

The Bulletin from the Clinical Pharmacist

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ACAMPROSATE

Alcohol is the seventh leading risk factor for death and disability globally. In ages 20–38, 13.5% of deaths are alcohol-related. In India, 29% of men and 1% of women (15–49 years) use alcohol; Tamil Nadu studies show 16.8–42.7% prevalence.

Alcohol Use Disorder (AUD)

- Chronic alcohol use leads to tolerance, withdrawal, cravings, impaired control, and health/social problems.
- Goal of treatment: Reduce or stop alcohol intake via medication and behavioral support.

S.NO	Treatment	Examples with usual dose
1.	First-line treatment	- Oral naltrexone - 50 mg/day - Depot naltrexone - 380 mg every four weeks (IM only) - Acamprosate - 666 mg three times daily
2.	Second-line treatment	- Disulfiram - 500 mg/day for one-to-two-week f/b 250 mg/day - Topiramate - 50 mg/day (Max: 150 mg BD) - Baclofen – 10 mg TDS (30 mg/day) - Nalmefene & Gabapentin

Focus on Acamprosate

- Pharmacologic Category: GABA Agonist/Glutamate Antagonist.
- Mechanism of Action: Restores balance between neuronal excitation and inhibition disrupted in chronic alcohol use; affects NMDA and mGlu5 receptors to rebalance glutamate/GABA transmission.
- Availability in India: In India, Acamprosate is available primarily as **Acamprosate Calcium** in dosages of 333 mg and 666 mg.
- Cost & Brands available in India: Acamprosate is manufactured by several pharmaceutical companies in India, with typical market prices ranging from ₹70 to ₹300 for a strip of 10 tablets: **Acamprol** (by Sun Pharma), **Camosat** (by CMG Biotech), Accimpure, Accimpak, Akrosite.

Dosing & Frequency:

Drug name	Usual Dosing	Renal Dosing	Hepatic Dosing
Acamprosate	666 mg 3 times daily	- CrCl 30 to 50 mL/minute: 333 mg TDS - CrCl $\leq$30 mL/minute: Use is contraindicated.	No Dosing adjustment needed.

Duration: Acamprosate is usually taken for at least 3 to 6 months. Treatment thereafter is assessed for each patient.

Administration:

- It typically started 5 days after stopping alcohol.

- May also begin during medically supervised withdrawal.
- Full effect by 5–8 days.

Side Effects

Most Common Side Effect	Less Common Side Effects
Diarrhea	Suicidal ideation (less common, but serious), Intestinal cramps, Headache, Flatulence, increased or decreased libido, Insomnia, Anxiety, Muscle weakness, Nausea, Itchiness, Dizziness

Cautions and Contraindications

Patient Group/Condition	Recommendation
Moderate renal impairment	Reduce dose: 333 mg TDS
Severe renal impairment	Contraindicated
Pregnant/nursing women	Avoid unless benefits outweigh risks (FDA Cat C)
Age ≥ 65	Check renal function regularly
Children/adolescents	Prescribe with caution (limited data)

Practical guidance

- Naltrexone and acamprosate are first line: Naltrexone preferred for craving/reduction in heavy drinking, acamprosate for maintenance of abstinence after detoxification.
- Disulfiram designated second-line due to compliance issues and risk of serious reactions.
- Acamprosate has unique safety in liver disease and concurrent opioid or detox therapies.