

# POSITION

Select patients with alcoholic hepatitis (AH), non-responsive to corticosteroids, should be considered for early liver transplantation (LT).

- LT for AH improves short and long-term survival
- LT for AH does not lead to increased allograft loss
- 6-month ETOH abstinence does not predict persistent sobriety

# BACKGROUND

- From 2002-2013 the prevalence of alcohol use disorder in the US increased from 8.5% to 12.7%.
- Alcoholic liver disease has risen to become the most common indication for LT in the US as of 2017.
- 4-fold increase in waitlisting for AH as primary diagnosis from 2011-2016 based on UNOS data.

- Grant, BF et al. Prevalence of 12-Month Alcohol Use, High-Risk Drinking and DSM-IV Alcohol Use Disorder in the United States, 2001-2002 to 2012-2013. Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry*. 2017; 74(9):911-923.
- Gene Y. Liver transplantation for alcoholic hepatitis. *Hepatology*. 2019; 70(2):328-334.

# BACKGROUND: PROGNOSIS

Maddrey DF was the first score and still the most widely used

- Discriminant Function =  $4.6 * (\text{Pt's PT} - \text{Control PT}) + \text{Tbili}$
- Score > 32 indicates severe AH and usually is the threshold for therapy.

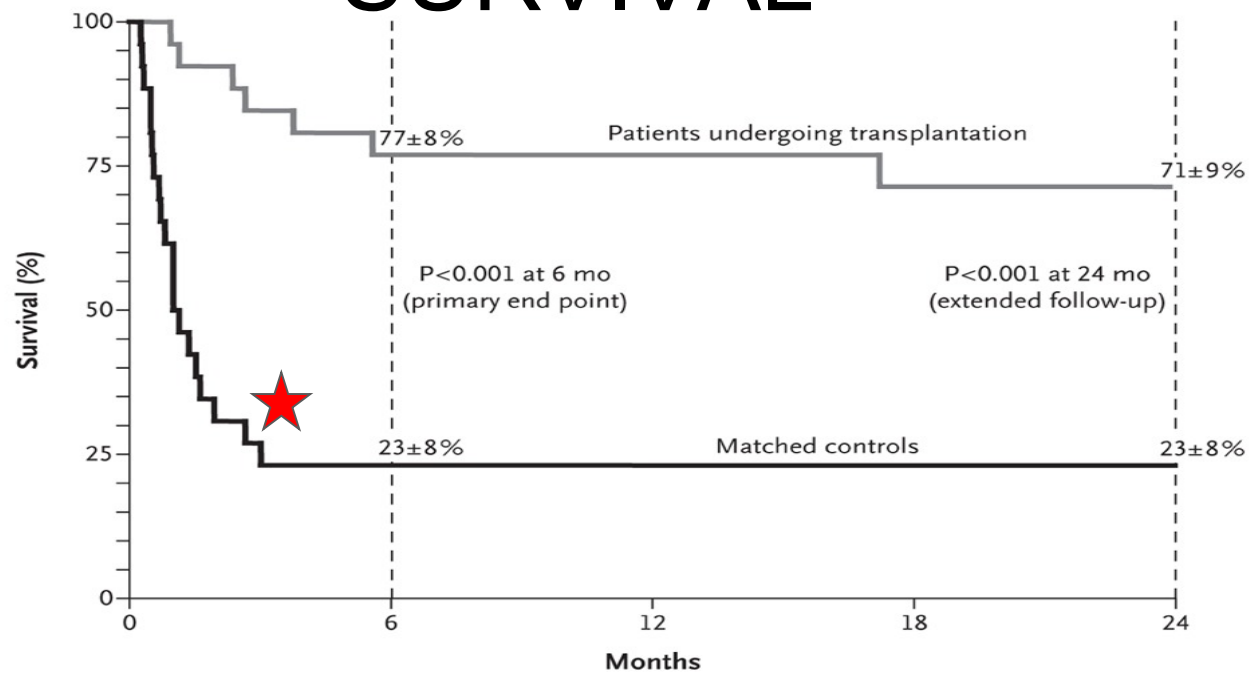
# BACKGROUND: PROGNOSIS

## Lille score

- Used after initiating therapy with corticosteroids
- A score  $> 0.45$  indicates treatment failure
- **Scores  $>0.45$  predict a 6-month survival of 25%**

# **Liver transplantation for alcoholic hepatitis improves short and long-term survival**

# SURVIVAL



No. at Risk		0	6	12	18	24
Patients undergoing transplantation	26	20	15	14	13	
Matched controls	26	6	6	5	4	

# PATIENT SURVIVAL

Multicenter observational study in USA for patients with AH  
from 2006-2017 at 12 centers

	Transplanted (n=147)
1 year survival	94% (95% CI, 89-97%)
3 year survival	84% (95% CI, 75-90%)

**LT for alcoholic hepatitis is not associated with increased graft loss as compared to alcoholic cirrhosis**



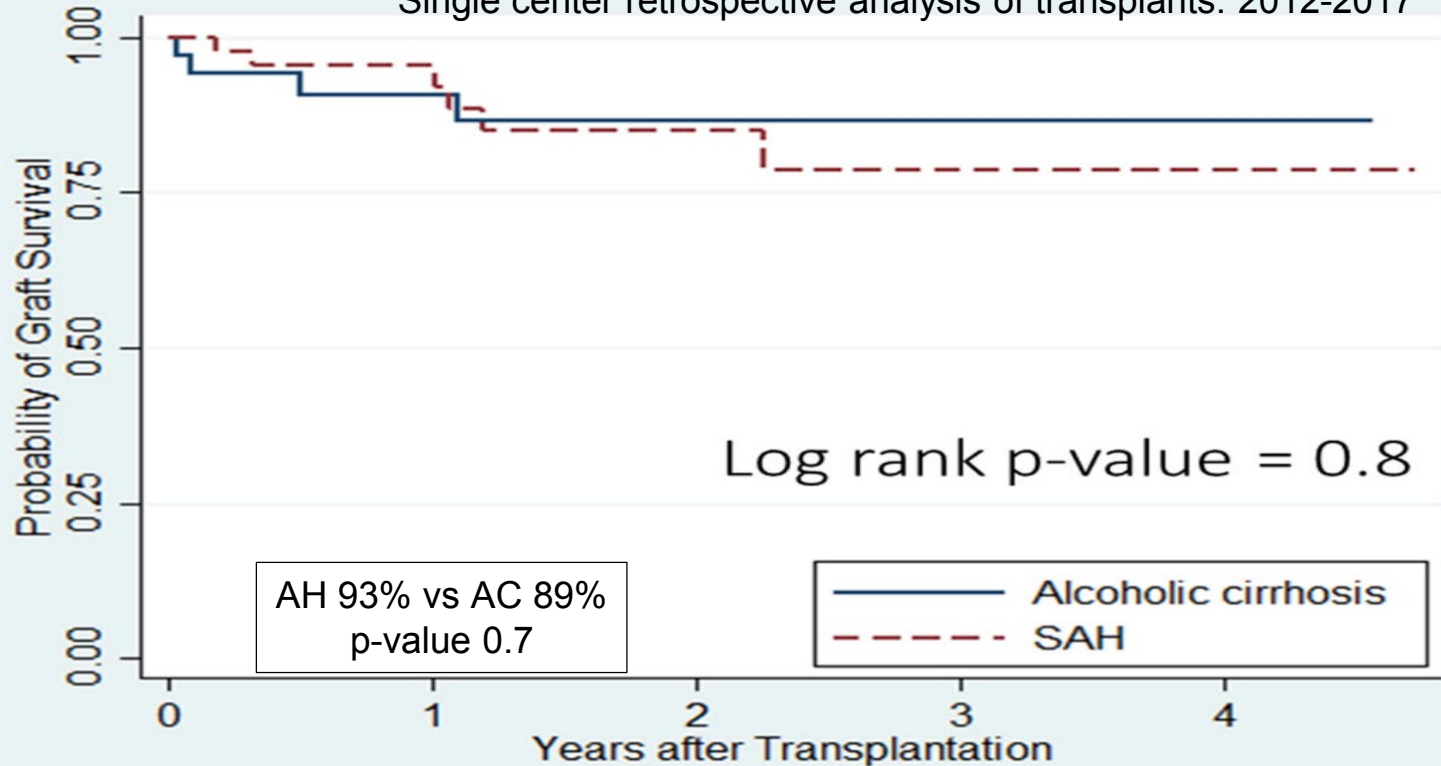
# ALLOGRAFT SURVIVAL

Comparative analysis from UNOS database from 2004-2010

Years of follow up	Alcoholic Hepatitis (n=46)	Alcoholic Cirrhosis (n=138)	Log Rank P-value
1 year	87%	84%	0.58
5 year	75%	73%	0.97

# ALLOGRAFT SURVIVAL

Single center retrospective analysis of transplants: 2012-2017



6 month rule should not be used as a  
predictor of sustained sobriety

# PREDICTING RECIDIVISM

- 1997 consensus conference of the AASLD and American Society of Transplantation suggested a “6-month rule” of sobriety
- Intended to allow time to assess liver recovery which may reduce need for LT.
- Subsequently has been inaccurately used as surrogate for predicting persistent sobriety post-transplant.

# PREDICTING RECIDIVISM

Characteristic	OR (95% CI)
Age (per year)	0.95 (0.92-0.99)
Days of pretransplant abstinence	1.00 (0.99-1.10)

# PREDICTING RECIDIVISM

Patients transplanted for AH do not have significantly higher risk of relapse than those transplanted for alcoholic cirrhosis

Outcome	Alcoholic cirrhosis (n=34)	Alcoholic hepatitis (n=46)	P-value
Any alcohol relapse	24%	28%	0.8
Alcohol relapse with harmful patterns	12%	17%	0.5

# GUIDELINES

# GUIDELINE: EASL

Recommendation	Grade of Recommendation	Level of Evidence
In case of non-response to corticosteroids, highly selected patients should be considered for early liver transplantation	A	1



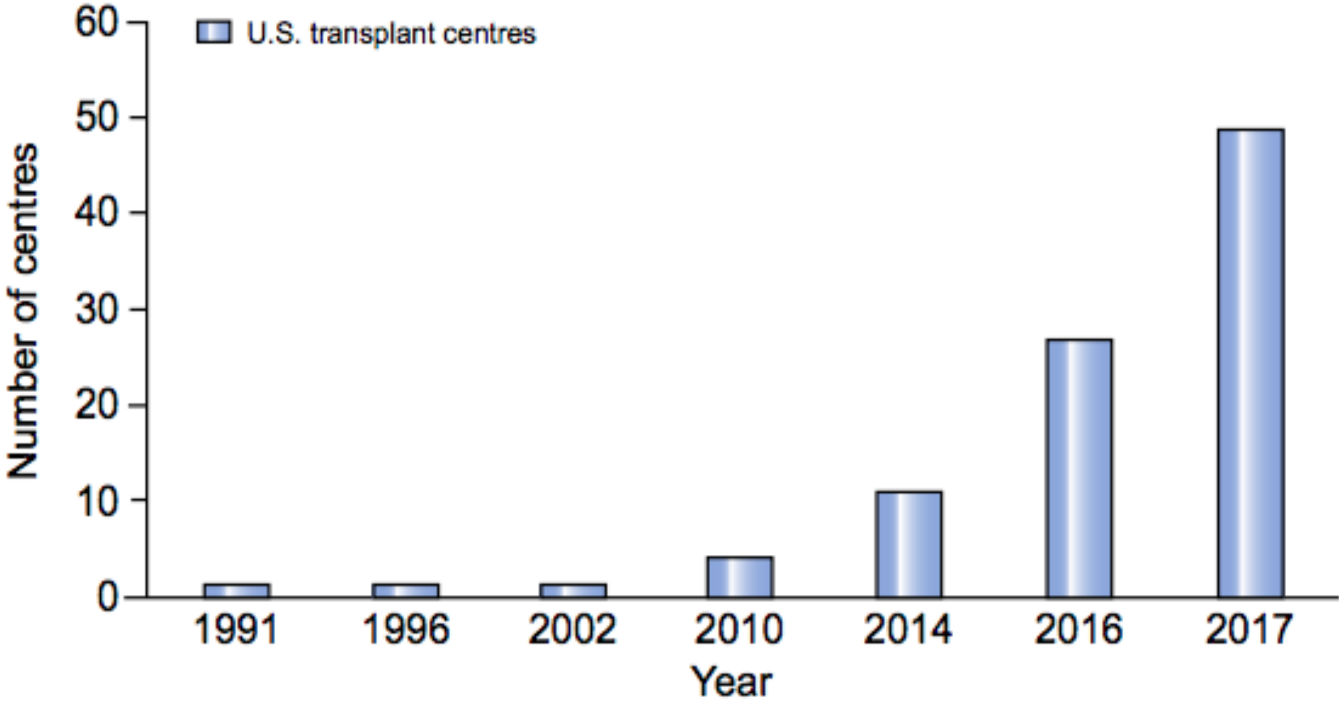
# GUIDELINE: ACG

Guideline	Grade of recommendation	Level of Evidence
Liver transplantation may be considered for highly selected patients with severe AH	Strong recommendation	Moderate level of evidence

# GUIDELINE: AASLD

Liver transplantation may be considered in carefully selected patients with favorable psychosocial profiles in severe AH not responding to medical therapy

# Centers Performing Liver Transplants for Alcoholic Hepatitis in the US



# SUMMARY

- Alcoholic liver disease, including AH, is on the rise
- Mortality for steroid non-responders is ~ 75% at 6 months with the vast majority of deaths (~90%) occurring within 2 months
- LT for AH improves short- and long-term survival
- LT for AH is not associated with increased graft loss
- 6-month rule should not be used as a predictor of sustained sobriety.
- When applied increases risk of death.

# CANDIDATES

Inclusion Criteria	Our Patient
Maddrey Discriminant Function > 32	✓
Non-responder to corticosteroids (according to Lille $\geq 0.45$ )	✓
First liver-decompensating event	✓
Good social support	✓
Favourable psychosocial profile	?
Agreement of transplant selection committee	?

Patient has potential for transplant candidacy for AH and should be evaluated by a transplant team