

Supplementary Table 1. Diagnosis, procedure, and drug codes used for Korean National Health information data analysis.

Category	Description details	Codes (KCD-8, HIRA code)
Diagnosis	Hyperplasia of prostate, Hyperplasia of prostate without complication, hyperplasia of prostate with urinary tract obstruction, hyperplasia of prostate with hematuria, hyperplasia of prostate with urinary tract obstruction and hematuria, hyperplasia of prostate with other complication	N40, N40.0, N40.1, N40.2, N40.3, N40.8
	Neuromuscular dysfunction of bladder, NEC, uninhibited neuropathic bladder, NEC, reflex neuropathic bladder, NEC, flaccid neuropathic bladder, NEC, other neuromuscular dysfunction of bladder, neuromuscular dysfunction of bladder, unspecified, neurogenic bladder due to cauda equina syndrome, cord bladder NOS, due to spinal cord lesion	N31, N31.0, N31.1, N31.2, N31.8, N31.9, G83.4, G95.8
	Stress incontinence, other specified urinary incontinence, urge incontinence, mixed incontinence, other specified urinary incontinence, urinary incontinence NOS, extravasation of urine, urinary incontinence of nonorganic origin	N39.3, N39.40, N39.41, N39.48, R32, R39.0, F98.0
	Other specified disorders of bladder, bladder disorder, unspecified, retention of urine, polyuria, frequency of micturition, nocturnal polyuria, other nocturia, other and unspecified polyuria, other difficulties with micturition	N32.8, N32.9, R33, R35, R35.1, R35.2, R35.8, R39.1
Drug	Alpha-blocker	104803ATR, 149101ATB, 149102ATB, 149104ATR, 504202ACH, 504202ATB, 504203ACH, 504203ATD, 234601ACR, 234601ATD, 234601ATR, 234603ACR, 614201ATB, 614202ATB, 614203ATB, 235501ATB, 235502ATB, 235503ATB
	Cholinergics, anticholinergics	245501ATB, 245503ATB, 219701ATB, 219702ATB, 357102ACR, 357102ATB, 357103ACR, 357103ATR, 493801ATB, 493801ATD, 493802ATB, 493802ATD, 655601ATB, 655602ATB, 657401ATB,

		657402ATB, 505802ATD, 116902ATB, 116904ATB, 207001ATB, 207001ATR, 207005ATR, 503801ATR, 503802ATR
	Beta 3 agonist	625701ATR, 625702ATR
Surgical procedure	Transurethral prostatectomy, prostatectomy, photoselective vaporization of the prostate, holmium laser enucleation of prostate, transurethral incision of prostate	R3975, R3950, R3976, R3977, R3530
	Radical urinary incontinence surgery, urinary incontinence surgery_past treatment, urinary incontinence surgery_open surgery, urinary incontinence surgery_injection of artificial substance or autologous fat, urinary incontinence surgery_surgery through the vaginal cavity_in case of using autologous fascia, urinary incontinence surgery_surgery through the vaginal cavity_others, extracorporeal magnetic field urinary incontinence treatment, and those who claimed electrical stimulation therapy for urinary incontinence.	R3560, R3561, R3562, R3563, R3564, R3565, MX033, MX034

BPH: benign prostatic hyperplasia, HIRA: Health Insurance Review & Assessment Service, KCD: Korean Standard Classification of Diseases, NB: neurogenic bladder, UI: urinary incontinence