AETC AIDS Education & Training Center Program Mountain West

Case Studies in Medications for Alcohol Use Disorders

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AETC AIDS Education & Training Center Program Mountain West

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Disclosures

No conflicts of interest or relationships to disclose

We will discuss off-label use of medications

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Learning Objectives

At the conclusion of this talk learners will be able to:

- Understand the evidence basis for medications to treat alcohol use disorder
- Counsel patients about the risks and benefits of medication to treat alcohol use disorder
- Identify when and how to tailor medications for alcohol use disorder to specific patients' comorbidities.

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Important Caveat!

- All patients with alcohol use disorders should be encouraged to pursue psychosocial treatments.

MODERATION MANAGEMENT

UNITY SERVICE AA RECOVERY

SMART Recovery

Life beyond addiction

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Case 1

- 32-year-old woman presents to clinic for routine care.
- Her only medical condition is depression in remission on sertraline.
- She consumes 1-2 drinks with dinner; on the weekends she may consume 4 or more drinks in a single day. Her consumption has increased during the pandemic.
- No history of alcohol treatment.
- She works as a paralegal, has a good relationship with her parents and siblings.
- She does not think she has a problem with alcohol use.

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What medication would you recommend?

A. Disulfiram 250 mg PO daily

B. Naltrexone 50 mg PO daily

C. Topiramate 50 mg PO daily

D. Acamprosate 666 mg PO TID

E. Naltrexone 380 mg IM monthly

F. Gabapentin 300 mg PO TID

G. No medication

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Time to participate!

- Go to: **join.nearpod.com**
- Use code **PGUWB** to view the poll
- Select your best guess!

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Spectrum of Alcohol Use

Saitz R. New Engl J Med 2005;352:596.

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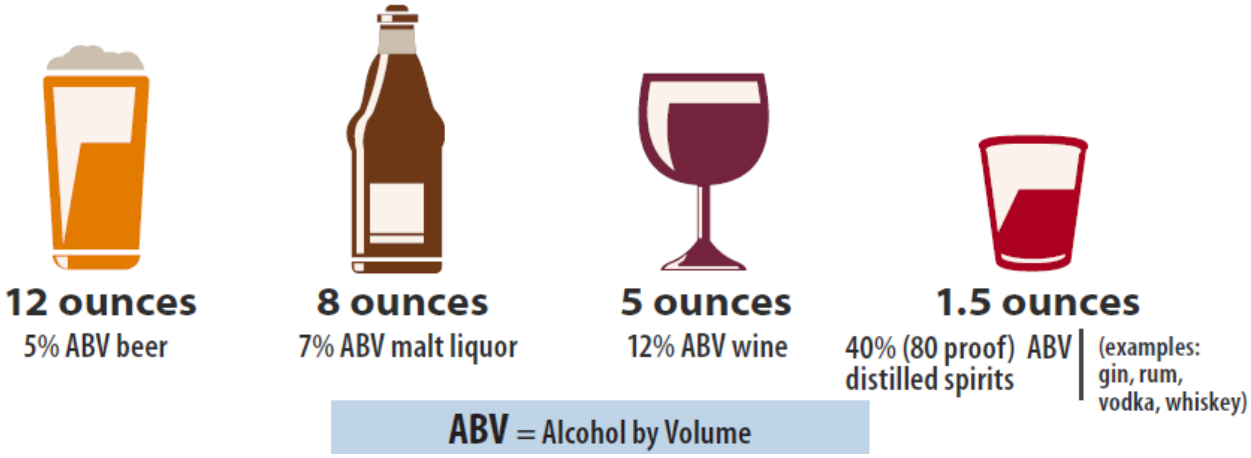
Low-risk Alcohol Use



www.cdc.gov

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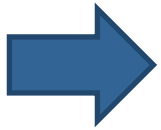
Alcohol Use Disorder criteria

- Larger amounts than intended
- Persistent desire to cut down or quit
- Significant time spent taking, obtaining
- Craving or urge to use
- Failure to fulfill obligations
- Continued use despite negative interpersonal consequences
- Reduced social, recreational activities
- Use in physically hazardous situations
- Use despite knowledge of harms
- Tolerance
- Withdrawal



SEVERITY
No SUD: 0-1
Mild: 2-3
Moderate: 4-5
Severe: >5

DSM-5

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Brief Intervention for Unhealthy Alcohol Use

Component	Example
Clearly review the situation	"You are drinking more than is safe for your health."
Make an explicit recommendation	"I recommend you consume no more than 2 (for men) / 1 (for women) drinks per day."
Ask about willingness to change • NO? Reflect pros/cons • YES? Strategize a plan	"Are you ready to cut back?" • NO – "What do you like about drinking? What don't you like?" • YES – "How will you cut back?"

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Case 2

- 44-year-old man presents after an ER visit for alcohol intoxication resulting in a head injury.
- His head injury is improving as expected, but he describes a long history of heavy alcohol consumption resulting in medical and interpersonal consequences.
- He has attended AA meetings in the past and had several periods of abstinence from alcohol lasting a few months.
- He has never taken medications for alcohol use disorder in the past, but is open to the possibility.
- He has no other medical problems, does not take other medications and his liver and kidney function are normal.

What medication would you recommend?

A. Disulfiram 250 mg PO daily

B. Naltrexone 50 mg PO daily

C. Topiramate 50 mg PO daily

D. Acamprosate 666 mg PO TID

E. Naltrexone 380 mg IM monthly

F. Gabapentin 300 mg PO TID

G. No medication

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Naltrexone is the best option for most patients

- 50 mg PO daily, can increase to 100 mg if needed
- Contraindicated with opioids; caution in liver disease
- Side effects include headache, nausea
- Safe in patients who continue to drink

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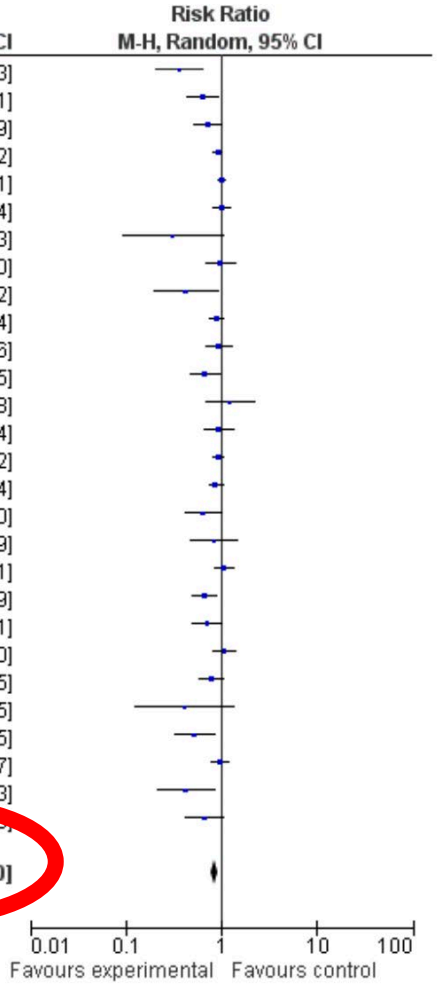
NNT to prevent return to heavy drinking = 9

Study or Subgroup	Naltrexone Events	Total	Placebo Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Ahmadi 2002	12	58	33	58	1.8%	0.36 [0.21, 0.63]
Anton 1999	26	68	38	63	3.2%	0.63 [0.44, 0.91]
Anton 2005	33	80	46	80	3.6%	0.72 [0.52, 0.99]
Anton 2006	207	309	226	309	7.1%	0.92 [0.83, 1.02]
Balldin 2003	53	56	58	62	7.3%	1.01 [0.92, 1.11]
Chick 2000	57	85	53	79	5.2%	1.00 [0.81, 1.24]
de Goes e Castro 2004	3	35	10	36	0.4%	0.31 [0.09, 1.03]
Gastpar 2002	34	84	36	87	3.2%	0.98 [0.68, 1.40]
Guardia 2002	8	101	19	101	1.0%	0.42 [0.19, 0.92]
Heinälä 2001	49	63	51	58	6.1%	0.88 [0.75, 1.04]
Hersh 1998	22	31	25	33	3.9%	0.94 [0.70, 1.26]
Kiefer 2003	20	40	30	40	3.2%	0.67 [0.47, 0.95]
Killeeen 2004	21	51	12	36	1.7%	1.24 [0.70, 2.18]
Kranzler 2000	29	61	32	63	3.2%	0.94 [0.65, 1.34]
Kranzler 2004	122	158	132	157	7.0%	0.92 [0.82, 1.02]
Krystal 2001	183	418	105	209	5.9%	0.87 [0.73, 1.04]
Latt 2002	19	56	27	51	2.4%	0.64 [0.41, 1.00]
Monti 2001	16	64	19	64	1.7%	0.84 [0.48, 1.49]
Morley 2006	39	53	43	61	5.0%	1.04 [0.83, 1.31]
Morris 2001	28	55	43	56	3.9%	0.66 [0.49, 0.89]
O'Malley 1992	24	52	34	52	3.3%	0.71 [0.50, 1.01]
O'Malley 2007	39	57	32	50	4.3%	1.07 [0.81, 1.40]
O'Malley 2008	22	34	28	34	4.0%	0.79 [0.59, 1.05]
Oslin 1997	3	21	8	23	0.5%	0.41 [0.13, 1.35]
Oslin 2005	13	37	25	37	2.1%	0.52 [0.32, 0.85]
Oslin 2008	73	120	76	120	5.5%	0.96 [0.79, 1.17]
Volpicelli 1992	8	35	19	35	1.3%	0.42 [0.21, 0.83]
Volpicelli 1997	17	48	26	49	2.3%	0.67 [0.42, 1.08]
Total (95% CI)		**2330**		**2103**	**100.0%**	**0.83 [0.76, 0.90]**
Total events	1180		1286			

Heterogeneity: Tau² = 0.02; Chi² = 69.81, df = 27 (P < 0.0001); I² = 61%

Test for overall effect: Z = 4.39 (P < 0.0001)



Cochrane Database Syst Rev. 2010 Dec 8;(12):CD001867.

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Case 3

- 54-year-old man with alcohol use disorder presents for follow-up after admission for alcoholic hepatitis and pancreatitis.
- His most recent AST was 507 (normal 5-40) and ALT 298 (normal 7-56). His kidney function was normal at discharge.
- Since discharge he has not resumed drinking but has cravings to consume alcohol.
- He was previously consuming up to 750 mL of hard liquor per day.

What medication would you recommend?

A. Disulfiram 250 mg PO daily

B. Naltrexone 50 mg PO daily

C. Topiramate 50 mg PO daily

D. Acamprosate 666 mg PO TID

E. Naltrexone 380 mg IM monthly

F. Gabapentin 300 mg PO TID

G. No medication

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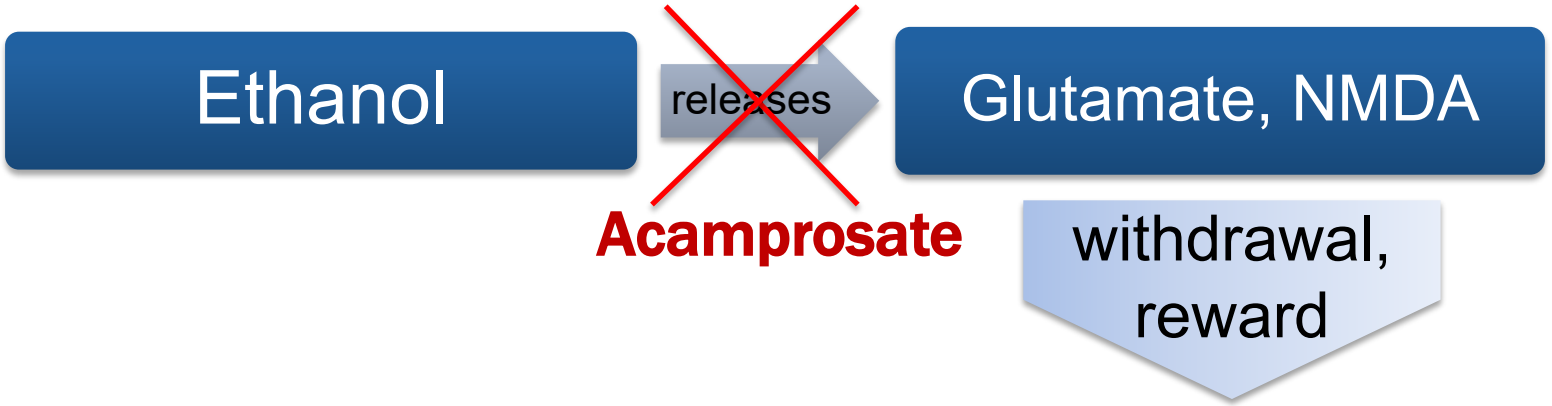
Acamprosate can be used in liver disease

- Precise mechanism unclear
- Dose is 666 mg TID (renal excretion, so 333 mg TID if GFR 30-50, contraindicated if GFR <30)
- GI upset common
- Safe in liver disease

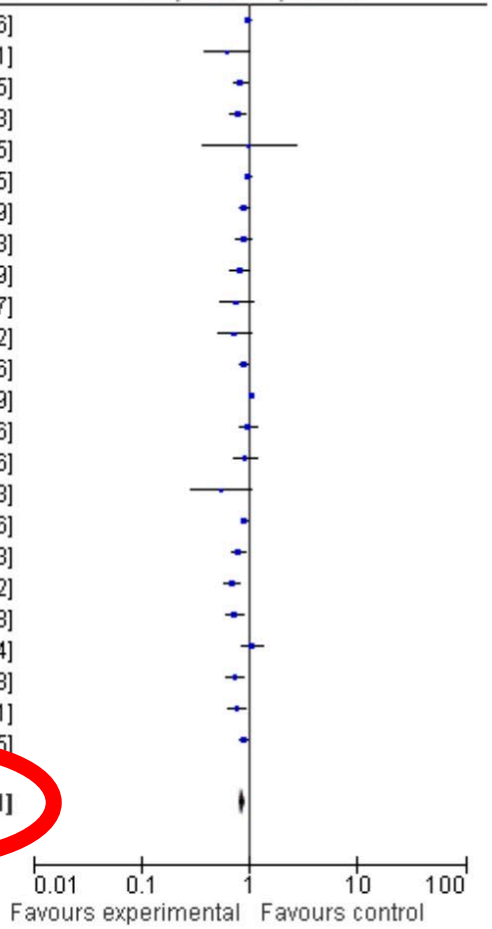


Acamprosate results in 14% reduction drinking

Study or Subgroup	Acamprosate Events	Total	Placebo Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Anton 2006	244	303	254	309	6.3%	0.98 [0.91, 1.06]
Baltieri 2003	15	40	21	35	1.2%	0.63 [0.39, 1.01]
Barrias 1997	98	150	121	152	4.9%	0.82 [0.71, 0.95]
Besson 1998	41	55	52	55	4.4%	0.79 [0.67, 0.93]
Borg 2003	3	5	3	5	0.3%	1.00 [0.36, 2.75]
Chick 2000	254	289	260	292	6.5%	0.99 [0.93, 1.05]
Geerlings 1997	103	128	121	134	5.8%	0.89 [0.80, 0.99]
Gual 2001	92	141	109	147	4.7%	0.88 [0.75, 1.03]
Kiefer 2003	30	40	37	40	3.8%	0.81 [0.66, 0.99]
Ladewig 1993	17	29	25	32	1.9%	0.75 [0.53, 1.07]
Lhuintre 1985	22	42	31	43	2.0%	0.73 [0.52, 1.02]
Lhuintre 1990	208	279	245	291	6.1%	0.89 [0.81, 0.96]
Mason 2006	328	341	240	260	6.8%	1.04 [1.00, 1.09]
Morley 2006	44	55	50	61	4.2%	0.98 [0.82, 1.16]
Namkoong 2003	45	72	48	70	3.2%	0.91 [0.72, 1.16]
Niederhofer 2002	6	13	11	13	0.7%	0.55 [0.29, 1.03]
Paille 1995	294	361	161	177	6.4%	0.90 [0.84, 0.96]
Pelc 1992	42	55	45	47	4.6%	0.80 [0.68, 0.93]
Pelc 1997	74	126	53	62	4.2%	0.69 [0.57, 0.82]
Poldrugo 1997	66	122	92	124	3.9%	0.73 [0.60, 0.88]
Rousseaux 1996	45	63	43	64	3.3%	1.06 [0.84, 1.34]
Sass 1996	75	136	102	136	4.2%	0.74 [0.61, 0.88]
Tempesta 2000	87	164	115	166	4.2%	0.77 [0.64, 0.91]
Whitworth 1996	183	224	208	224	6.3%	[illegible]
Total (95% CI)		**3233**		**2939**	**100.0%**	**0.86 [0.81, 0.91]**
Total events	2416		2447			

Heterogeneity: Tau² = 0.01; Chi² = 110.11, df = 23 (P < 0.00001); I² = 79%

Test for overall effect: Z = 5.07 (P < 0.00001)



Cochrane Database Syst Rev. 2010 Sep 8;(9):CD004332.

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Case 4

- 39-year-old man seen in clinic requesting treatment.
- Past medical history of anxiety, alcohol and opioid use disorders.
- Has nearly completed work release, plans on finding employment in construction industry.
- Previously drinking 5-6 drinks per day (more on the weekends). Was also using prescription opioids (smoking or snorting) prior to incarceration.
- Has previously attended AA and NA.
- He is concerned about going back to use when he is no longer in supervised setting.

What medication would you recommend?

A. Disulfiram 250 mg PO daily

B. Naltrexone 50 mg PO daily

C. Topiramate 50 mg PO daily

D. Acamprosate 666 mg PO TID

E. Naltrexone 380 mg IM monthly

F. Gabapentin 300 mg PO TID

G. No medication

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Extended-release Naltrexone

- 380 mg monthly intramuscular injection
- Side effects uncommon (nausea, headaches, injection site reactions)
- May be preferable for co-morbid AUD and OUD
  - Requires 7-10 days of opioid abstinence

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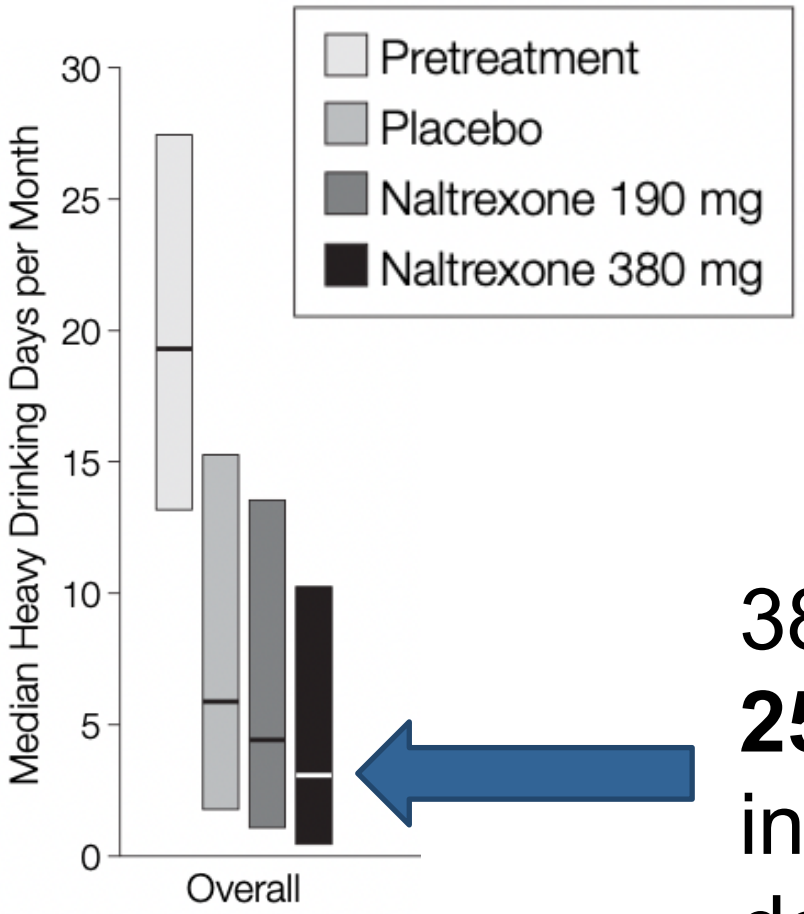
IM Naltrexone reduces heavy drinking



380 mg dose = **25% reduction** in heavy drinking days vs. placebo

JAMA. 2005 Apr 6;293(13):1617-25.

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Case 5

- 23-year-old woman with history of seizure disorder (not currently on anti-epileptic medications) is seen for routine follow-up.
- She endorses significant alcohol use that has escalated in recent months.
- Previously completed residential treatment and 2 prior treatment attempts with naltrexone without response.
- She asks if there are any other medications that could be considered.

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What medication would you recommend?

A. Disulfiram 250 mg PO daily

B. Naltrexone 50 mg PO daily

C. Topiramate 50 mg PO daily

D. Acamprosate 666 mg PO TID

E. Naltrexone 380 mg IM monthly

F. Gabapentin 300 mg PO TID

G. No medication

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Topiramate in patients with seizure disorders

- 50-300 mg PO daily (must be slowly uptitrated)
- Use limited by side effects including weight loss, cognitive impairment, fatigue, dizziness, paresthesias
- Not FDA approved for alcohol use disorder
- Could be useful for patients with co-morbid seizure disorder

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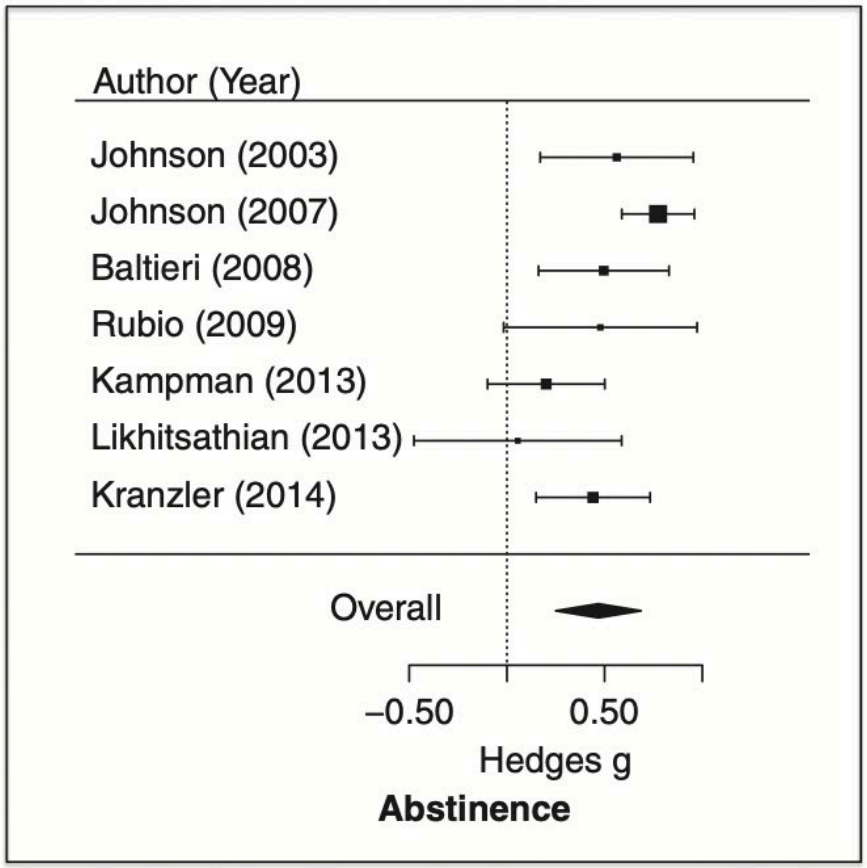
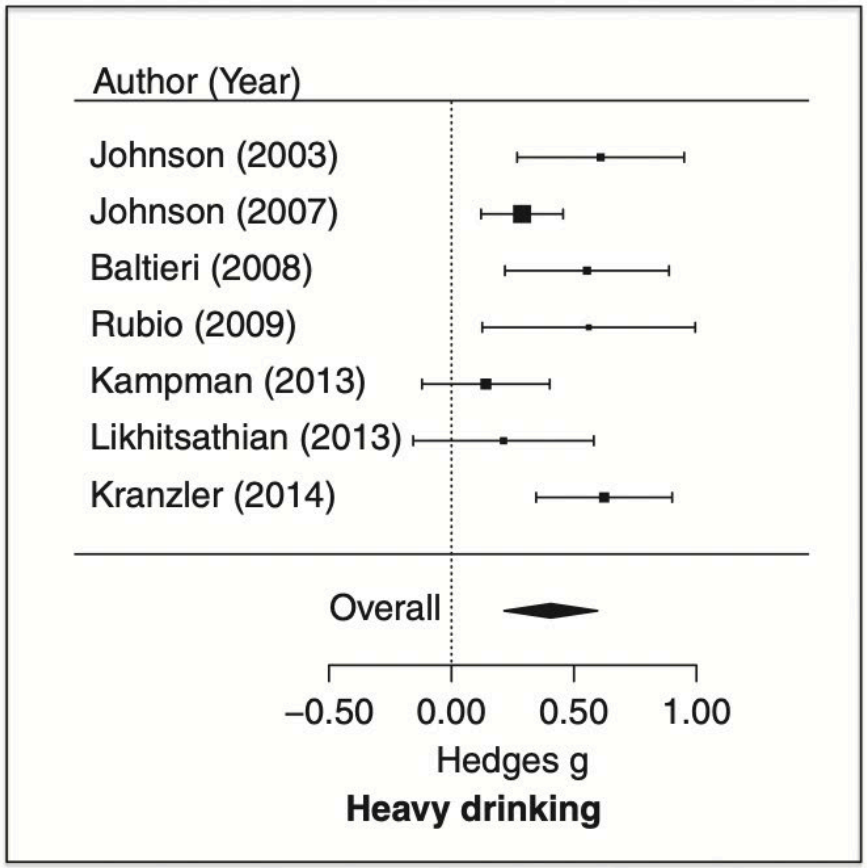
Topiramate has small but significant effect





Alcohol Clin Exp Res. 2014 Jun;38(6):1481-8.

Case 6

- 64-year-old man with type 2 diabetes mellitus and alcohol use disorder presents for routine follow-up.
- He has poorly controlled diabetes complicated by albuminuria, neuropathy and gastroparesis.
- Current medications are metformin, lisinopril and atorvastatin, but adherence has been challenging.
- He has previously discontinued naltrexone for alcohol use due to headache and fatigue.
- He continues to drink >5 drinks per day, but today expresses some interest in cutting back.
- His kidney and liver function are normal.

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What medication would you recommend?

A. Disulfiram 250 mg PO daily

B. Naltrexone 50 mg PO daily

C. Topiramate 50 mg PO daily

D. Acamprosate 666 mg PO TID

E. Naltrexone 380 mg IM monthly

F. Gabapentin 300 mg PO TID

G. No medication

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Gabapentin may be useful with chronic pain

- 300-900 mg PO BID-TID
- Growing concern about potential for misuse
- Not FDA approved for alcohol use disorder
- Could be useful for patients with co-morbid chronic pain, neuropathy or anxiety

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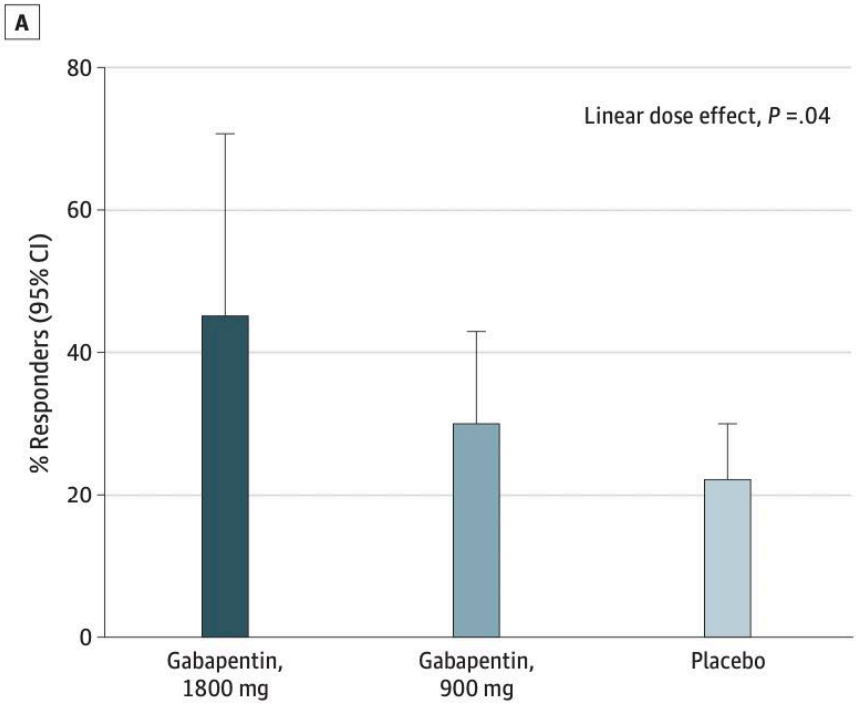
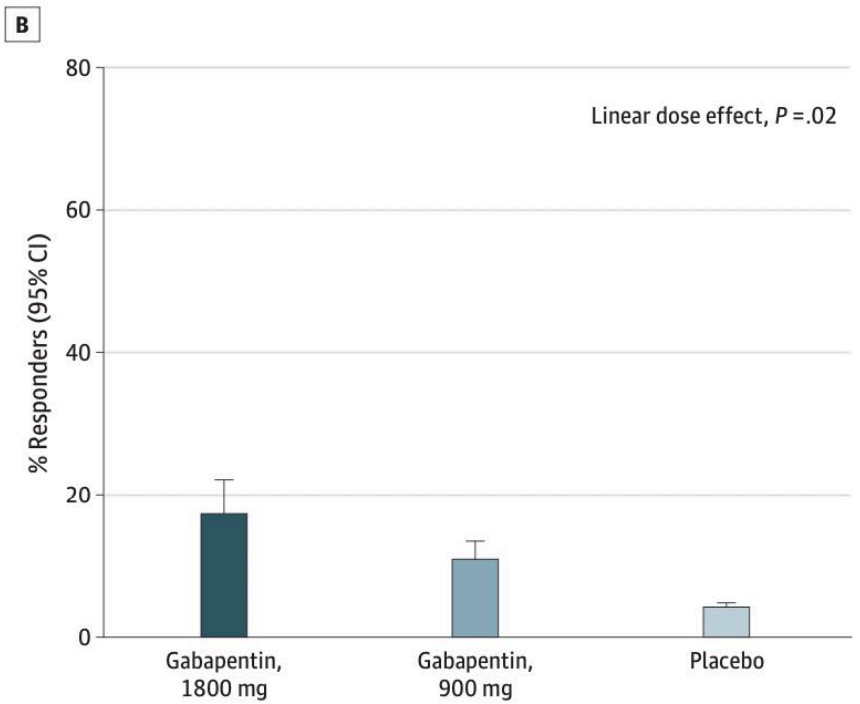
Gabapentin doubles likelihood of responding

Heavy drinking



Abstinence



JAMA Intern Med. 2014 Jan;174(1):70-7.

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Take Home Points

- Naltrexone is the best option for most patients
- Acamprosate is safe with severe liver disease
- IM naltrexone can be useful for concurrent OUD
- Topiramate and gabapentin are 3rd-line options
- Disulfiram should generally be avoided

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Panel Discussion

- What has been your experience with medications for alcohol use disorder in practice?

- Do you have other tips or suggestions for how to discuss these medications with your patients?

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