

Medications for Overactive Bladder (OAB)

Medication	Format	Mechanism	ACB Score	AEC Score	Cost	Coverage
Oxybutynin (Ditropan®)	IR tab: 2.5 mg & 5 mg Oral syrup: 1 mg/mL ER tab discontinued	M1 and M3 receptor; active metabolite; tertiary amine anticholinergic drug which exerts antimuscarinic as well as direct antispasmodic action on smooth muscle	3	3	2.5 mg: \$0.18 per tab	Covered in PCH
					5 mg: \$0.26 per tab	
					1 mg/mL: \$0.21 per mL or \$1.05 per 5 mL	
Tolterodine (Detrol®)	IR tab: 1 mg & 2 mg ER cap: 2 mg & 4 mg	M1-5; less lipid soluble; active metabolite; competitive muscarinic receptor antagonist	3	2	1 mg: \$0.26 per tab	Covered in PCH
					2 mg: \$0.26 per tab	
					ER 2 mg: \$1.03 per cap	
					ER 4 mg: \$1.03 per cap	
Fesoterodine (Toviaz®)	ER tab: 4 mg & 8 mg	Competitive muscarinic receptor antagonist	3	0	4 mg: \$1.18 per tab	Covered in PCH
					8 mg: \$1.18 per tab	
Tropium (Trosec®)	20 mg tab	M2 & M3; low BBB penetration due to quaternary amine, hydrophilic; antispasmodic, antimuscarinic drug that antagonizes the effect of acetylcholine on muscarinic receptors in cholinergically innervated organs	3	0	20 mg: \$0.64 per tab	Part 3 EDS*
Solifenacin (Vesicare®)	5 mg & 10 mg tabs	M3+ specific; long half life (t½ = 45-68hrs); competitive muscarinic receptor antagonist with selectivity for the urinary bladder	3	1	5 mg: \$0.32 per tab	Covered in PCH
					10 mg: \$0.32 per tab	
Darifenacin (Enablex®)	ER tab: 7.5 mg & 15 mg	M3 +++ specific; ↓ BBB penetration; selective antagonist of the M3 receptor	3	0	7.5 mg: \$1.44 per tab	Not covered
					15 mg: \$1.44 per tab	
Propiverine (Mictoryl®)	MR cap: 30 mg & 45mg	Anticholinergic action results in relaxation of bladder smooth muscle, and inhibits the calcium influx and modulating the intracellular calcium in urinary bladder smooth muscle cells causing musculotropic spasmolysis	3	Not listed	30 mg: \$1.46 per cap 45 mg: \$1.57 per cap	Not covered
Mirabegron (Myrebetriq®)	ER tab: 25 mg & 50 mg	Selective β-3 agonist; ↑ bladder capacity	0	0	25 mg: \$1.53 per tab 50 mg: \$1.53 per tab	Covered in PCH

IR: immediate-release; ER: extended-release; MR: modified-release

ACB: Anticholinergic Burden Score <https://www.acbcalc.com/> AEC: Anticholinergic Effect on Cognition Score <https://medichec.com/>

*Part 3 EDS criteria: Urinary incontinence in patients unable to tolerate or failing oxybutynin (Ditropan), e.g., headache, dry mouth and dyspepsia.

References:

Canadian Agency for Drugs and Technology in Health (CADTH). (2017). Common Drug Review Clinical Review Report: Propiverine.

https://www.cadth.ca/sites/default/files/cdr/clinical/SR0504_Mictoryl_CL%20Report.pdf

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