



Drug Class Review Monograph → GPI Class 56 – Genitourinary Agents Miscellaneous

Review Time Frame: ~~January-February 02/2015-6~~ → ~~January 01/20167~~
Previous Class Review: 11/2016

Background:

Genitourinary tract agents are used to treat conditions of the reproductive organs and excretory system or urinary tract. They include medicines used for bladder spasms, urinary pH modifiers, urinary incontinence, ~~and and medicines used for treatment of Bbenign pProstatic hHyperplasia~~ (BPH). The classes of genitourinary agents include:

- Acidifiers increase acidity by increasing free hydrogen ion concentration to help maintain pH and create a mild diuretic effect.
- Alkalinizers increase urinary pH by promoting the urinary excretion of free bicarbonate ions to prevent uric acid or cysteine calculi of the urinary tract.
- Urinary ~~a~~Analgesics exert a topical analgesic effect on the mucosa of the urinary tract through an unknown mechanism of action.
- Cystinosis ~~a~~Agents reacts with cysteine within the lysosome to convert it to cysteine and to a cysteine-cysteamine mixed disulfide, both of which can then exit the lysosome in patients with cystinosis.
- Interstitial ~~c~~Cystitis ~~a~~Agents have anti-inflammatory, analgesic, mast cell inhibition, and free-radical scavenger properties through an unknown mechanism of action.
- Urinary ~~s~~Stone ~~a~~Agents inhibit hydrolysis of urea and production of ammonia, reducing the urine alkalinity and ammonia concentration to enhance the effectiveness of antibacterial medications.
- Genitourinary ~~i~~rrigants dissolve apatite or struvite calculi via exchange of magnesium for insoluble calcium contained in the stone matrix.

New ~~t~~Treatment guideline recommendations ~~pertaining to genitourinary agents:~~

- None identified

Newly approved drugs:

- None identified

Newly approved formulations:

- None identified

Newly approved generics:

- ~~None identified~~
- ~~Darifenacin hydrobromide extended release March 13, 2015.~~
- ~~Fesoterodine fumarate extended release December 2015.~~

Discontinued drugs:

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- None identified

FDA Safety Alert/black box warnings:

- None identified

Pipeline alerts:

Agents pending FDA approval include:

Summary/Recommendation:

***generic availability**

- ~~1. Clemens JQ. Management of interstitial cystitis/bladder pain syndrome. O'Leary MP, <http://www.clinicalpharmacology-ip.com/>. Updated January-February 2017.~~
- ~~3. US Script Oracle PBM: Medi-Span® Master Drug Data Base. January 2016~~
- ~~4.3. Pharmacy & Therapeutics Management [database online]. Bay Harbor Islands, FL: IPD Analytics, LLD. Accessed February 2017. Available at: www.ipdanalytics.com.~~

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