



**HAL**  
open science

## Alcohol rehabilitation after alcoholic hepatitis is associated with reduced mortality: results of a 2012-2021 National retrospective study

Vincent Mallet, Eric Nguyen-Khac, L. Parlati, S. Bouam, A. Courtois, A. Louvet, Ingrid Marcq, Olivier Ganry, S. Pol, P. Sogni

### ► To cite this version:

Vincent Mallet, Eric Nguyen-Khac, L. Parlati, S. Bouam, A. Courtois, et al.. Alcohol rehabilitation after alcoholic hepatitis is associated with reduced mortality: results of a 2012-2021 National retrospective study. EASL Congress, Jun 2023, Vienne (AUT), Austria. Journal of Hepatology, 78 (Suppl. 1), pp.S161-S162, 2023, 10.3252/pso.eu.EASLCONGRESS.2023 . hal-04265863

**HAL Id: hal-04265863**

**<https://u-picardie.hal.science/hal-04265863v1>**

Submitted on 3 Nov 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# Alcohol rehabilitation after alcoholic hepatitis is associated with reduced mortality: results of a 2012-2021 National retrospective study

V Mallet,<sup>1,2</sup> E Nguyen Khac,<sup>3,4</sup> L Parlati,<sup>1,2,5</sup> S Bouam,<sup>6</sup> A Courtois,<sup>4</sup> A Louvet,<sup>7</sup> I Marcq,<sup>4</sup> O Ganry,<sup>8</sup> S Pol,<sup>1,2</sup> P Sogni,<sup>1,2</sup>

1. AP-HP. Centre, Groupe Hospitalier Cochin Port Royal, DMU Cancérologie et spécialités médico-chirurgicales, Service d'Hépatologie, Paris, France
2. Université Paris Cité, F-75006, Paris, France
3. Service d'Hépatogastro-Entérologie, CHU Amiens, Amiens 80054 Cedex
4. INSERM 1247 GRAP, CURS CHU Amiens site sud, Amiens 80054 Cedex
5. Institut Cochin, Université Paris Cité, CNRS, INSERM, F-75014 Paris, France
6. AP-HP. Centre, Groupe Hospitalier Cochin Port Royal, DMU PRIME, Unité d'Information Médicale, Paris, France
7. Service des maladies de l'appareil digestif, hôpital Claude-Huriez, Lille
8. Service de Santé Publique, CHU Amiens, Amiens 80054 Cedex

**Take home message:**  
**Rehab is the most critical intervention to improve outcome of patients after severe alcoholic hepatitis**

1

## Introduction

- The impact of alcohol rehabilitation programs following severe alcoholic hepatitis remains understudied, with limited available knowledge on this topic.

2

## Aim

- The objective of the study was to assess the outcome of liver transplantation or death within one year after severe alcoholic hepatitis
- The main exposure was participation in alcohol rehabilitation programs within one to 12 months following the diagnosis of severe alcoholic hepatitis

3

## Method

- We conducted a retrospective longitudinal study involving patients diagnosed with alcohol use disorders in French hospitals from 2012 to 2021 (N=1,438,236).
- We selected individuals recorded with hepatic failure, portal hypertension bleeding, extrahepatic organ failure or transjugular liver biopsy within 8 weeks following the diagnosis of alcoholic hepatitis
- We measured the strength of associations with multivariate Cox models stratified on age, sex, initial severity of illness, bacterial and fungal sepsis, major comorbidities, and deprivation in the complete population and in matched patients (Matchit package, exact method)

4

## Results

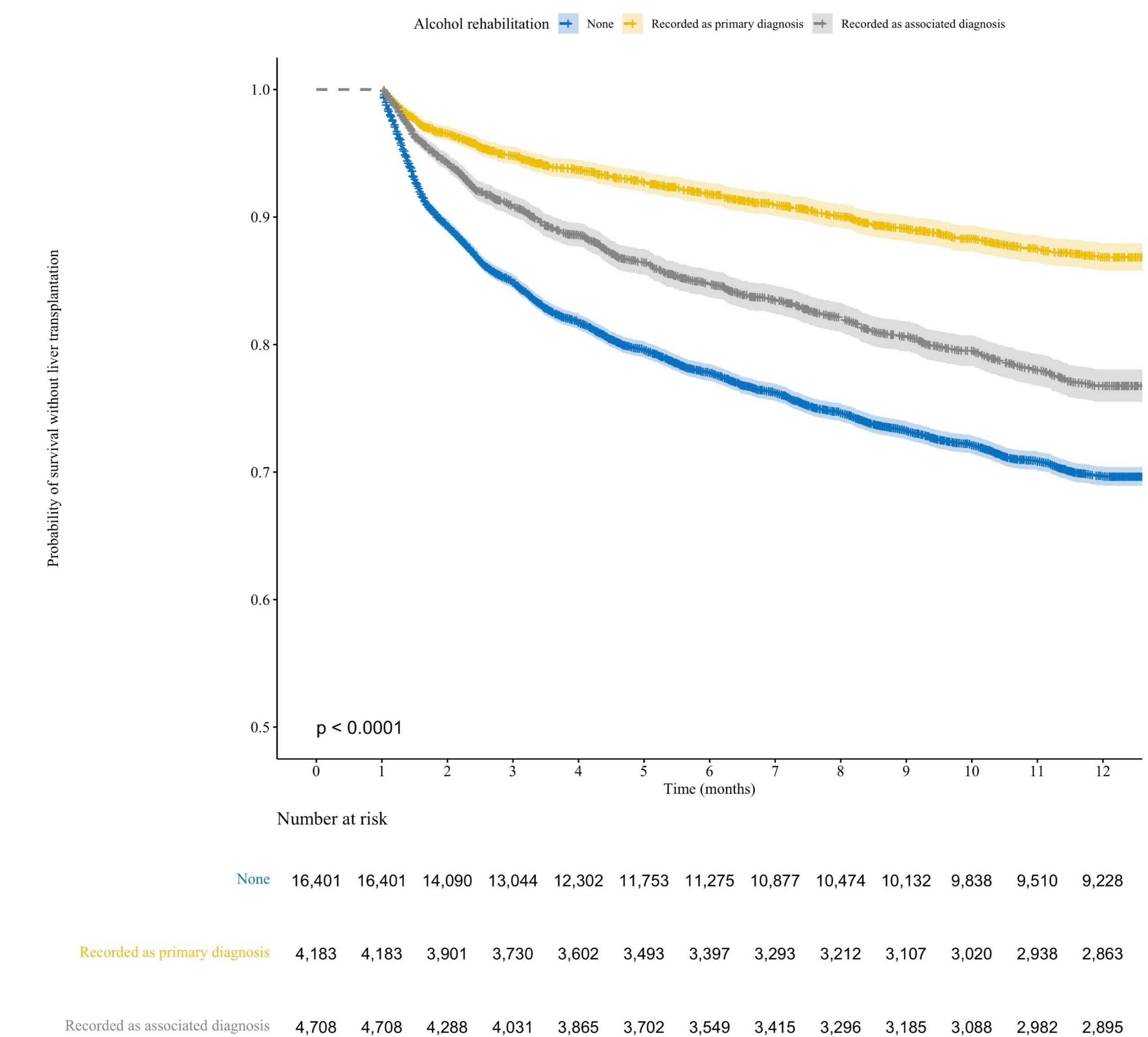
**Table 1: Characteristics of patients with alcoholic hepatitis by 1-year liver transplantation or mortality**

Characteristic	Overall N = 25,368 <sup>1</sup>	No death or liver transplantation n = 19,160, 76% <sup>1</sup>	1-year mortality (n=5,544) or liver transplantation (n=664) n = 6,208, 24% <sup>1</sup>	p-value <sup>2</sup>
Age at alcoholic hepatitis	54.0 (47.0, 61.2)	53.0 (46.0, 60.0)	58.0 (51.0, 64.0)	<0.001
Male sex	18,492 (72.89%)	13,932 (72.71%)	4,560 (73.45%)	0.3
Smoking habits	12,089 (47.65%)	9,850 (51.41%)	2,239 (36.07%)	<0.001
Obesity	5,839 (23.02%)	4,601 (24.01%)	1,238 (19.94%)	<0.001
Type-2 diabetes mellitus	5,816 (22.93%)	4,491 (23.44%)	1,325 (21.34%)	<0.001
Metabolic syndrome	1,988 (7.84%)	1,567 (8.18%)	421 (6.78%)	<0.001
Liver risk factors	2,960 (11.67%)	2,200 (11.48%)	760 (12.24%)	0.11
Sepsis	8,907 (35.11%)	6,159 (32.15%)	2,748 (44.27%)	<0.001
<b>Alcohol rehabilitation</b>				<0.001
Not recorded	16,460 (65%)	11,772 (61%)	4,688 (76%)	
Recorded as a primary diagnosis	4,188 (17%)	3,683 (19%)	505 (8.1%)	
Recorded as an associated diagnosis	4,720 (19%)	3,705 (19%)	1,015 (16%)	
Follow-up, m	18.5 (5.0, 45.5)	29.3 (13.4, 55.0)	3.1 (1.6, 6.5)	<0.001

Patients were included one month after alcoholic hepatitis. Severe alcoholic hepatitis was alcoholic hepatitis with any of hepatic failure, extrahepatic organ failure, portal hypertension bleeding, or transjugular liver biopsy within 4 weeks after alcoholic hepatitis. Sepsis was bacterial pneumonia, urinary tract infection, bacteremia, peritonitis, or invasive fungal disease. The Charlson comorbidity index predicts 1-year survival in patients with comorbidities, and ranges from low (<3), intermediate (3-5) and high (>5), with higher scores indicating higher frailty. The ecological deprivation index used to describe spatial socioeconomic and health inequalities was the French deprivation index Fdep, and was categorized in quintiles

<sup>1</sup> Median (IQR); n (%); <sup>2</sup> Wilcoxon rank sum test; Pearson's Chi-squared test

**1-year survival or liver transplantation after alcoholic hepatitis by alcohol rehabilitation**



**Multivariate risks for 1-year liver transplantation or mortality**

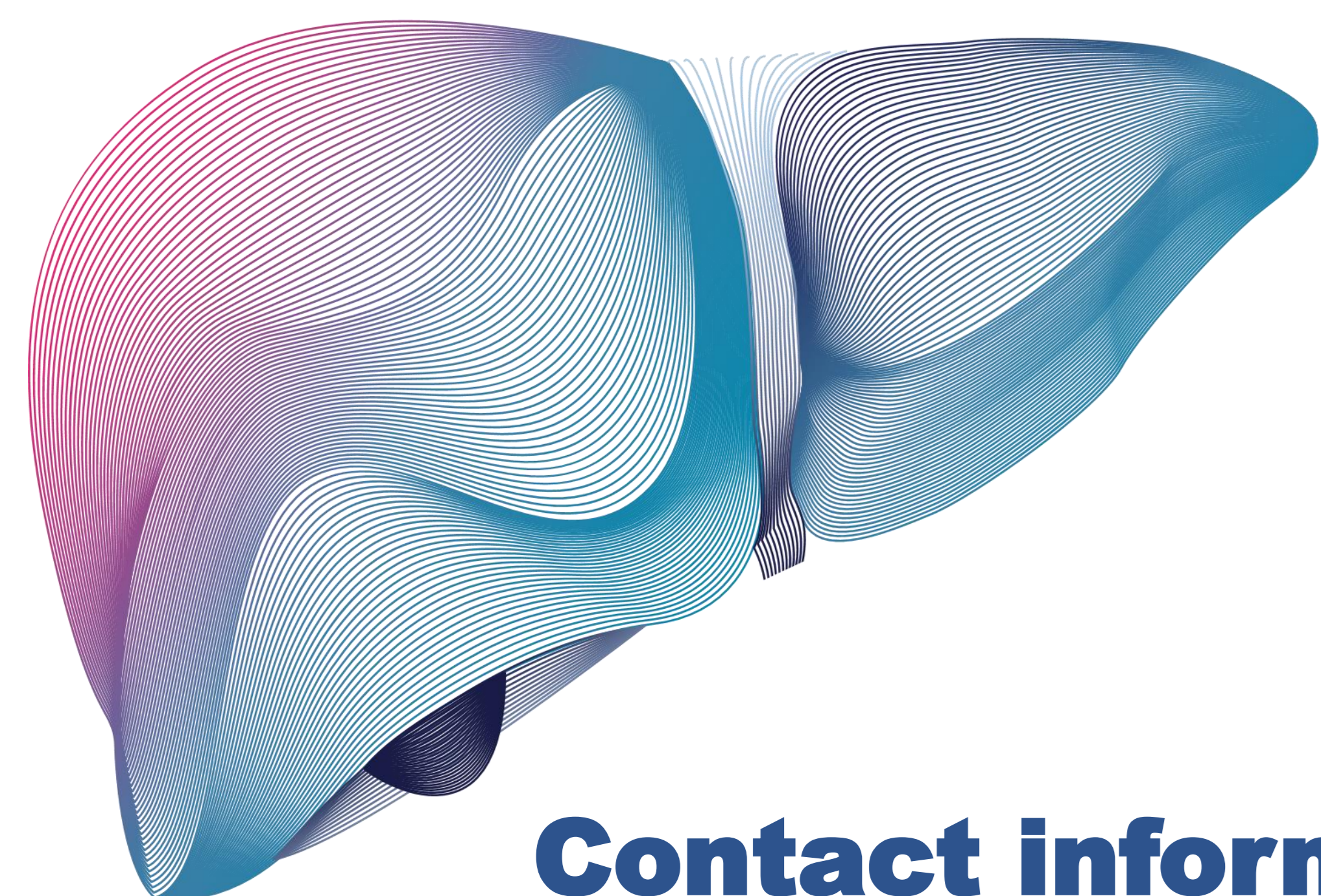
Characteristic	Complete sample		Matched sample	
	HR <sup>1</sup>	p-value	HR <sup>1</sup>	p-value
<b>Alcohol rehabilitation</b>				
None	—			
Recorded as primary diagnosis	0.51 (0.45-0.58)	<0.001	0.44 (0.39-0.49)	<0.001
Recorded as associated diagnosis	0.74 (0.68-0.81)	<0.001	0.72 (0.66-0.78)	<0.001

Risks were computed with Cox proportional hazards models stratified on age category, organ failure, sepsis, Charlson comorbidity index, and deprivation in the complete population (N=25,292) and in matched patients (N=20,483). Severe alcoholic hepatitis was alcoholic hepatitis with any of hepatic failure, extrahepatic organ failure, portal hypertension bleeding, or transjugular liver biopsy within 4 weeks after alcoholic hepatitis. Patients censored before 4 weeks were excluded from the analysis  
<sup>1</sup> HR = Hazard Ratio, CI = Confidence Interval

5

## Conclusions

- Alcohol rehabilitation programs are the most critical clinical interventions to reduce mortality or liver transplantation within one year after severe alcoholic hepatitis.
- Currently, less than 40% of patients have access to this treatment in France.



## Contact information

Vincent.mallet@aphp.fr

