

Evaluation of the adequacy of drug prescriptions in patients with chronic kidney disease: results from the CKD-REIN cohort

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Supplementary Table 3: Inappropriate prescriptions by ATC class (using SPCs as the reference)

	ATC class	Number of evaluable prescriptions	Number of contraindicated prescriptions	Number of overdosed prescriptions
ANTIHYPERTENSIVES				
Rilmenidine	C02AC06	204	13	NA
Moxonidine	C02AC05	17	NA	6
Hydrochlorothiazide	C03AA03	106	53	NA
Indapamide	C03BA11	53	18	NA
Spirolactone	C03DA01	91	32	NA
Eplerenone	C03DA04	21	7	NA
Amiloride	C03DB01	10	8	NA
Hydrochlorothiazide and potassium-sparing diuretics	C03EA01	5	4	NA
Altizide and potassium-sparing diuretics	C03EA04	18	7	NA
Sotalol	C07AA07	28	NA	6
Nadolol	C07AA12	11	NA	3
Atenolol	C07AB03	163	NA	42
Acebutolol	C07AB04	56	NA	7
Bisoprolol	C07AB07	560	NA	13
Nebivolol	C07AB12	297	56	NA
Bisoprolol and thiazide diuretic	C07BB07	12	2	NA
Nebivolol and thiazide diuretic	C07BB12	7	3	NA
Atenolol and other antihypertensive agents	C07FB03	14	5	NA
Lercanidipine	C08CA13	403	3	NA
Perindopril	C09AA04	186	NA	150
Ramipril	C09AA05	468	NA	156
Benazepril	C09AA07	6	NA	1
Trandolapril	C09AA10	33	NA	14
Enalapril and diuretics	C09BA02	15	7	1
Lisinopril and diuretics	C09BA03	8	6	NA
Perindopril and diuretics	C09BA04	60	35	2
Ramipril and diuretics	C09BA05	28	15	6
Quinapril et diuretics	C09BA06	1	1	NA
Fosinopril and diuretics	C09BA09	3	2	NA
Zofenopril and diuretics	C09BA15	2	2	NA
Enalapril and calcic inhibitors	C09BB02	27	9	NA
Perindopril and amlodipine	C09BB04	68	NA	2
Tandolapril and calcic inhibitors	C09BB10	9	7	NA
Olmesartan	C09CA08	102	14	24
Losartan and diuretics	C09DA01	30	14	NA
Valsartan and diuretics	C09DA03	56	22	NA
Irbesartan and diuretics	C09DA04	143	48	NA
Candesartan and diuretics	C09DA06	28	14	0
Telmisartan and diuretics	C09DA07	24	8	NA
Olmesartan and diuretics	C09DA08	32	5	0
Diltiazem	C08DB01	40	NA	31
Olmesartan and Amlodipine	C09DB02	41	4	25
Valsartan, amlodipine and hydrochlorothiazide	C09DX01	21	8	NA
Aliskiren	C09XA02	21	10	NA
Aliskiren and hydrochlorothiazide	C09XA52	11	6	NA
LIPID MODIFYING AGENTS				
Rosuvastatin	C10AA07	444	189	0
Bezafibrate	C10AB02	5	4	NA
Gemfibrozil	C10AB04	8	3	NA
Fenofibrate	C10AB05	77	30	NA

Ciprofibrate	C10AB08	4	3	NA
Simvastatin and ezetimibe	C10BA02	150	NA	51
Pravastatin and acetylsalicylic acid	C10BX02	5	2	NA
ANTITHROMBOTIC AGENTS				
Fluindione	Z-90751	330	53	NA
Acenocoumarol	B01AA07	23	1	NA
Warfarin	B01AA03	85	11	NA
Tinzaparin	B01AB10	5	2	NA
Duoplavin	B01AC30	60	25	NA
Rivaroxaban	B01AF01	4	NA	1
DRUGS USED IN DIABETES				
Metformin	A10BA02	236	40	77
Glibenclamide	A10BB01	20	6	NA
Glipizide	A10BB07	2	1	NA
Gliclazide	A10BB09	100	27	NA
Glimepiride	A10BB12	37	5	NA
Metformin and sitagliptin	A10BD07	30	6	16
Metformin and vildagliptin	A10BD08	22	7	9
Metformin and saxagliptin	A10BD10	1	0	1
Sitagliptin	A10BH01	69	NA	40
Vildagliptin	A10BH02	119	NA	14
Saxagliptin	A10BH03	5	NA	4
Exenatide	A10BX04	13	1	NA
Liraglutide	A10BX07	32	9	NA
DRUGS FOR ACID-RELATED DISORDERS				
Antiacid salt associations	A02AD01	3	2	NA
Other associations of antiacids	A02AX-9	3	2	NA
Ranitidine	A02BA02	11	NA	5
ANTI-GOUT PREPARATIONS				
Allopurinol	M04AA01	777	NA	395
Probenecid	M04AB01	2	2	NA
Colchicine	M04AC01	64	26	1
ANALGESICS				
Dihydrocodeine	N02AA08	1	1	0
Codeine associated with psycholeptic	N02AA59	21	NA	2
Tramadol	N02AX02	86	19	0
Associated tramadol	N02AX52	41	NA	4
Acid acetylsalicylic	N02BA01	61	29	NA
Paracetamol	N02BE01	214	NA	18
Paracetamol associated with psycholeptic	N02BE71	13	NA	2
PSYCHOLEPTICS				
Risperidone	N05AX08	5	NA	1
Oxazepam	N05BA04	21	NA	2
Lorazepam	N05BA06	34	NA	2
Prazepam	N05BA11	18	NA	4
Alprazolam	N05BA12	67	NA	16
Nordazepam	N05BA16	2	NA	1
Etifoxine	N05BX03	4	2	NA
Lormetazepam	N05CD06	14	NA	9
Loprazolam	N05CD11	13	NA	11
MINERAL SUPPLEMENTS				
Calcium	A12AA20	8	8	NA
Calcium associated	A12AX-9	163	25	NA
Potassium chloride	A12BA01	155	154	NA
Potassium citrate	A12BA02	3	2	NA

Potassium carbonate acid	A12BA04	2	2	NA
Magnesium lactate	A12CC06	1	1	NA
Magnesium	A12CC08	10	6	NA
Magnesium oxide	A12CC10	1	1	NA
Other mineral element	A12CX-L	1	1	NA
Magnesium	Z91231	1	1	NA
Magnesium	Z92554	1	1	NA
Magnesium	Z92071	7	3	NA
Magnesium	Z90560	19	12	NA
Magnesium	Z91231	1	1	NA
CARDIAC THERAPY				
Digoxin	C01AA05	28	NA	8
Flecainide	C01BC04	54	NA	3
Midodrine	C01CA17	6	4	NA
Trimetazidine	C01EB15	5	3	0
UROLOGICALS				
Alfuzosin	G04CA01	86	44	NA
Silodosin	G04CA04	26	5	NA
PSYCHOANALEPTICS				
Amitriptyline	N06AA09	6	NA	3
Citalopram	N06AB04	17	4	NA
Paroxetine	N06AB05	39	NA	7
Milnacipran	N06AX17	2	NA	2
Duloxetine	N06AX21	20	6	NA
Piracetam	N06BX03	2	1	0
ANTIEPILEPTICS				
Clonazepam	N03AE01	11	NA	6
Valproic acid	N03AG01	12	NA	1
Topiramate	N03AX11	5	NA	1
Gabapentin	N03AX12	32	NA	7
Levetiracetam	N03AX14	11	NA	1
Pregabalin	N03AX16	87	NA	14
ANTIINFECTIVES FOR SYSTEMIC USE				
Amoxicillin	J01CA04	22	NA	9
Amoxicillin and clavulanic acid	J01CR02	14	NA	7
Cephalexin	J01DB01	1	NA	1
Cefpodoxime	J01DD13	4	NA	2
Sulfamethoxazole et trimethoprim	J01EE01	54	NA	2
Clarithromycin	J01FA09	1	NA	1
Nitrofurantoin	J01XE01	4	3	NA
Ofloxacin	J01MA01	8	NA	4
Ciprofloxacin	J01MA02	7	NA	1
Levofloxacin	J01MA12	5	NA	2
Rifabutin	J04AB04	1	1	NA
Ethambutol	J04AK02	1	NA	1
Ribavirin	J05AB04	2	NA	1
Lamivudine	J05AF05	2	NA	1
Tenofovir	J05AF07	4	NA	2
Entecavir	J05AF10	7	NA	2
Anti-HIV associations	J05AF30	5	3	NA
IMMUNOSUPPRESSANTS				
Mycophenolic acid	L04AA06	69	NA	2
Leflunomide	L04AA13	1	1	NA
Anakinra	L04AC03	1	1	NA
Azathioprine	L04AX01	34	NA	1

Methotrexate	L04AX03	6	2	NA
ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS				
Diclofenac	M01AB05	4	2	NA
Piroxicam	M01AC01	2	2	NA
Ibuprofen	M01AE01	2	1	NA
Ketoprofen	M01AE03	3	1	NA
Flurbiprofen	M01AE09	2	1	NA
Tiaprofenic acid	M01AE11	2	2	NA
DRUGS FOR FUNCTIONAL GASTROINTESTINAL DISORDERS				
Domperidone	A03FA03	17	NA	4
DRUGS FOR CONSTIPATION				
Paraffin Oil	A06AA51	3	2	NA
INTESTINAL ANTIINFLAMMATORY AGENTS				
Mesalazine	A07EC02	4	2	NA
BLOOD SUBSTITUTES AND PERFUSION SOLUTIONS				
Electrolytes	B05BB01	3	3	NA
PITUITARY AND HYPOTHALAMIC HORMONES AND ANALOGUES				
Desmopressin	H01BA02	3	2	NA
TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN				
Ketoprofen	M02AA10	5	4	NA
Ibuprofen	M02AA13	1	1	NA
DRUGS FOR TREATMENT OF BONE DISEASES				
Alendronic Acid	M05BA04	13	6	NA
Risedronic acid	M05BA07	17	5	NA
Alendronic Acid and cholecalciferol	M05BB03	13	6	NA
ANTI-PARKINSON DRUGS				
Ropinirole	N04BC04	5	4	NA
OTHER NERVOUS SYSTEM DRUGS				
Acamprosate	N07BB03	1	1	NA
ANTIPROTOZOALS				
Proguanil associated	P01BB51	1	1	NA
ANTIHISTAMINES FOR SYSTEMIC USE				
Cetirizine	R06AE07	14	NA	13
Levocetirizine	R06AE09	18	NA	15
Rupatadine	R06AX28	6	6	NA
OPHTHALMOLOGICALS				
Brinzolamide	S01EC04	7	2	NA

ATC: Anatomical Therapeutic and Chemical; NA: not applicable; SPC: Summary of Product Characteristics