



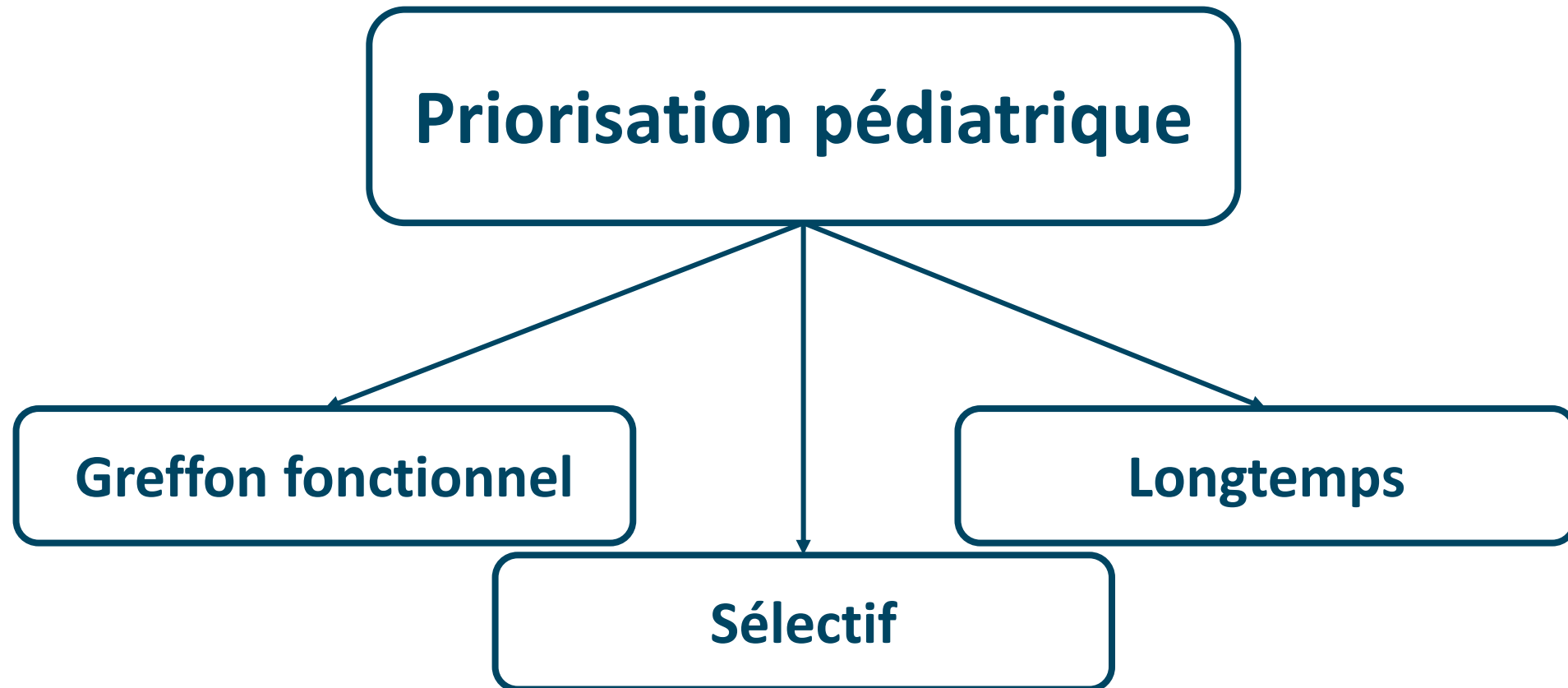
CRITÈRES DE SÉLECTION DES GREFFONS PÉDIATRIQUES

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JOURNÉE MULTIDISCIPLINAIRE D'HÉPATOLOGIE ET DE TRANSPLANTATION HÉPATIQUE
2 DÉCEMBRE 2021

HCL
HOSPICES CIVILS
DE LYON

PROBLEME DE RICHE ?



DONNEUR

SELECTION



REFUS

ATCD

Age

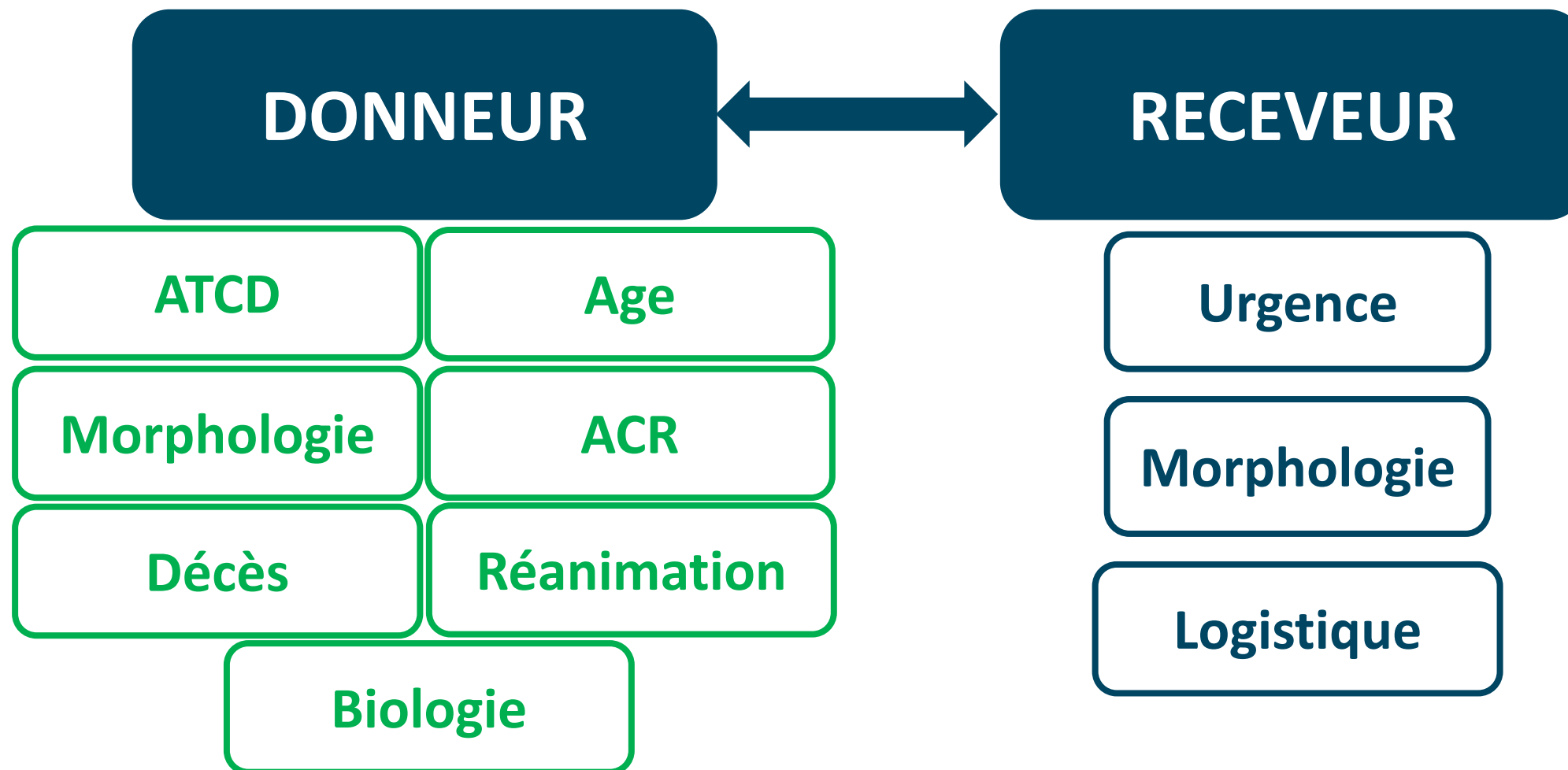
Morphologie

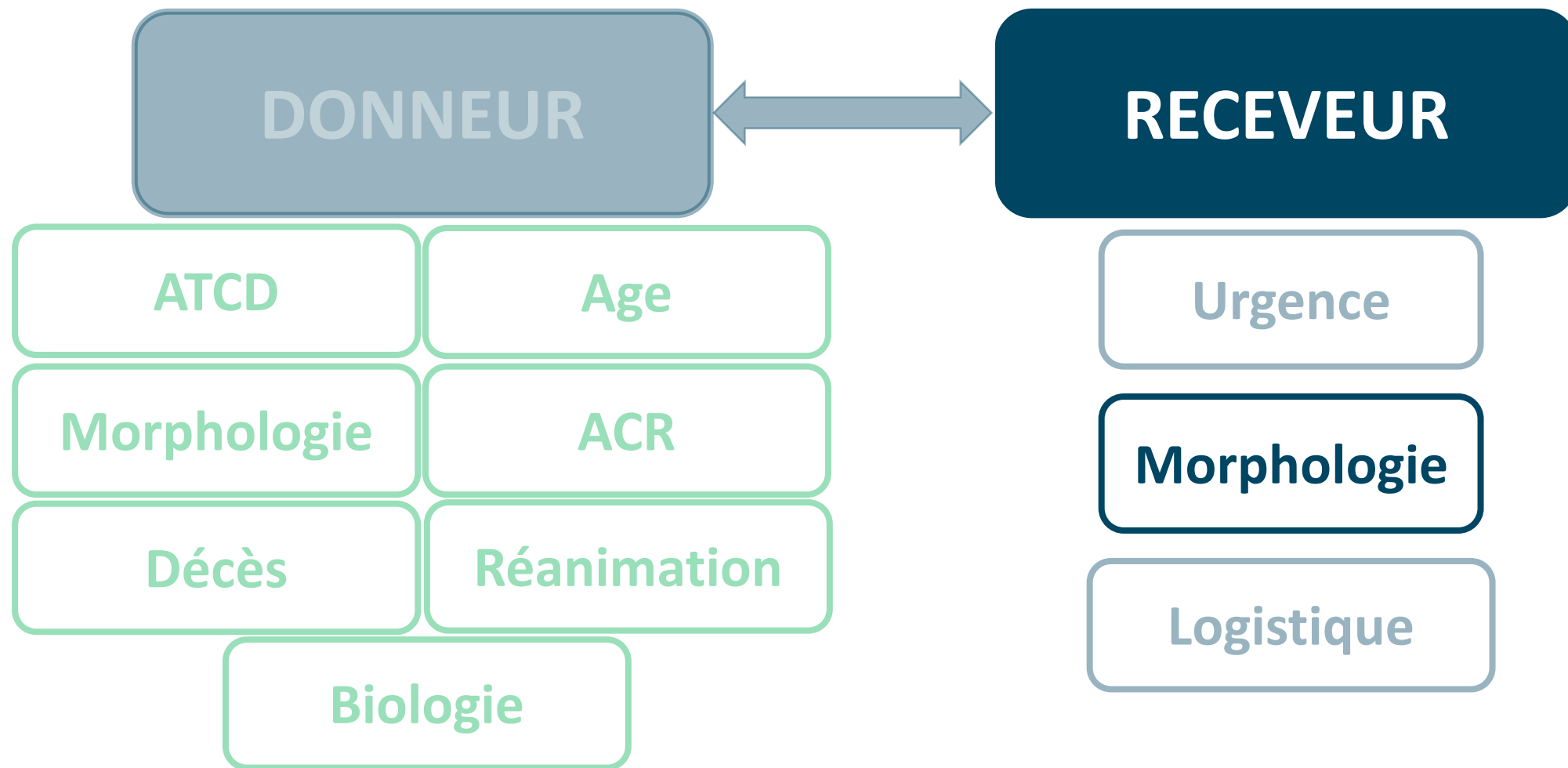
ACR

Décès

Réanimation

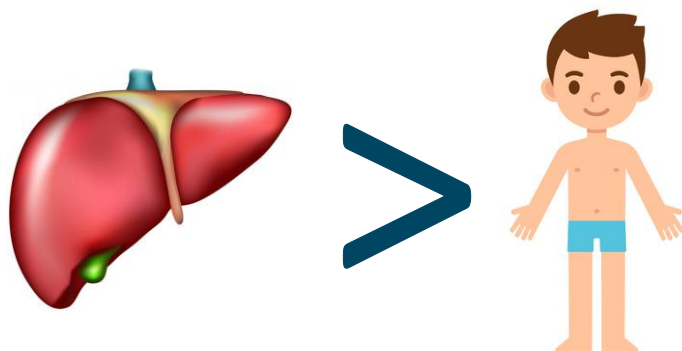
Biologie





LARGE FOR SIZE

ENTITE PEDIATRIQUE



GWR > 4%

Erzoy et al. Exp. Clin. Transplant, 2017
Wan et al. Ped. Transplant, 2015

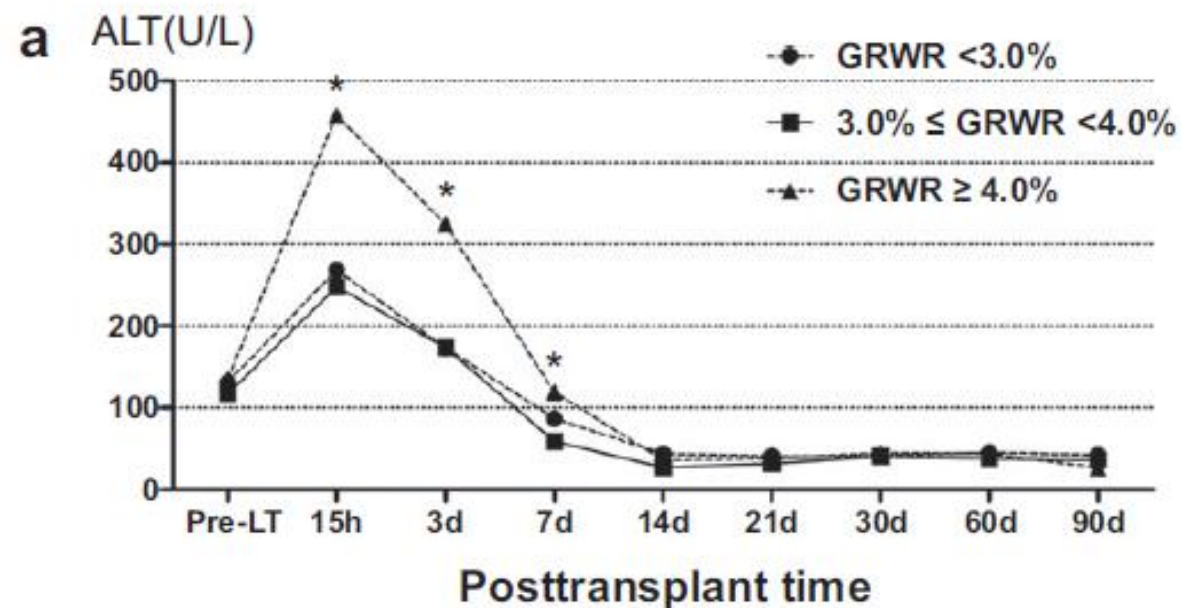


Table 4. Postoperative complications of recipients according to GRWR (n, %)

Variables	GRWR			P-values
	<2%(25)	≥ 2%, <4% (204)	≥ 4%(23)	
Hepaticartery Stenosis/thrombosis	0(0%)	1(0.49%)	4(17.40%)	0.001

FOIE ENTIER

FOIE PARTIEL

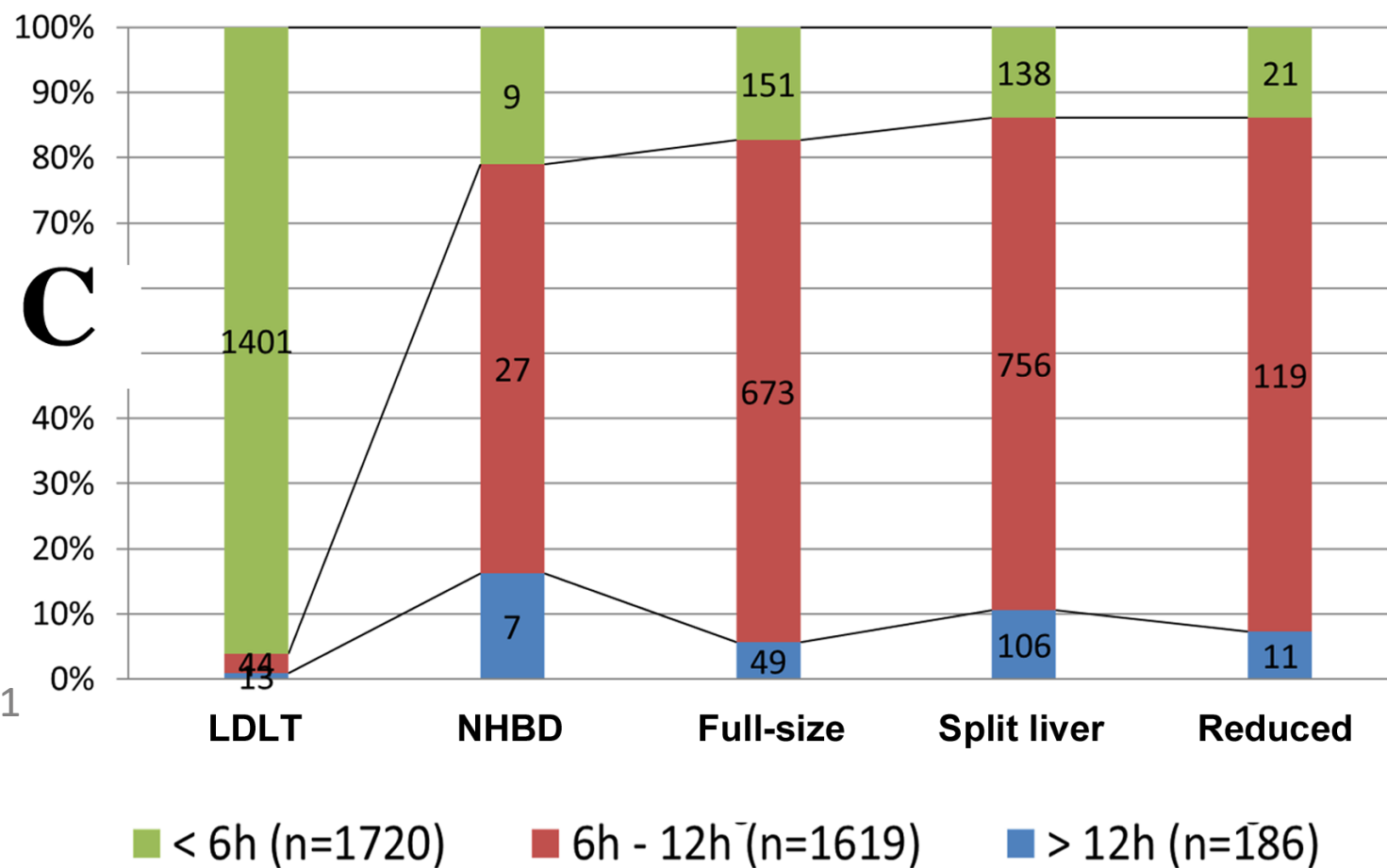
<i>Age at Transplant (years)</i>	<i>< 12 yrs</i>	<i>12 - 17 yrs</i>	<i>p</i>
Type of graft			
Full-size liver	35%	76%	<0.0001
Reduced Liver	9%	4%	
Split liver graft	29%	11%	
Living Donor liver graft	27%	9%	

FOIE PARTIEL

Ischémie froide

Survie

De ville de Goyet et al. Hepatology, 2021
Angelico et al. Transplant. Int. 2018



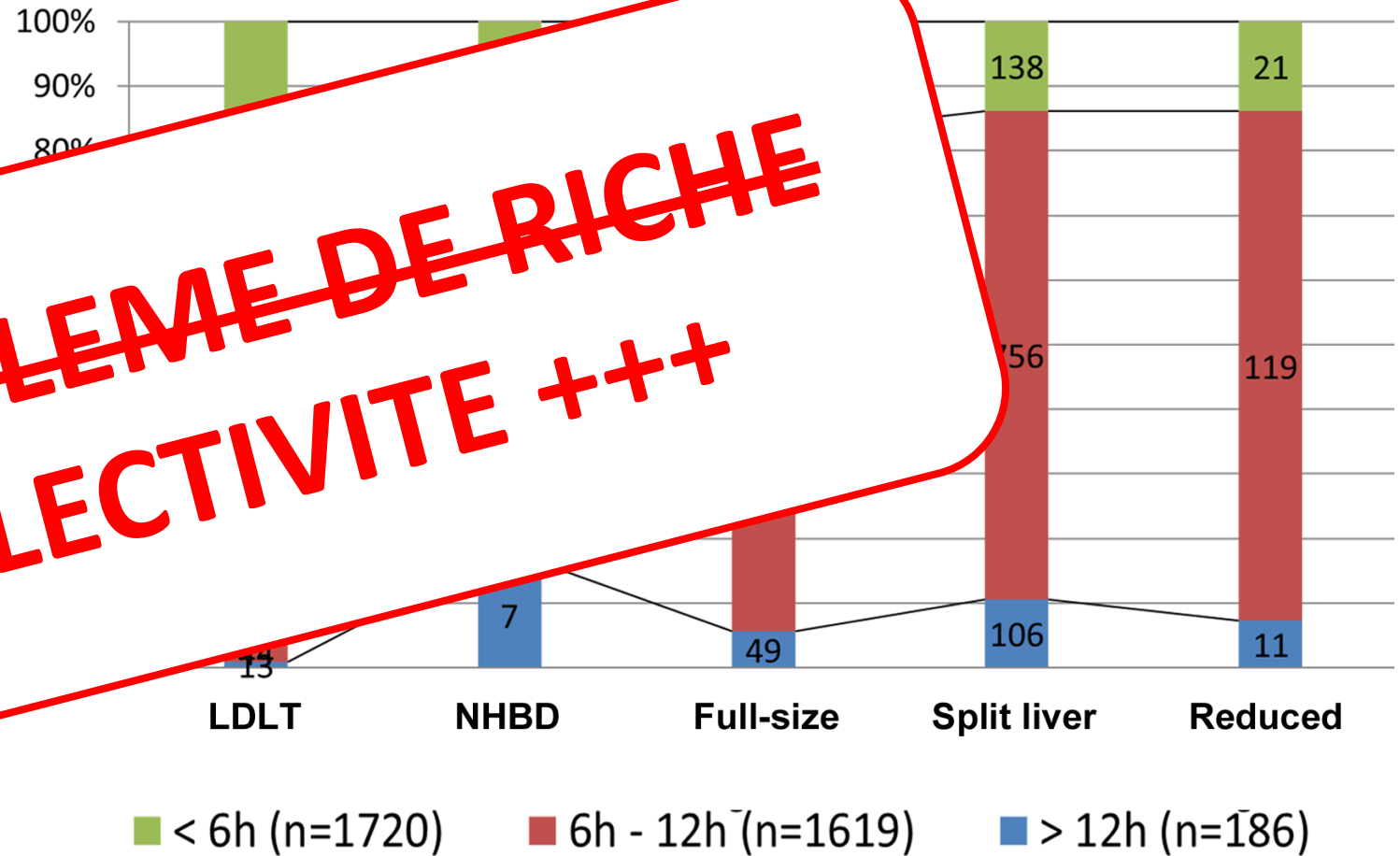
FOIE PARTIEL

9

Ischémie

**PROBLEME DE RICHE
SELECTIVITE +++**

De ville de Goyet et
Angelico et al. Transplantation 2018



COMMENT ?

10

SELECTION



RECEVEUR

ATCD

Age

Morphologie

ACR

Décès

Réanimation

Biologie

Urgence

Morphologie

Logistique

PAS DE CONSENSUS

11

Program	Rate of SLT	Donor age	Weight/BMI	Transaminases	Other criteria
UNOS	1%-4% (but according to UNOS criteria > 10% eligible)	< 40	< 28 kg/m ²	< 3 × ULN	Single vasopressor
ET	6%	< 50	> 50 kg		
United Kingdom	10.6%	< 40	> 50 kg		< 5 d ICU
Argentina/Brazil	10%	< 47	umbilical perimeter < 92 cm	AST < 42 U/L ALT < 29 U/L	
Oceania	6%				
Scandia-transplant	?	< 51	< 26 kg/m ²	ALT/AST < 3 × normal	< 4 d ICU
Saudi-Arabia	5.6%				
South Africa	3%				
Japan	1.8%				
Italy	8% (Northern Italy: 20%)	< 60		Near-normal liver function tests	< 5 d ICU Low inotropic support

Hacki et al. W. J. Gastro. 2018

PEDIATRIE

12

Age

50 ans – Bipartition

60 ans - Attention
Tabac (30-40PA)

Angelico et al. Transplant. Int. 2018

ATCD

Ethylisme Chronique ou Aigue

Toxicomanie

Décès

Décès=Qualité du donneur

Hypoxie

Vasculaire

ACR

HTA

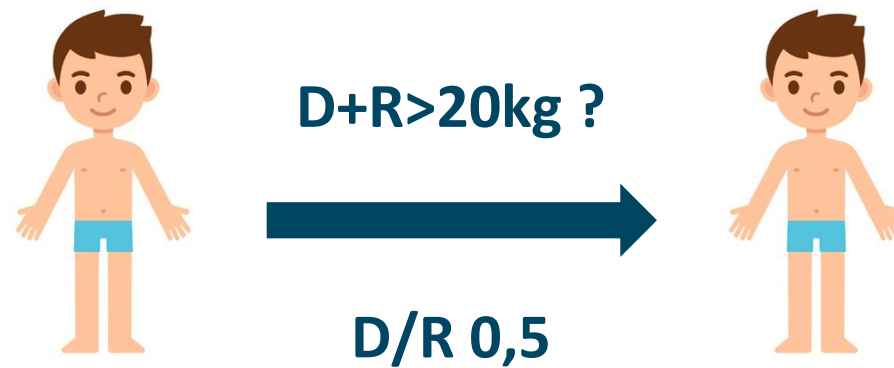
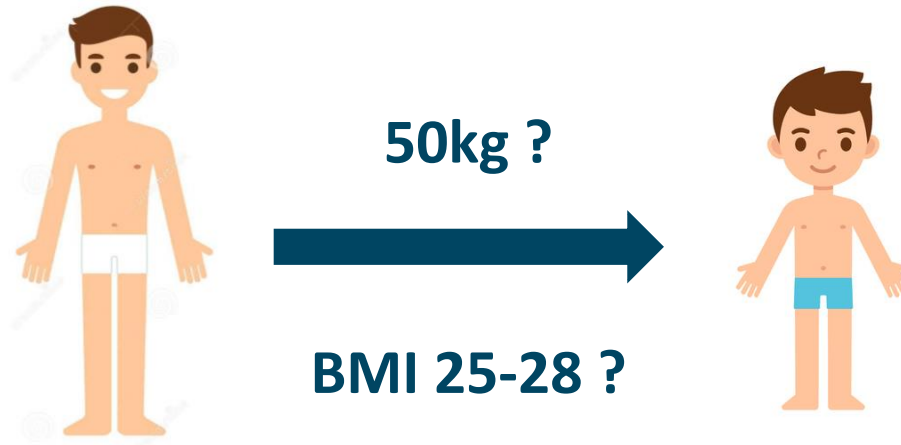
Tabac

Vx

PEDIATRIE

13

Morphologie



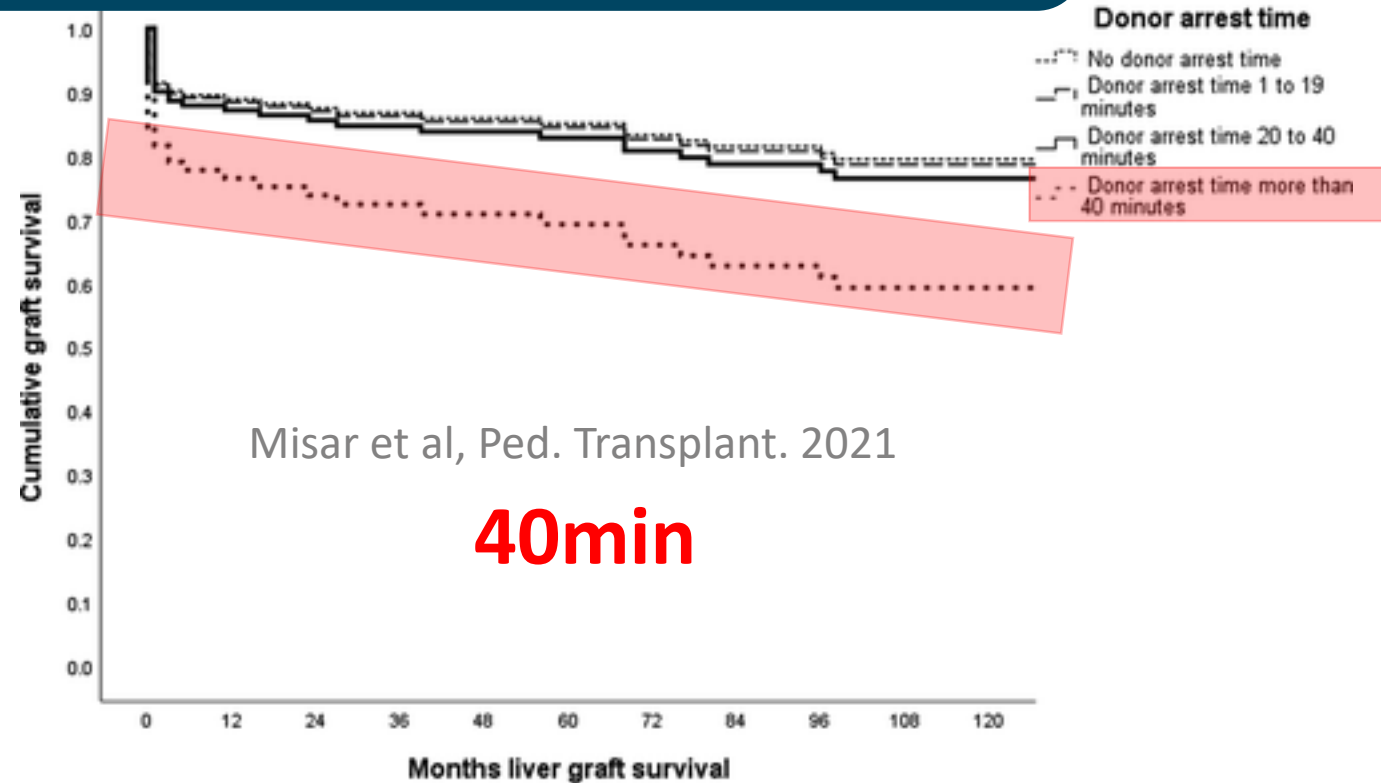
PEDIATRIE

14

ACR

LOW flow ou NO Flow
60 min 15min

Réanimation



ICU>5jrs
Complications biliaires
Mortalité patient

Misar et al, Ped. Transplant. 2021

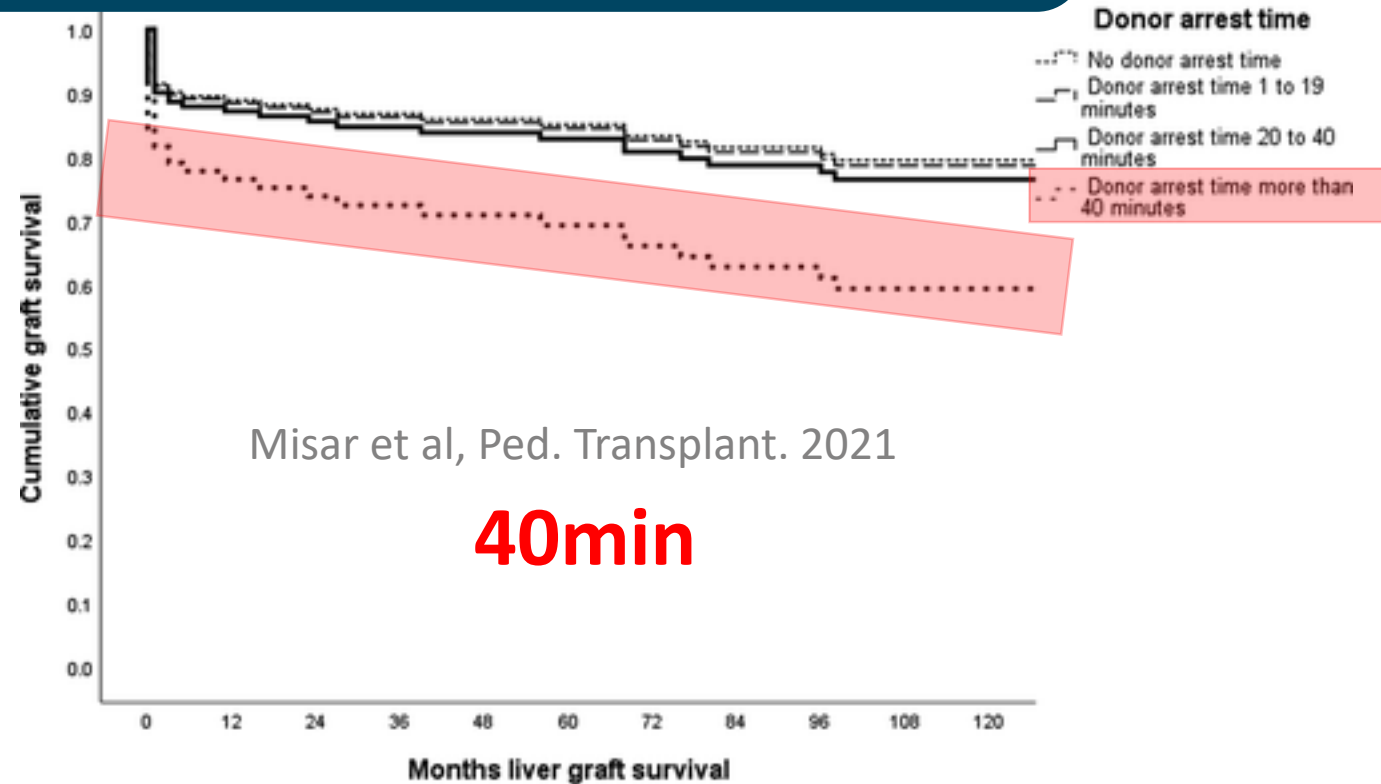
PEDIATRIE

15

ACR

LOW flow ou NO Flow
60 min 15min

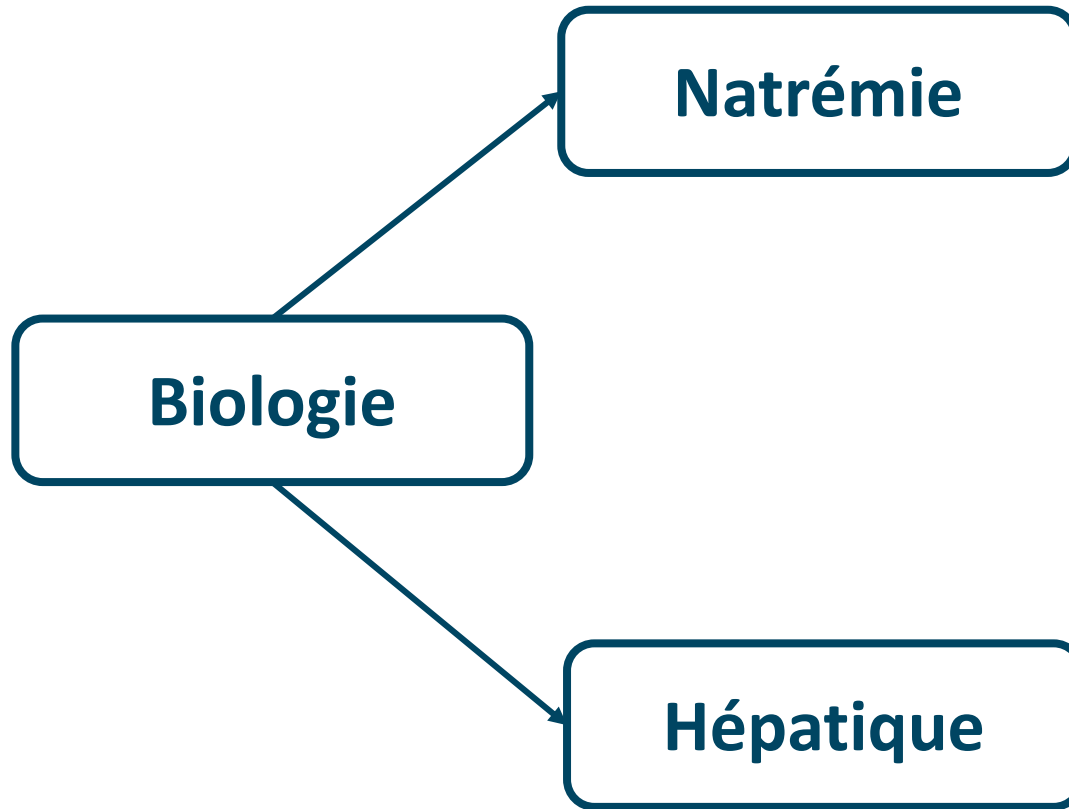
Réanimation



Amines oui/non
Nombres
NAdré vs Adré

PEDIATRIE

16



150
150-170
>170

**Stabilité du
Donneur**

Kaseje et al, Eur J Pediatr Surg. 2012

**Importance de la
cinétique**

BONS GREFFONS

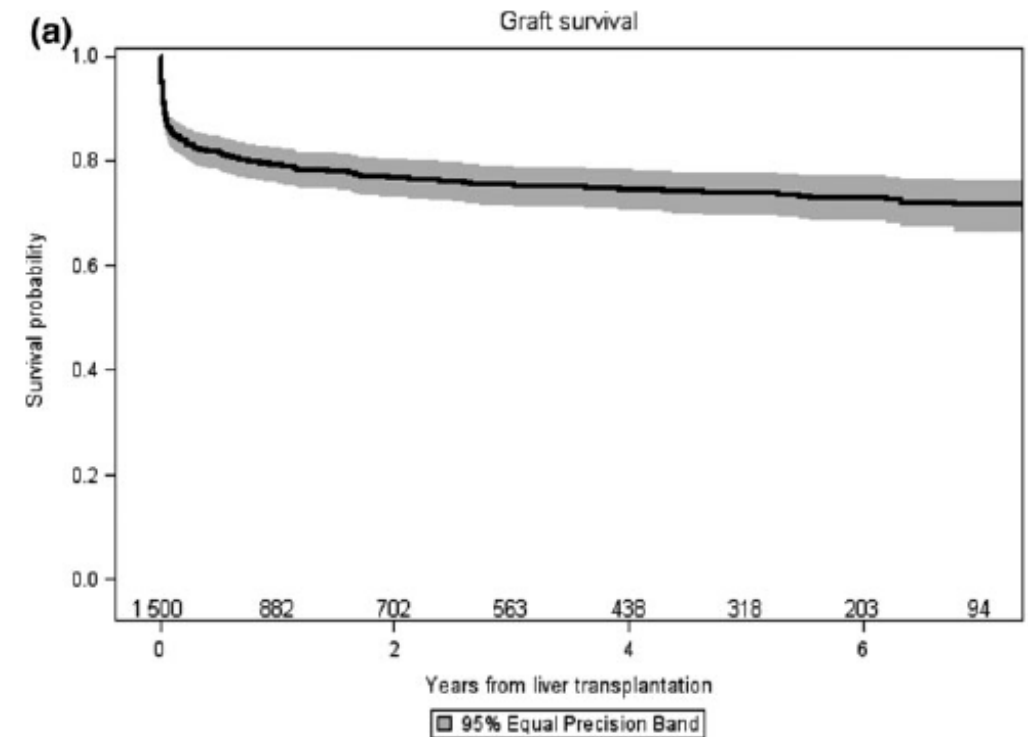
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Age		20 [18-27]
BMI		22,4 [19,2-23,4]
COD	Trauma	9 (45)
	Hypoxic Brain Injury	6 (30)
	Cerebrovascular	5 (25)
Cardiac Arrest		6 (30)
Inotropes		14 (70)
ICU stay		3 [2-4]
Na (mmol/l)		146 [140-149]
AST peak (UI/l)		65 [54-133]
ALT peak (UI/L)		34 [21-47]
Lactate peak (mmol/L)		3,4 [2,2-5,4]

BONS RESULTATS

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Recipient age	Type	N	Graft survival	
			1 year	5 years
Less 1 yr	Split	423	80%	74%
	Living	818	87%	80%
1-6 yrs	Split	706	88%	83%
	Living	772	87%	81%
6-12 yrs	Split	235	86%	77%
	Living	227	82%	76%
12-18 yrs	Split	114	83%	78%



De ville de Goyet et al. Hepatology, 2021
 Angelico et al. Transplant. Int. 2018

DONNEUR

ATCD

Age

Morphologie

ACR

Décès

Réanimation

Biologie



RECEVEUR

Urgence

Morphologie

Logistique

ON LE PREND ?

20

15 ans - 160cm - 76kg

Mort cérébrale sur HTIC (craniopharyngiome)

3 jours REA

ACR 40min (Adré et CEE) - 1 amine

Natrémie normale

ASAT à 1088 puis 650

Lactates 25,2 puis 7



SPLIT

PLUS DE GREFFES ?

21

2 ans

242 greffons



26 greffes



10%

**MAUVAIS
GREFFON**

SELECTIF



PLUS DE GREFFES ?

22

Morphologie

20%

AGE

4%

ATCD-BIO

43%

Mauvais

25%

REFUS

PLUS DE GREFFES ?

23

Morphologie

20%

AGE

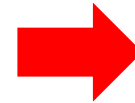
4%

ATCD-BIO

43%

Mauvais

25%



129
Greffés

PLUS DE GREFFES ?

We can do
more.....

Watch your
mouth



MACHINE PERFUSION

25

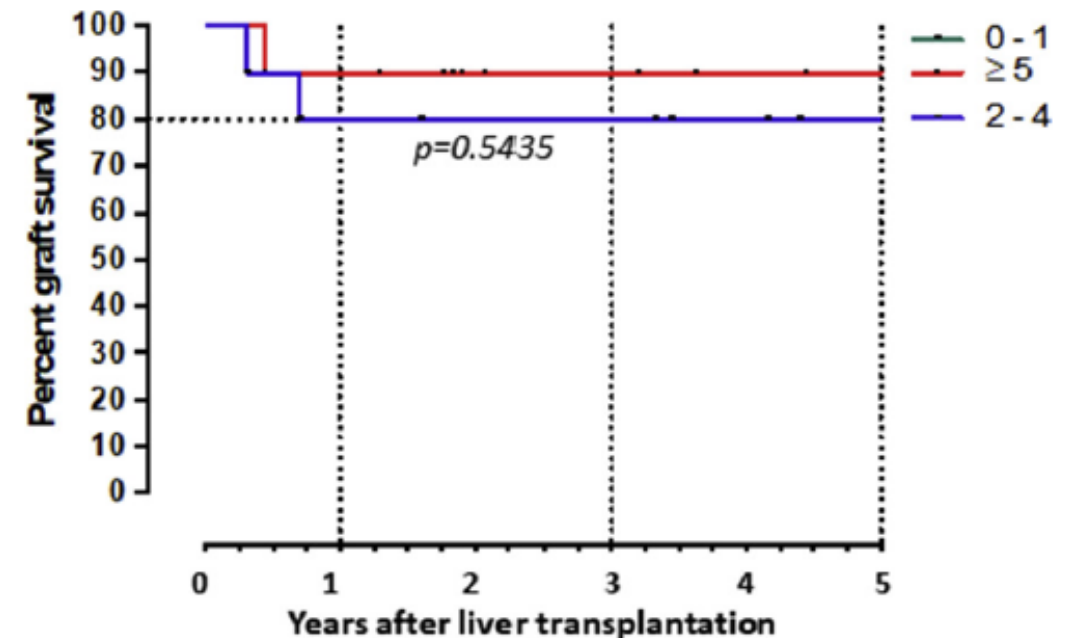
Can hypothermic oxygenated perfusion (HOPE) rescue futile DCD liver grafts?

ORIGINAL ARTICLE

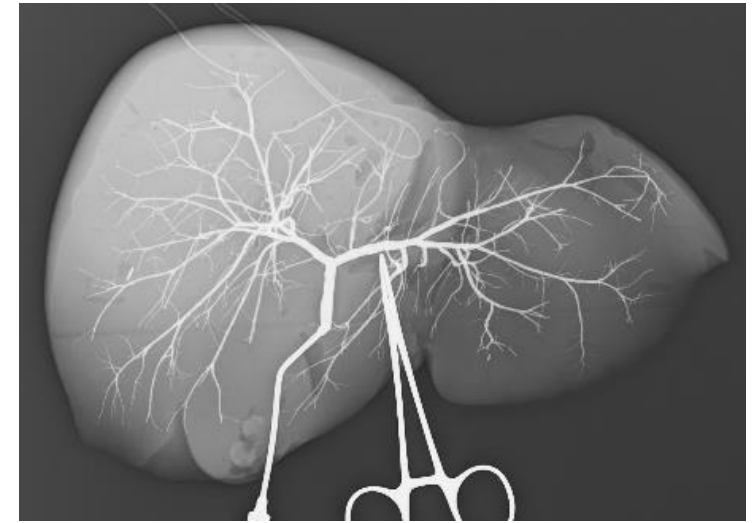
Hypothermic Machine Perfusion in Liver Transplantation — A Randomized Trial

R. van Rijn, I.J. Schurink, Y. de Vries, A.P. van den Berg, M. Cortes Cerisuelo, S. Darwish Murad, J.I. Erdmann, N. Gilbo, R.J. de Haas, N. Heaton, B. van Hoek, V.A.L. Huurman, I. Jochmans, O.B. van Leeuwen, V.E. de Meijer, D. Monbaliu, W.G. Polak, J.J.G. Slangen, R.I. Troisi, A. Vanlander, J. de Jonge, and R.J. Porte, for the DHOPE-DCD Trial Investigators*

C Graft survival of futile DCD group according to the DCD-RI, n=21



HOPE + SPLIT



Letter to the Editor



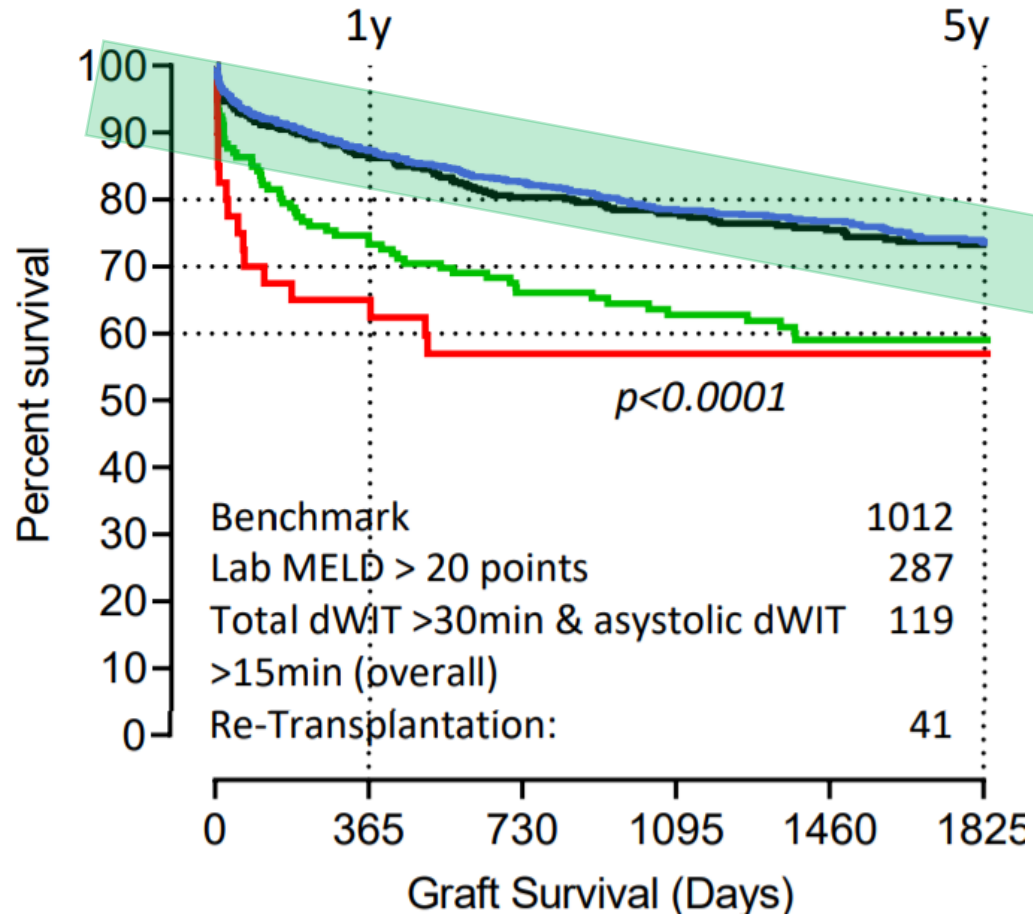
Ex Vivo Liver Splitting and Hypothermic Oxygenated Machine Perfusion: Technical Refinements of a Promising Preservation Strategy in Split Liver Transplantation

Jean-Yves Mabrut, MD, PhD,^{1,2} Mickaël Lesurtel, MD, PhD,^{1,2} Xavier Muller, MD,^{1,2} Rémi Dubois, MD,³ Christian Ducerf, MD, PhD,¹ Guillaume Rossignol, MD,^{2,3} and Kayvan Mohkam, MD, PhD^{1,2,3}

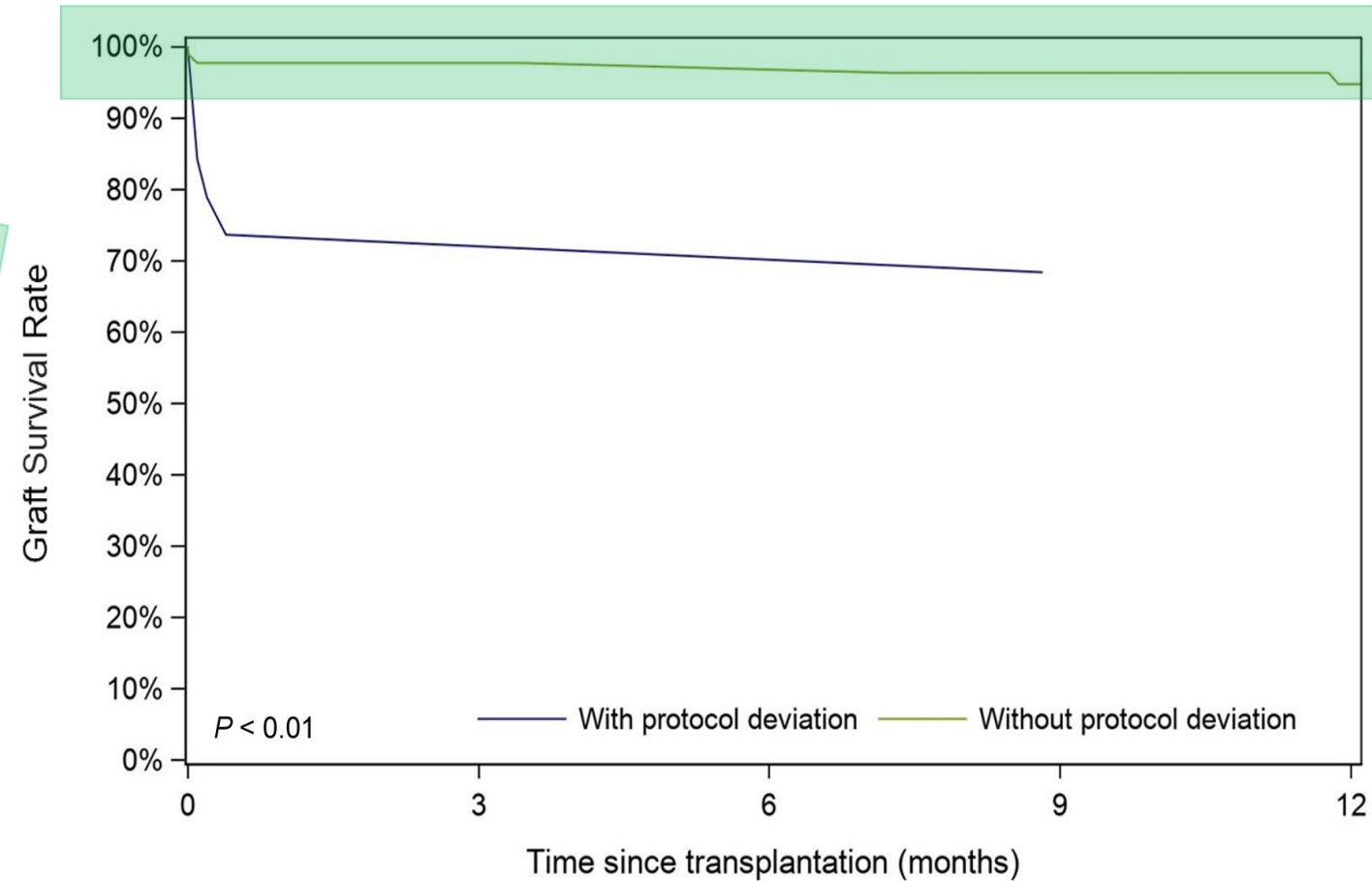


DONNEUR MAASTRICHT III

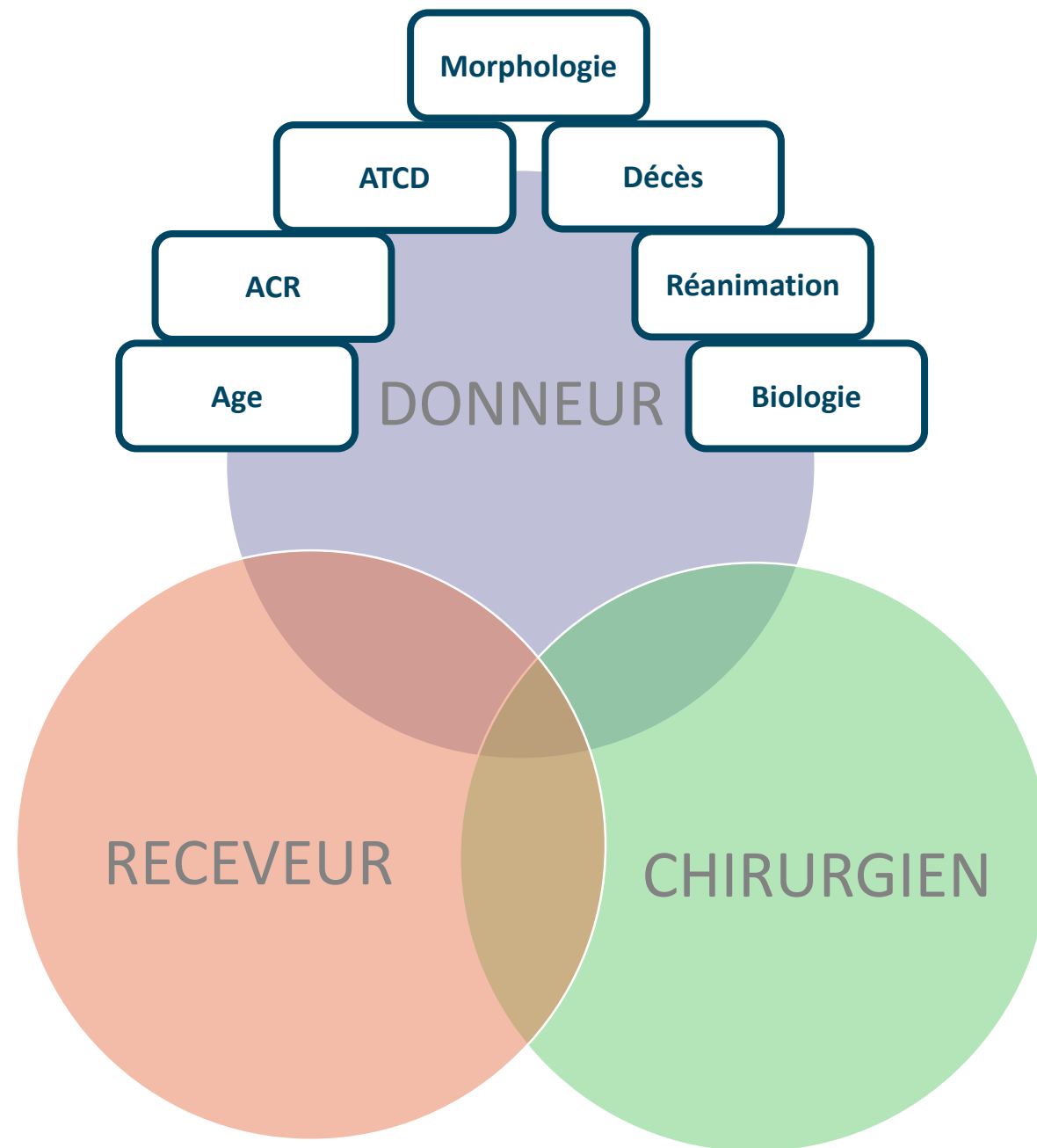
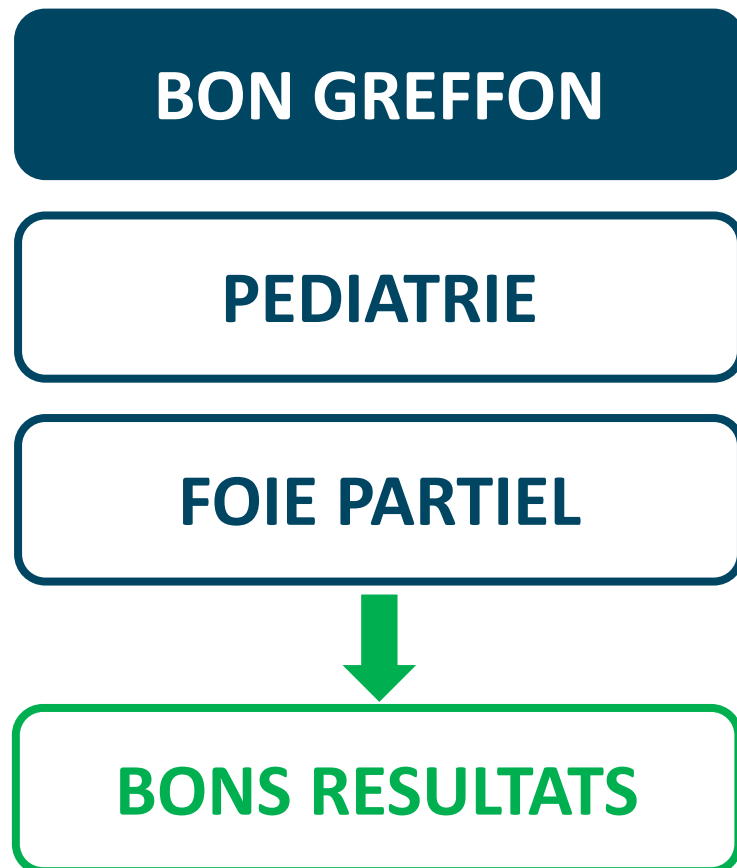
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Schlegel et al, JHEP 2021



Antoine et al, Liver Transplant. 2020



NOUVEAUX CRITERES

NOUVEAUX OUTILS

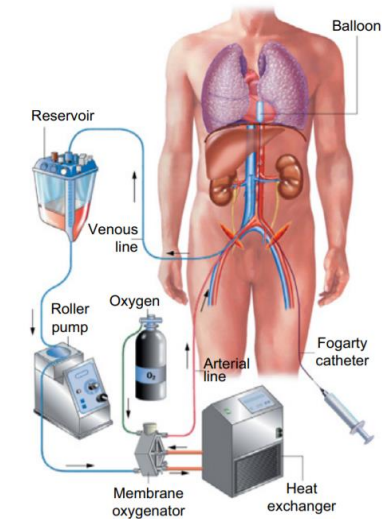
NOUVEAUX DONNEURS

BON GREFFON

PEDIATRIE

FOIE PARTIEL

BONS RESULTATS



BON GREFFON

CRITERES ELARGIS



NOUVEAUX CRITERES

NOUVEAUX OUTILS

NOUVEAUX DONNEURS

BON GREFFON

PEDIA

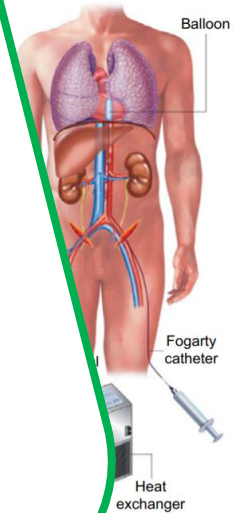
FOIE PAI



BONS RESULT

AUGMENTER LE
NOMBRE DE
GREFFES

CRITERES ELARGIS



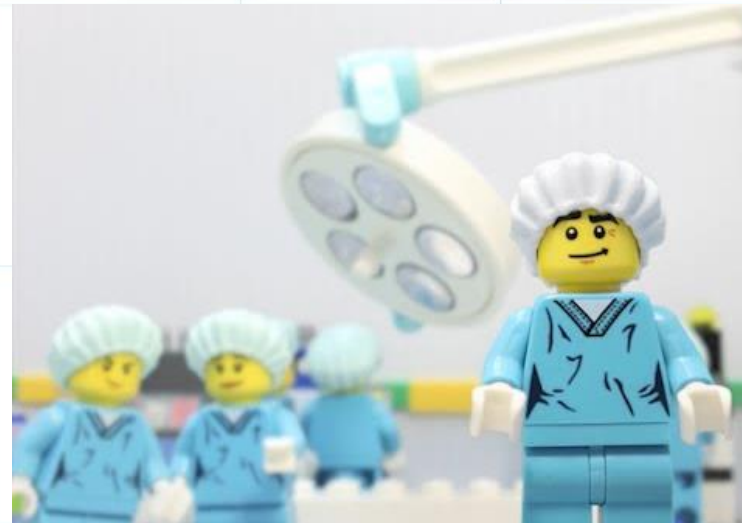


MERCI

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