Best Papers en Transplantation Hépatique

Xavier MULLER

Service de chirurgie générale, digestive et transplantations hépatiques
Hôpital de la Croix Rousse, Lyon
Institut d'Hépatologie de Lyon, IHU EVEREST

HCL
HOSPICES CIVILS DE LYON

UNIVERSITÉ DE LYON
Université Claude Bernard Lyon 1

INSTITUT D'HÉPATOLOGIE DE LYON

Disclosures

- Speaker fees from **XVIVO**
- Speaker fees fromm **AFERTICA**
- Industrial Grant from **IGL**

Clinical Practice Guidelines

JOURNAL OF HEPATOLOGY

EASL Clinical Practice Guidelines on liver transplantation☆

European Association for the Study of the Liver*

Appendix. Delphi round agreement on the recommendations of the present clinical practice guidelines.

Recommendation	Consensus
A potential candidate for LT should not be disqualified based on age alone **(LoE 2, strong recommendation).**	94%
The assessment of candidacy for LT in the elderly population should include cardiopulmonary, frailty-sarcopenia and nutritional status, anatomical and surgical factors, as well as age- and risk factor-based screening for asymptomatic malignancies **(LoE 3, strong recommendation).**	97%
New allocation systems should be implemented to address the compromised access of women to LT **(LoE 3, strong recommendation).**	93%
Patients with ACLF grade 3 (and CLIF-C ACLF score ≤64) should be evaluated for LT **(LoE 3, strong recommendation).**	100%
Patients with ACLF and more than three organ failures according to the CLIF-C organ failure score or CLIF-C ACLF score >64 should be re-evaluated daily and only listed for LT when organ failures and/or ACLF grade improves to ≤3 (or CLIF-C ACLF score ≤64). In cases of acute respiratory distress syndrome and/or high lactate levels, the indication for transplantation should be a cautious decision as this is associated with increased postoperative mortality **(LoE 3, strong recommendation).**	91%
Selected patients with severe acute alcohol-related hepatitis not responding to medical treatment should be considered for early LT if they present with favourable predictors for post-LT sobriety **(LoE 3, strong recommendation**	94%
Patients with acute severe autoimmune hepatitis should be considered for early corticosteroid therapy before hepatic encephalopathy onset **(LoE 3, strong recommendation).**	100%
Patients with acute severe autoimmune hepatitis with severe coagulopathy and hepatic encephalopathy III-IV should not be treated with corticosteroids but considered for early LT **(LoE 3, strong recommendation).**	94%
Patients with severe autoimmune hepatitis not responding to corticosteroids (no improvement or worsening in liver biochemistry and liver synthetic function parameters or development or worsening of hepatic encephalopathy) should be considered for early LT **(LoE 3, strong recommendation**	100%
In patients with Wilson's disease and end-stage liver failure, neuropsychiatric manifestations should not preclude referral, evaluation and waitlisting for LT **(LoE 4, strong recommendation).**	100%
Patients with Wilson's disease and isolated neuropsychiatric manifestations should ideally be referred for evaluation by a multidisciplinary team at a LT centre. The decision to proceed with LT screening needs to be taken on a case-by-case basis after careful discussion **(LoE 4, strong recommendation).**	100%
Patients with a history of a recently treated non-hepatic cancer, who have undergone a curative therapy and are tumour free/in remission, should undergo a multidisciplinary assessment for suitability and timing of LT that includes detailed cancer- and treatment-specific information, including "recurrence-free survival" estimates, and therapeutic options for potential post-LT cancer recurrence **(LoE 3, strong recommendation).**	97%

Guidelines

JOURNAL OF HEPATOLOGY

Deceased donor liver utilisation and assessment: Consensus guidelines from the European Liver and Intestine Transplant Association

Topic 1: Defining high-risk livers

Recommendations

- The term "discard" should be avoided when describing non-utilisation of a deceased donor liver for transplantation **(LoE 4, strong recommendation).**
- The classification of deceased donor liver non-utilisation into different categories should be considered **(LoE 4, conditional recommendation)**:
  - Type 1: Organ offered, not allocated
  - Type 2: Organ allocated, not recovered
    - 2a: DBD graft
    - 2b: DCD graft, without *in situ* normothermic regional perfusion
    - 2c: DCD graft, not recovered after *in situ* normothermic regional perfusion
  - Type 3: Organ recovered, not transplanted
    - 3a: Without *ex situ* machine perfusion
    - 3b: Not transplanted after *ex situ* machine perfusion

Topics 2 & 3: Strategies and criteria for dynamic liver assessment.

The same body of literature was assessed to address strategies and criteria for dynamic liver assessment, and results, statements, and commentary are complementary. For greater ease of reading and understanding, these two topics are presented together.

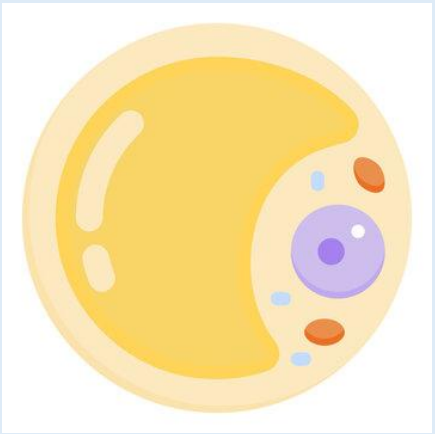
Recommendations

- Optimisation of pre-recovery donor management and the organ recovery process, including donor surgeon experience and donor hepatectomy time, should be considered an important adjunct to any dynamic liver recovery, preservation, and/or assessment strategy **(LoE 2+, strong recommendation [best clinical practice]).**
- The ultimate decision to accept a liver for transplantation should be based on not only donor- and organ-specific factors but also recipient medical and surgical risk factors; waiting list demands and dynamics; and other local or regional factors, such as technological, financial, and human resources and logistical considerations **(LoE 4, strong recommendation [best clinical practice]).**

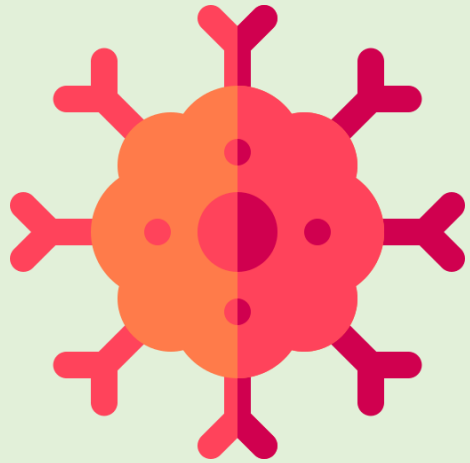
Hessheimer et al, JHEP 2025

Inflammation et immunologie

TH et Obésité



Transplant Oncology



PICO Framework

P	**Patient, problème ou population**
I	**Intervention**
C	**Comparaison, groupe contrôle**
O	***Outcome* (Résultats)**

Inflammation et Immunologie

Research Article
Cirrhosis and Liver Failure

JOURNAL
OF HEPATOLOGY

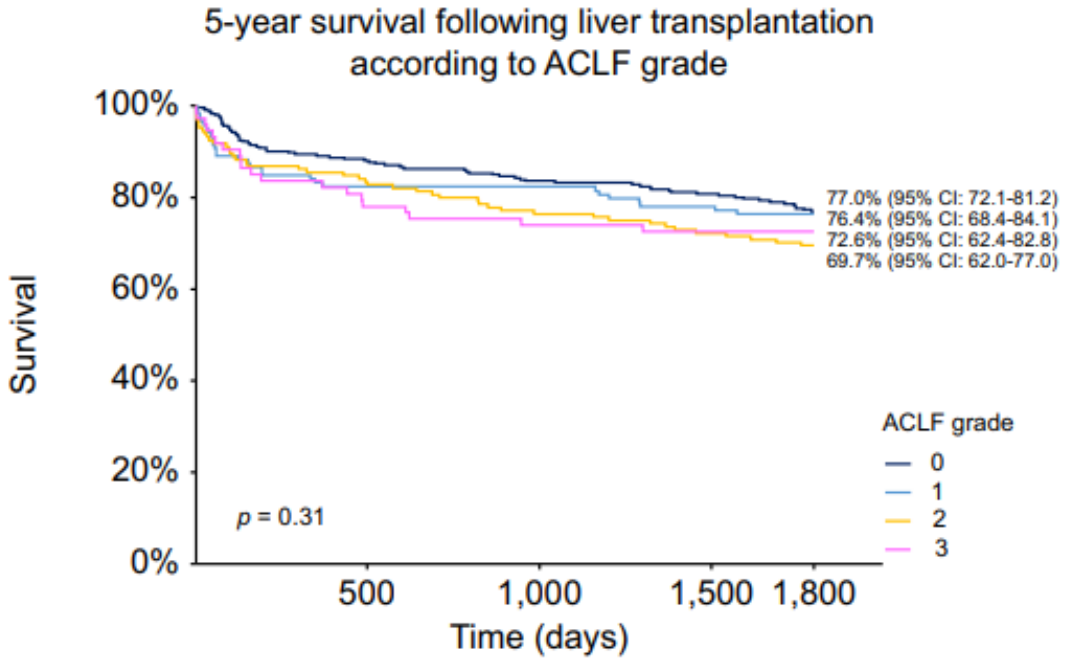
Long-term outcome following liver transplantation of patients with ACLF grade 3

P Survie à 5 et 10 ans après TH de 73 patients ACLF-3

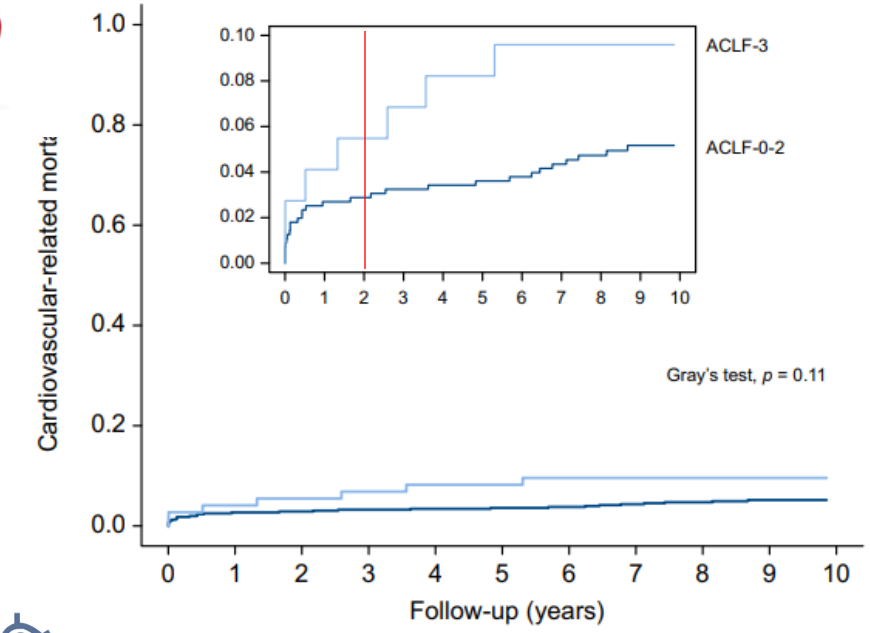
I Etude cas-témoins multicentrique rétrospective – 3 centres de TH français

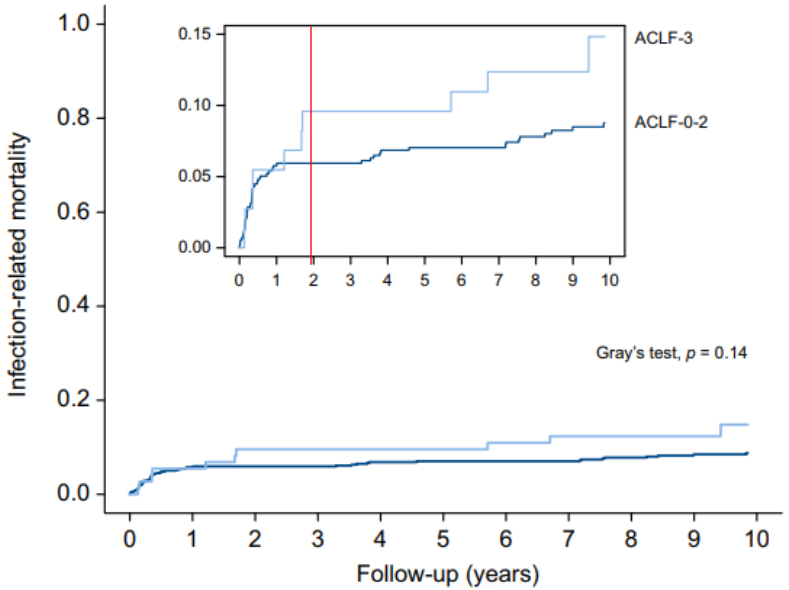
C 1 cas ACLF 3 avec 4 contrôles ACLF 0-2

72,6% survie à 5 ans



< 2ans post-TH





Research Article
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O
- Survie à 5 ans : 72,6% sans différence avec ACLF 0-2
- 90% des décès dans les 2 ans post-TH

Research Article
Cirrhosis and Liver Failure

JOURNAL
OF HEPATOLOGY

Long-term outcome following liver transplantation of patients with ACLF grade 3

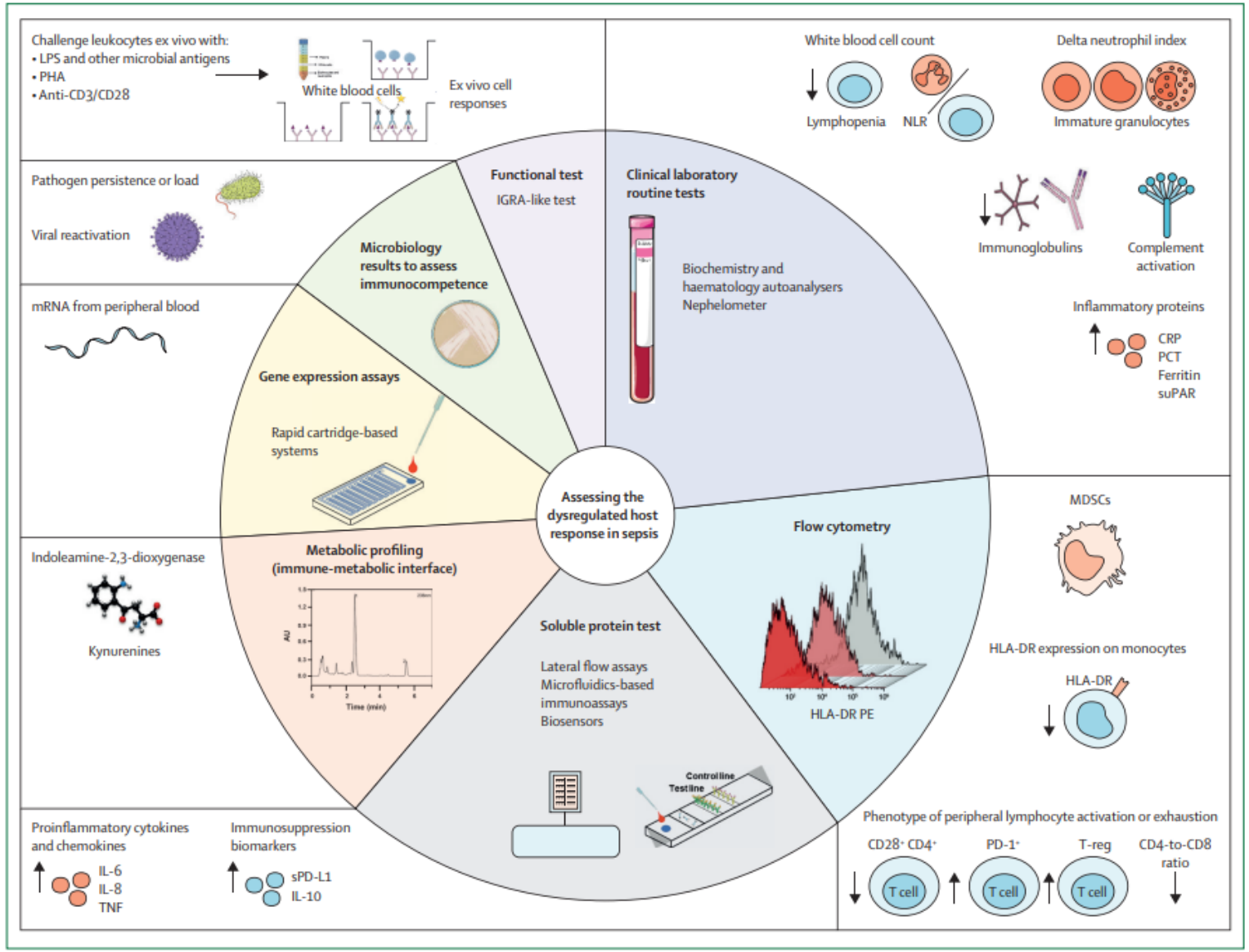
O

- Survie à 5 ans : <u>72,6%</u> sans différence avec ACLF 0-2
- 90% des décès dans les <u>2 ans post-TH</u>

Réduire le taux d'infection

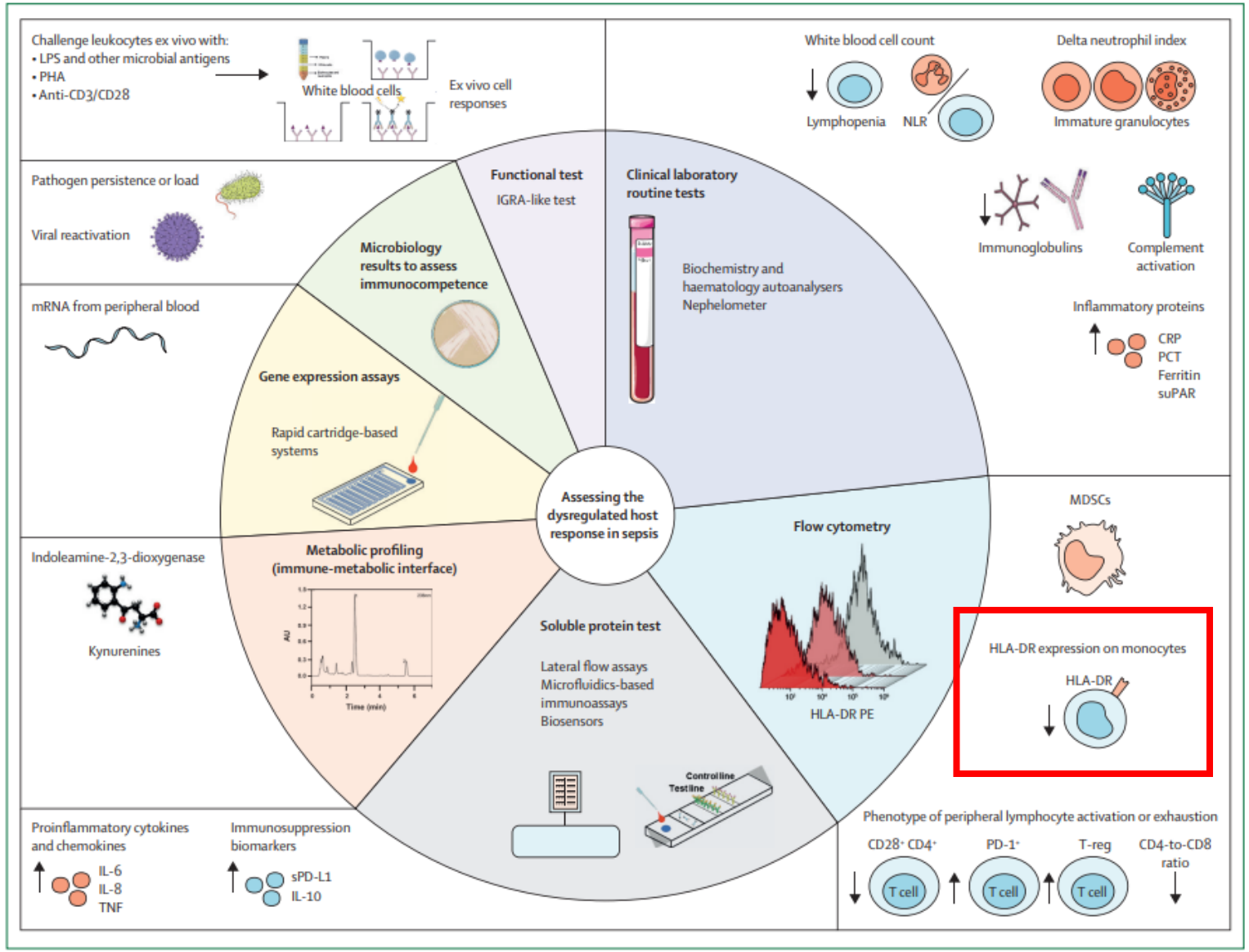
- Immunoanergie des patients ACLF avant et après TH : **<u>prédire</u>**
- Immunosuppresion personnalisé: **<u>prévenir</u>**

Figure 3: Technologies to profile immune status in sepsis



Cajander et al, Lancet Resp Med 2024

Figure 3: Technologies to profile immune status in sepsis



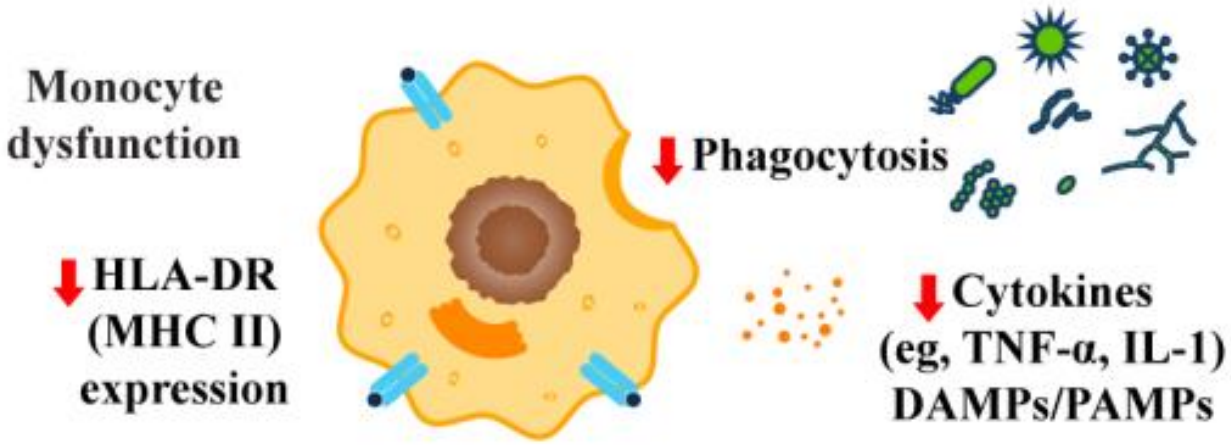
Cajander et al, Lancet Resp Med 2024

Delignette *et al. Critical Care* (2025) 29:79
https://doi.org/10.1186/s13054-025-05305-x

Critical Care

RESEARCH Open Access

Individual mHLA-DR trajectories in the ICU as predictors of early infections following liver transplantation: a prospective observational study



Delignette et al, Crit Care, 2025
Joshi et al, Front Immuno 2023

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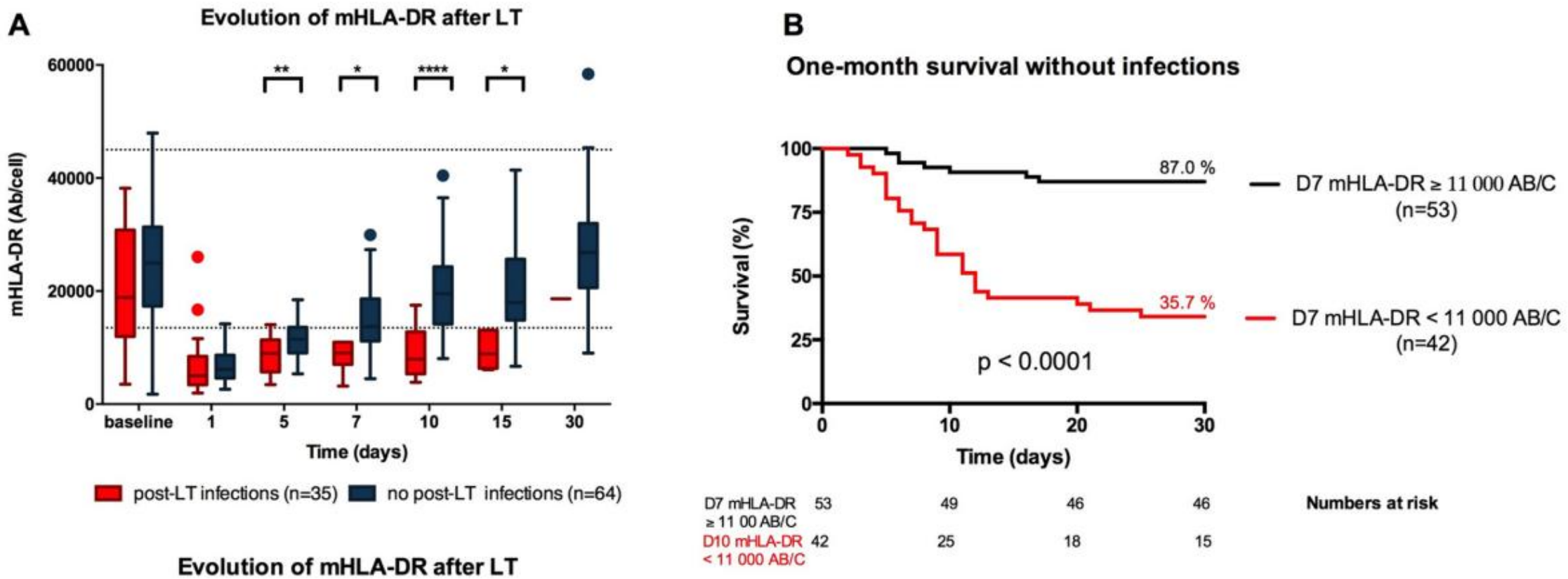

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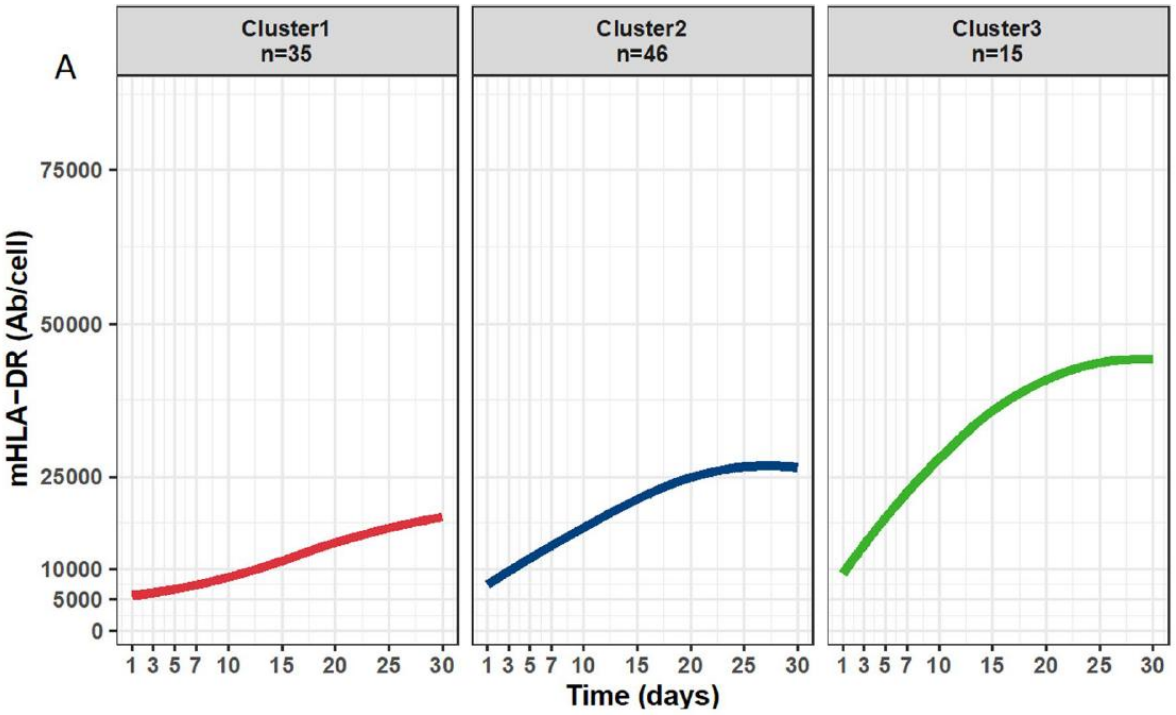
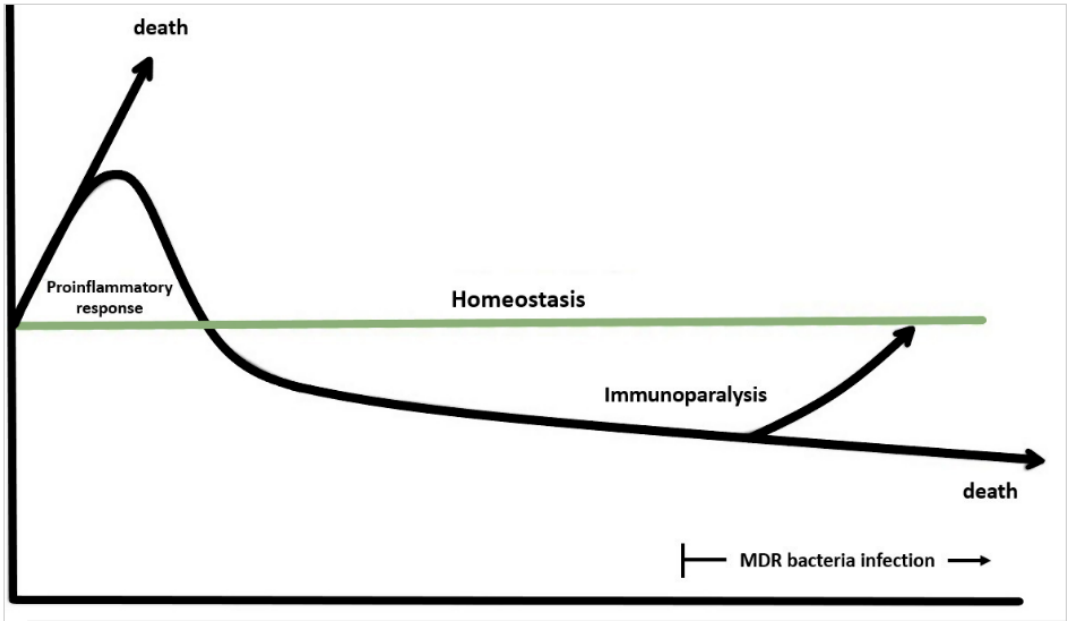
Immunoparalysie prolongée





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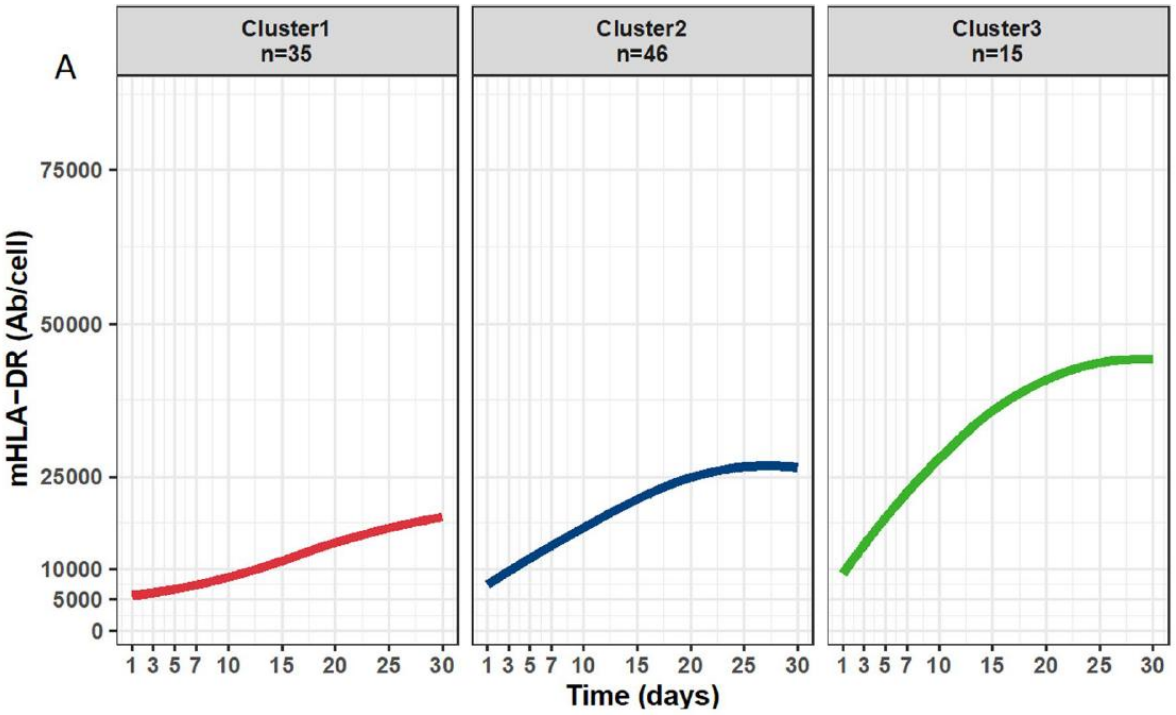

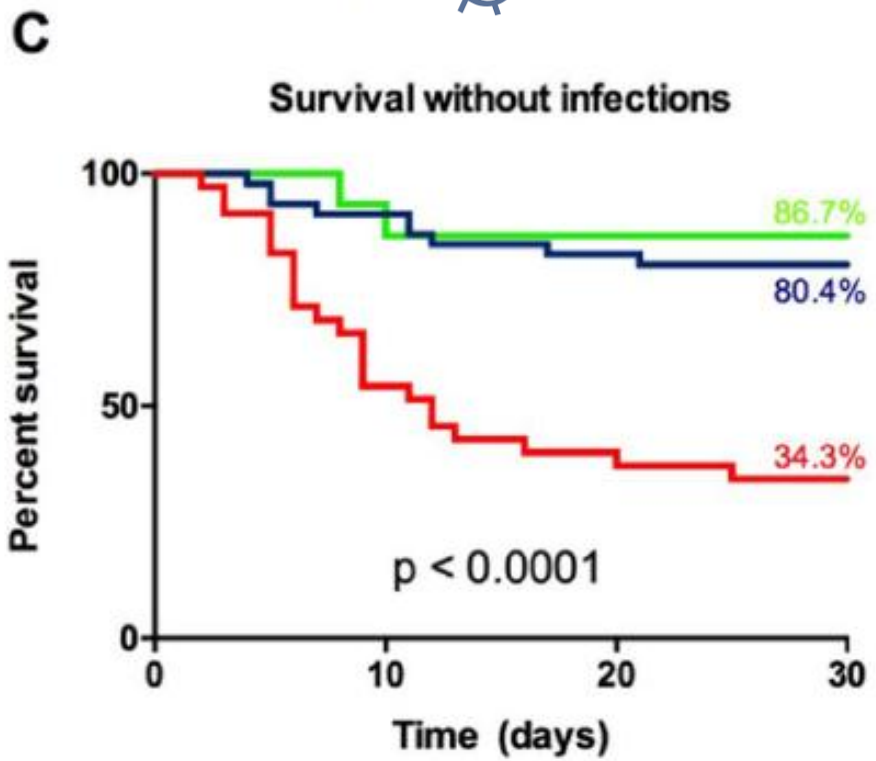

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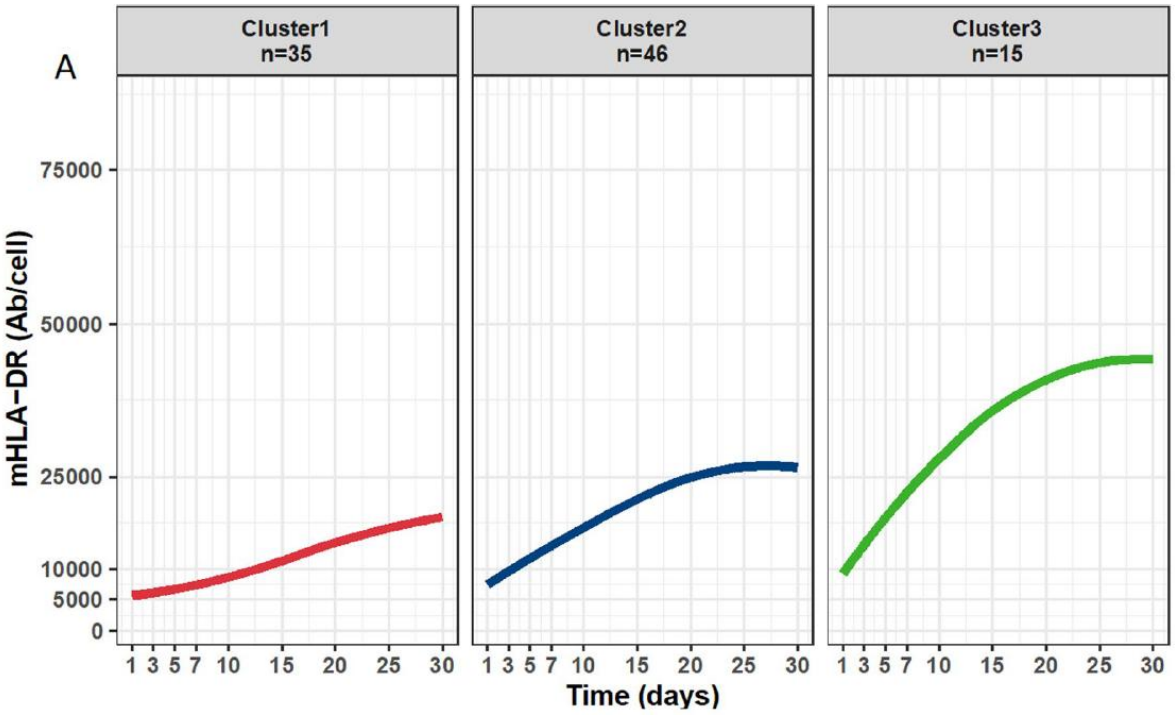
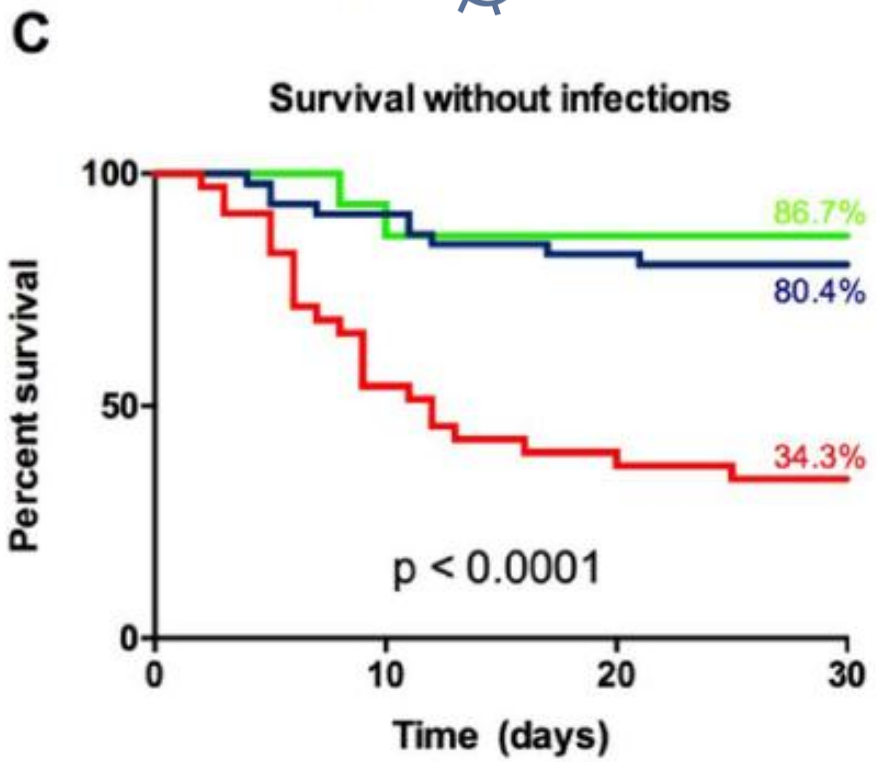
Immuno-monitoring

Immunoparalysie prolongée





Delignette et al, Crit Care, 2025

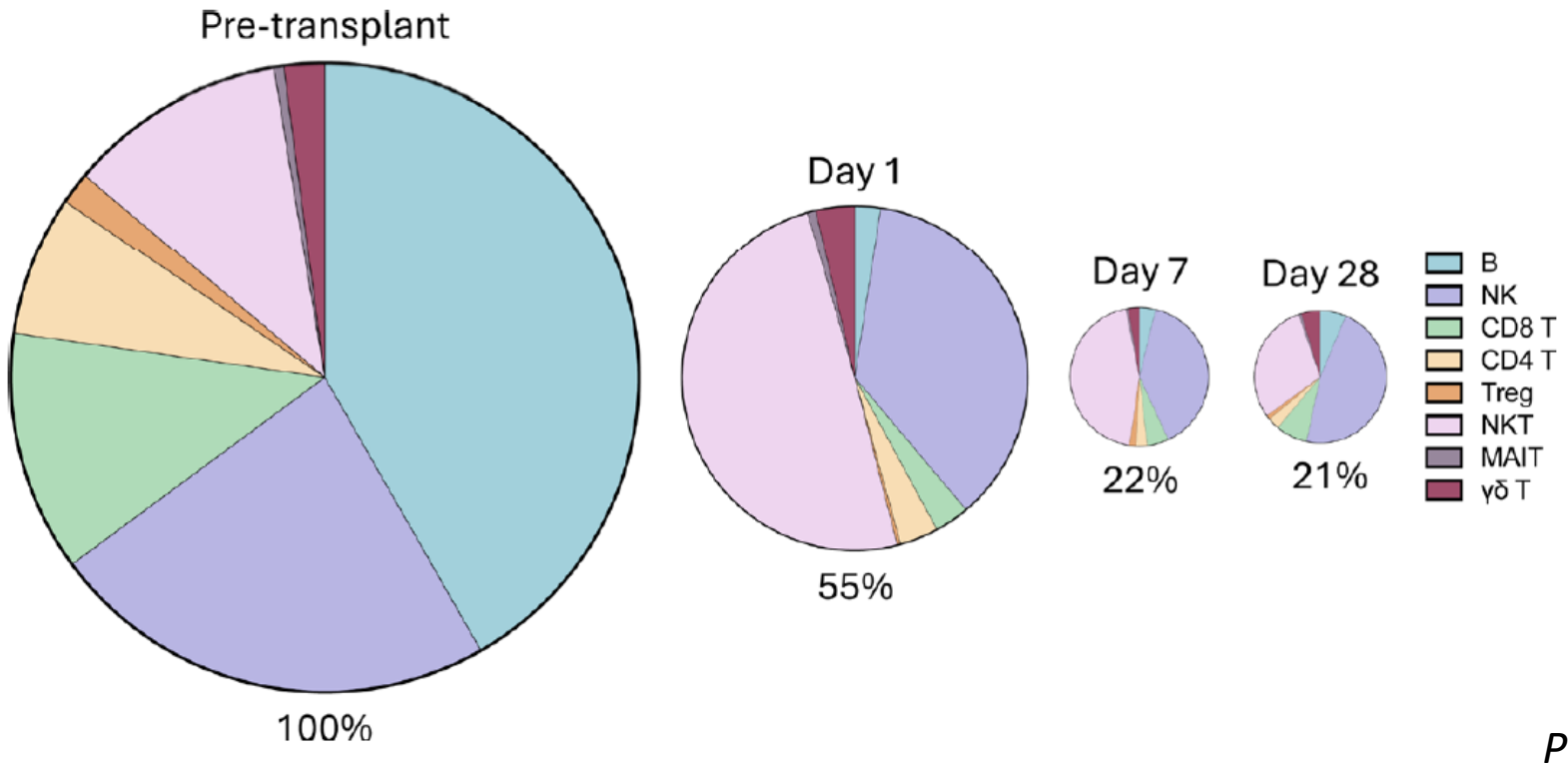
TH et Obésité

Review

Understanding Liver Transplantation Outcomes Through the Lens of Its Tissue-resident Immunobiome

Amy C. Prosser, PhD,[1] Paul Klenerman, FMedSci,[2,3,4] and Michaela Lucas, MD, FRACP, FRCPA[1,5,6,7]

Changement dynamique de l'immunobiome post-TH

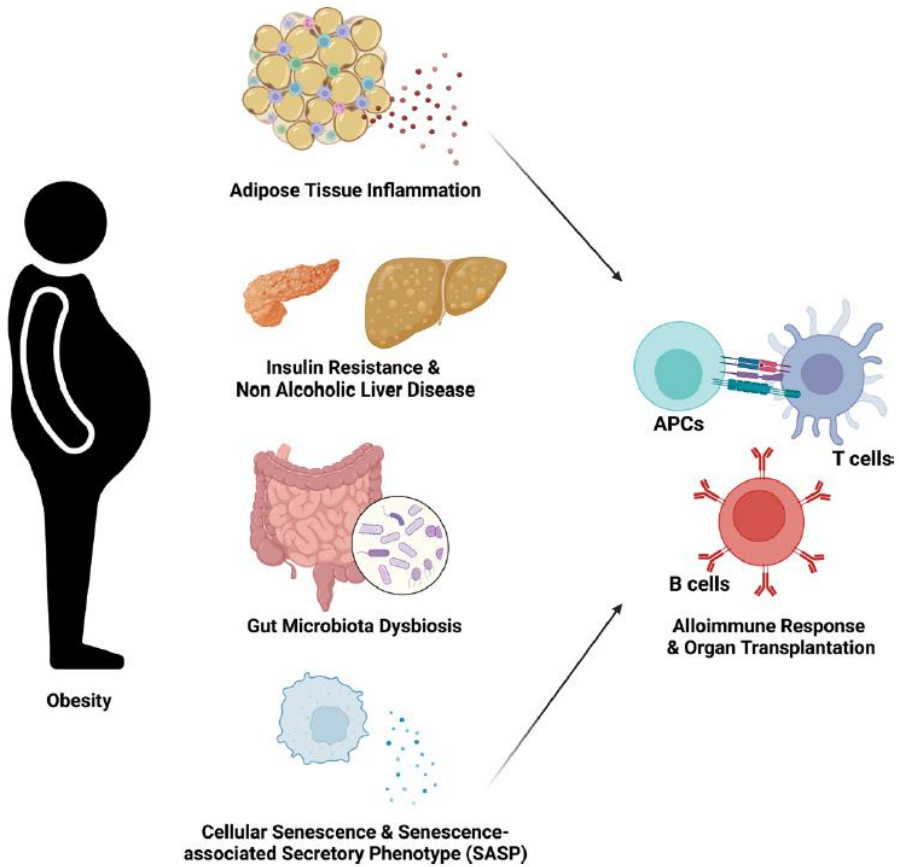


Prosser et al, Transpl 2025

Review

Obesity-associated Inflammation and Alloimmunity

Hao Zhou, MD, PhD,[1] Merih Gizlenci, MD Candidate,[1,2] Yao Xiao, MD,[1] Friederike Martin, MD,[1,3] Keita Nakamori, MD,[1,4] Elizabeth M. Zicari, BSc,[1,5] Yuko Sato, PhD,[1] and Stefan G. Tullius, MD, PhD[1]



Zhou et al, Transplantation 2025

Review

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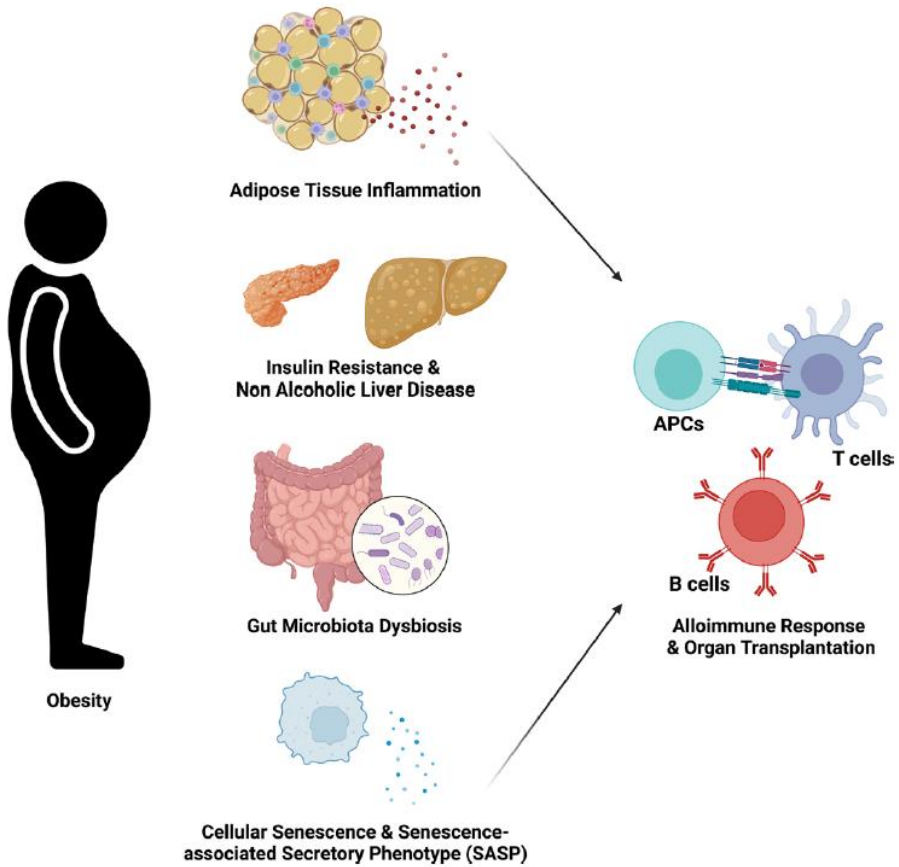

centers. This approach raises a critical question: should BMI be used as the sole parameter to evaluate transplant eligibility for patients with obesity, and if so, what will be

Zhou et al, Transplantation 2025

Research Article
Liver Transplantation

JOURNAL
OF HEPATOLOGY

Simultaneous liver transplant and sleeve gastrectomy provides durable weight loss, improves metabolic syndrome and reduces allograft steatosis

P **Résultats après combination *Sleeve* +TH chez BMI >35 (*n=72, BMI médian 44*)**

I **Etude cas-témoins multicentrique rétrospective**

C **TH pour BMI>30 et MASLD (*n=185*)**

Larson et al, JHEP 2025

Research Article
Liver Transplantation

JOURNAL
OF HEPATOLOGY

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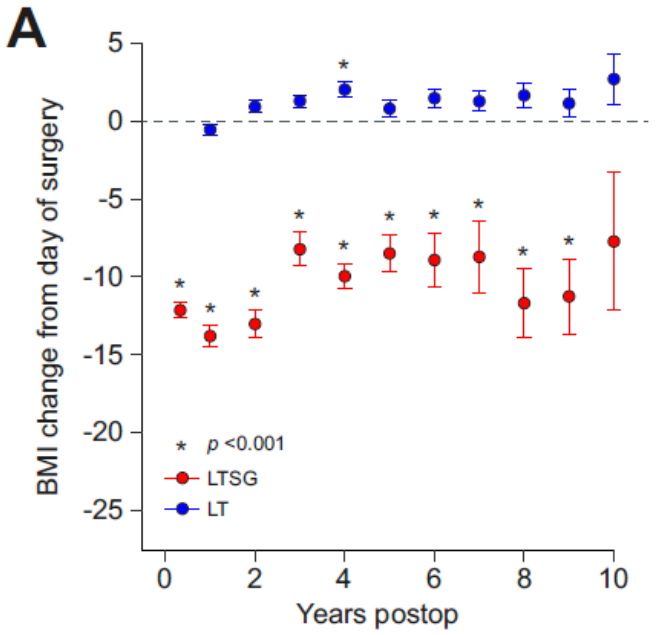
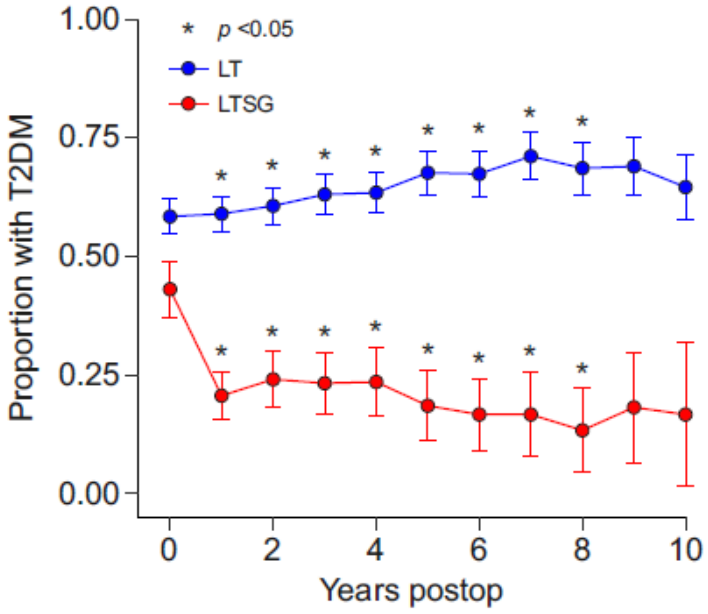
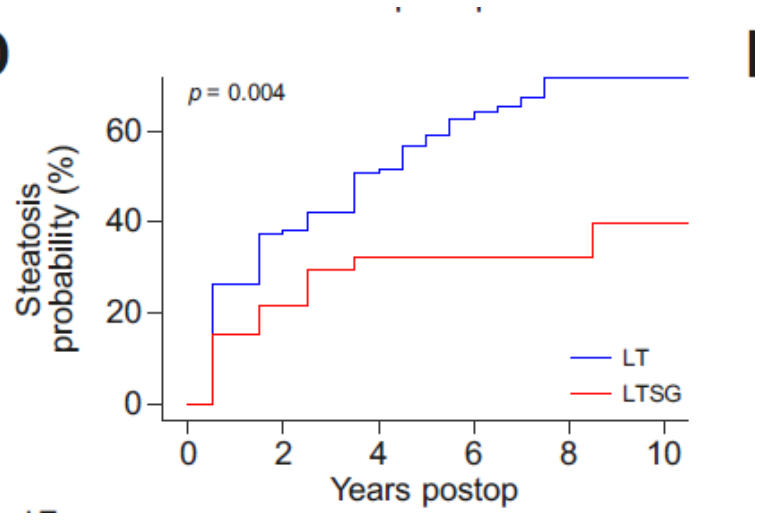
Réduction du BMI



Réduction du DII



Réduction du risque de stéatose du greffon



Larson et al, JHEP 2025

Research Article
Liver Transplantation

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OF HEPATOLOGY

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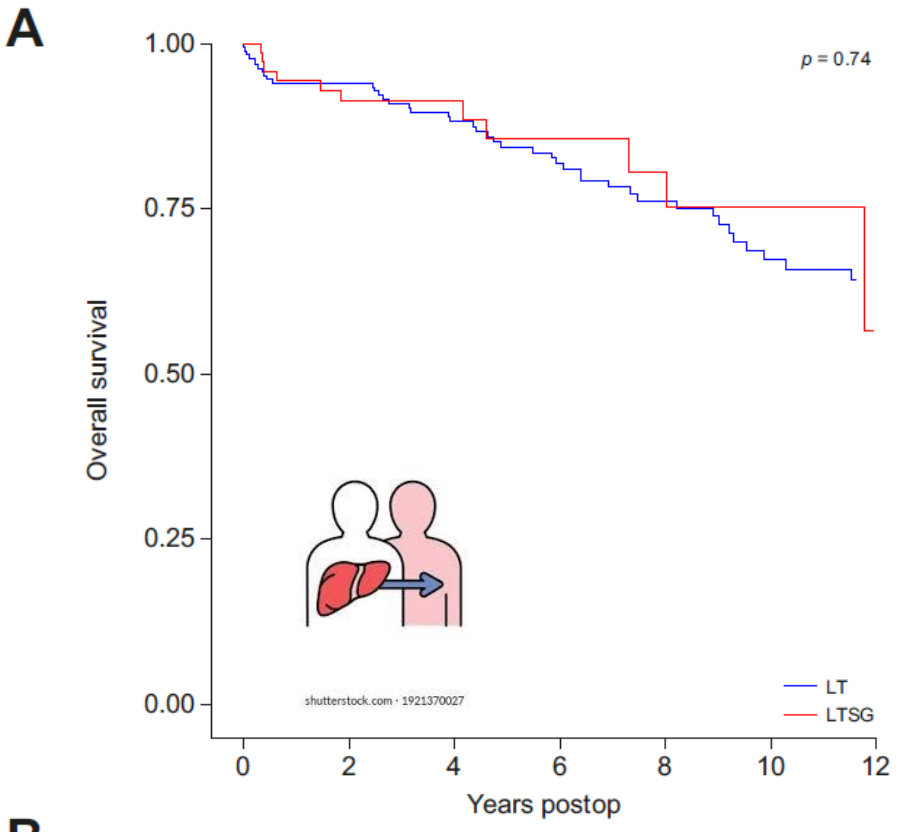
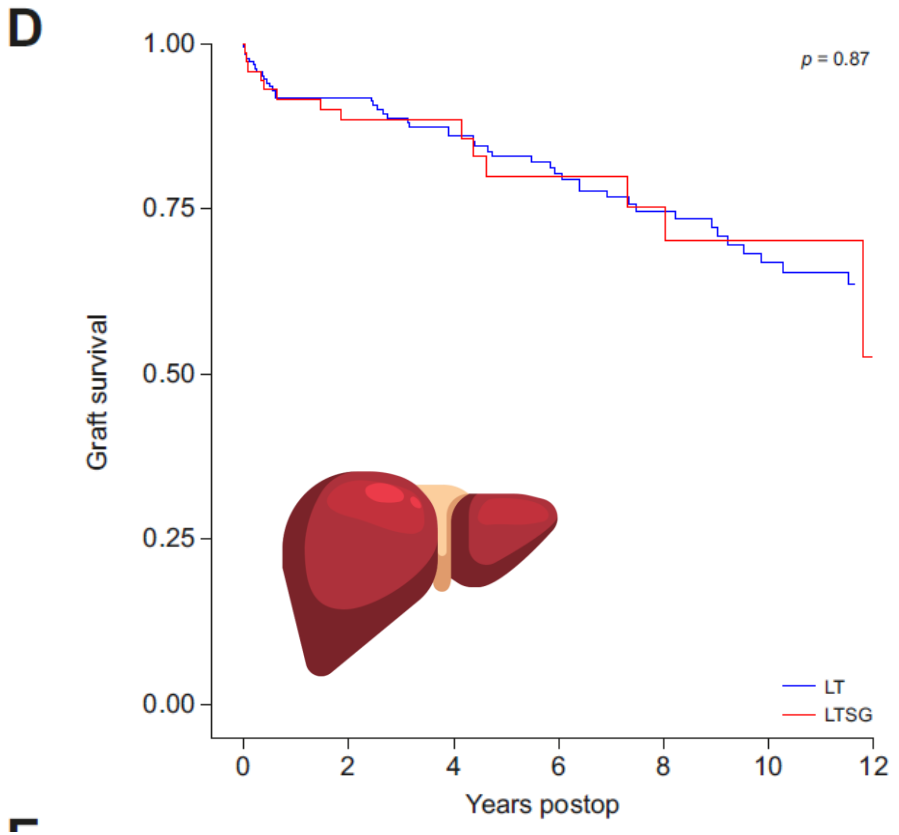
Pas d'impact négatif sur la survie





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I **Etude cas-témoins multicentrique rétrospective**

C **TH pour BMI>30 et MASLD (*n=185*)**

O **Réduction des complications métaboliques post-TH**

Larson et al, JHEP 2025

Editorial

JOURNAL
OF HEPATOLOGY

To sleeve or not to sleeve: Validation of liver transplantation with sleeve gastrectomy

Linda W. Moore[1,2,3], Elizabeth W. Brombosz[2], R. Mark Ghobrial[1,2,3,*]

Recommendation EASL 2025

Sleeve gastrectomy should be proposed as the technique of choice in selected patients with obesity with well-compensated cirrhosis, or in the setting of LT **(LoE 3, strong recommendation).** 97%

Safety and efficacy of simultaneous liver transplantation and sleeve gastrectomy in morbid obese patients with end-stage liver disease: The LT-SG study

P ***Sleeve* +TH chez BMI >30 (*n=11*, *BMI médian 42*)**

I **Etude monocentrique rétrospective**

C **Descriptif**

Manzia et al, liver Transpl 2025

Safety and efficacy of simultaneous liver transplantation and sleeve gastrectomy in morbid obese patients with end-stage liver disease: The LT-SG study

P — ***Sleeve* +TH chez BMI >30 (*n=11, BMI médian 42*)**

I — **Etude monocentrique rétrospective**

C — **Descriptif**

O — **Survie à 90 jour < 60%**

Facteurs de risque: >60 years, BMI >45, metabolic syndrome, MELD >25 or DRI >1.6

Manzia et al, liver Transpl 2025

Letter to the Editor

Liver transplantation and bariatric surgery: Is sleeve gastrectomy really the panacea?

- **Rôle des agonistes *du glucagon-like peptide-1* en TH?**
- **Est-ce que la *Sleeve* est vraiment la bonne intervention?**
- **Sélection des receveurs +++**

Sensi et al, AJT 2025

Received: 9 April 2024 | Accepted: 6 August 2024
DOI: 10.1097/LVT.0000000000000455

PERSPECTIVE

A tale of 2 diseases: ALD and MASLD requirements and monitoring for liver transplantation

Benjamin L. Robinson[1] | Camelia Ciobanu[1] | Robert S. Brown Jr.[2] | Mark W. Russo[1]

MASLD demonstrate that centers may be holding patients with ALD accountable for their alcohol use but not holding patients with MASLD accountable to the same degree for their weight or metabolic disease control. Two groups of patients with ALD considered for

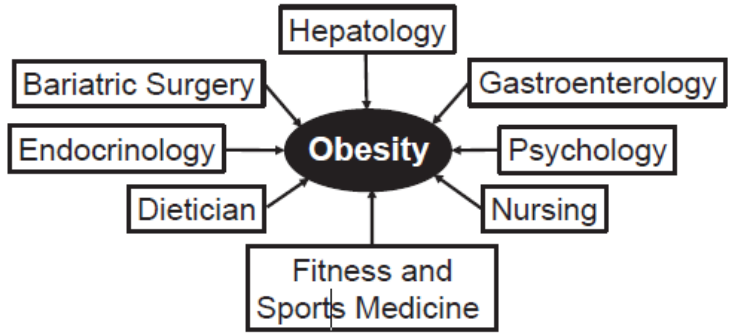
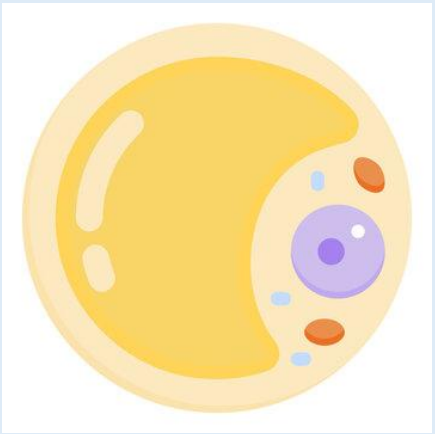
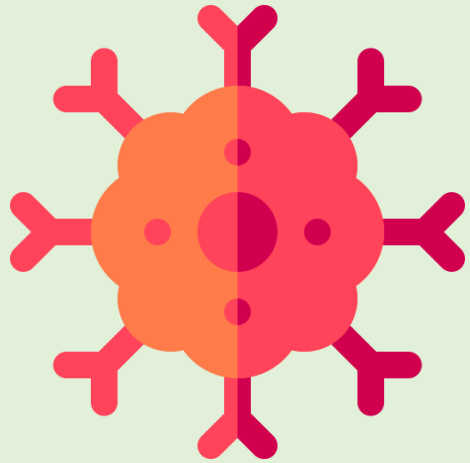


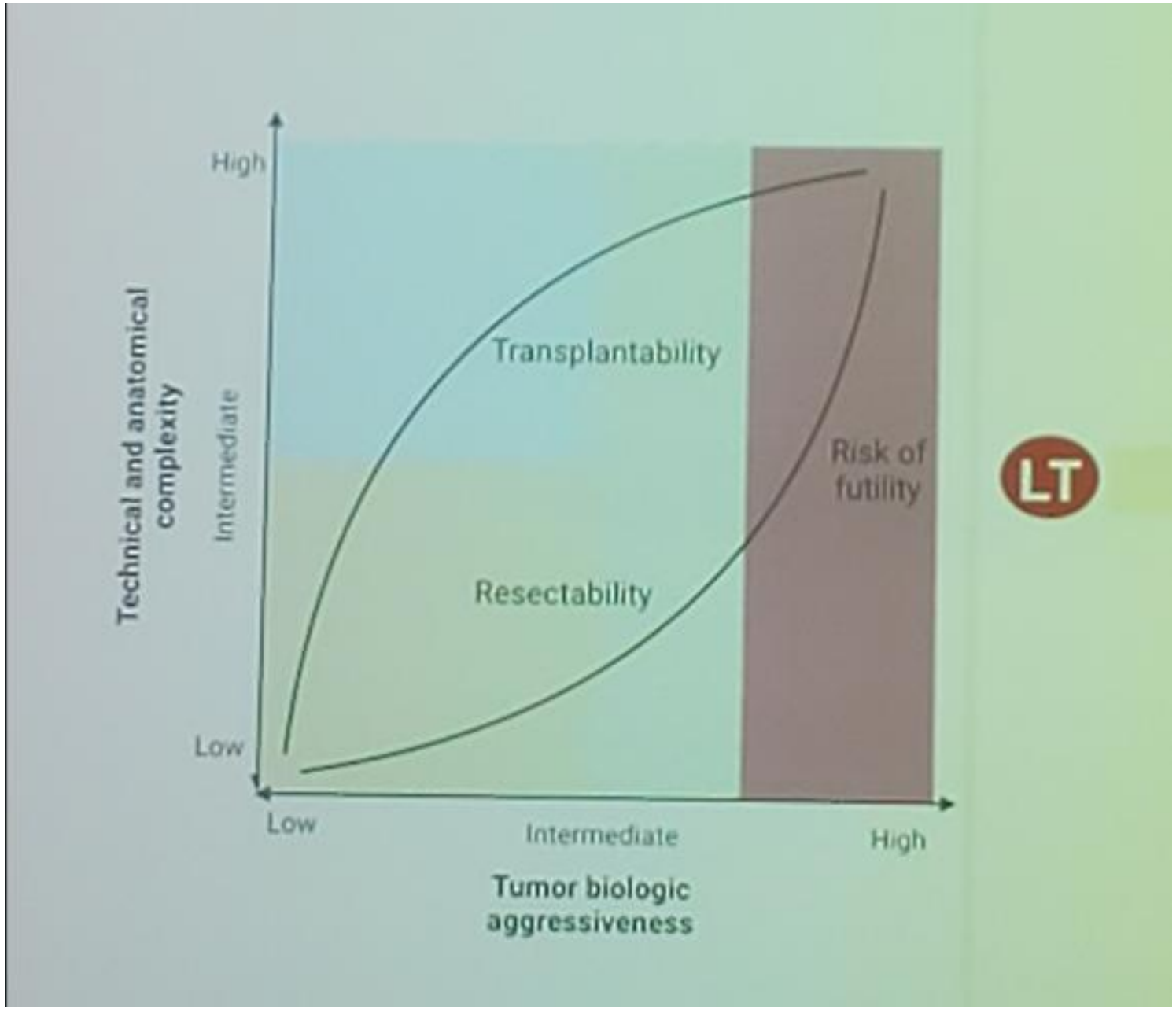
FIG. 1. The multidisciplinary obesity team.

Robinson et al, Liver Transpl 2024



Transplant Oncology



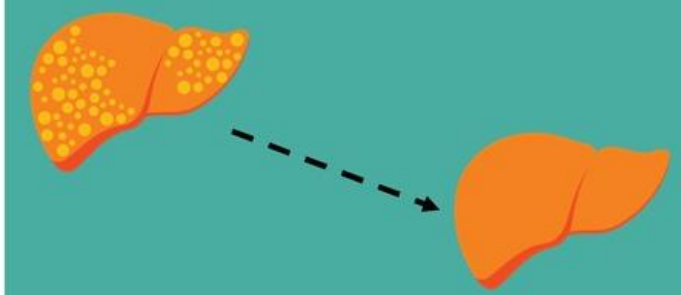


Mazzaferro, EHPBA 2025

Liver transplantation for primary and secondary liver tumors: Patient-level meta-analyses compared to UNOS conventional indications

Transplant Oncology Indications

4 patient-level meta-analyses



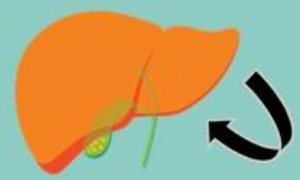
CRLM (103 patients)	NET (494 patients)
Hilar CC (721 patients)	Intrahepatic CC (345 patients)

VERSUS

Conventional Indications

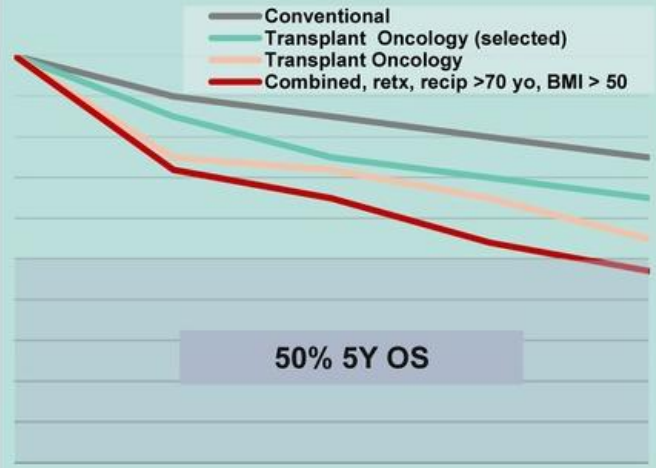
UNOS database

112.014 patients



HCV	HBV	ETOH	PBC	PSC
AIH	NAFLD	BMI>40	BMI>50	MELD 30-40
MELD >40	ALF	COMB	REC >70yo	REDO urgent
	REDO elective	3rd REDO	4thREDO	

Results



+ Selection Criteria

SECA-2 → CRLM
Mayo → phCC
Milan → NET

ORIGINAL ARTICLE

Two-stage Hepatectomy Versus Liver Transplantation for Patients with Marginally Resectable Extensive Bilobar Colorectal Liver Metastases

P MCCR TRANSMET study n= 16

I Etude monocentrique rétrospective, Propensity Score Matching

C TSH/ALPPS n= 42

Allard et al, AoS 2025

ORIGINAL ARTICLE

Two-stage Hepatectomy Versus Liver Transplantation for Patients with Marginally Resectable Extensive Bilobar Colorectal Liver Metastases

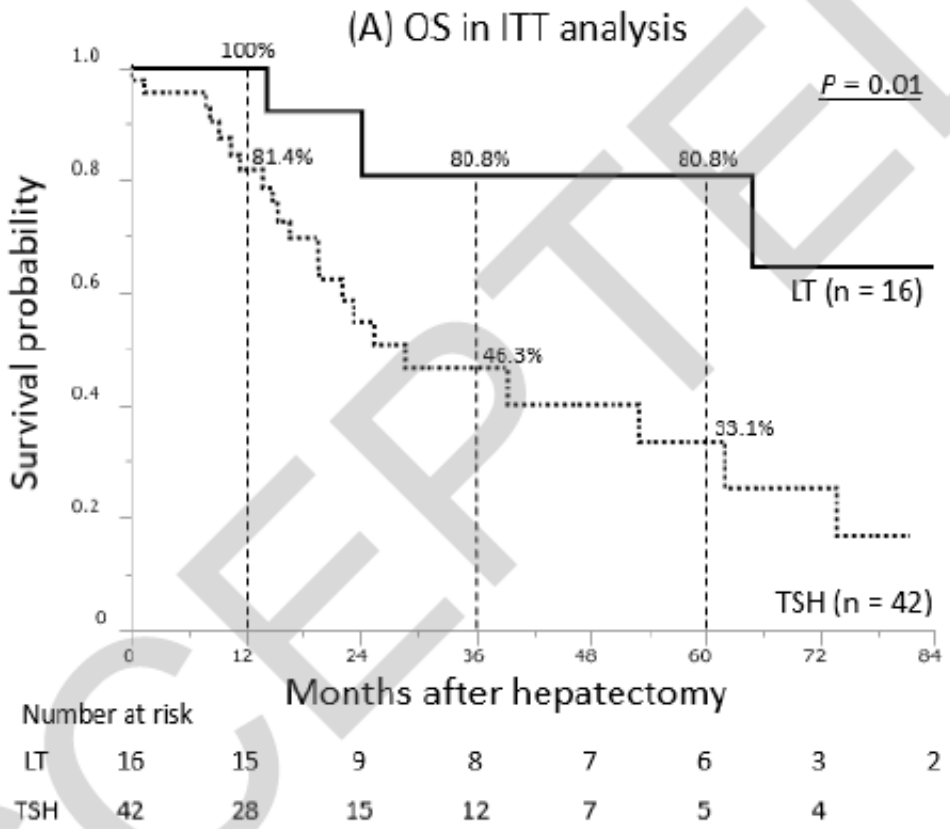
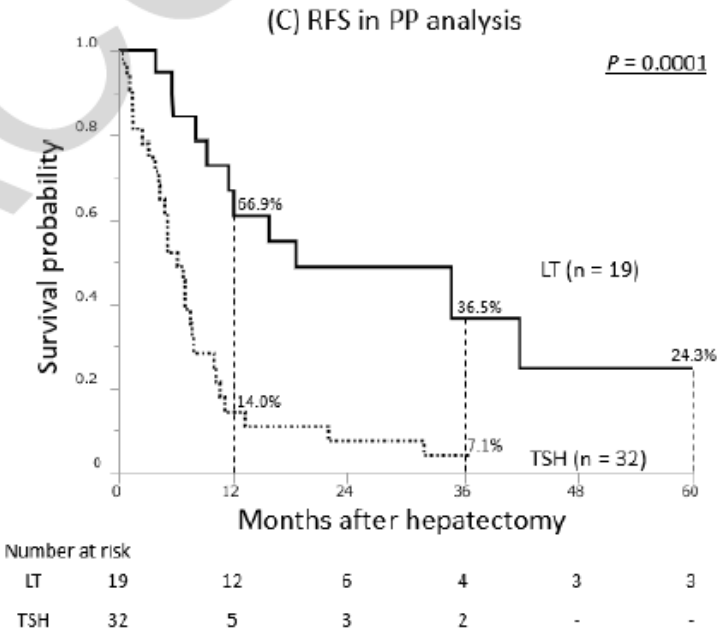


Figure 2. Survival curve of OS in ITT (n = 58), OS, RFS, and TSF in PP analysis (n = 51)



Allard et al, AoS 2025

ORIGINAL ARTICLE

Two-stage Hepatectomy Versus Liver Transplantation for Patients with Marginally Resectable Extensive Bilobar Colorectal Liver Metastases

P MCCR TRANSMET study n= 16

I Etude monocentrique rétrospective, Propensity Score Matching

C TSH/ALPPS n= 42 (10-15 MCCR par patient)

O TH : meilleure OS (ITT et PP), TFS et RFS
TH facteur indépendant d'une meilleure OS

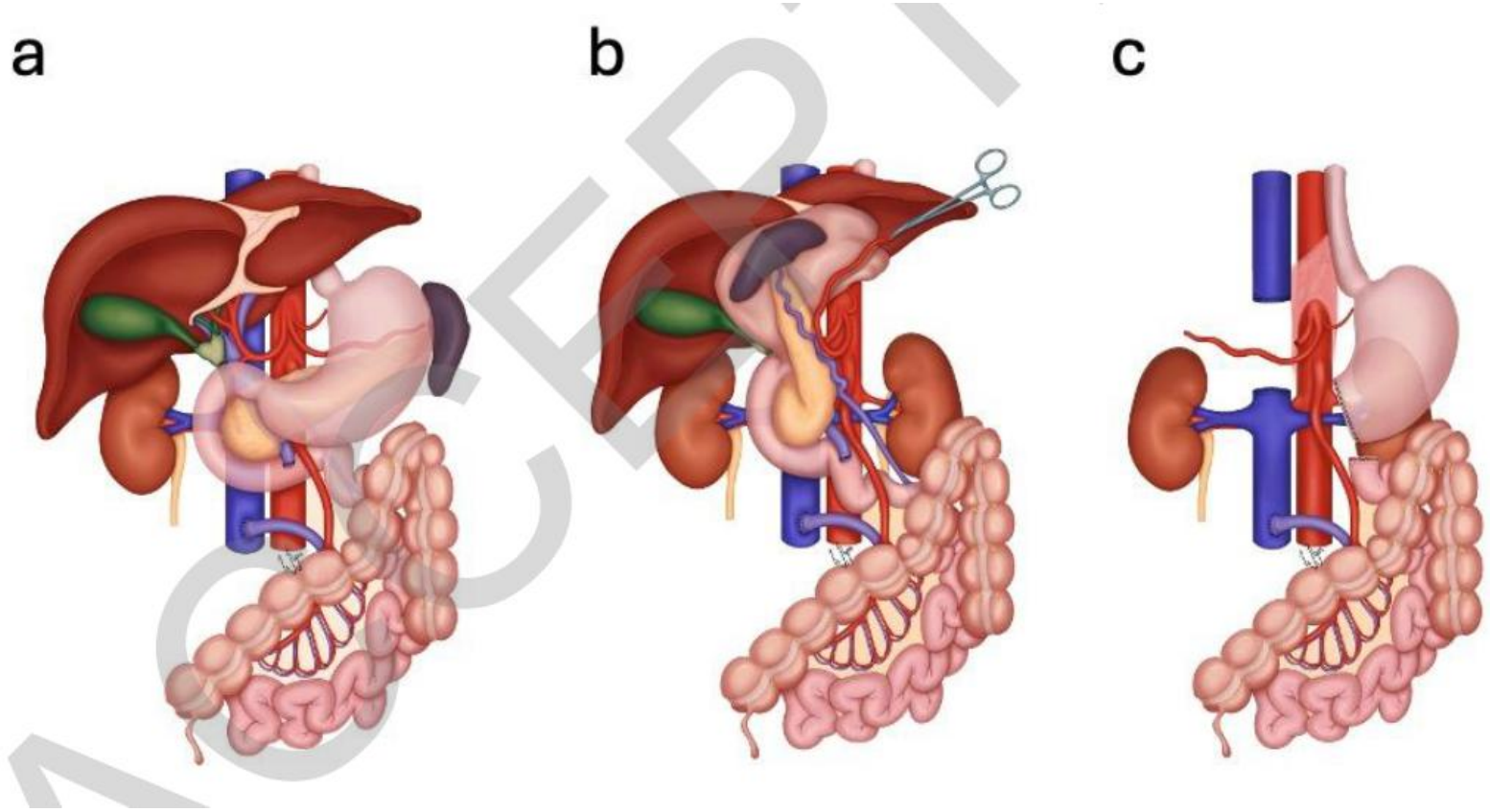
Allard et al, AoS 2025

SURGICAL PERSPECTIVES

A Novel Transplant Approach for Locally Advanced Unresectable Perihilar Cholangiocarcinoma

The SURE-LT Concept

SUperior **R**ight **E**xenteration and **L**iver **T**ransplantation



Line et al, AoS 2025

Review

Live Donor Liver Transplantation for Oncologic Indications

Matthew M. Byrne, MD,[1] Mariana Chávez-Villa, MD,[2] Yutaka Endo, MD, PhD,[3] Cristina Jimenez-Soto, MD,[3] Luke Cybulski, MD,[1] Luis I. Ruffolo, MD,[1] Roberto Hernandez-Alejandro, MD,[3] and Koji Tomiyama, MD, PhD[3]

Byrne et al, Transplantation 2025

ORIGINAL ARTICLES

Fully Robotic Left Lobe Donor Hepatectomy Is Safer Compared to Open

P Donneur vivant foie gauche

I n=267 abord robot

C n=72 abord ouvert

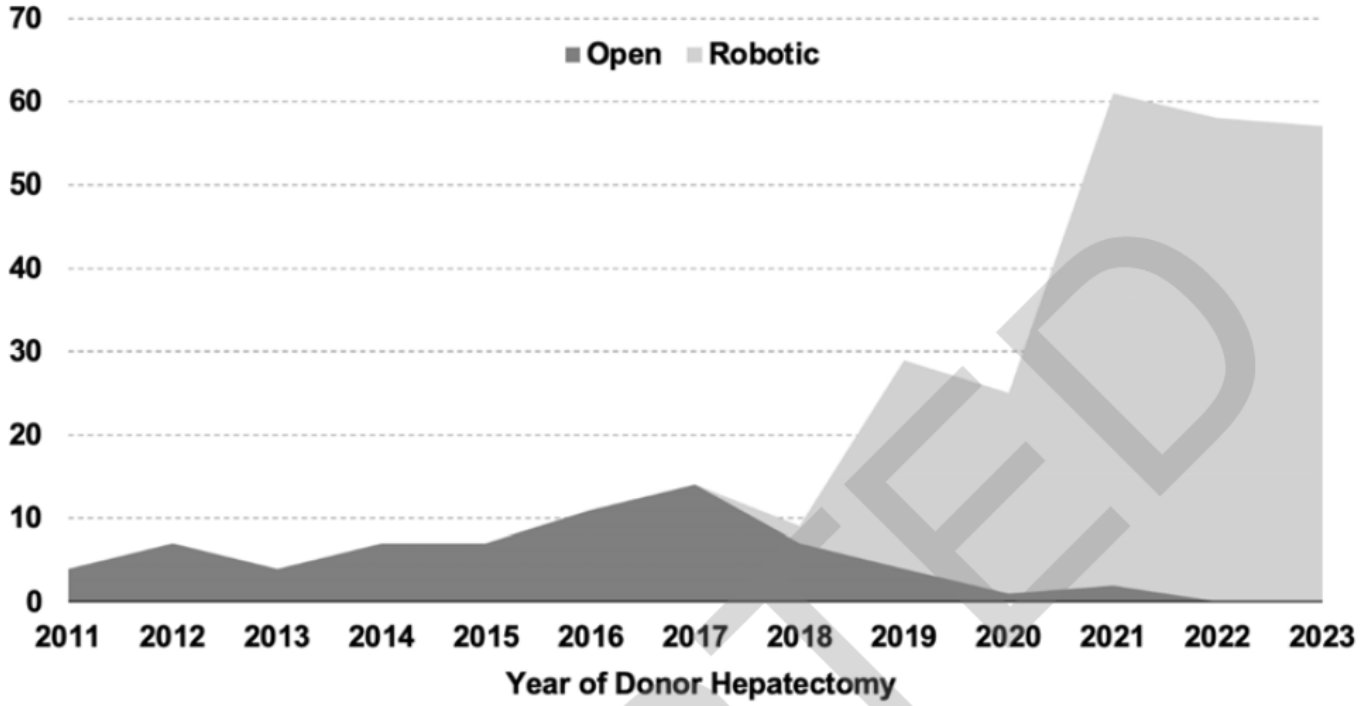
O **Morbidité donneur 6% vs. 18% (p=0.003)**
Complications biliaires et pleurésie

Broering et al, AoS 2025

ORIGINAL ARTICLES

Fully Robotic Left Lobe Donor Hepatectomy Is Safer Compared to Open

Figure 2. Left donor hepatectomy surgical approach annually



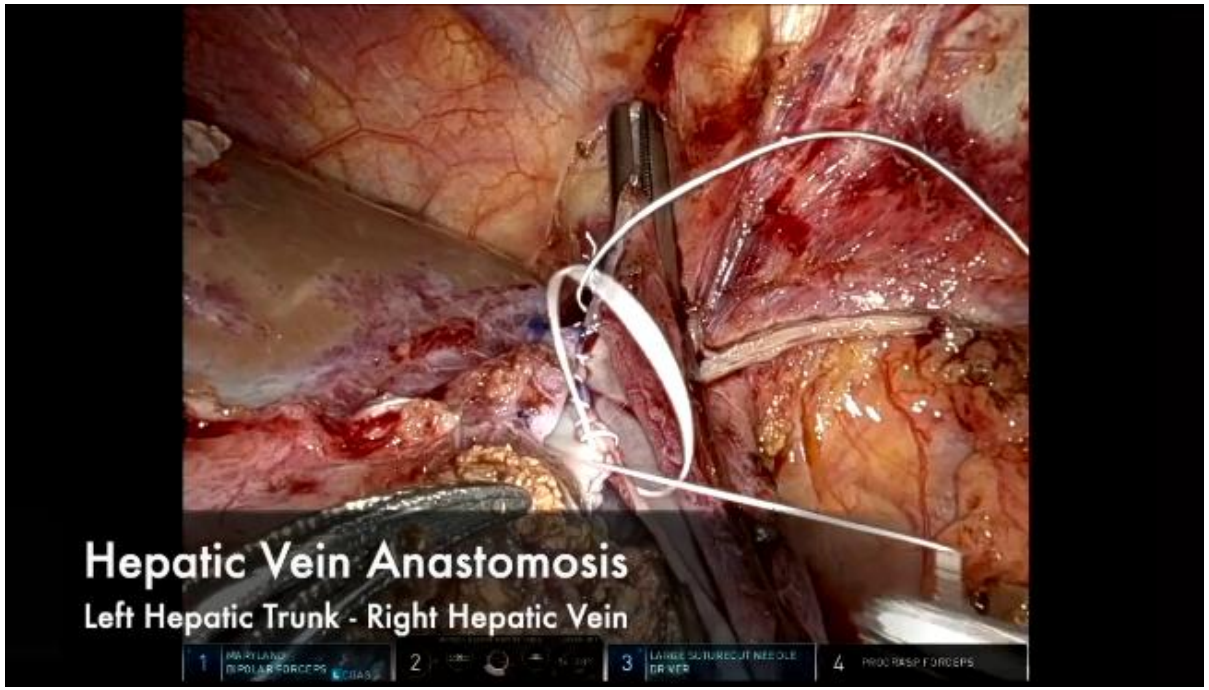
Broering et al, AoS 2025

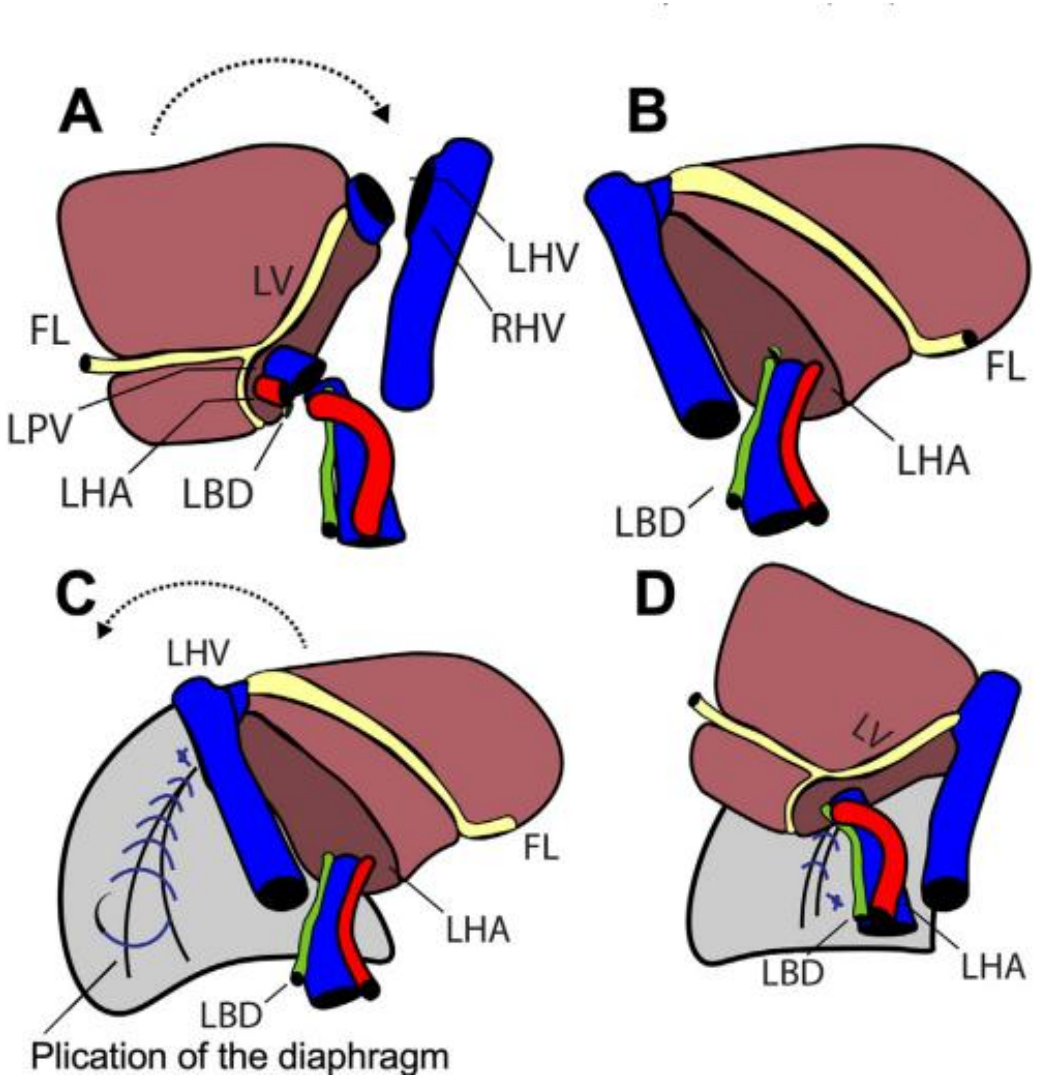
Case Report

Fully robotic recipient left graft living donor liver transplantation

Dieter C. Broering *, Dimitri A. Raptis, Yasser Elsheikh

Organ Transplant Center of Excellence, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia



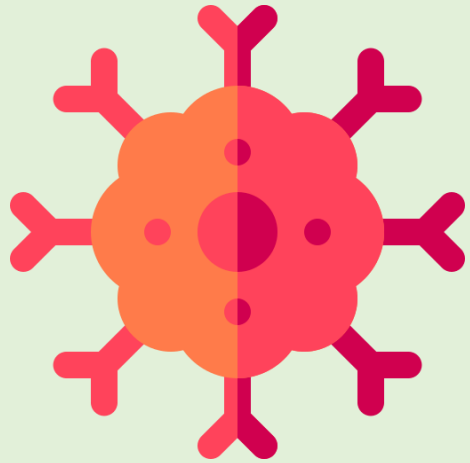


Broering et al, AJT 2025

Inflammation et Immunologie

TH et Obésité

Transplant Oncology



MERCI

Xavier Muller

xavier.muller@chu-lyon.fr

HCL
HOSPICES CIVILS
DE LYON

UNIVERSITÉ DE LYON
Université Claude Bernard Lyon 1

INSTITUT
D'HÉPATOLOGIE
DE LYON