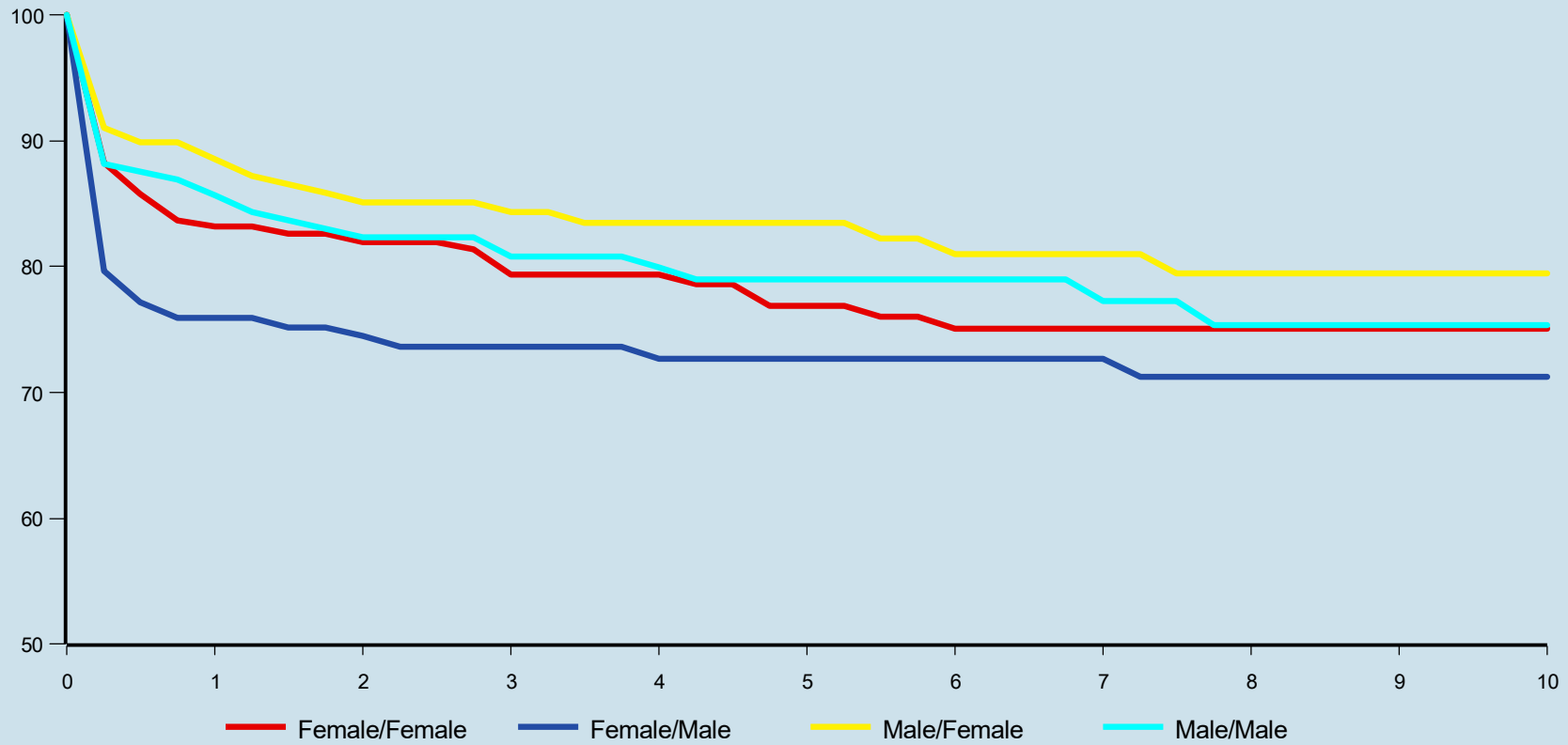
Donor Age	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
[0-55[	84%	82%	81%	80%	79%	78%	78%	77%	77%	77%
[55-65[	60%	40%	40%	40%						

Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
[0-55[	741	562	488	431	366	313	276	234	204	173	137
[55-65[	8	3	2	1	1	0	0	0	0	0	0

# POWARS : Graft Survival *vs* Gender matching (Rec./Donor)

N = 723 Children (1988-2019)



Details : Log rank p

proba

F/F	F/M	0.14
F/F	M/F	0.21
F/M	M/F	0.014
F/F	M/M	0.8
F/M	M/M	0.12
M/F	M/M	0.33

Survival %

Gender Matching	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Female/Female	83%	82%	79%	79%	77%	75%	75%	75%	75%	75%
Female/Male	76%	74%	74%	73%	73%	73%	73%	71%	71%	71%
Male/Female	89%	85%	84%	83%	83%	81%	81%	79%	79%	79%
Male/Male	86%	82%	81%	80%	79%	79%	77%	75%	75%	75%

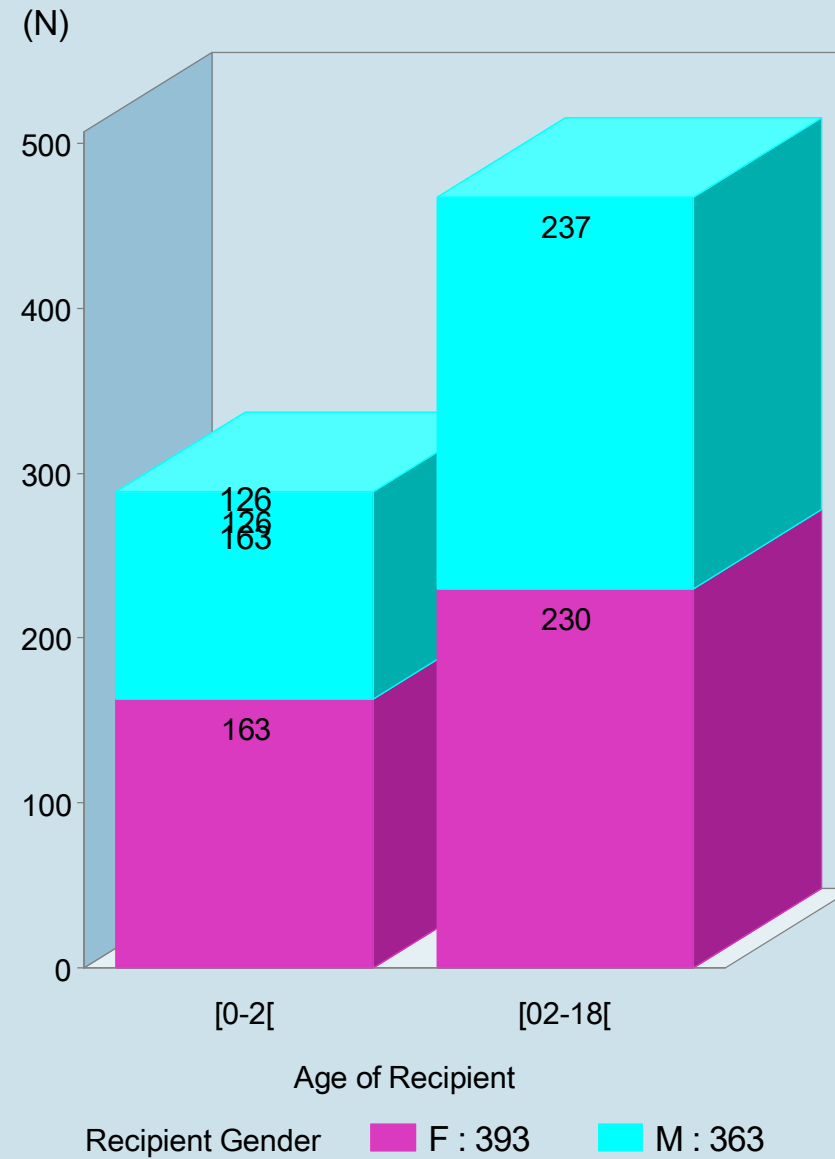
Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Female/Female	210	154	134	119	104	89	81	67	61	50	42
Female/Male	169	116	97	86	72	64	59	51	44	37	32
Male/Female	171	137	116	103	88	75	61	54	46	39	29
Male/Male	173	134	121	103	86	69	59	46	37	36	29

POWARS : Children : RECIPIENT DATA

# POWARS : Patients Demography

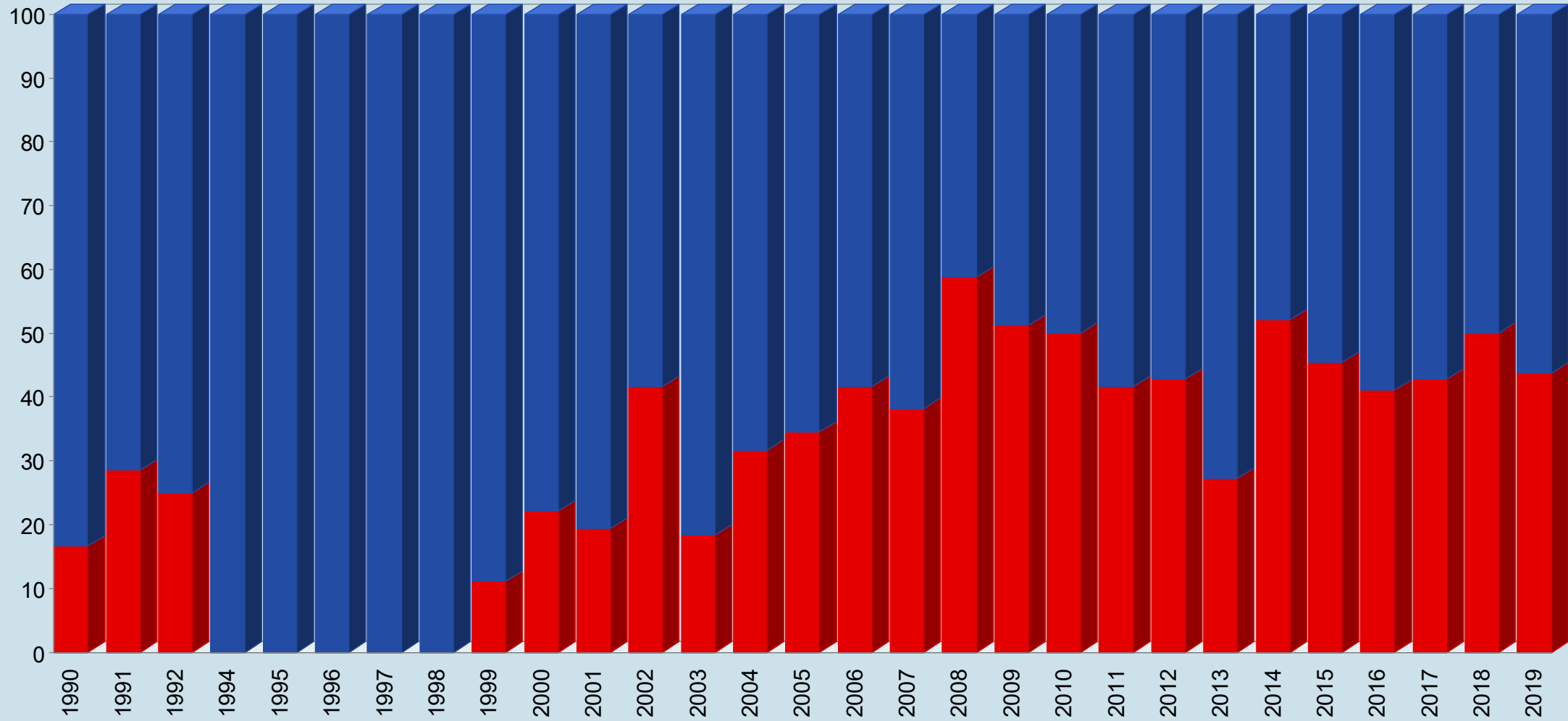
N = 756 Children (1968-2019)



# POWARS : Evolution of Recipient age

Children : N = 756

(%)

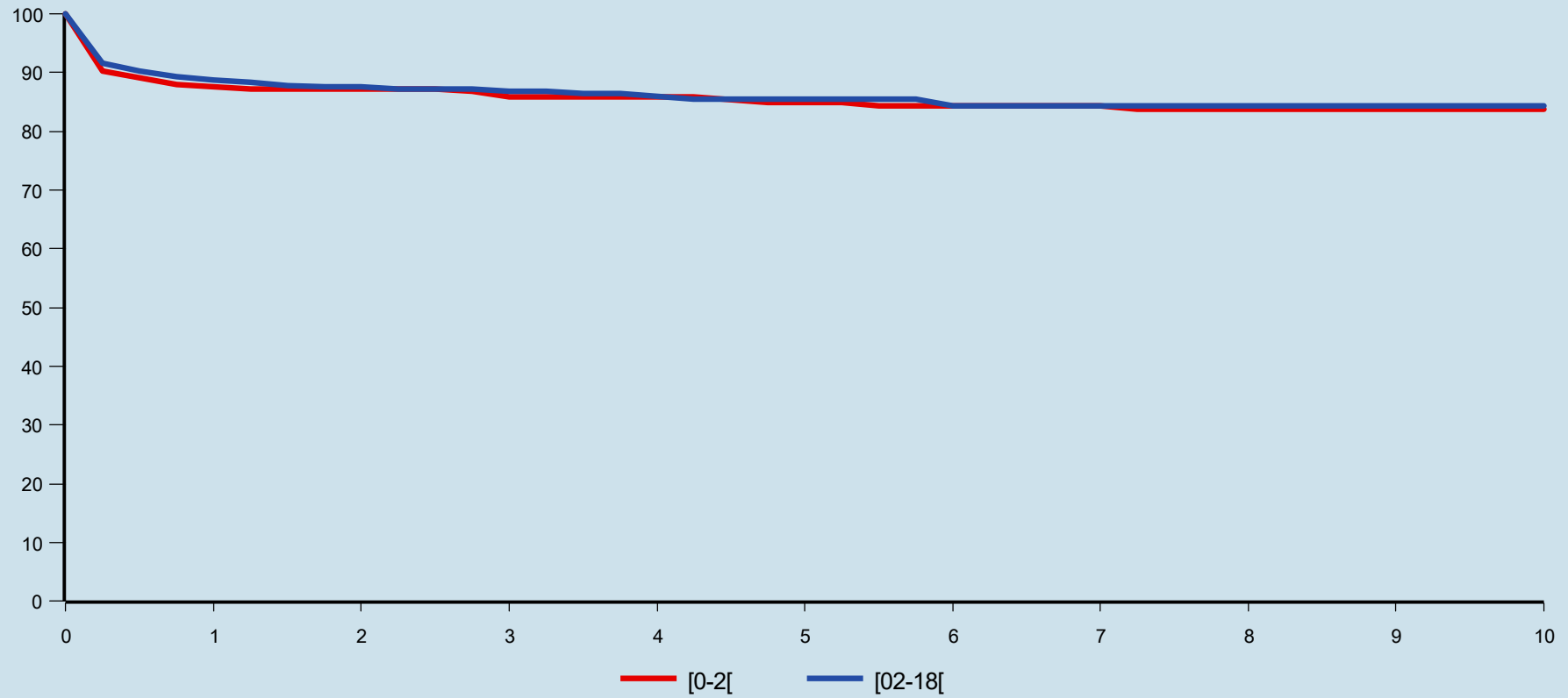


Recipient age [0-2] : 289 [02-18] : 467

# POWARS : Patient Survival vs Pediatric Recipient Age

N = 695 Children (1988-2019)

Log Rank p = 0.76



Recipient Age	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
[0-2[	88%	87%	86%	86%	85%	84%	84%	84%	84%	84%
[02-18[	89%	88%	87%	86%	86%	84%	84%	84%	84%	84%

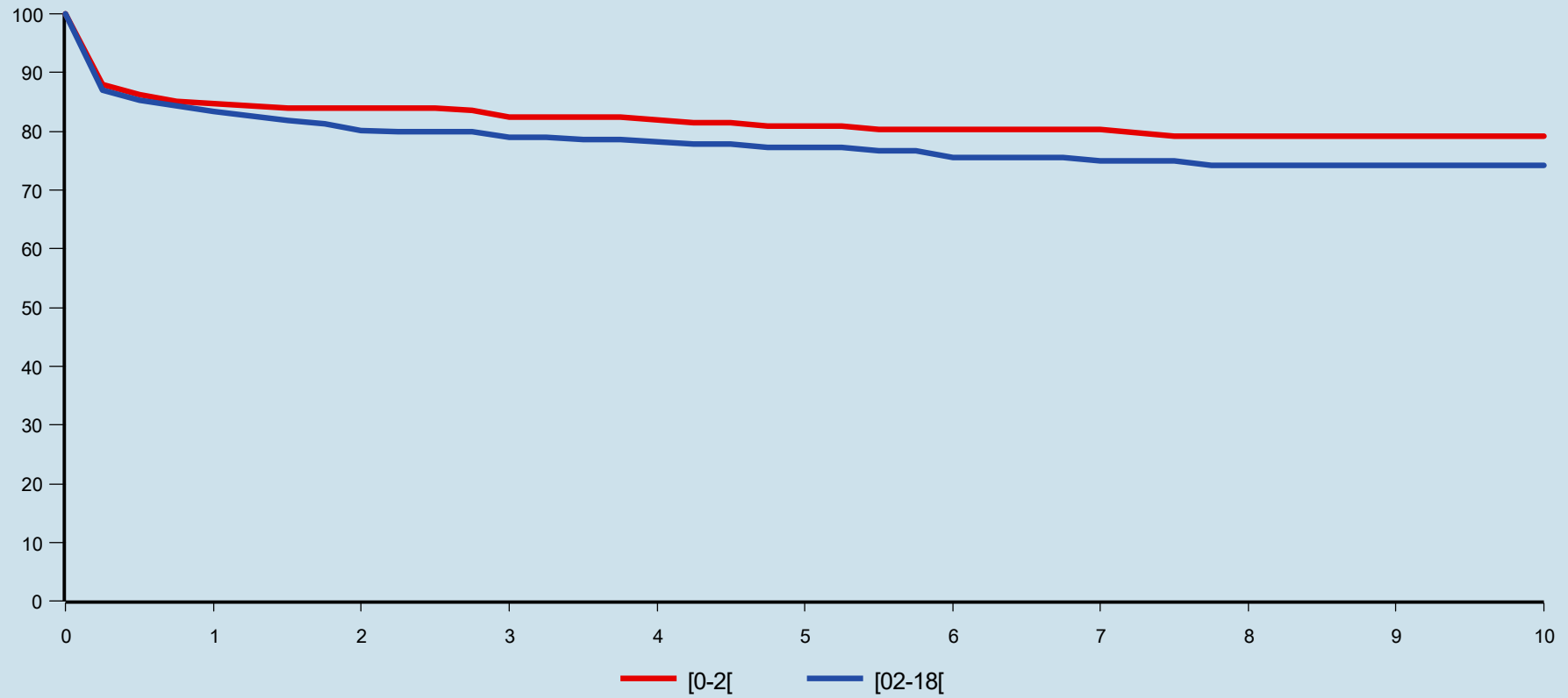
Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
[0-2[	280	227	207	193	177	162	150	135	123	106	87
[02-18[	415	325	280	240	193	159	133	105	86	72	55

# POWARS : Graft Survival vs Pediatric Recipient Age

N = 755 Children (1988-2019)

Log Rank p = 0.3



Survival %

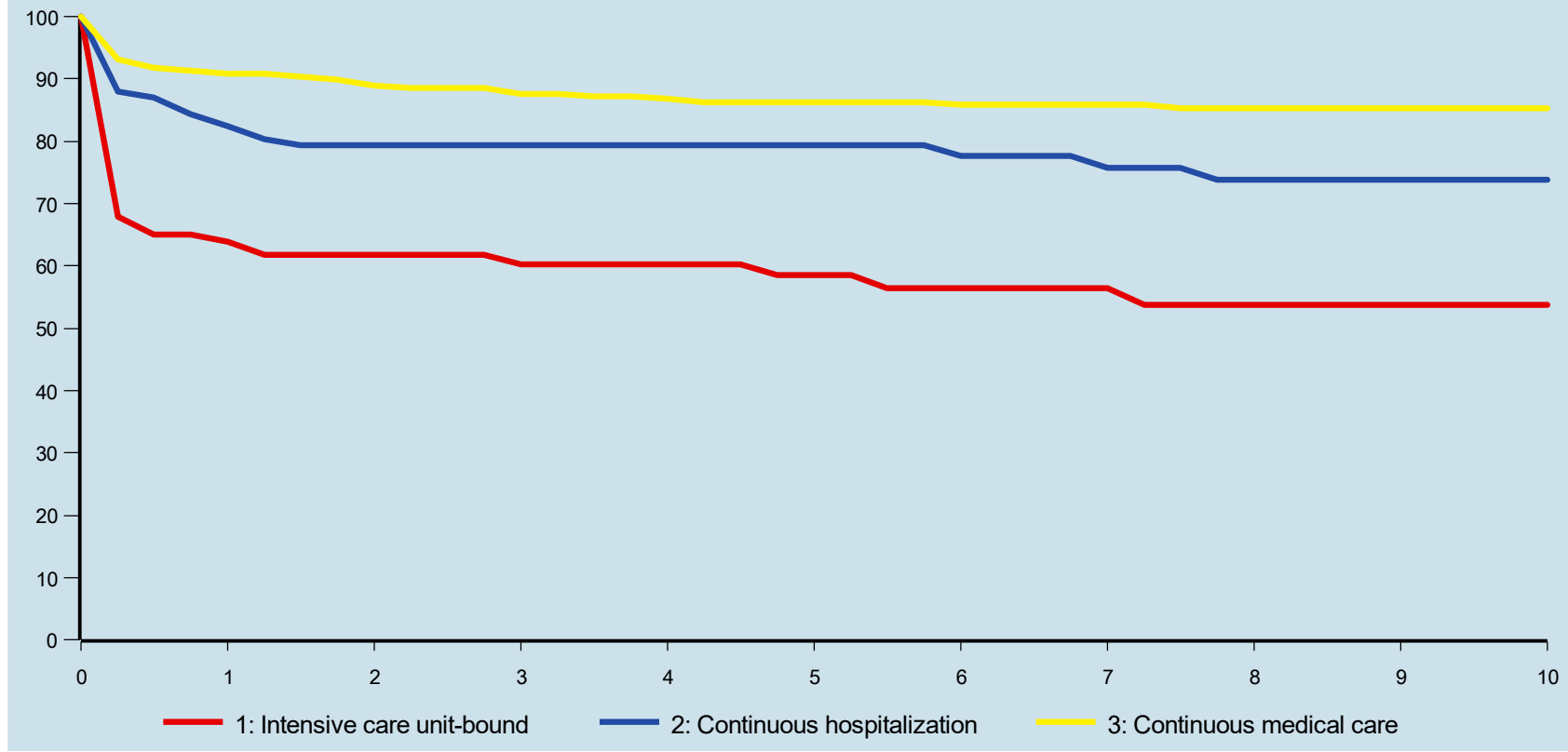
Recipient Age	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
[0-2[	85%	84%	82%	82%	81%	80%	80%	79%	79%	79%
[02-18[	83%	80%	79%	78%	77%	76%	75%	74%	74%	74%

Number of exposed patients

Recipient Age	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
[0-2[	289	227	206	191	175	160	148	133	120	103	85
[02-18[	466	343	288	244	195	156	131	104	86	72	54

# POWARS : Graft Survival vs Unos Status

N = 688 Children (1988-2019)



Details : Log rank p

		proba
1	2	0.0009
1	3	<0.0001
2	3	0.009

UNOS status	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
1: Intensive care unit-bound	64%	62%	60%	60%	59%	56%	56%	54%	54%	54%
2: Continuous hospitalization	82%	79%	79%	79%	79%	78%	76%	74%	74%	74%
3: Continuous medical care	91%	89%	88%	87%	86%	86%	86%	85%	85%	85%

Number of exposed patients

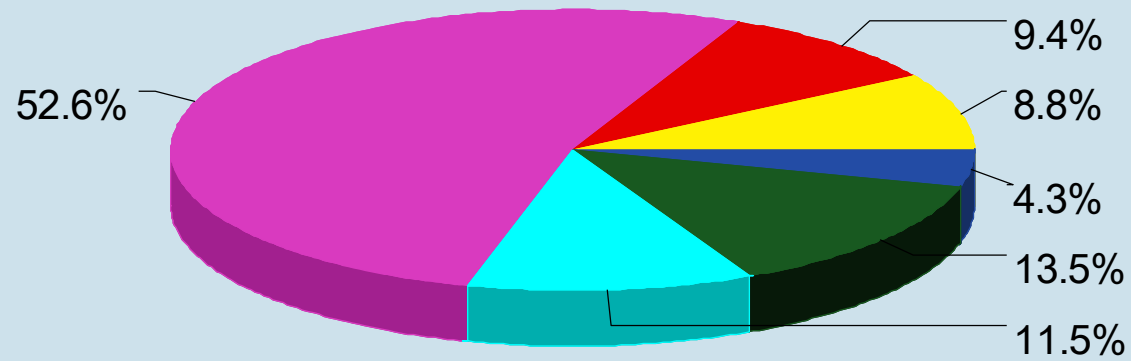
	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
1: Intensive care	108	61	50	42	36	31	26	22	17	12	11
2: Continuous	119	85	72	66	57	47	44	40	36	34	27
3: Continuous medical	461	388	348	312	266	229	203	173	151	128	101



**POWARS : Children : OVERALL INDICATIONS AND RESULTS**

# Primary Disease Leading to Liver Transplantation

N = 681 Children (1988-2019)



Acute hepatic failure : 60  
Cirrhosis : 78

Cancers : 64  
Metabolic disease : 92

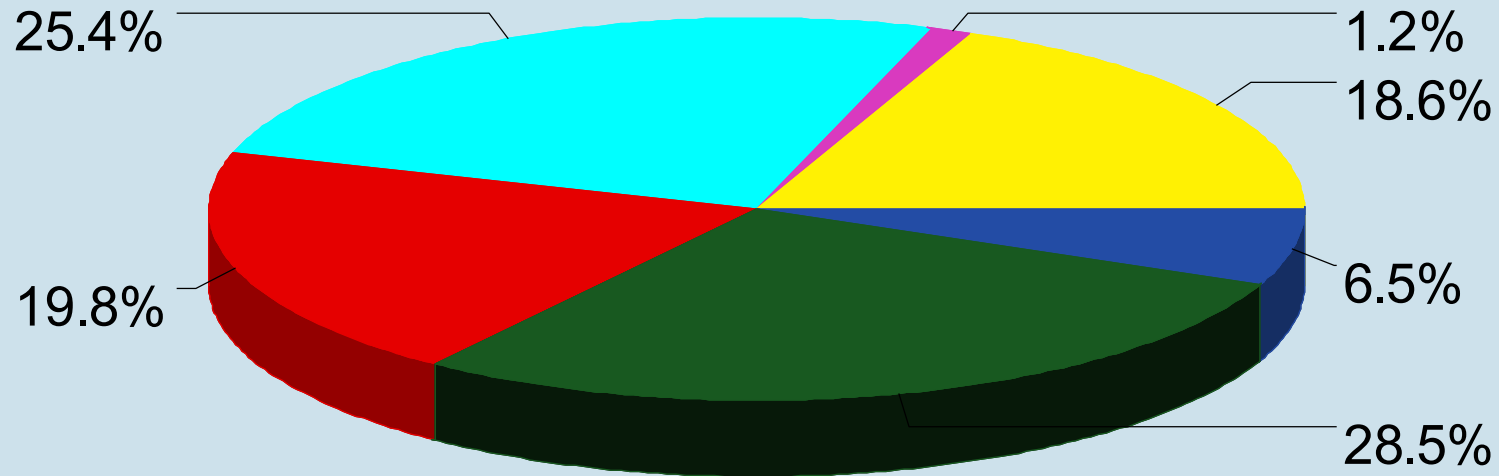
Cholestatic-Cong disease : 358  
Other disease : 29

## Details of Other Main Diseases :

Other liver diseases-unprecised	19
Benign liver tumors or Polycystic dis	4
Budd Chiari	4
TPN-induced cholestasis	2

# Primary Indications of Liver Transplantation

N = 323 Children (1988-2019)



Acute Liver Diseases : 60  
Malignant Tumors : 64

Benign Tumors : 4  
Metabolic Diseases : 92

Chronic Liver Diseases : 82  
Others : 21

**POWARS : Children : Primary Indication of Liver Transplantation**  
01/01/1968-31/12/2019

Main Disease	N	% of the Group	% of the Total
<b>Fulminant or Subfulminant hepatitis : 45 (6.61%)</b>			
Fulm-Virus A	2	4.44	0.29
Fulm-Virus B	2	4.44	0.29
Fulm-Other known	4	8.89	0.59
Fulm-Other unknown	23	51.11	3.38
Fulm-Paracetamol	2	4.44	0.29
Fulm-Other drug related: specify	1	2.22	0.15
Fulm-Toxic (non drug)	11	24.44	1.62
<b>Acute or Subacute hepatic failure : 15 (2.2%)</b>			
Acute-Other known	1	6.67	0.15
Acute-Other unknown	1	6.67	0.15
Other acute hepatic failure: specify	13	86.67	1.91
<b>Cholestatic disease : 38 (5.58%)</b>			
Primary sclerosing cholangitis	12	31.58	1.76
Other cholestatic disease: specify	26	68.42	3.82
<b>Congenital biliary disease : 320 (47%)</b>			
Caroli disease	3	0.94	0.44
Extrahepatic biliary atresia	292	91.25	42.88
Congenital biliary fibrosis	2	0.63	0.29
Choledocal cyst	1	0.31	0.15
Alagille syndrome	14	4.38	2.06

**POWARS : Children : Primary Indication of Liver Transplantation**  
01/01/1968-31/12/2019

<b>Main Disease</b>	<b>N</b>	<b>% of the Group</b>	<b>% of the Total</b>
Other congenital biliary disease: specify	8	2.50	1.17
<b>Cirrhosis : 78 (11.5%)</b>			
Secondary biliary cirrhosis	2	2.56	0.29
Primary biliary cirrhosis	2	2.56	0.29
Autoimmune Cirrhosis	41	52.56	6.02
Virus B related cirrhosis	4	5.13	0.59
Virus C related cirrhosis	3	3.85	0.44
Virus BC related cirrhosis	1	1.28	0.15
Other cirrhosis: specify	4	5.13	0.59
Cryptogenic (unknown) cirrhosis	21	26.92	3.08
<b>Cancers : 63 (9.25%)</b>			
Hepatocellular carcinoma and cirrhosis	1	1.59	0.15
Hepatocellular carcinoma and non cirrhotic liver	11	17.46	1.62
Hepatic cholangiocellular carcinoma	1	1.59	0.15
Hepatoblastoma	43	68.25	6.31
Epithelioid hemangioendothelioma	4	6.35	0.59
Other liver malignancies: specify	3	4.76	0.44
<b>Secondary liver tumors : 1 (0.15%)</b>			
Other neuroendocrine	1	100.00	0.15
<b>Metabolic disease : 92 (13.5%)</b>			
Wilson disease	17	18.48	2.50

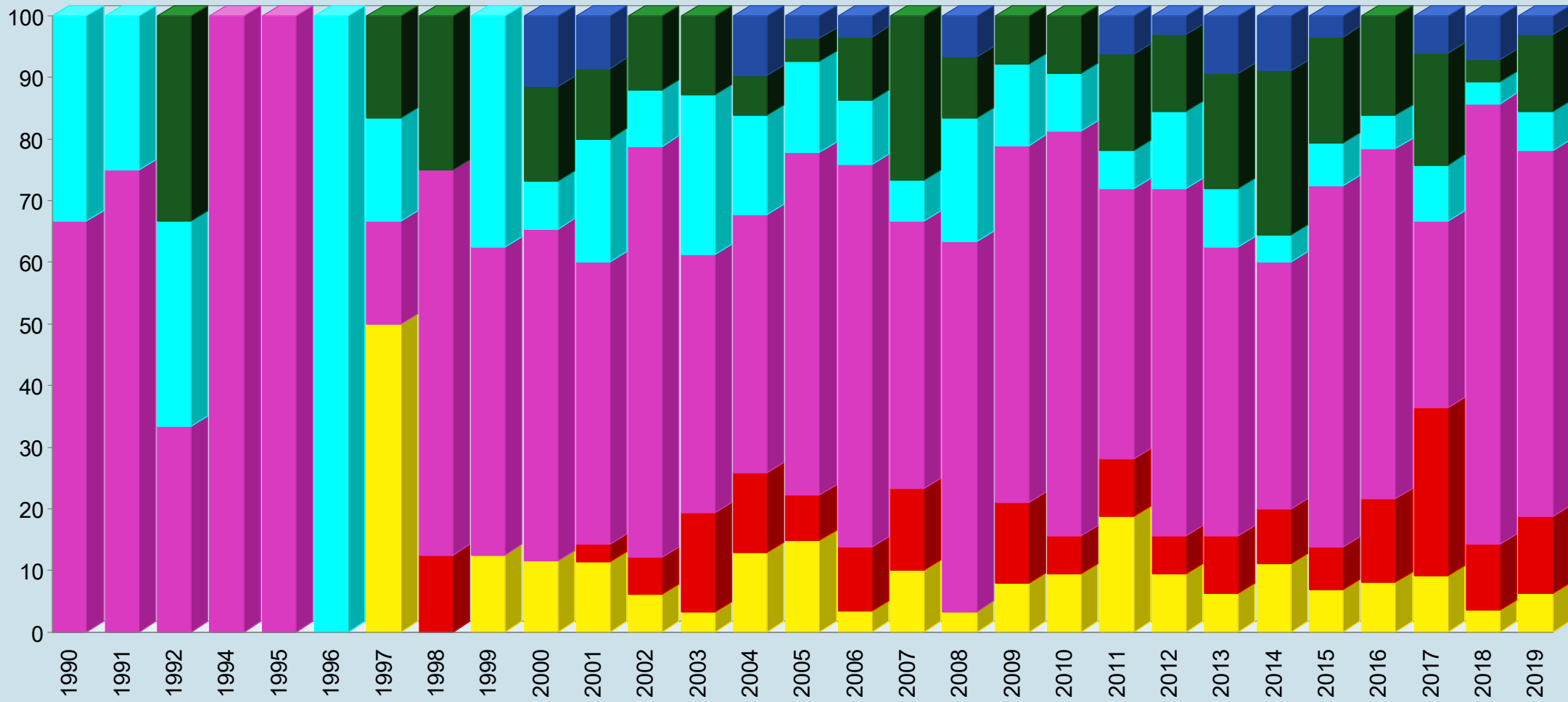
**POWARS : Children : Primary Indication of Liver Transplantation**  
01/01/1968-31/12/2019

<b>Main Disease</b>	<b>N</b>	<b>% of the Group</b>	<b>% of the Total</b>
Alpha-1 - Antitrypsin deficiency	18	19.57	2.64
Tyrosinemia	4	4.35	0.59
Primary hyperoxaluria	2	2.17	0.29
Non alcoholic steatohepatitis (NASH)	2	2.17	0.29
Cystic fibrosis	16	17.39	2.35
Byler disease	5	5.43	0.73
Other metabolic disease	28	30.43	4.11
<b>Budd Chiari : 4 (0.59%)</b>			
Budd Chiari	4	100.00	0.59
<b>Benign liver tumors or Polycystic disease : 4 (0.59%)</b>			
Polycystic disease	2	50.00	0.29
Other benign tumors: specify	2	50.00	0.29
<b>Other liver disease : 21 (3.08%)</b>			
TPN-induced cholestasis	2	9.52	0.29
Other liver diseases	19	90.48	2.79

# POWARS : Evolution of Primary Disease

Children : N = 681

(%)



Main Disease

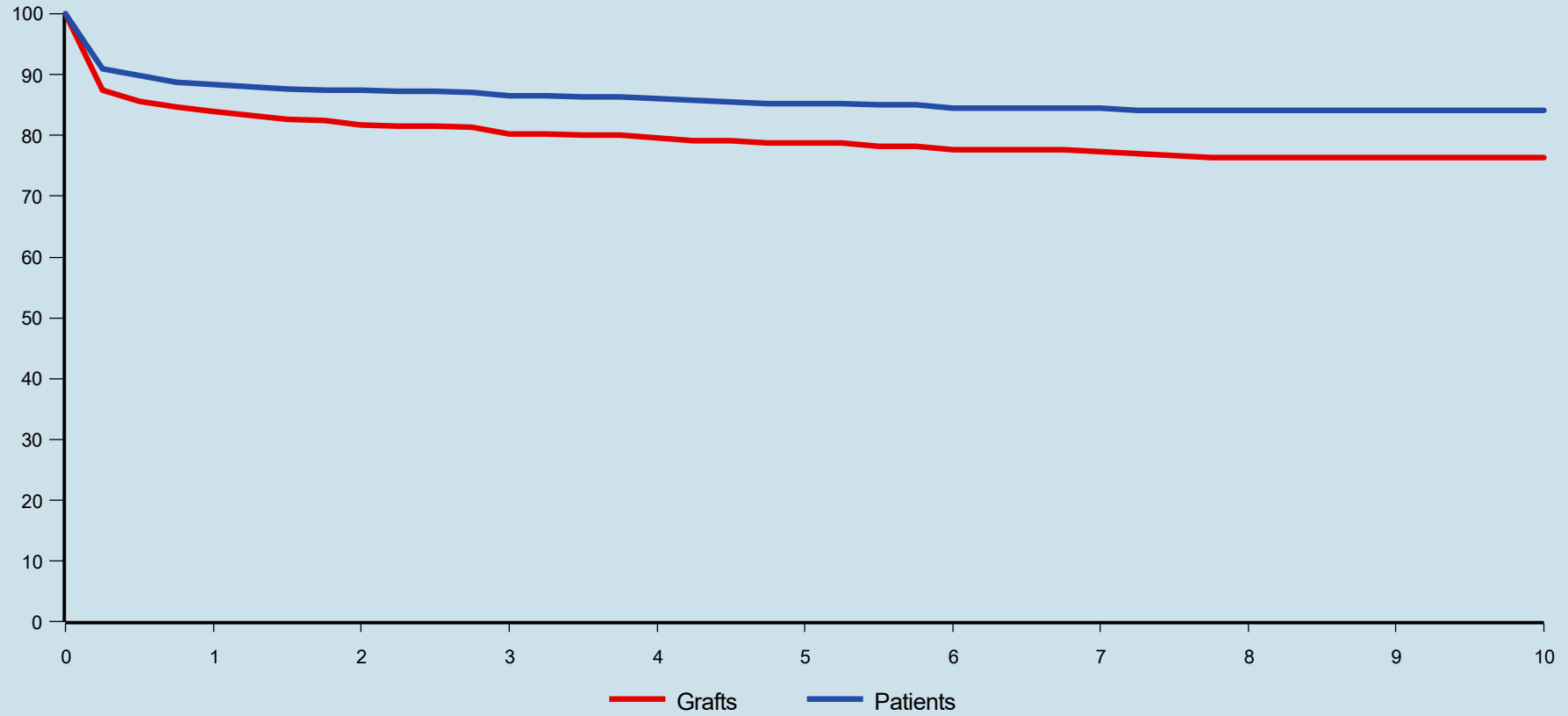
Acute hepatic failure : 60  
Cirrhosis : 78

Cancers : 64  
Metabolic disease : 92

Cholestatic-Cong disease : 358  
Other disease : 29

# POWARS : Patient and Graft Survival after Pediatric Liver transplantation

## 1988-2019



Survival %

Population	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Grafts	84%	82%	80%	80%	79%	78%	77%	76%	76%	76%
Patients	88%	87%	86%	86%	85%	84%	84%	84%	84%	84%

Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Grafts	755	570	494	435	370	316	279	237	206	175	139
Patients	695	552	487	433	370	321	283	240	209	178	142

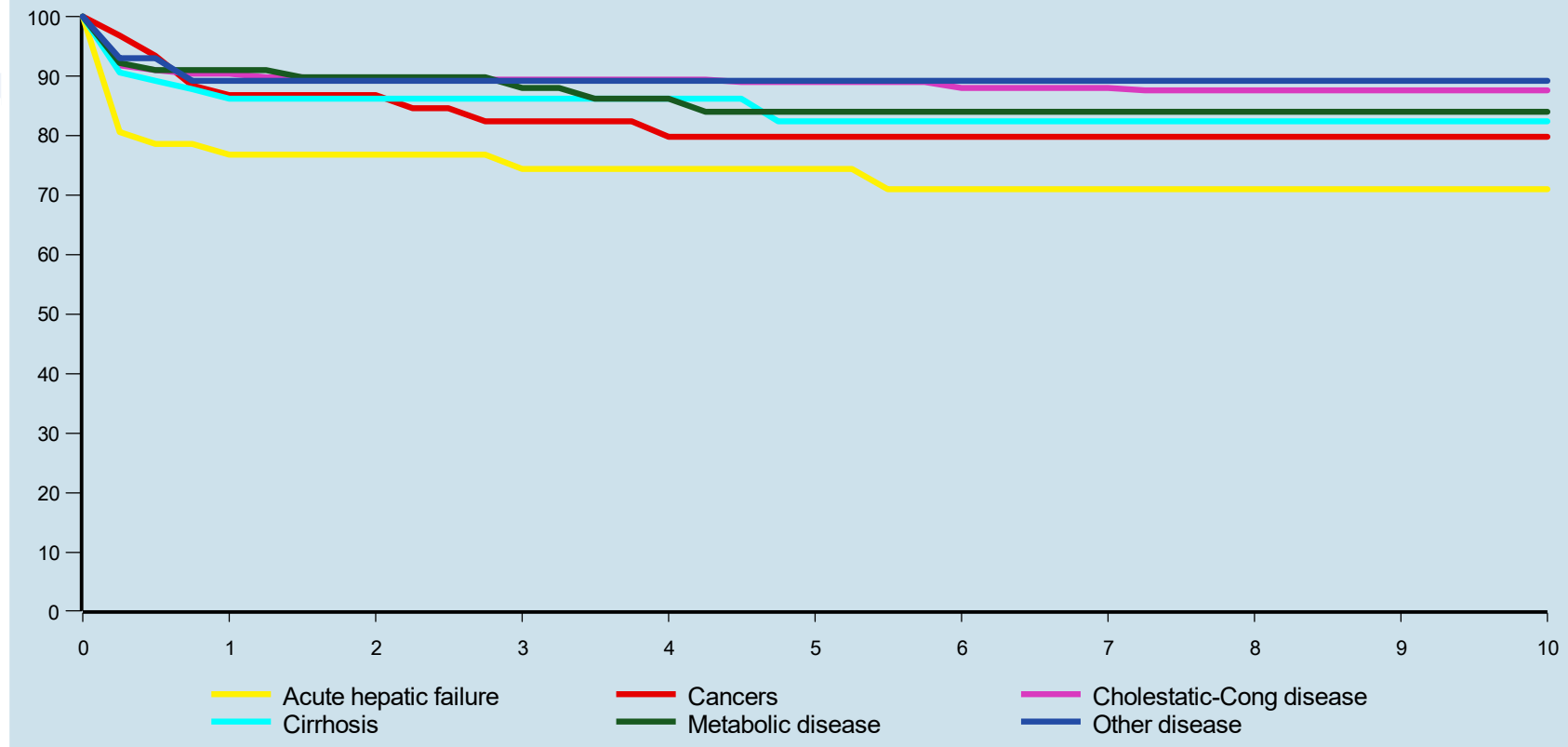


# POWARS : Patient Survival vs Primary Disease

N = 680 Children (1988-2019)

Details : Log rank p

		proba
Acute	Kc	0.21
Acute	Chol_	0.001
Kc	Chol_	0.21
Acute	Cirrh	0.11
Kc	Cirrh	0.79
Chol_	Cirrh	0.36
Acute	Metab	0.053
Kc	Metab	0.52
Chol_	Metab	0.55
Cirrh	Metab	0.74
Acute	Oth	0.1
Kc	Oth	0.41
Chol_	Oth	0.9
Cirrh	Oth	0.55
Metab	Oth	0.7



Survival %

Main disease	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute hepatic failure	77%	77%	74%	74%	74%	71%	71%	71%	71%	71%
Cancers	87%	87%	82%	80%	80%	80%	80%	80%	80%	80%
Cholestatic-Cong disease	90%	89%	89%	89%	89%	88%	88%	88%	88%	88%
Cirrhosis	86%	86%	86%	86%	82%	82%	82%	82%	82%	82%
Metabolic disease	91%	90%	88%	86%	84%	84%	84%	84%	84%	84%
Other disease	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%

Number of exposed patients

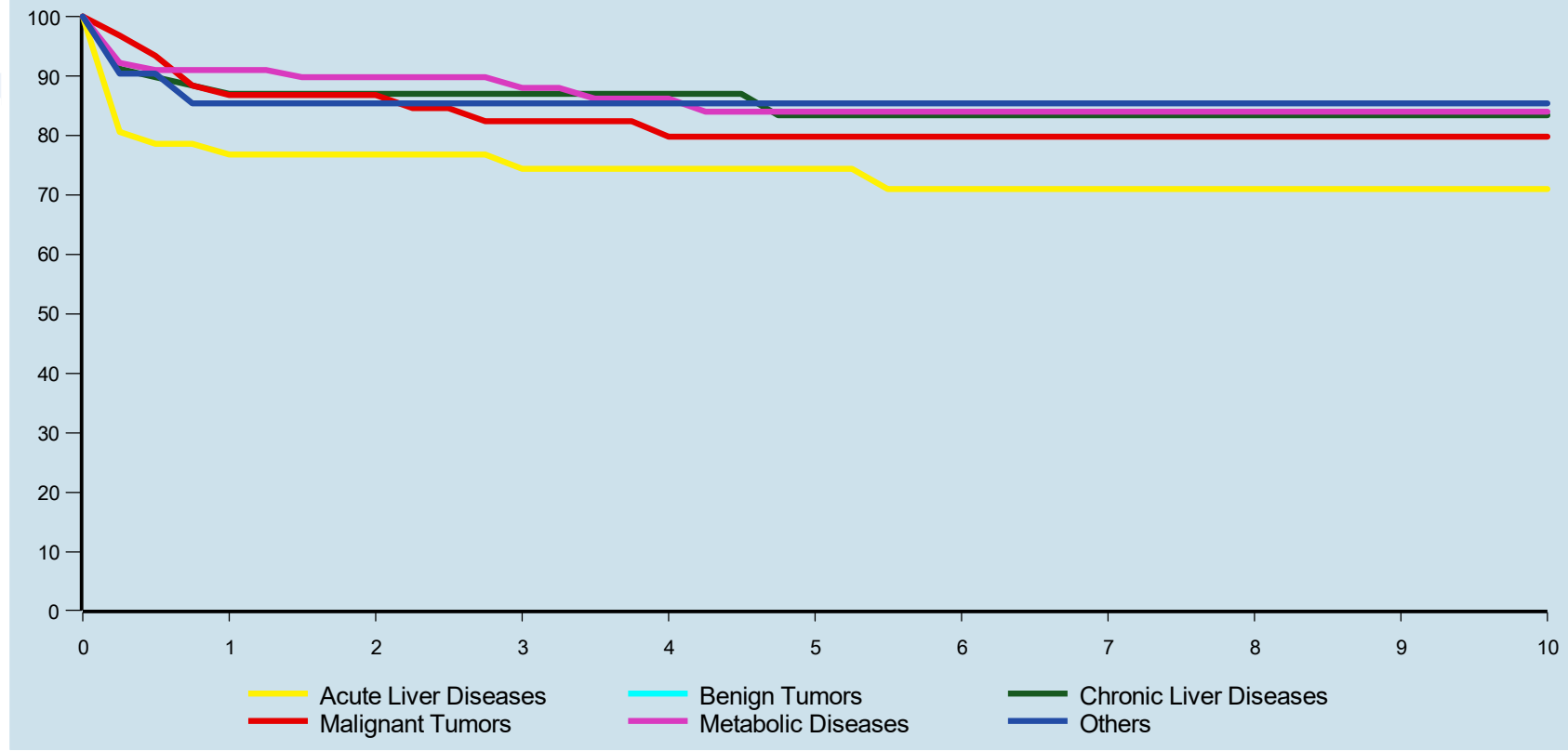
	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute hepatic failure	59	38	35	31	28	24	20	17	13	10	8
Cancers	64	50	44	36	28	25	22	18	18	16	14
Cholestatic-Cong disease	358	299	267	249	225	207	191	170	147	128	103
Cirrhosis	78	56	48	38	29	21	16	10	9	7	6
Metabolic disease	92	75	64	53	41	28	22	17	14	11	6
Other disease	29	22	20	19	15	13	10	6	6	4	4

# POWARS : Patient Survival vs Primary Indication

N = 322 Children (1988-2019)

Details : Log rank p

		proba
Acute	Chronic	0.082
Acute	Metabolic	0.053
Chronic	Metabolic	0.84
Acute	Malignant	0.21
Chronic	Malignant	0.68
Metabolic	Malignant	0.52
Acute	Others	0.28
Chronic	Others	1
Metabolic	Others	0.92
Malignant	Others	0.75



Survival %

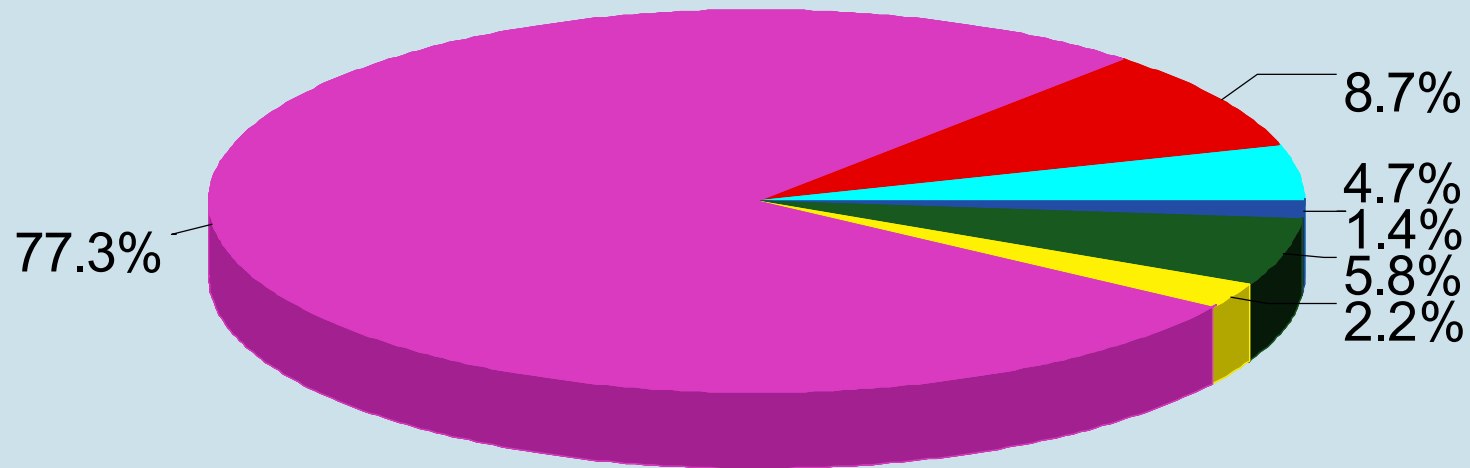
Primary indication	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute Liver Diseases	77%	77%	74%	74%	74%	71%	71%	71%	71%	71%
Chronic Liver Diseases	87%	87%	87%	87%	83%	83%	83%	83%	83%	83%
Metabolic Diseases	91%	90%	88%	86%	84%	84%	84%	84%	84%	84%
Malignant Tumors	87%	87%	82%	80%	80%	80%	80%	80%	80%	80%
Benign Tumors	-	-	-	-	-	-	-	-	-	-
Others	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%

Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute Liver Diseases	59	38	35	31	28	24	20	17	13	10	8
Chronic Liver Diseases	82	58	50	40	31	23	17	10	9	7	6
Metabolic Diseases	92	75	64	53	41	28	22	17	14	11	6
Malignant Tumors	64	50	44	36	28	25	22	18	18	16	14
Benign Tumors	4	3	3	3	2	2	2	1	1	1	1
Others	21	17	15	14	11	9	7	5	5	3	3

# POWARS : Primary Disease of Liver Transplantation : 0-2 years

N = 277 Children (1988-2019)



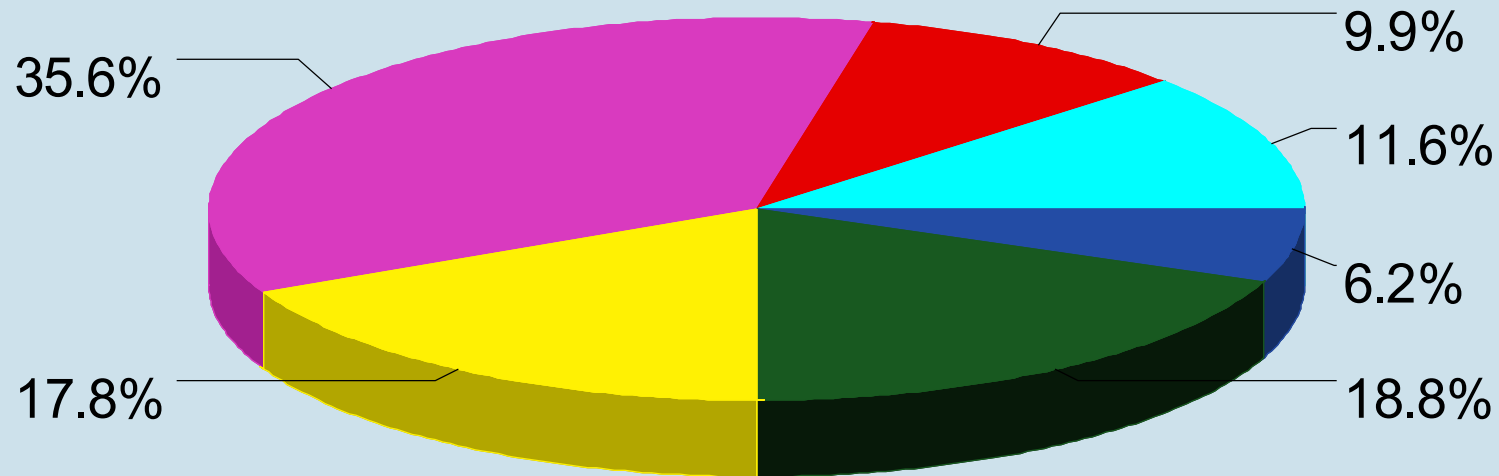
Acute hepatic failure : 13  
Cirrhosis : 6

Cancers : 24  
Metabolic disease : 16

Cholestatic-Cong disease : 214  
Other disease : 4

# POWARS : Primary Disease of Liver Transplantation : 2-18 years

N = 404 Children (1988-2019)



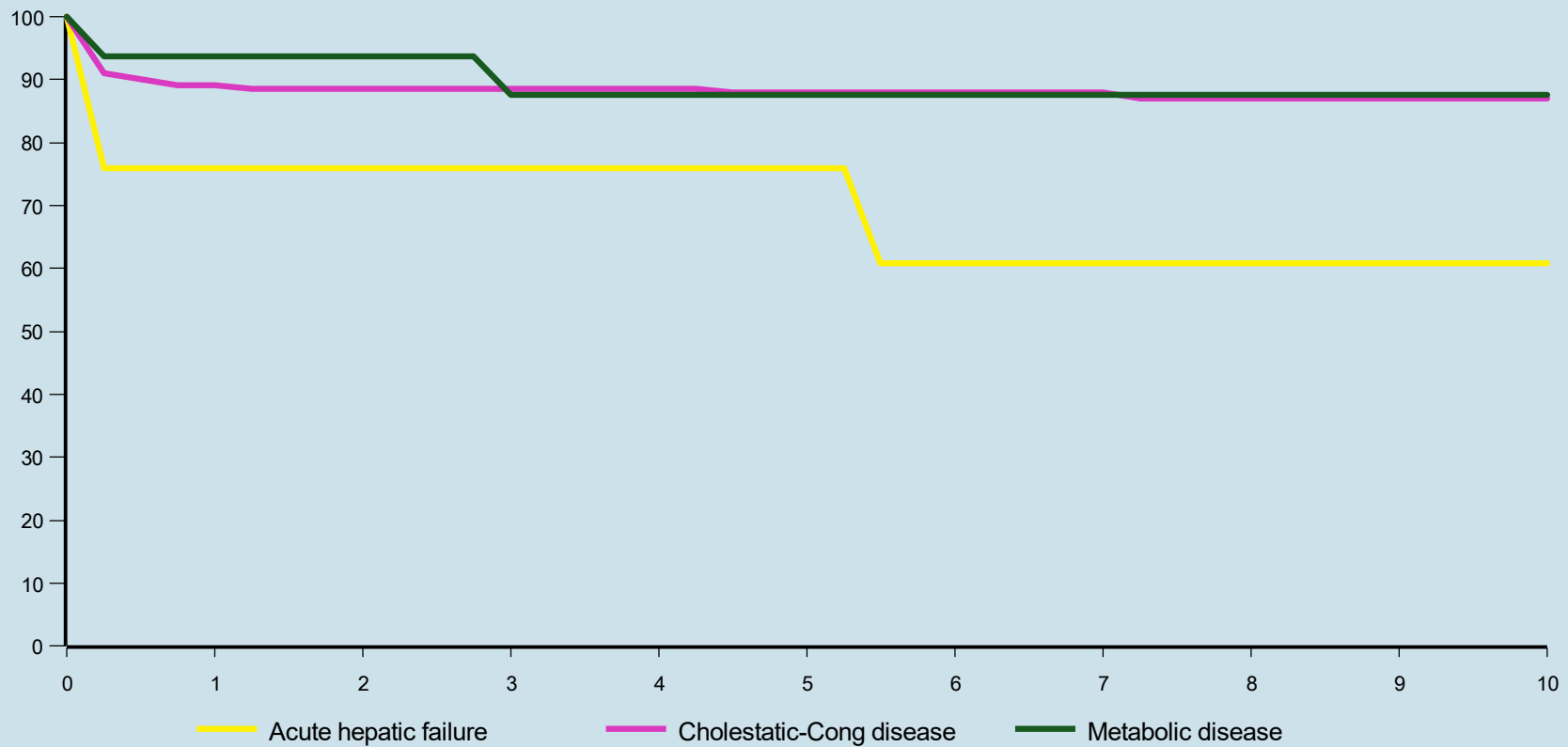
Acute hepatic failure : 47  
Cirrhosis : 72

Cancers : 40  
Metabolic disease : 76

Cholestatic-Cong disease : 144  
Other disease : 25

# POWARS : Patient Survival vs POWARS : Primary Disease : 0-2 Years

N = 243 Children (1988-2019)



Details : Log rank p

**proba**

Acute	Chol_	0.046
Acute	Metab	0.2
Chol_	Metab	0.98

Survival %

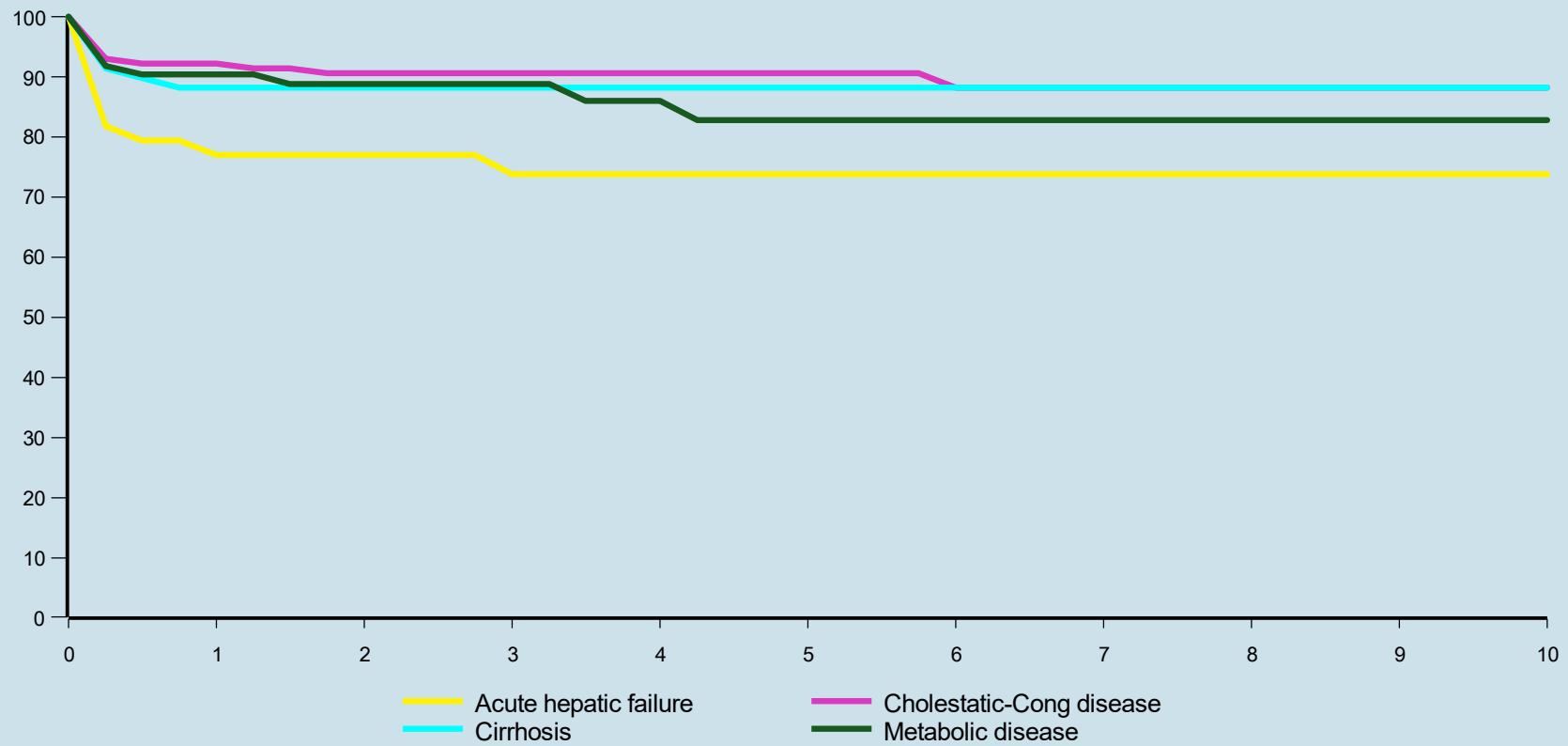
Main disease	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute hepatic failure	76%	76%	76%	76%	76%	61%	61%	61%	61%	61%
Cholestatic-Cong disease	89%	89%	89%	89%	88%	88%	88%	87%	87%	87%
Metabolic disease	94%	94%	88%	88%	88%	88%	88%	88%	88%	88%

Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute hepatic failure	13	8	8	7	6	5	4	4	4	2	2
Cholestatic-Cong disease	214	177	161	154	141	130	122	113	101	88	70
Metabolic disease	16	15	15	14	13	11	8	5	5	4	3

# POWARS : Patient Survival vs POWARS : Primary Disease : 2-18 Years

N = 338 Children (1988-2019)



Details : Log rank p

		proba
Acute	Chol_	0.012
Acute	Cirrh	0.063
Chol_	Cirrh	0.69
Acute	Metab	0.13
Chol_	Metab	0.38
Cirrh	Metab	0.75

Survival %

Main disease	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute hepatic failure	77%	77%	74%	74%	74%	74%	74%	74%	74%	74%
Cholestatic-Cong disease	92%	91%	91%	91%	91%	88%	88%	88%	88%	88%
Cirrhosis	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Metabolic disease	90%	89%	89%	86%	83%	83%	83%	83%	83%	83%

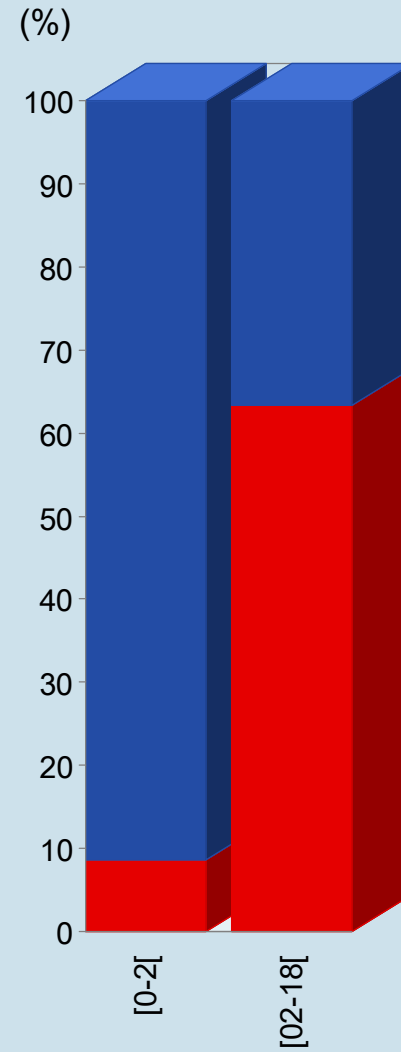
Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Acute hepatic failure	46	30	27	24	22	19	16	13	9	8	6
Cholestatic-Cong disease	144	122	106	95	84	77	69	57	46	40	33
Cirrhosis	72	53	45	35	26	19	14	8	7	6	5
Metabolic disease	76	60	49	39	28	17	14	12	9	7	3

**POWARS : Children : TECHNICAL ASPECTS**

# POWARS : Type of Liver Graft according to Recipient Age

N = 755 Children (1988-2019)



Type of Liver Graft

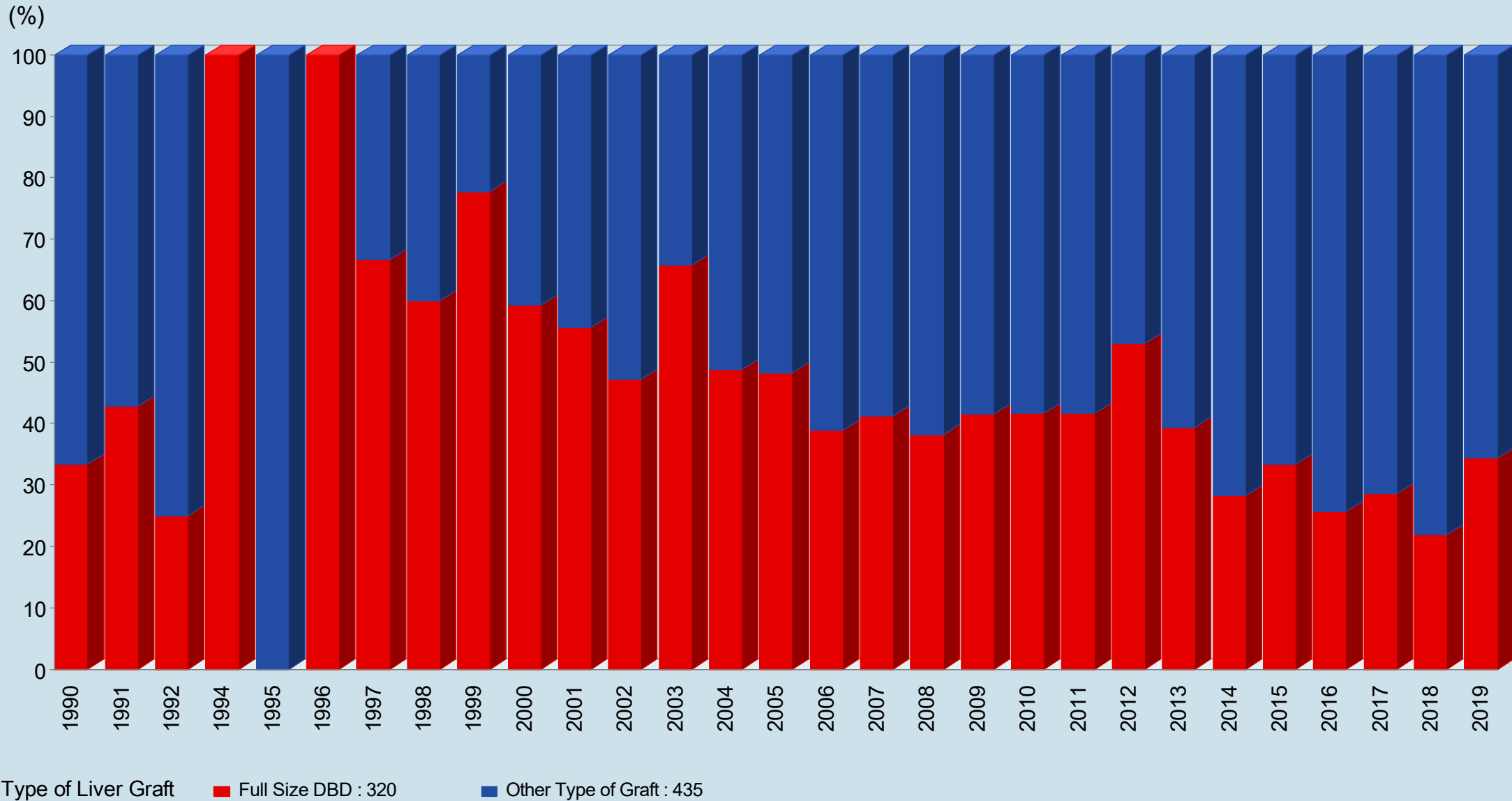
■ Full Size DBD : 320

■ Other Type of Graft : 435



# POWARS : Evolution of Type of Liver Graft

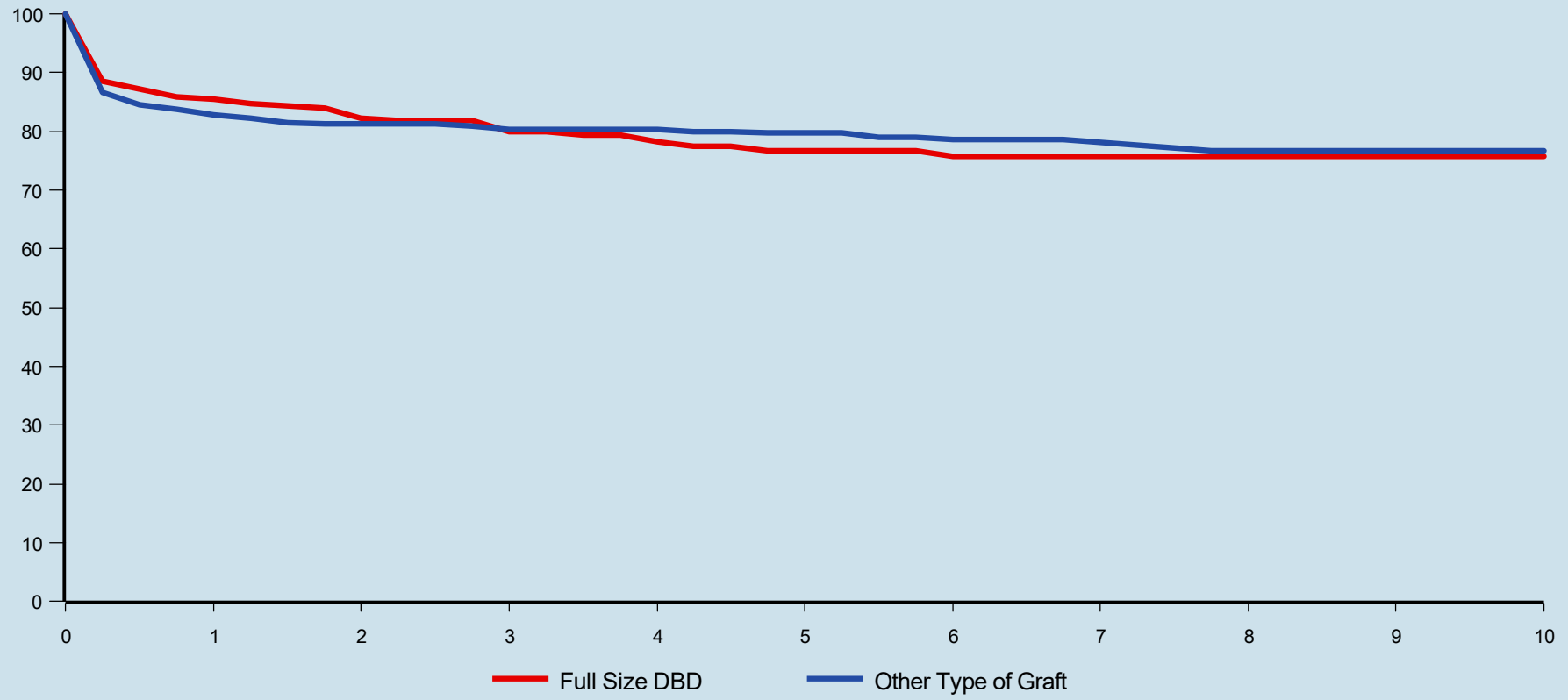
Children : N = 755



# POWARS : Graft Survival *vs* Type of Graft

N = 754 Children (1988-2019)

Log Rank p = 0.82



Survival %

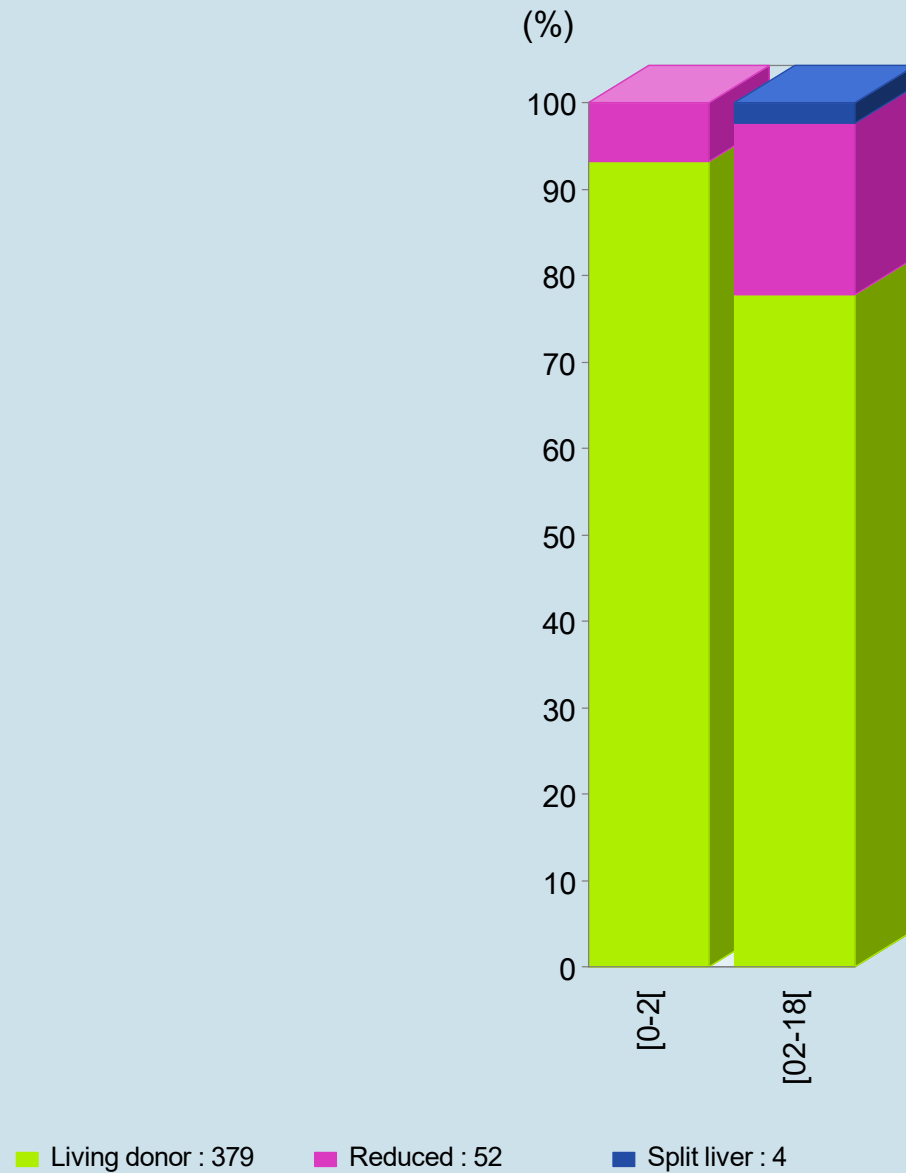
Type of graft	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Full Size DBD	85%	82%	80%	78%	77%	76%	76%	76%	76%	76%
Other Type of Graft	83%	81%	80%	80%	80%	79%	78%	77%	77%	77%

Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Full Size DBD	320	238	198	162	124	93	79	65	54	45	31
Other Type of Graft	434	331	296	273	246	223	200	172	152	130	108

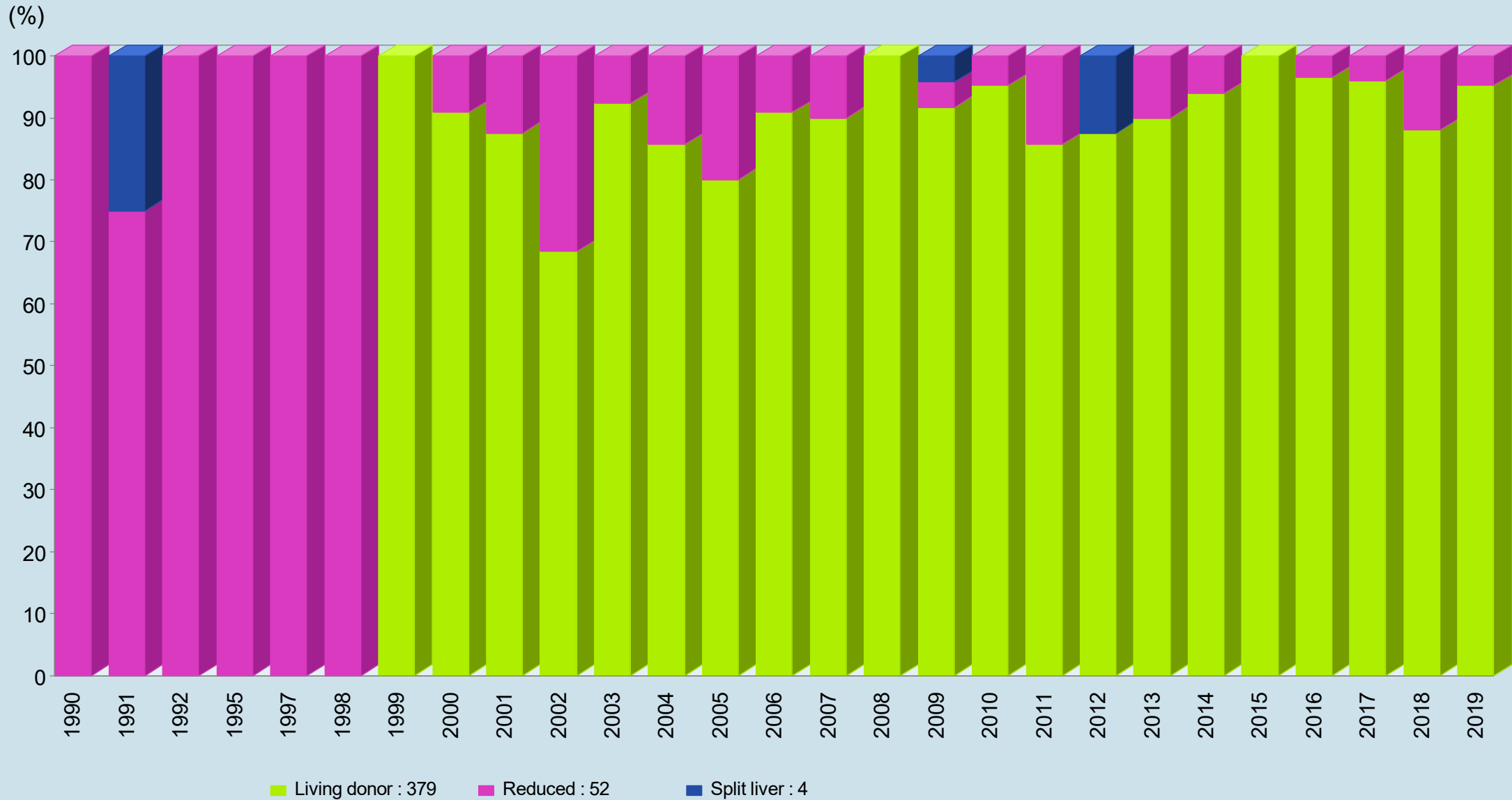
# POWARS : Alternatives to the use of full size DBD liver grafts according to Recipient Age

N = 435 Children (1988-2019)



# POWARS : Evolution of Alternatives to the use of full size DBD liver grafts

Children N = 435

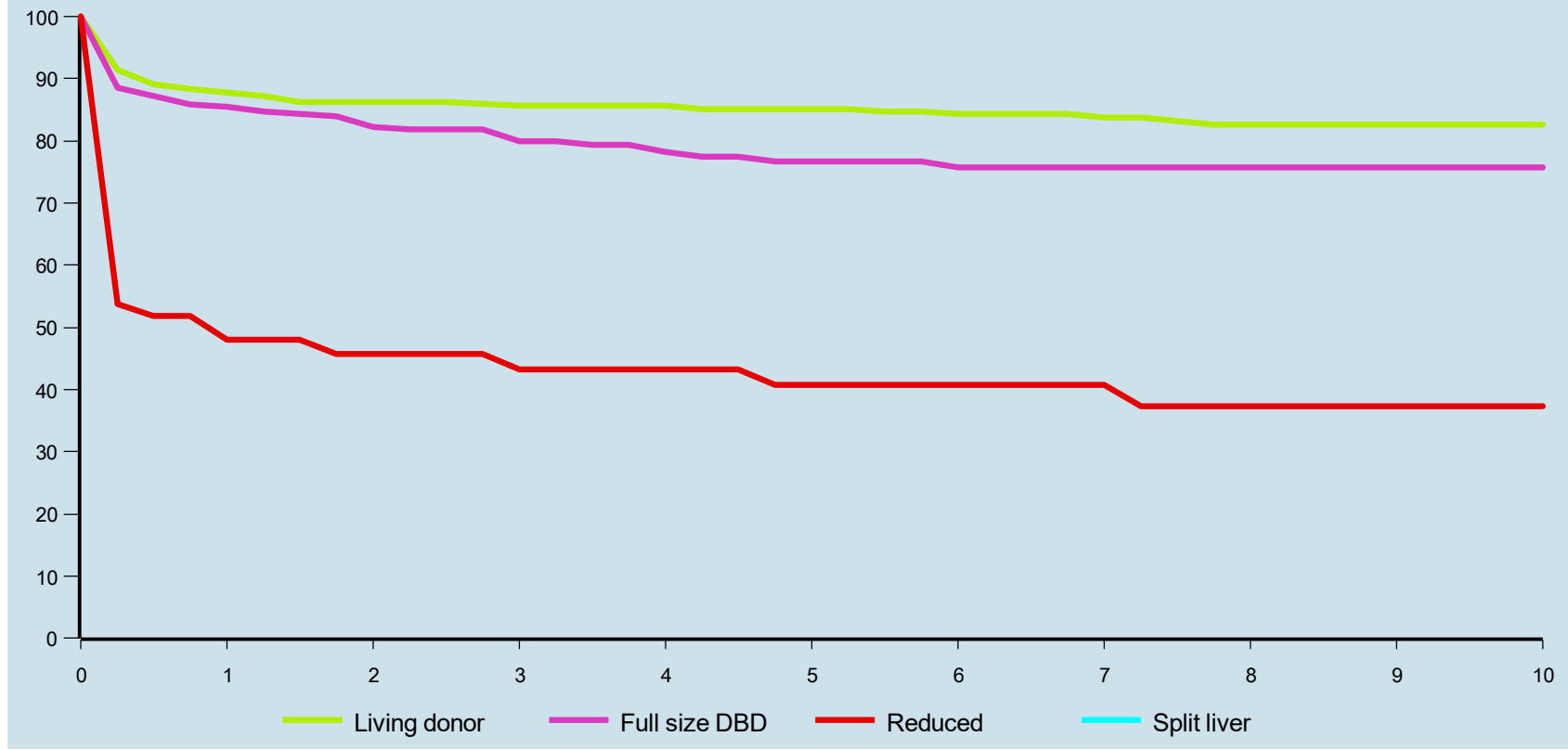


# POWARS : Graft Survival vs Type of Graft

N = 754 Children (1988-2019)

Details : Log rank p

		proba
Liv.	FS DBD	0.034
Liv.	Red.	<0.0001
FS DBD	Red.	<0.0001



Survival %

Type of liver graft	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Living donor	88%	86%	86%	86%	85%	84%	84%	83%	83%	83%
Full size DBD	85%	82%	80%	78%	77%	76%	76%	76%	76%	76%
Reduced	48%	46%	43%	43%	41%	41%	41%	37%	37%	37%
Split liver	-	-	-	-	-	-	-	-	-	-

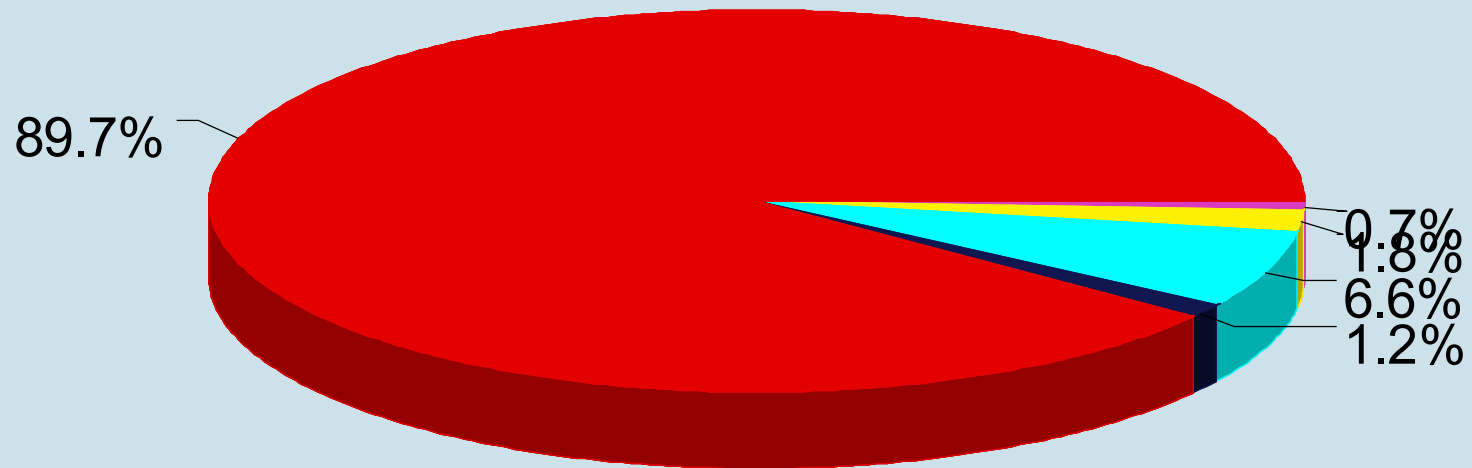
Number of exposed patients

	Total	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs
Living donor	378	304	274	252	225	204	183	158	141	121	99
Full size DBD	320	238	198	162	124	93	79	65	54	45	31
Reduced	52	24	19	18	18	16	15	12	10	8	8
Split liver	4	3	3	3	3	3	2	2	1	1	1

POWARS : Children : MORTALITY AND RETRANSPLANTATION

# POWARS : Outcome of Recipients

N = 667 Children (1988-2019)

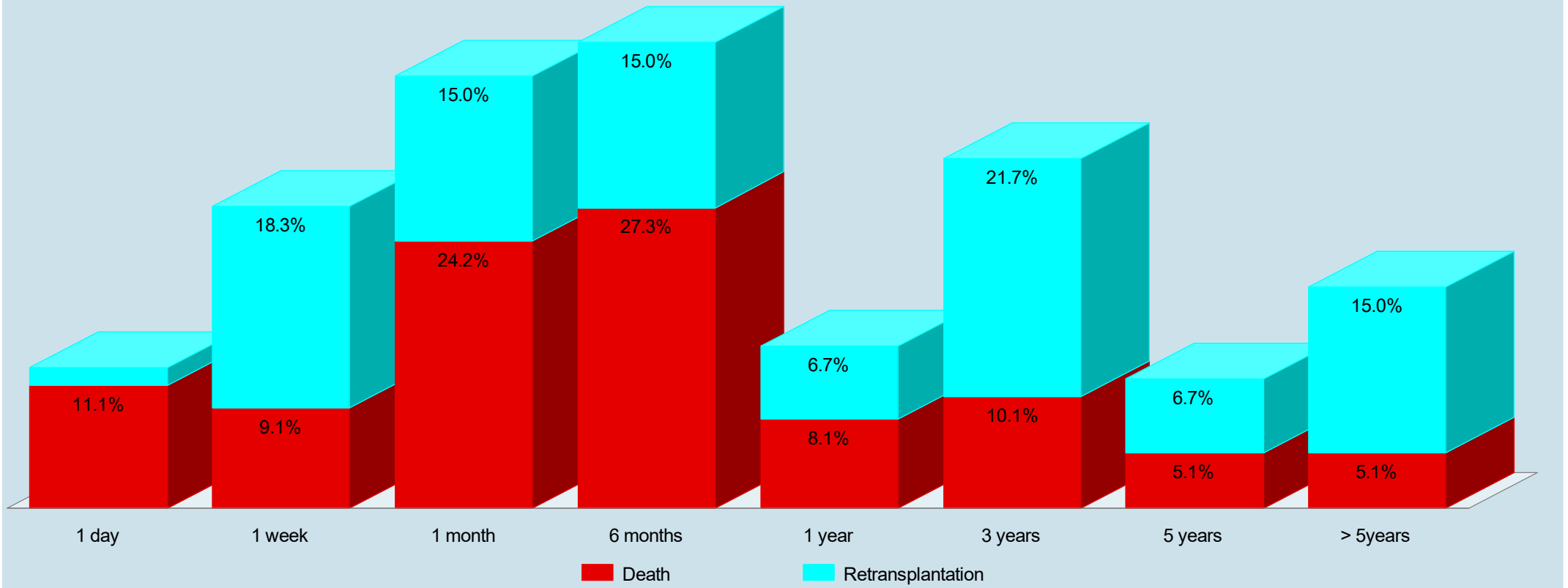


Alive 6 months after LT1 : 598  
Death in 2nd month after LT1 : 12

Death in [3-6] months after LT1 : 8  
Death in 3rd month after LT1 : 5

Death in 1st month after LT1 : 44

## POWARS : Mortality and Retransplantation Children (1988-2019)

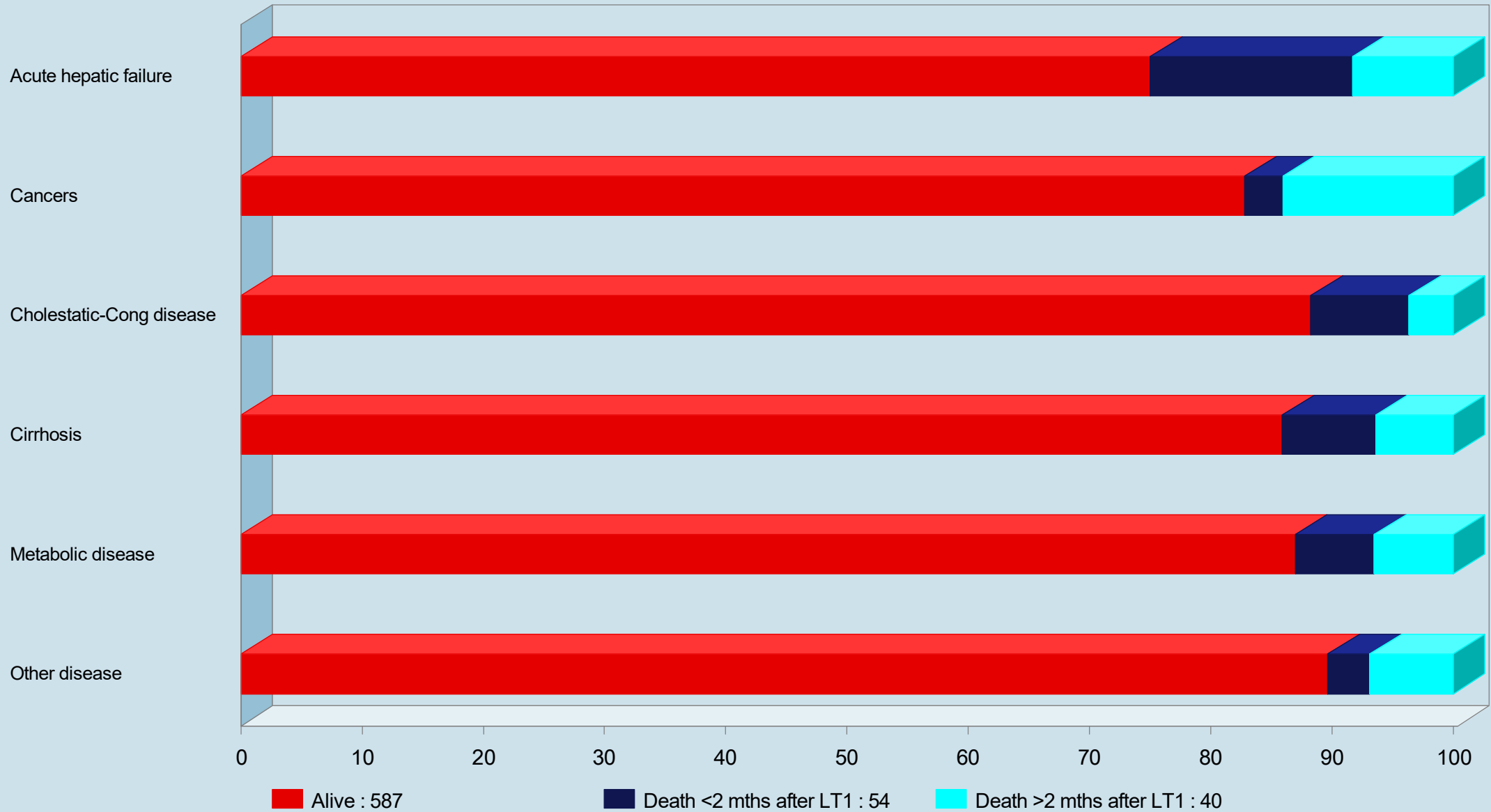


Cumulative proportions	1 day	1 week	1 month	6 months	1 year	3 years	5 years	>5 years
Death	11%	20%	44%	72%	80%	90%	95%	100%
Retransplantation	2%	20%	35%	50%	57%	78%	85%	100%



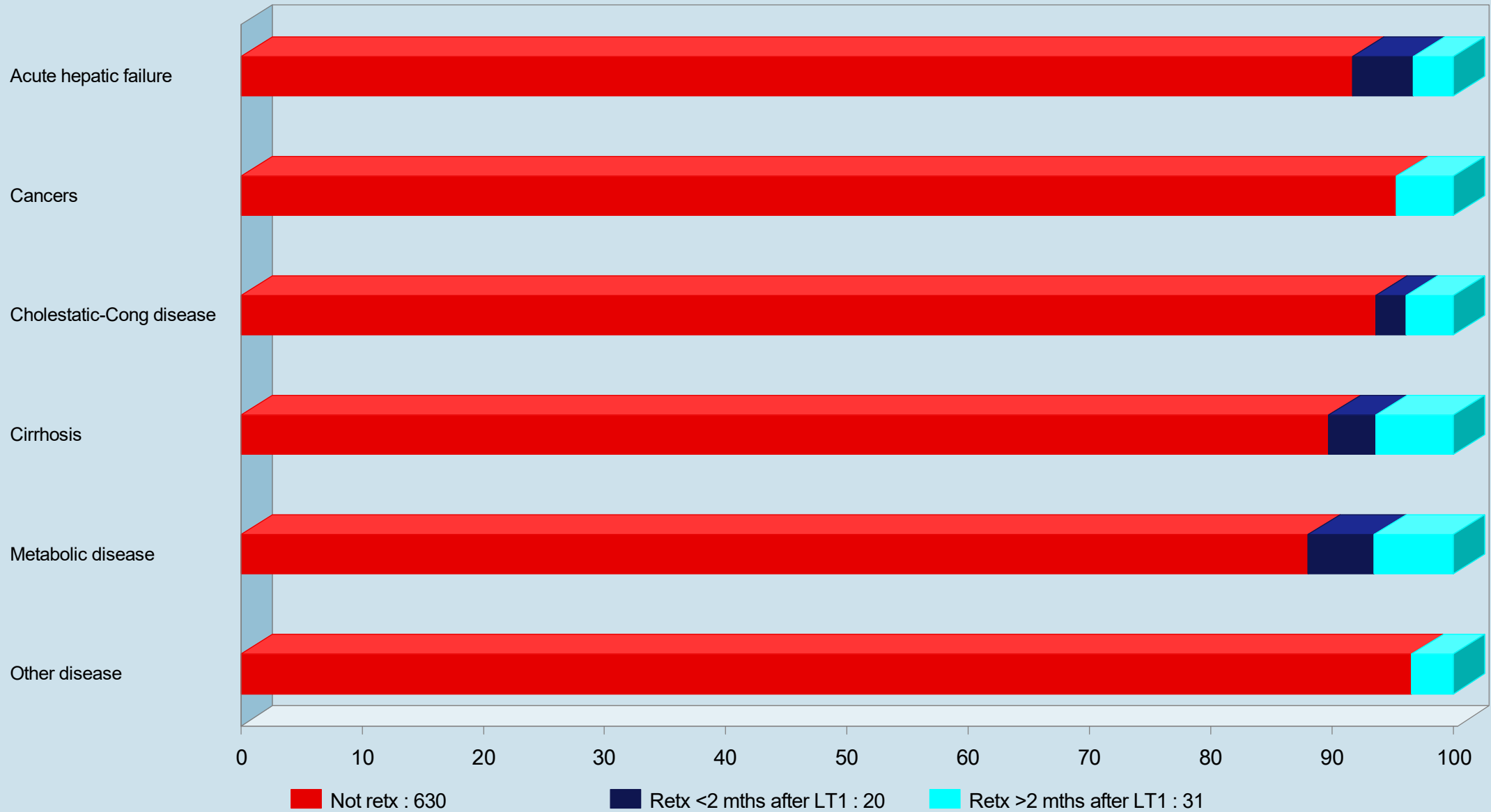
# POWARS : Mortality according to the First Indication

N = 681 Children (1988-2019)



# POWARS : Retransplantation according to the First Indication

N = 681 Children (1988-2019)



# Post\_LT Mortality following 1st LT : 1988-2019

**POWARS : Children (1st cause of failure declared according to the date of its occurrence)**

Time	Peroperative	Liver Complications							Tumors			
		Primary non function or dysfunction	Technical complications				Rejection		Non tumoral recurrence	Liv. Complic. Others	Tumoral recurrence	Tumor de Novo
			Biliary	Haemorrhage	Vascular	Hepatic infarction	Acute	Chronic				
1 day	4	0	0	0	0	0	0	0	0	0	0	0
1 week	0	1	0	0	0	0	0	0	0	0	0	0
1 month	0	0	0	0	0	0	0	0	0	2	0	0
6 months	0	0	0	0	0	0	0	1	0	0	2	0
1 year	0	0	0	0	0	0	0	0	0	0	2	0
3 years	0	0	0	0	0	0	0	0	0	0	1	1
5 years	0	0	0	0	0	0	0	0	0	0	1	0
> 5years	0	0	1	0	1	0	0	0	0	0	0	0
	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>1</b>

Time	Infections				General causes					Others
	Bacterial	Viral	Fungal	Inf. Unprecised	Gastrointestinal	Cardiovascular	Cerebrovascular	Renal	Pulmonary	
1 day	0	0	0	0	0	1	3	0	0	0
1 week	0	0	0	3	0	1	1	0	0	0
1 month	4	0	1	0	0	1	2	1	1	2
6 months	3	1	1	3	1	0	1	0	0	5
1 year	0	0	0	1	0	0	0	0	0	2
3 years	1	0	0	1	0	0	0	0	0	2
5 years	1	0	0	1	0	0	0	0	0	0
> 5years	0	0	0	1	0	0	0	0	0	0
	<b>9</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>11</b>

# Causes of Retransplantation following 1st LT : 1988-2019

POWARS : Children (1st cause of failure declared according to the date of its occurrence)

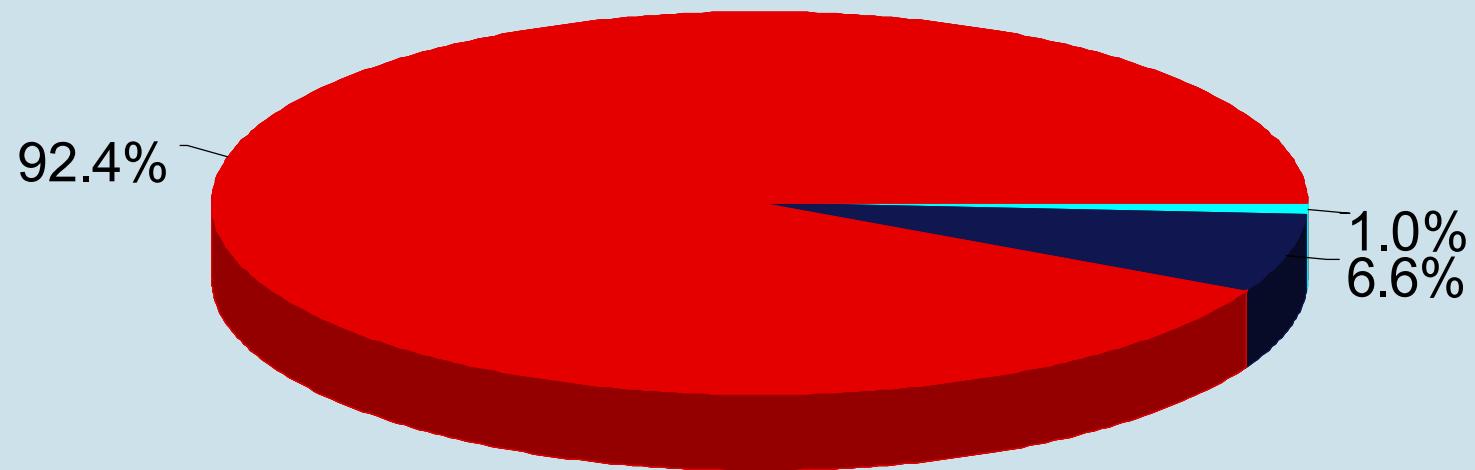


Time	Peroperative	Liver Complications							Tumors			
		Primary non function or dysfunction	Technical complications				Rejection		Non tumoral recurrence	Liv. Complic. Others	Tumoral recurrence	Tumor de Novo
			Biliary	Haemorrhage	Vascular	Hepatic infarction	Acute	Chronic				
1 day	0	1	0	0	0	0	0	0	0	0	0	0
1 week	0	8	0	0	1	0	0	0	0	0	0	0
1 month	0	1	0	0	2	0	0	0	0	0	0	0
6 months	0	0	2	0	0	0	0	0	1	0	0	0
1 year	0	0	0	0	0	0	0	2	0	1	0	0
3 years	0	0	6	0	0	0	0	0	2	1	0	0
5 years	0	0	0	0	0	0	0	1	0	0	0	0
> 5years	0	0	3	0	0	0	0	2	1	1	0	0
	<b>0</b>	<b>10</b>	<b>11</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>0</b>

Time	Infections				General causes					Others
	Bacterial	Viral	Fungal	Inf. Unprecised	Gastrointestinal	Cardiovascular	Cerebrovascular	Renal	Pulmonary	
1 day	0	0	0	0	0	0	0	0	0	0
1 week	0	0	0	0	0	0	0	0	0	0
1 month	1	0	0	0	0	0	0	1	0	0
6 months	1	0	1	0	0	0	0	0	0	3
1 year	0	0	0	0	0	0	0	0	0	1
3 years	1	0	0	0	0	0	0	0	0	0
5 years	0	0	0	0	0	0	0	0	0	0
> 5years	0	0	0	0	0	0	0	0	0	1
	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>5</b>

# POWARS : Number of LT per Patient

N = 696 Children (1988-2019)



■ 1 : 643    ■ 2 : 46    ■ 3 : 7



# ELTR Team



René Adam MD, PhD,  
Chairman



Vincent H Karam PhD  
Data Management and Quality Control



Valérie Cailliez  
Biostatistics



Anne-Marie Lamerant  
Secretary

European Liver Transplant Registry  
Hôpital Paul Brousse  
Centre Hépatobiliaire  
12 Av Paul Vaillant Couturier  
94800 Villejuif  
France

[Karam@eltr.org](mailto:Karam@eltr.org)  
[www.eltr.org](http://www.eltr.org)

The ELTR continue to evolve thanks to the participation of the 174 centers (list available at [www.eltr.org](http://www.eltr.org)) and to

the support of:



the collaboration with:

