# Use of Anticholinergic Medications

## Does it Increase the Risk of Dementia?

JAMA Intern Med. 2015 March 1; 175(3): 401–407.
doi:10.1001/jamainternmed.2014.7663.
Cumulative Use of Strong Anticholinergic Medications and Incident Dementia

For dementia, adjusted hazard ratios (HRs) and 95% confidence interval (CI) for cumulative anticholinergic use was 0.92 (95% CI, 0.74-1.16) for 1-90 TSDD; 1.19 (CI, 0.94-1.51) for 91-365 TSDD; 1.23 (CI, 0.94-1.62) for 366-1095 TSDD; and 1.54 (95% CI, 1.21-1.96) for >1095 TSDD, compared to non-use.

# General Acceptance

Anticholinergic induced cognitive impairment reverses with removal of medication

Does it cause irreversible cognitive impairment?

# Most Common Classes of Anticholinergics

- Tricyclic antidepressants
- First generation antihistamines
- **Bladder antimuscarinics**

# Anticholinergic Medications Used for Overactive Bladder

- Oxybutynin
- More selective anticholinergics
  - Tolterodine
  - Solifenacin
  - Darifenacin

# Lot of Mixed Information

**Anticholinergic drugs and risk of dementia case-control study Richardson et al BMJ 2018(361)**

- Association with increasing anticholinergic use over previous 4-20 years and incident dementia diagnosis
- Even for exposures 15-20 years earlier
- Oxybutynin and tolterodine consistently associated with incident dementia

# In Summary

- Bladder antimuscarinics are useful
  - Catheter related bladder spasms
  - Management of overactive bladder
- Consider other conservative measures
  - Fluid intake
  - Bladder retraining
  - Neuromodulation
  - Botulinum toxin