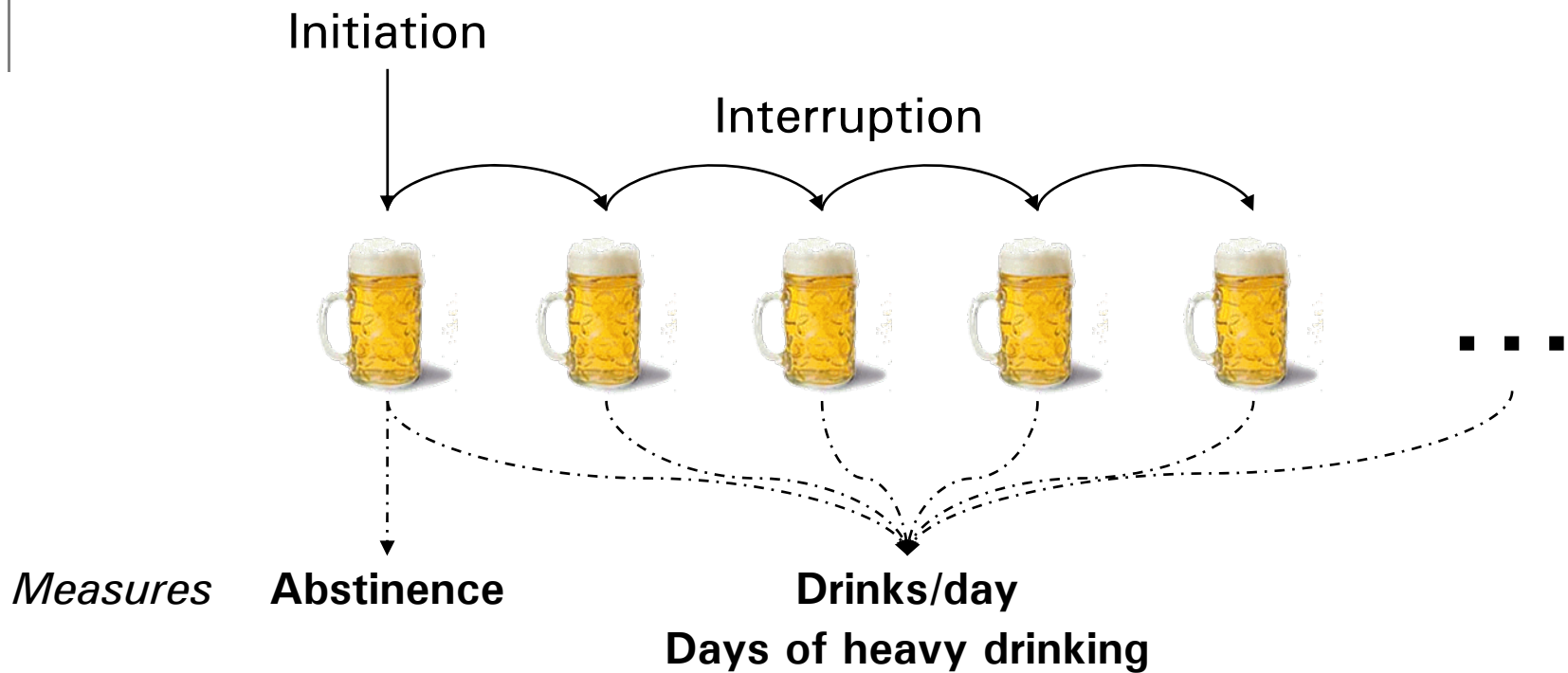


Daniele Zullino

Does topiramate target the core mechanism of addiction?

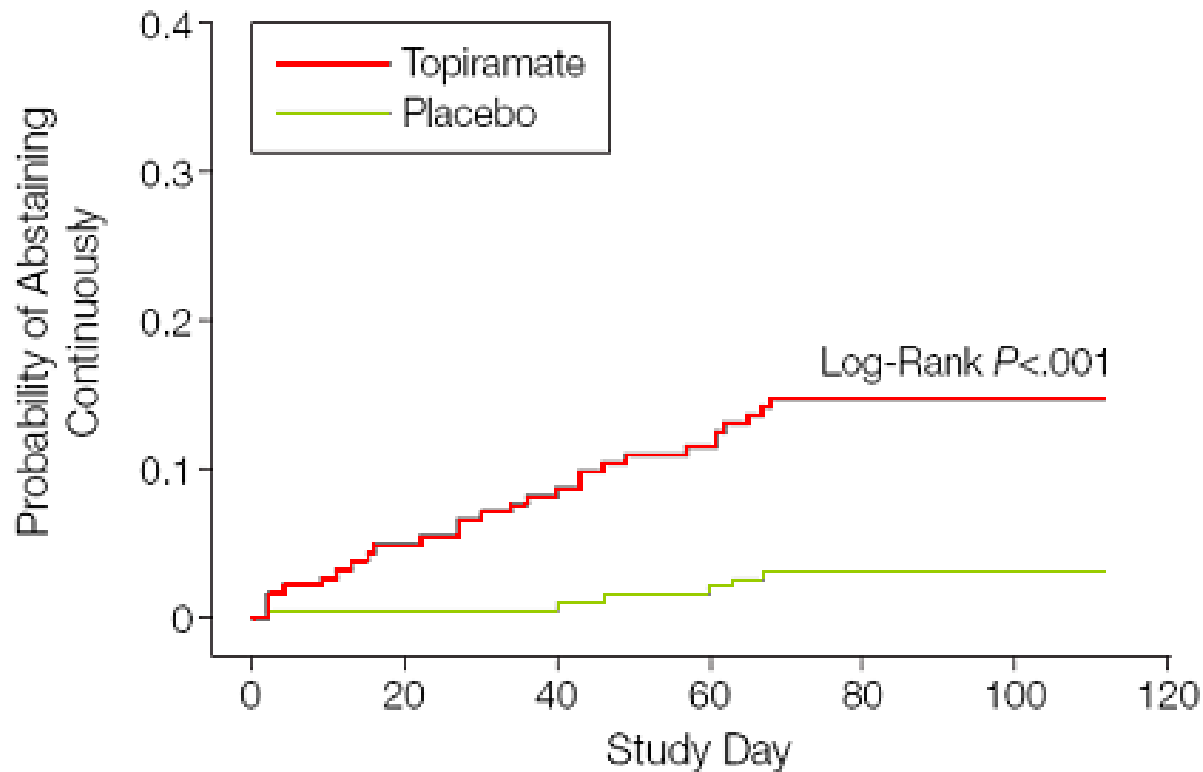
The cocaine and alcohol experiences

Loss of control

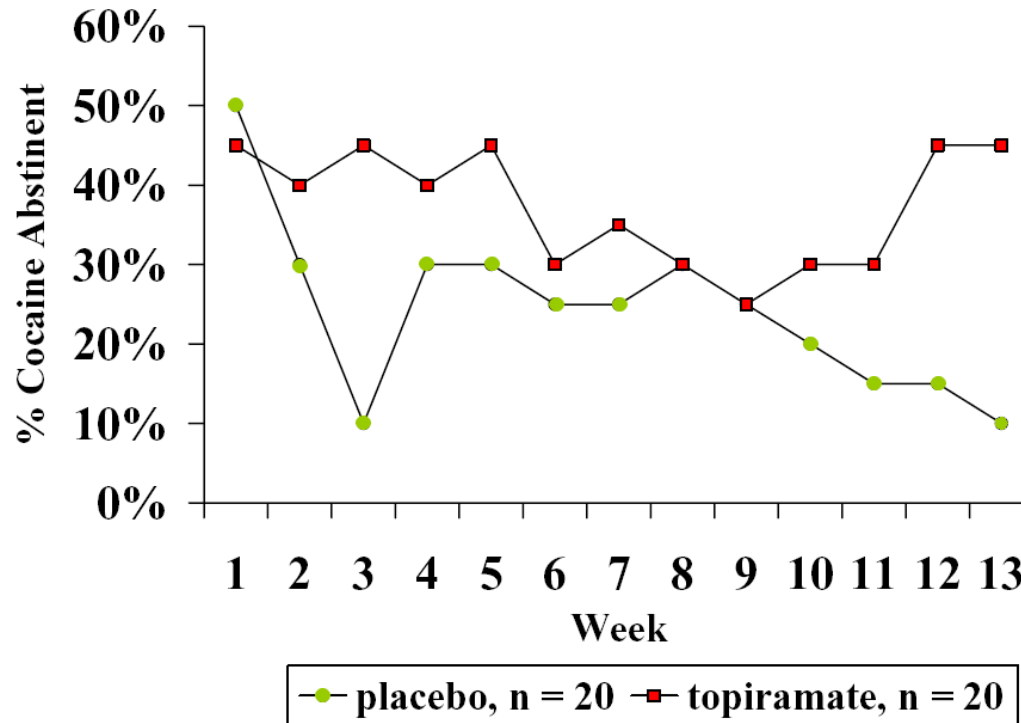


Abstinence promotion (Alc)

Johnson et al., 2007

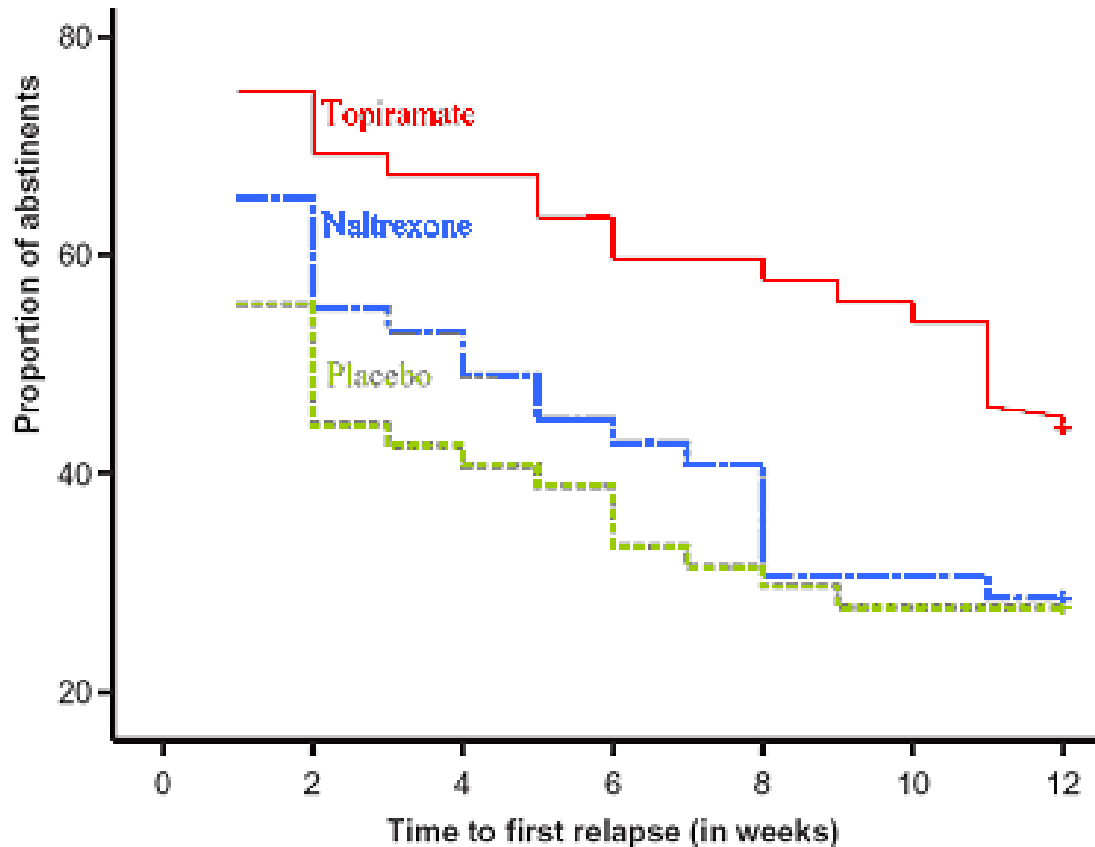


Abstinence promotion (Coca)



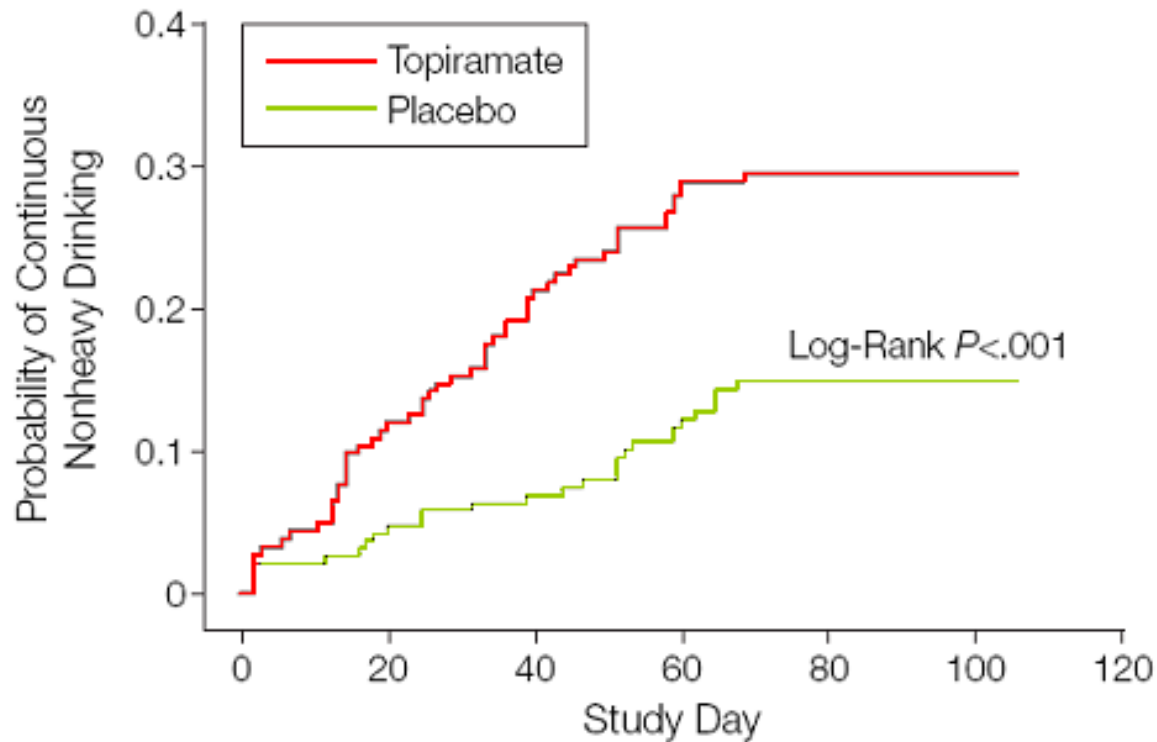
Alcohol relapse prevention

Baltieri et al., 2008



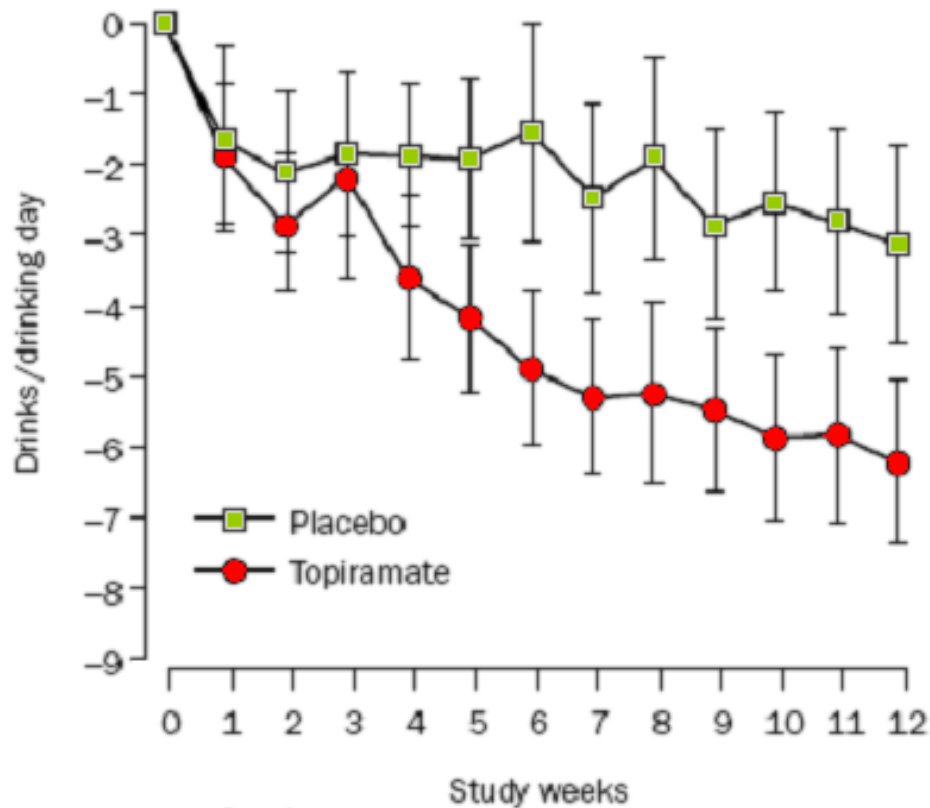
Continuous (> 28d) Nonheavy Drinking

Johnson et al., 2007



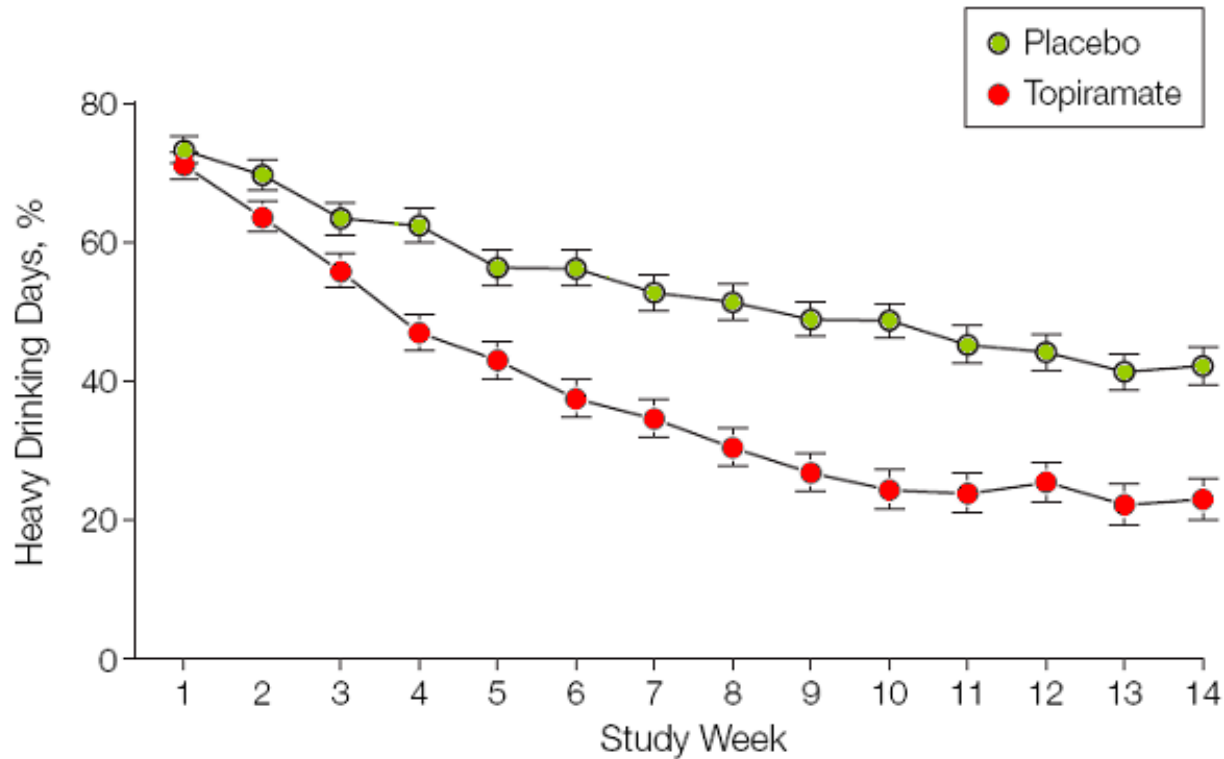
Capacity to limit drinking

Johnson et al., 2003



↓ heavy drinking days

Johnson et al., 2007



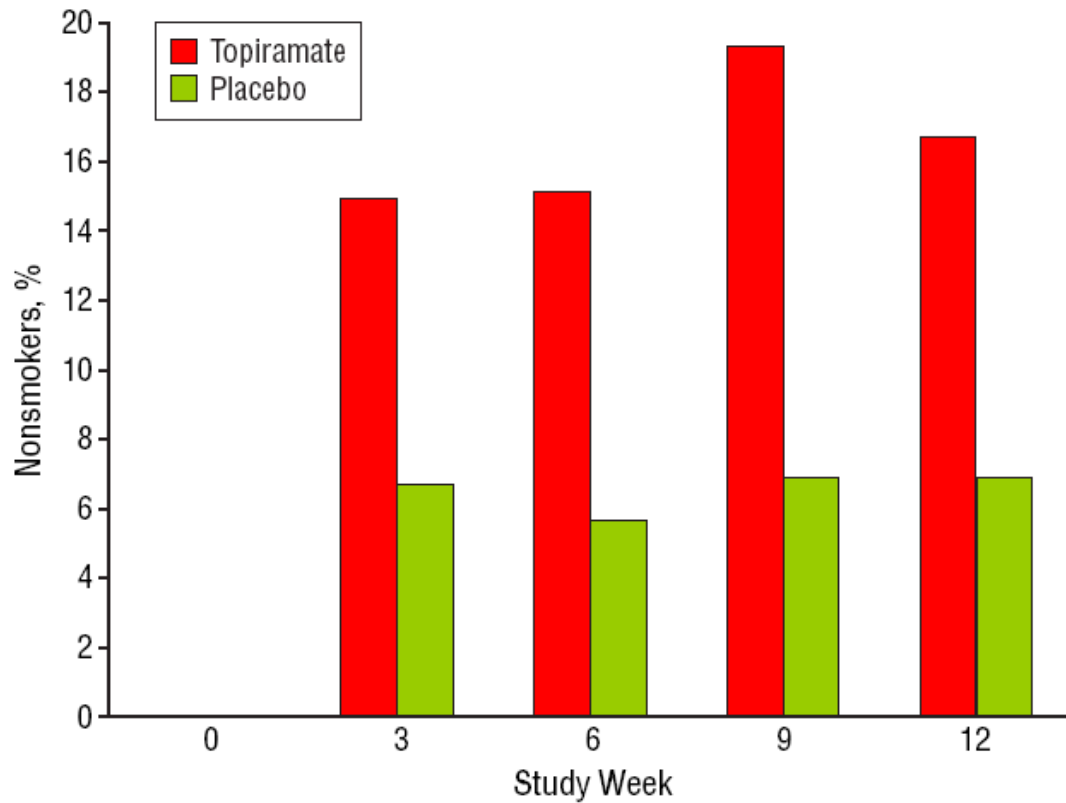
1st Conclusion

- Topiramate may be efficacious regarding consumption initiation *and* continuation

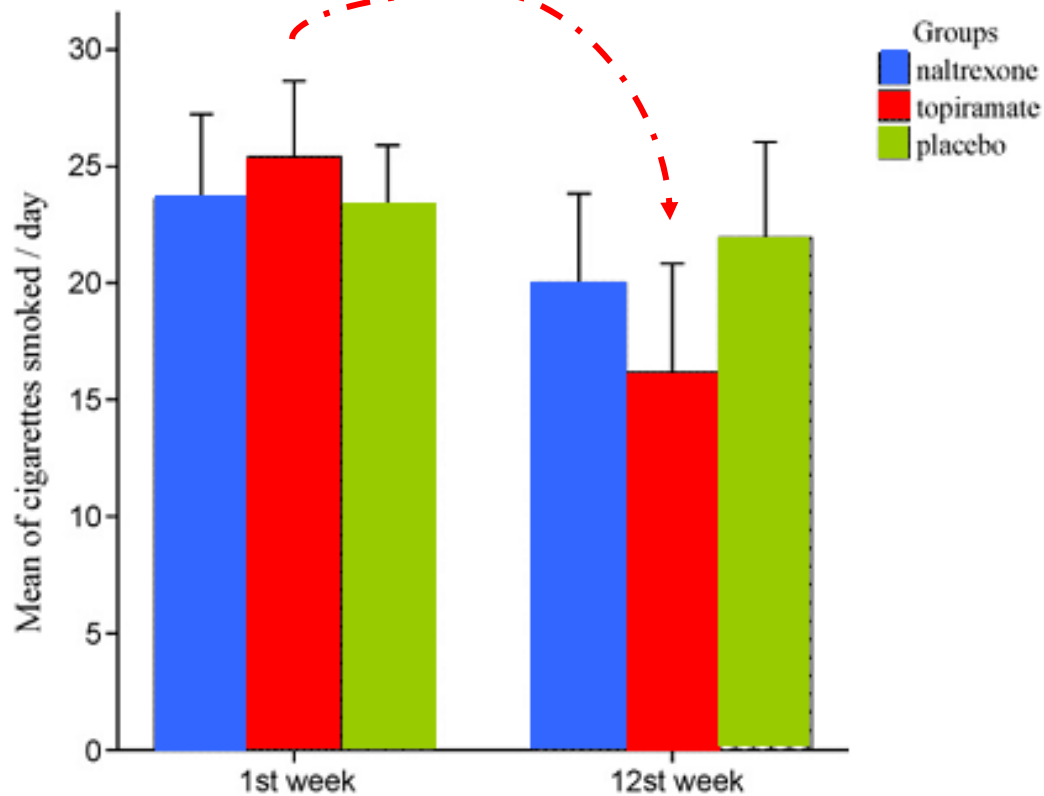


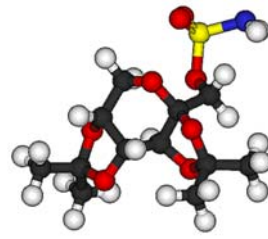
Effect on smoking

Johnson et al., 2005



Effect on smoking





Topiramate



Alcohol



Hyperphagia



Cocaine



Tobacco



Gambling

2nd Conclusion



- Topiramate may be efficacious regarding consumption initiation *and* continuation
- Topiramate may be efficacious regarding various (all?) addictive behaviors

The motives of consumption



Initiation

Context



Hedonic
consumption

«Pleasure»

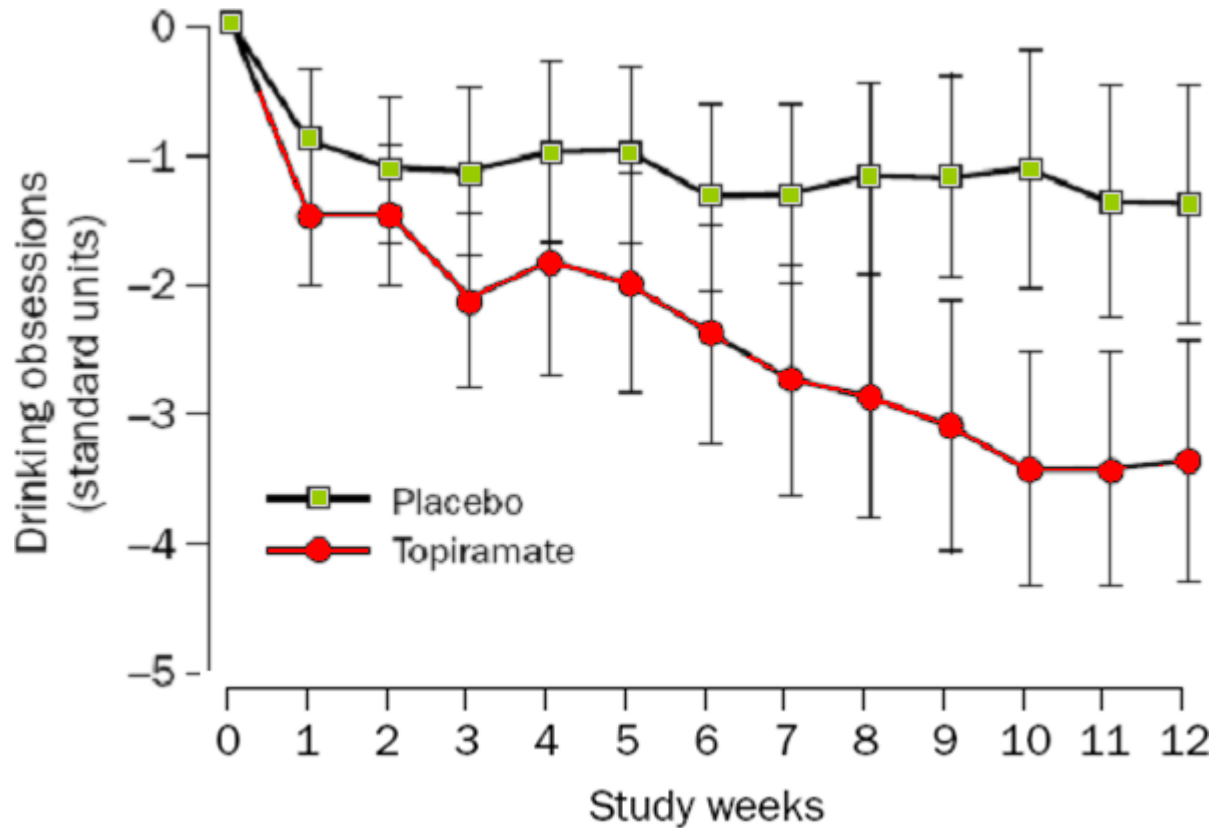


Addiction

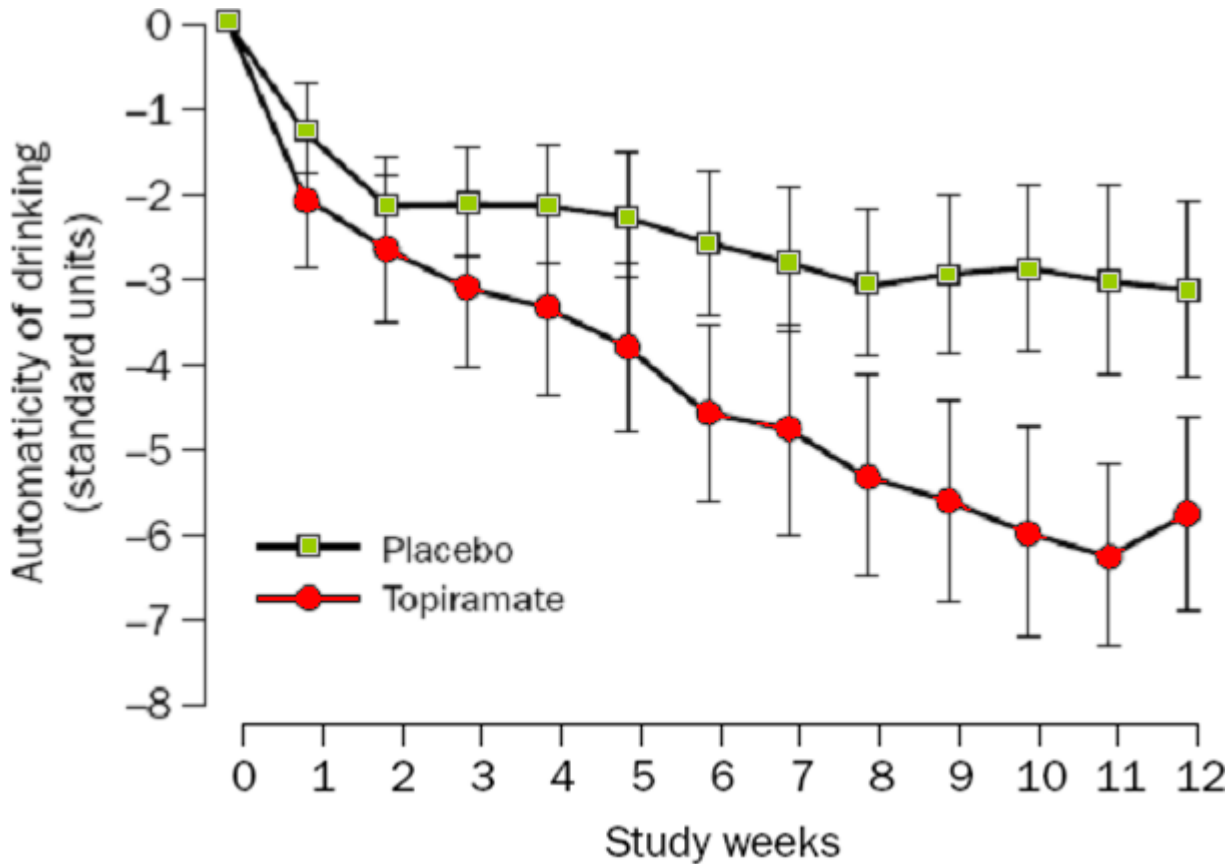
Automatization

Drinking obsessions (OCDS)

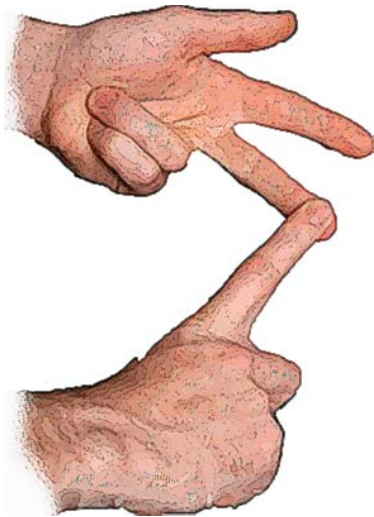
Johnson et al., 2003



Automaticity of Drinking (OCDS)



3rd Conclusion



- Topiramate may be efficacious regarding consumption initiation *and* continuation
- Topiramate may be efficacious regarding diverse (all ?) addictive behaviors
- Topiramate may act on ***expression of automatisms***

The motives of consumption



Initiation

Context



Hedonic
consumption

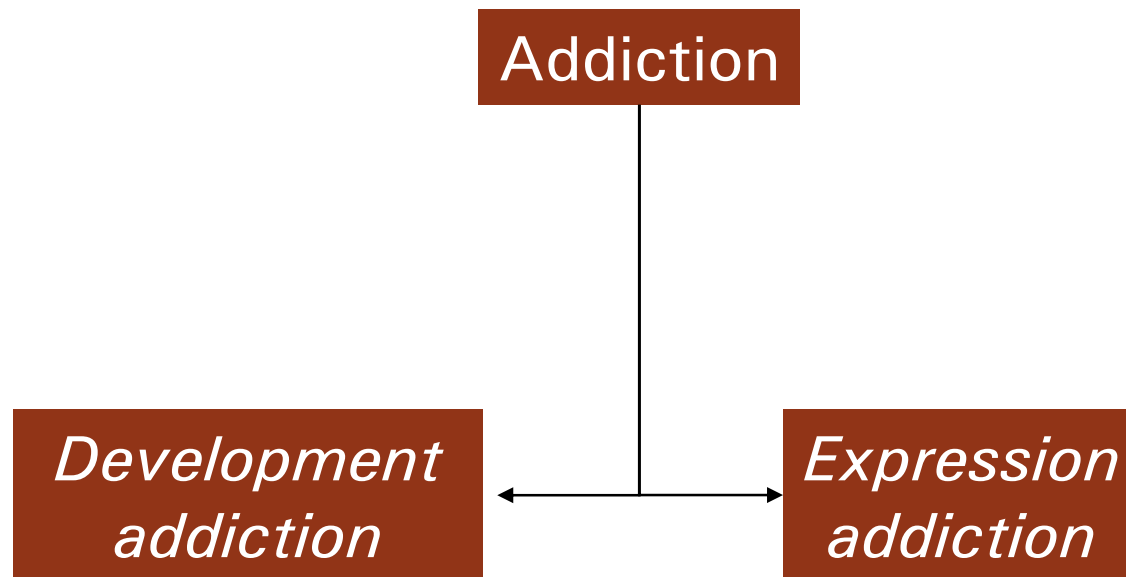
«Pleasure»

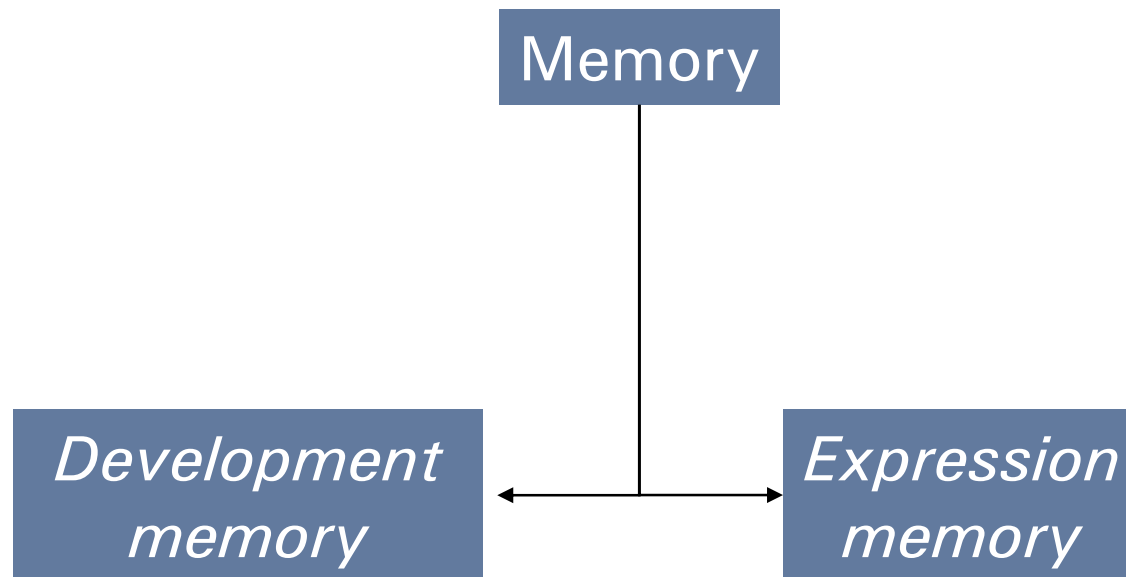
development



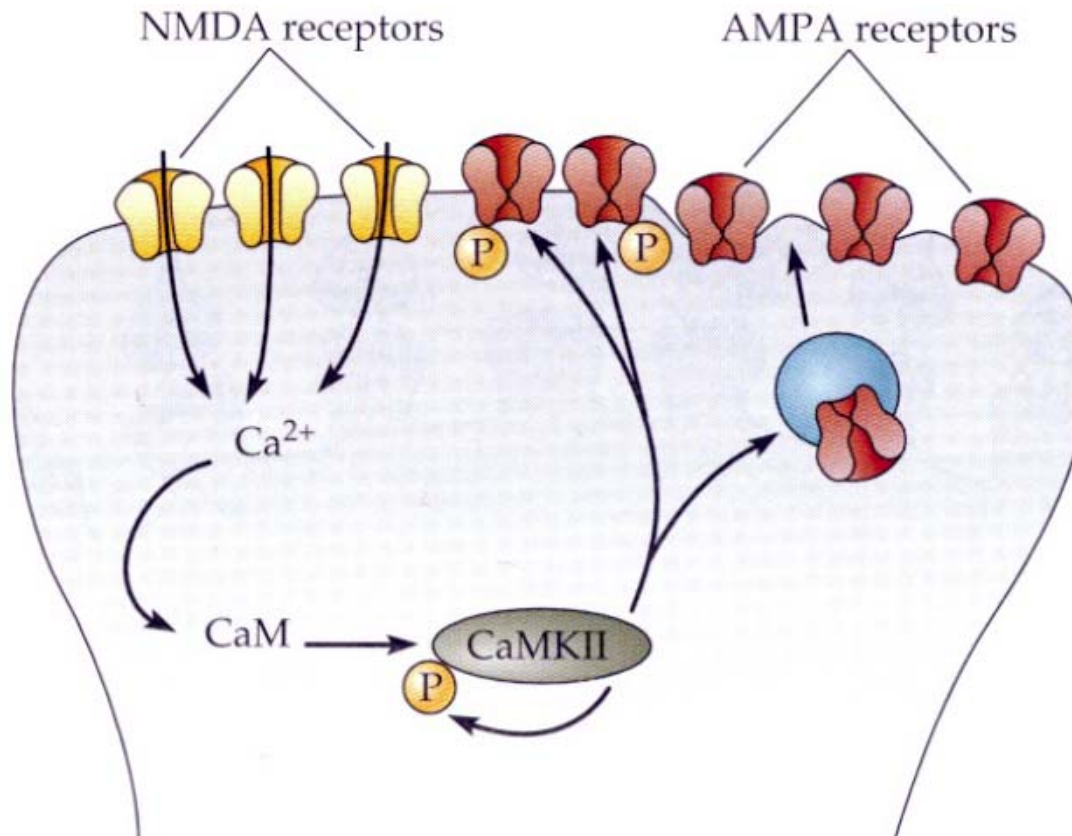
Addiction
expression

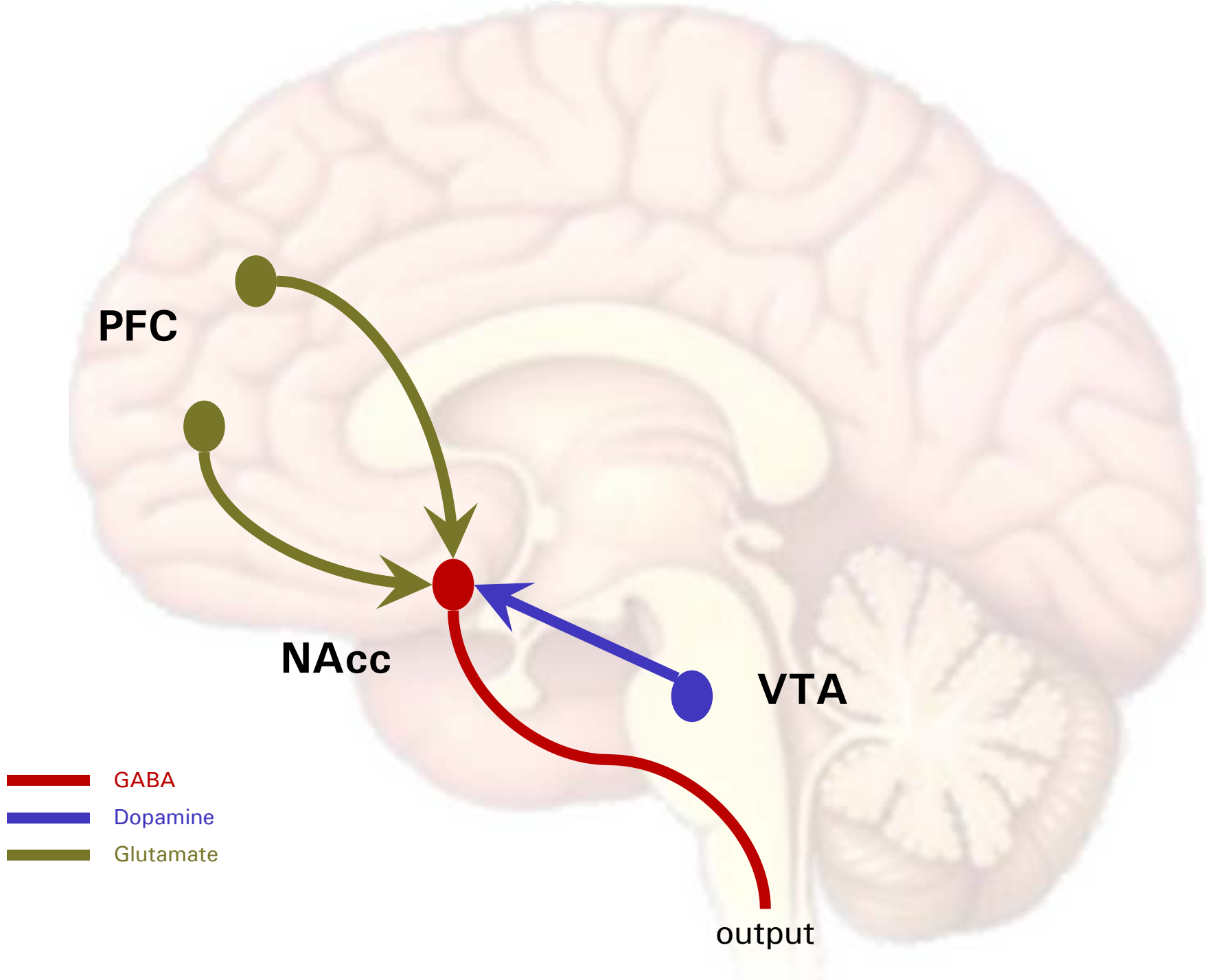
Automatization





Glutamate receptors

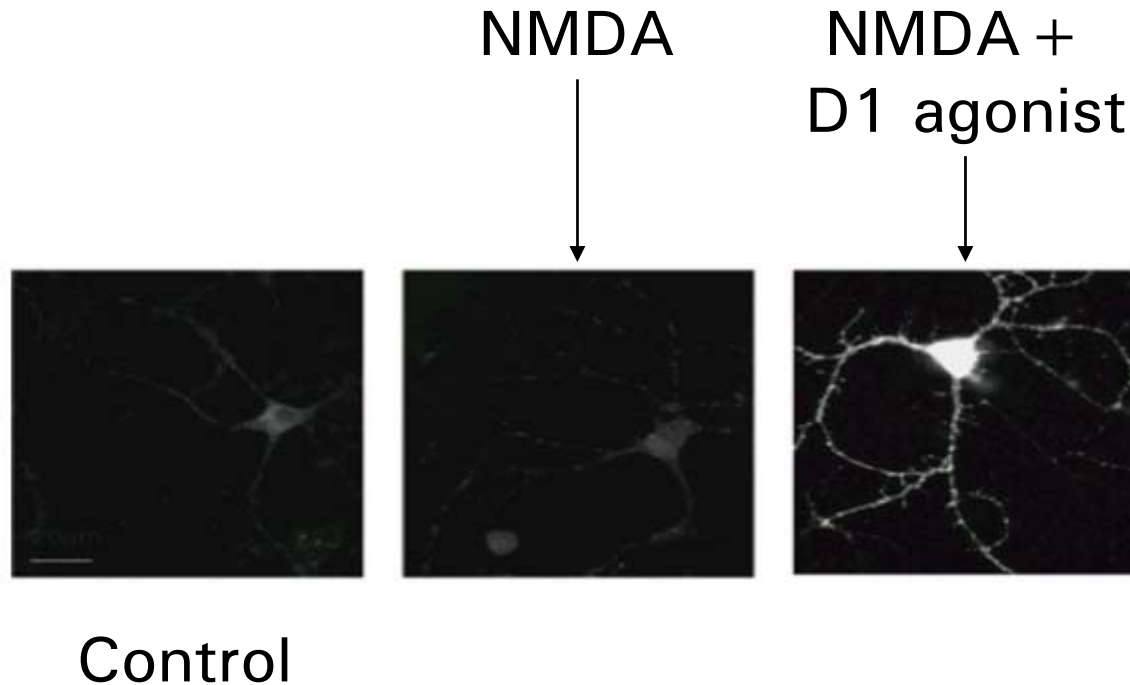






Glutamate receptors

Mangiavacchi & Wolf, 2004

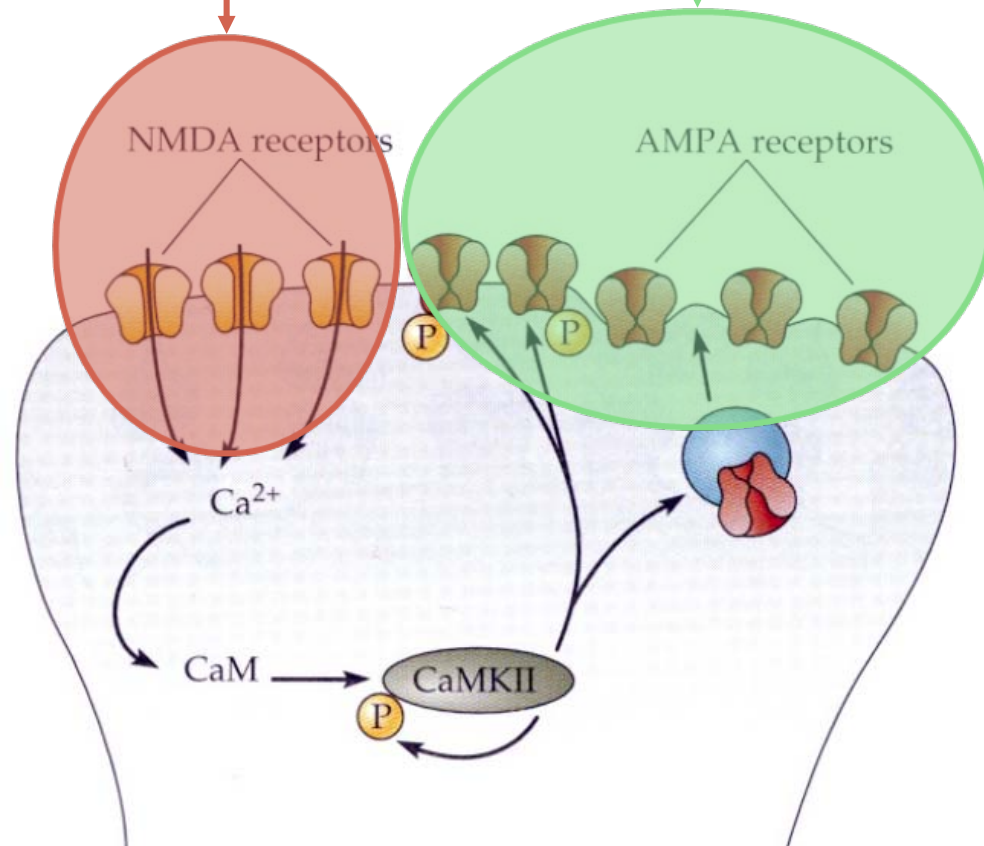


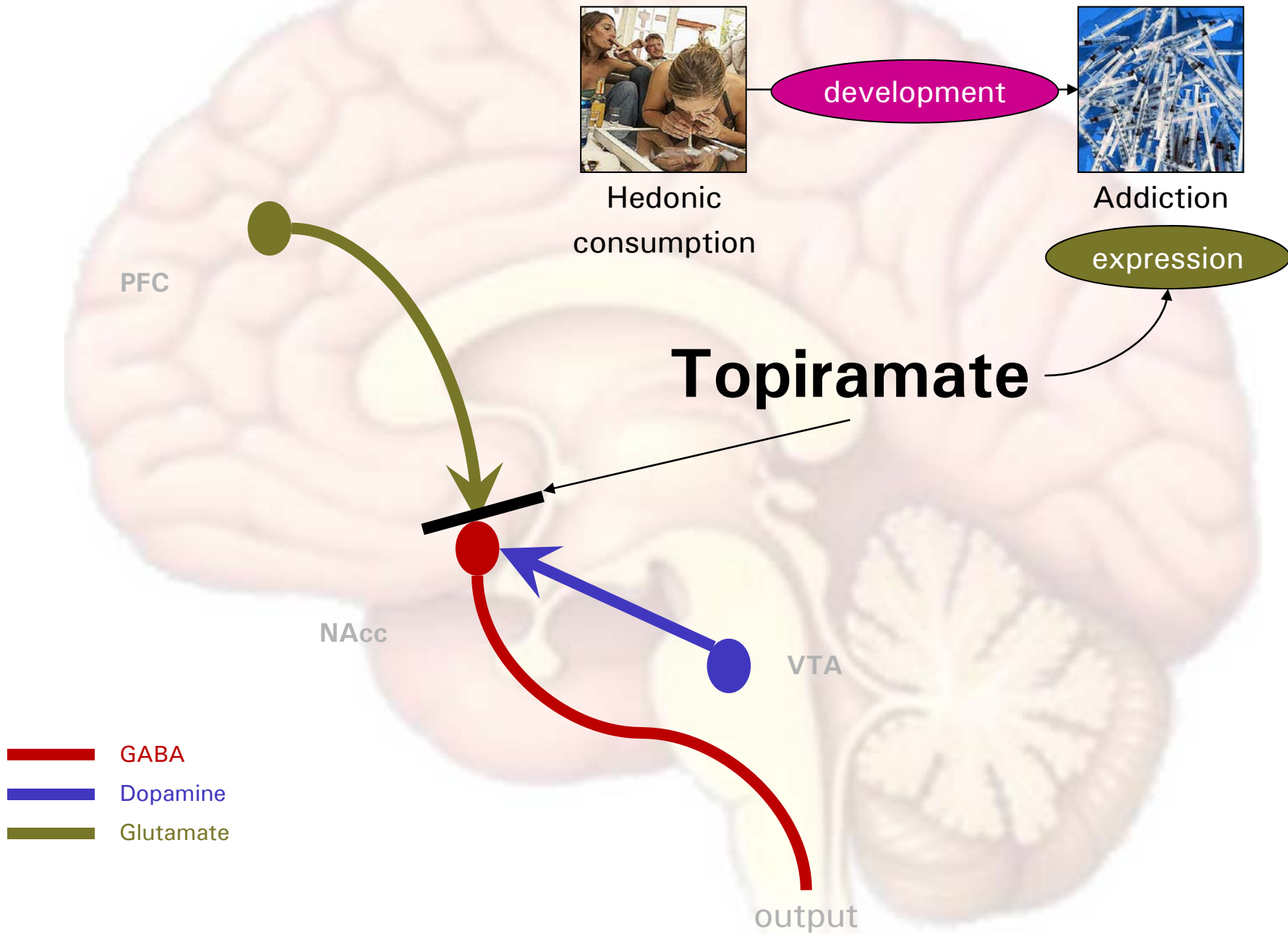
↓ Development
addictive behaviors

↓ Expression
addictive behaviors

Modulation NMDA

Modulation AMPA



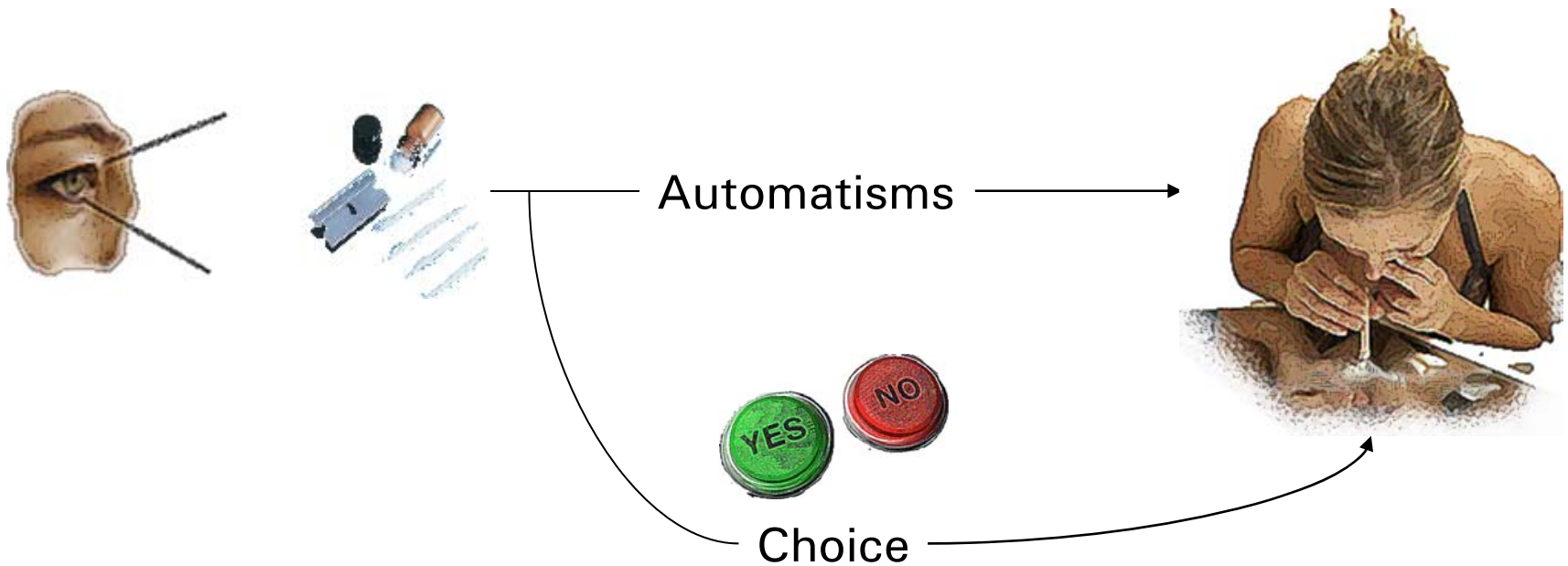


4th Conclusion



- Topiramate may be efficacious regarding consumption initiation *and* continuation
- Topiramate may be efficacious regarding diverse (all ?) addictive behaviors
- Topiramate may act on *expression of automatisms*
- Topiramate may act ***through AMPA-blockade***

Treatment objective



5th Conclusion



- Topiramate may be efficacious regarding consumption initiation *and* continuation
- Topiramate may be efficacious regarding diverse (all ?) addictive behaviors
- Topiramate may act on *expression of automatisms*
- Topiramate may act *through AMPA-blockade*
- Topiramate → ↑ competitiveness of explicit processing (targeted by ‘psychotherapy’)

I gave you five



- Topiramate may be efficacious regarding consumption initiation **and** continuation
- Topiramate may be efficacious regarding diverse (all ?) addictive behaviors
- Topiramate may act on **expression of automatisms**
- Topiramate may act **through AMPA-blockade**
- Topiramate → ↑ competitiveness of explicit processing (targeted by 'psychotherapy')



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