

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 2: Details of drug prescriptions at baseline according to CKD stages and therapeutic classes.

	STAGE				p-value
	TOTAL n = 3011 N (%)	STAGES 2 & 3A n = 526 N (%)	STAGE 3B n = 1126 N (%)	STAGES 4 & 5 n = 1359 N (%)	
ANTIHYPERTENSIVES					
<i>Beta blockers</i>	1254 (41.6%)	191 (36.3%)	440 (39.1%)	623 (45.8%)	<0.0001
<i>Calcium channel blockers</i>	1445 (48.0%)	216 (41.1%)	509 (45.2%)	720 (53.0%)	<0.0001
<i>Diuretics</i>					
Thiazide and thiazide like diuretics	565 (18.8%)	114 (21.7%)	222 (19.7%)	229 (16.9%)	0.0325
Loop diuretics	1108 (36.8%)	86 (16.3%)	374 (33.2%)	648 (47.7%)	<0.0001
Potassium sparing diuretics	145 (4.8%)	41 (7.8%)	53 (4.7%)	51 (3.8%)	0.0011
<i>RAS inhibitors</i>					
ACE inhibitors	1031 (34.2%)	174 (33.1%)	390 (34.6%)	467 (34.4%)	0.8179
Angiotensin II receptor antagonists	1369 (45.5%)	245 (46.6%)	517 (45.9%)	607 (44.7%)	0.7028
Renin inhibitors	32 (1.1%)	6 (1.1%)	10 (0.9%)	16 (1.2%)	0.7685
<i>Other antihypertensive agents</i>	367 (12.2%)	51 (9.7%)	119 (10.6%)	197 (14.5%)	0.0019
LIPID MODIFYING AGENTS					
<i>Statins</i>	1757 (58.4%)	274 (52.1%)	672 (59.7%)	811 (59.7%)	0.0059
<i>Fibrates</i>	94 (3.1%)	26 (4.9%)	31 (2.8%)	37 (2.7%)	0.0303
<i>Ezetimibe</i>	269 (8.9%)	49 (9.3%)	94 (8.3%)	126 (9.3%)	0.6840
<i>Bile acid sequestrants</i>	4 (0.1%)	0 (0%)	3 (0.3%)	1 (0.1%)	0.3991*
ANTIPLATELET THERAPY					
<i>Aspirin</i>	956 (31.8%)	156 (29.7%)	357 (31.7%)	443 (32.6%)	0.4691
<i>Clopidogrel</i>	297 (9.9%)	37 (7.0%)	108 (9.6%)	152 (11.2%)	0.0235
<i>Other</i>	78 (2.6%)	11 (2.1%)	34 (3.0%)	33 (2.4%)	0.4765
DRUGS USED IN DIABETES					
<i>Insulin</i>	643 (21.4%)	86 (16.3%)	234 (20.8%)	232 (23.8%)	0.0017
<i>Injectable Incretin mimetics</i>	45 (1.5%)	17 (3.2%)	18 (1.6%)	10 (0.7%)	0.0003
<i>Oral hypoglycemic agents</i>					
Metformin	278 (9.2%)	86 (16.3%)	139 (12.3%)	53 (3.9%)	<0.0001
Glinides	338 (11.2%)	36 (6.8%)	131 (11.6%)	171 (12.6%)	0.0016
Sulfonylureas	154 (5.1%)	42 (8.0%)	74 (6.6%)	38 (2.8%)	<0.0001
Alpha glucosidase inhibitors	31 (1.0%)	7 (1.3%)	16 (1.4%)	8 (0.6%)	0.0928
DPP inhibitors	243 (8.1%)	42 (8.0%)	106 (9.4%)	95 (7.0%)	0.0871
DRUGS FOR ACID-RELATED DISORDERS					
<i>Antiacids</i>	61 (2.0%)	13 (2.5%)	12 (1.1%)	36 (2.6%)	0.0149
<i>Drugs for peptid ulcer</i>					
Proton pump inhibitors	991 (32.9%)	140 (26.6%)	381 (33.8%)	470 (34.6%)	0.0030
H2 receptor antagonists	12 (0.4%)	4 (0.8%)	4 (0.4%)	4 (0.3%)	0.3988*
ANTI-GOUT PREPARATIONS					
<i>Xanthine oxidase inhibitors</i>					
Allopurinol	794 (26.4%)	100 (19.0%)	262 (23.3%)	432 (31.8%)	<0.0001
Febuxostat	207 (6.9%)	24 (4.6%)	77 (6.8%)	106 (7.8%)	0.0448
<i>Colchicine</i>	70 (2.3%)	10 (1.9%)	34 (3.0%)	26 (1.9%)	0.1478
ANALGESICS					
<i>Opioids</i>	199 (6.6%)	32 (6.1%)	83 (7.4%)	84 (6.2%)	0.4278
<i>Other analgesic</i>					
including salicylic acid derivatives	61 (2.0%)	9 (1.7%)	23 (2.0%)	29 (2.1%)	0.8419
including acetaminophen (paracetamol)	528 (17.5%)	89 (16.9%)	194 (17.2%)	245 (18.0%)	0.8030
<i>Antimigraine preparations</i>	9 (0.3%)	2 (0.4%)	6 (0.5%)	1 (0.1%)	0.0814*

PSYCHOLEPTICS					
<i>Antipsychotics</i>	188 (6.2%)	25 (4.8%)	72 (6.4%)	91 (6.7%)	0.2842
<i>Anxiolytics</i>	312 (10.4%)	51 (9.7%)	122 (10.8%)	139 (10.2%)	0.7601
<i>Hypnotics and sedatives</i>	240 (8.0%)	44 (8.4%)	74 (6.6%)	122 (9.0%)	0.0824
MINERAL SUPPLEMENTS	480 (15.9%)	62 (11.8%)	135 (12.0%)	283 (20.8%)	<0.0001
ANTICOAGULANTS					
<i>Vitamin K antagonists</i>	428 (14.2%)	58 (11.0%)	158 (14.0%)	212 (15.6%)	0.0378
<i>Non Antivitamin K antagonist oral anticoagulants</i>	12 (0.4%)	5 (1.0%)	4 (0.4%)	3 (0.2%)	0.0958*
CARDIAC THERAPY	432 (14.3%)	63 (12.0%)	160 (14.2%)	209 (15.4%)	0.1654
UROLOGICALS	345 (11.5%)	64 (12.2%)	116 (10.3%)	165 (12.1%)	0.3058
PSYCHOANALEPTICS					
<i>Antidepressants</i>	227 (7.5%)	36 (6.8%)	84 (7.5%)	107 (7.9%)	0.7436
<i>Psychostimulants</i>	4 (0.1%)	1 (0.2%)	2 (0.2%)	1 (0.1%)	0.5316*
<i>Anti-dementia drugs</i>	12 (0.4%)	4 (0.8%)	4 (0.4%)	4 (0.3%)	0.3988*
ANTIEPILEPTICS	188 (6.2%)	25 (4.8%)	72 (6.4%)	91 (6.7%)	0.2842
ANTIBACTERIALS FOR SYSTEMIC USE	182 (6.0%)	33 (6.3%)	67 (6.0%)	82 (6.0%)	0.9673
IMMUNOSUPPRESSANTS	167 (5.5%)	36 (6.8%)	61 (5.4%)	70 (5.2%)	0.3443
ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS					
<i>Non-steroidal anti-inflammatory antirheumatic</i>	43 (1.4%)	12 (2.3%)	14 (1.2%)	17 (1.3%)	0.1924
CKD-MBD DRUGS					
<i>Phosphate binders</i>					
Non calcium based phosphate binders	65 (2.2%)	0 (0%)	6 (0.5%)	59 (4.3%)	<0.0001
Calcium based phosphate binders	47 (1.6%)	2 (0.4%)	7 (0.6%)	38 (2.8%)	<0.0001
<i>Calcium carbonate</i>	318 (10.6%)	39 (7.4%)	81 (7.2%)	198 (14.6%)	<0.0001
<i>Vitamin D</i>					
Nutritional vitamin D only	1422 (47.2%)	206 (39.2%)	483 (42.9%)	733 (53.9%)	<0.0001
Active vitamin D only	78 (2.6%)	6 (1.1%)	12 (1.1%)	60 (4.4%)	<0.0001
<i>Calcimimetic</i>	10 (0.3%)	0 (0%)	0 (0%)	10 (0.7%)	0.0016*
ANTIANEMIC PREPARATIONS					
<i>Iron</i>	305 (10.1%)	23 (4.4%)	99 (8.8%)	183 (13.5%)	<0.0001
<i>Erythropoietin stimulating agents</i>	231 (7.7%)	12 (2.3%)	45 (4.0%)	174 (12.8%)	<0.0001
POTASSIUM BINDING RESINS	387 (12.9%)	27 (5.1%)	111 (9.9%)	249 (18.3%)	<0.0001
THYROID THERAPY (Levothyroxine)	357 (11.9%)	57 (10.8%)	138 (12.3%)	162 (11.9%)	0.7044
CORTICOSTEROIDS FOR SYSTEMIC USE	218 (7.2%)	54 (10.3%)	71 (6.3%)	93 (6.8%)	0.0114
DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES	227 (7.5%)	43 (8.2%)	80 (7.1%)	104 (7.7%)	0.7280

ACE: angiotensin-converting-enzyme; CKD-MBD: Chronic Kidney Disease-Mineral and Bone Disorder; RAS: renin-angiotensin system