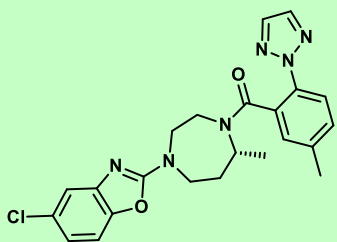


Drug of the Week: Suvorexant (Belsomra)

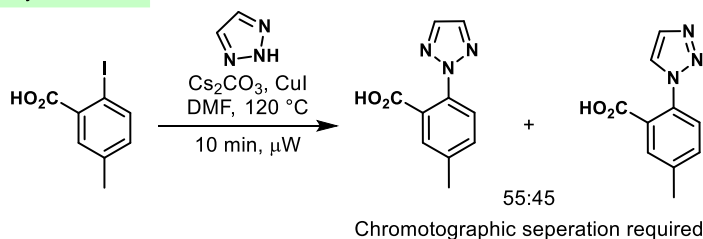


Suvorexant (Belsomra)

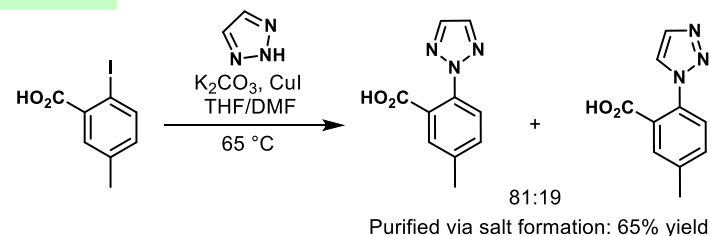
- Belsomra was approved by the FDA for treatment of insomnia in 2014
- It is a first-in-class dual orexin receptor antagonist while other sleep aids such as Ambien and Lunesta target GABA receptor signaling
- Interesting structural features include a benzoxazole, a diazepane ring and a triazole
- Contains a single stereocenter that has been shown to be important for the activity of the molecule as the enantiomer has ~10-fold weaker binding.



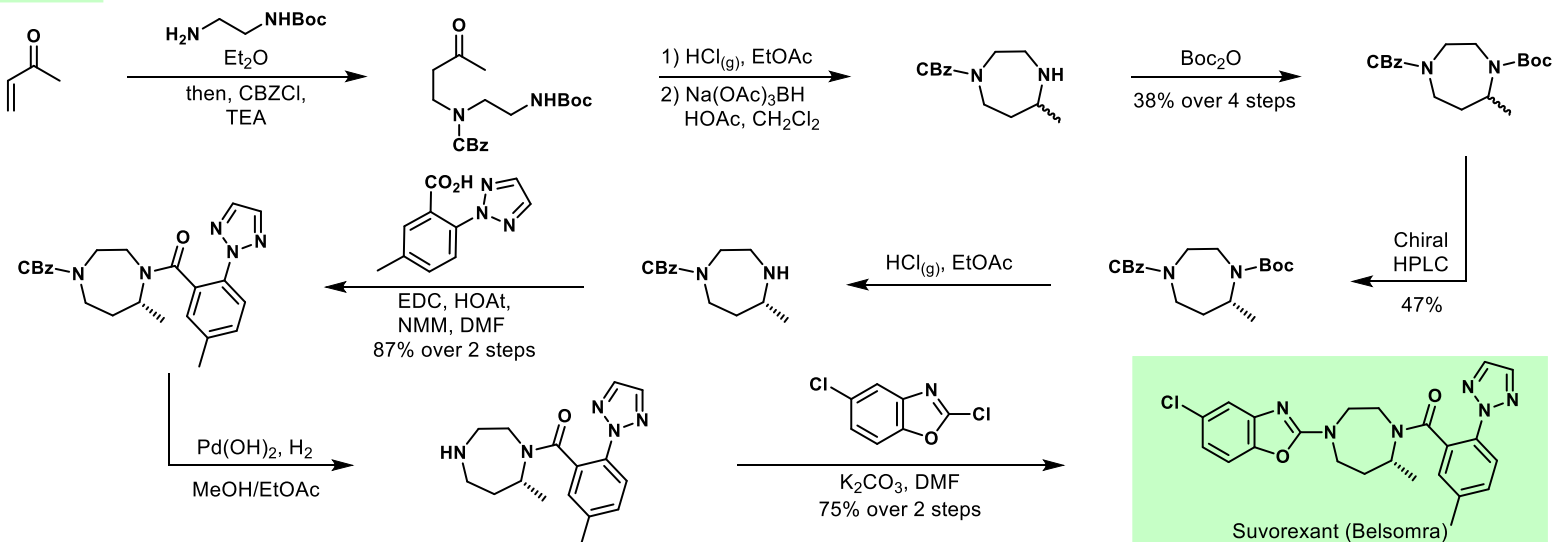
Discovery Conditions:



Process Conditions:



Discovery Route:

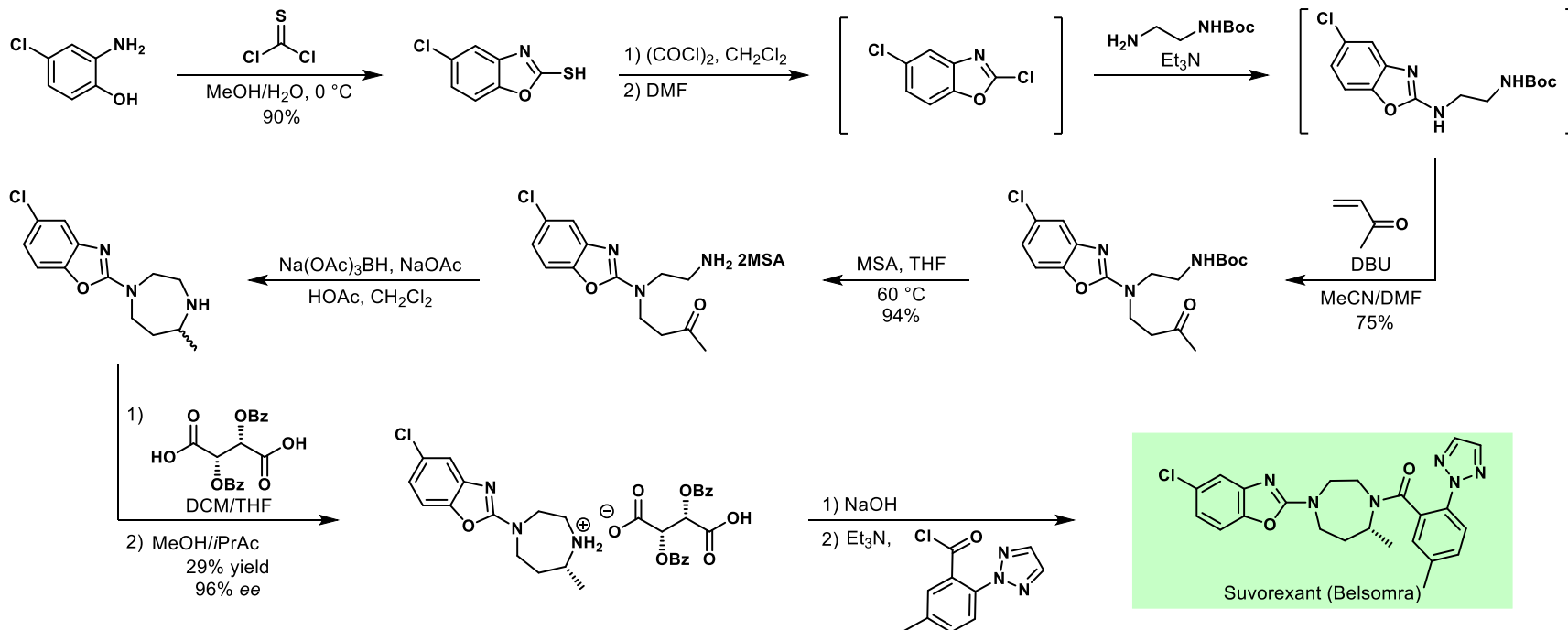


Org. Process Res. Dev. 2011, 15, 367

Drug of the Week: Suvorexant (Belsomra)

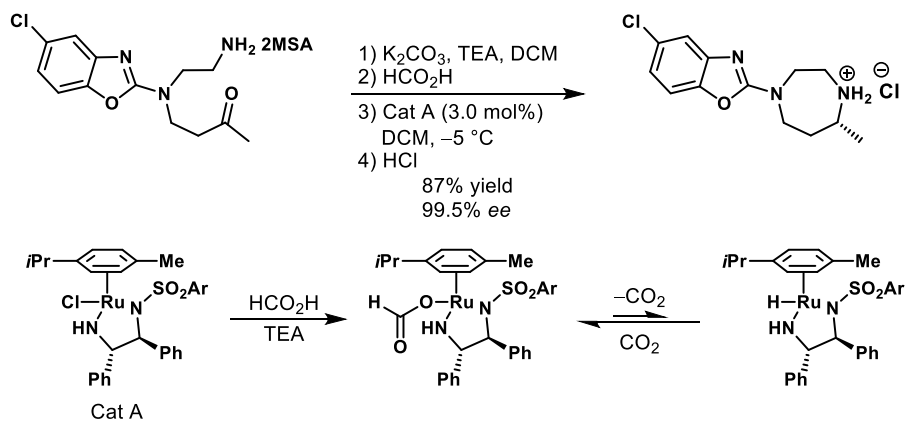
Sarlah Group

Process Route:



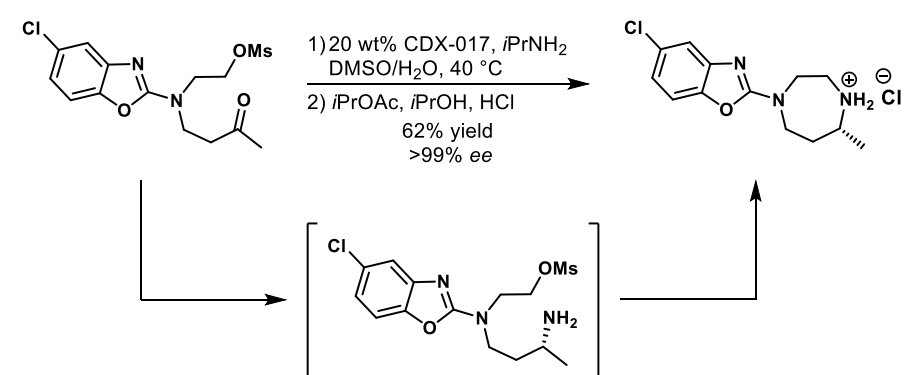
Org. Process Res. Dev. 2011, 15, 367

Asymmetric reductive amination:



J. Am. Chem. Soc. 2011, 133, 8362

Biocatalytic transamination:



Org. Lett. 2012, 14, 3458