

# Patients with Alcoholic Cirrhosis are less likely to receive treatment for Alcohol Use Disorder compared to their non-Cirrhotic counterparts



SCHOOL OF MEDICINE  
CASE WESTERN RESERVE  
UNIVERSITY

Syed A. Adil, MD, Akash Khurana, MD, Adrian Lindsey, MD, Perica Davitkov, MD



Table 1. Prevalence of Acamprosate use after at least 30-days post-Alcoholic Cirrhosis (AC) or Alcoholism diagnosis

	AC	Alcoholism w/o AC	Odds Ratio	95% CI	P-value
<b>Total</b>	920	7200	0.63	0.59- 0.67	<0.001
<b>Female</b>	360	3000	0.59	0.53- 0.66	<0.001
<b>Male</b>	570	4210	0.67	0.61-0.73	<0.001
<b>Caucasian</b>	780	6120	0.6	0.55- 0.64	<0.001
<b>African American</b>	80	640	0.81	0.64- 1.02	0.078
<b>Hispanic/Latino</b>	40	280	0.38	0.27-0.53	<0.001
<b>Anxiety Disorder</b>	670	5710	0.79	0.73- 0.85	<0.001
<b>Major Depressive Disorder</b>	660	5480	0.27	0.25- 0.29	<0.001
<b>Bipolar Disorder</b>	230	2220	0.4	0.34- 0.46	<0.001

Table 2. Prevalence of Naltrexone use after at least 30-days post-Alcoholic Cirrhosis (AC) or Alcoholism diagnosis

	AC	Alcoholism w/o AC	Odds Ratio	95% CI	P-value
<b>Total</b>	1120	15360	0.35	0.33-0.37	<0.001
<b>Female</b>	440	6210	0.34	0.31-0.37	<0.001
<b>Male</b>	660	9010	0.35	0.33-0.38	<0.001
<b>Caucasian</b>	900	12210	0.33	0.31-0.36	<0.001
<b>African American</b>	140	1870	0.48	0.41-0.57	<0.001
<b>Hispanic/Latino</b>	50	510	0.26	0.19-0.35	<0.001
<b>Anxiety Disorder</b>	820	11860	0.45	0.42-0.48	<0.001
<b>Major Depressive Disorder</b>	800	11490	0.14	0.13-0.15	<0.001
<b>Bipolar Disorder</b>	280	4330	0.22	0.19-0.25	<0.001

## Background

- Effective treatment for alcoholism involves pharmacotherapy and psychosocial support .
- Naltrexone, Acamprosate, and Disulfiram are FDA-approved for moderate-severe alcoholism.
- Patients with alcoholic cirrhosis (AC) appear to have less access to treatment modalities, including pharmacotherapy.
- We sought to investigate the discrepancies in pharmacologic treatment of alcohol use disorder in patients with AC compared to patients without cirrhosis using a large commercial database.

## Methods

- Data obtained from (Explorys Inc, Cleveland), an aggregate of EHR data from 27 integrated healthcare systems in the United States between 5/2017-5/2022.
- We identified all patients in the database with AC and alcoholism based on Systematized Nomenclature of Medicine-Clinical Terms (SNOMED-CT).
- We compared the prevalence of pharmacologic treatment for alcoholism with Acamprosate and Naltrexone at least 30 days following diagnosis of AC to a control cohort of patients with alcoholism, but without AC.

## Results

- Prevalence of Acamprosate use was 1.47% in the group with AC and 2.32% in the group with alcoholism with odds ratio (OR) for AC 0.63 [95% CI, 0.59-0.67, p< 0.001]. Odds of treatment with Acamprosate tended to be lower in patients with AC who were Hispanic/Latino (OR 0.38) or had a major mood disorder.
- Prevalence of Naltrexone use was 1.79% in AC and 4.95% in alcoholism with odds ratio (OR) for AC 0.35 [95% CI, 0.33-0.37, p< 0.001]. As with Acamprosate, odds of treatment with Naltrexone tended to be lower in patients with AC who identified as Hispanic/Latino or had a co-existing mood disorder.

## Conclusions

- In this population-based study, patients with AC were less likely to be treated for their alcohol use disorder with FDA-approved drugs compared to non-cirrhotics. This may be related to the highly stigmatized nature of the disease, provider bias, and patient-related factors such as socioeconomic status and adherence.
- One possible explanation for naltrexone specifically, is that it is contraindicated in acute hepatitis and advanced cirrhosis.