

Supplementary Table 1. Cluster analysis of comorbidities: 2-cluster solution using k-means

	AOK PLUS			GWQ		
	Cluster 1 (n=1,312)	Cluster 2 (n=491)	p value	Cluster 1 (n=825)	Cluster 2 (n=504)	p value
Untreated patients, n (%)	746 (56.9)	428 (87.2)	<0.001	487 (59.0)	201 (39.9)	<0.001
Ischemic heart disease	408 (31.1)	235 (47.9)	<0.001	293 (35.5)	59 (11.7)	<0.001
Dementia in Alzheimer disease	10 (0.8)	27 (5.5)	<0.001	15 (1.8)	1 (0.2)	0.009
Stroke	59 (4.5)	59 (12.0)	<0.001	76 (9.2)	10 (2.0)	<0.001
Parkinson's disease	8 (0.6)	17 (3.5)	<0.001	16 (1.9)	4 (0.8)	0.096
Heart failure	320 (24.4)	242 (49.3)	<0.001	209 (25.3)	30 (6.0)	<0.001
Renal disease/failure	789 (60.1)	398 (81.1)	<0.001	540 (65.5)	213 (42.3)	<0.001
Hyperuricemia without signs of inflammatory arthritis and tophaceous disease	296 (22.6)	148 (30.1)	0.001	208 (25.2)	68 (13.5)	<0.001
Glomerular diseases	182 (13.9)	105 (21.4)	<0.001	111 (13.5)	35 (6.9)	<0.001
Type 2 diabetes	509 (38.8)	264 (53.8)	<0.001	263 (31.9)	80 (15.9)	<0.001
Hearing loss	304 (23.2)	161 (32.8)	<0.001	206 (25.0)	89 (17.7)	0.002
Neuropathies	216 (16.5)	119 (24.2)	<0.001	139 (16.9)	32 (6.4)	<0.001
Undesirable side effects with therapeutic use of drugs/medicines	37 (2.8)	32 (6.5)	<0.001	36 (4.4)	6 (1.2)	<0.001
Essential (primary) hypertension	1,049 (80.0)	446 (90.8)	<0.001	663 (80.4)	288 (57.1)	<0.001

Supplementary Table 2. Cluster analysis of procedures: 2-cluster solution using k-means

	AOK PLUS			GWQ		
	Cluster 1 (n=1,312)	Cluster 2 (n=491)	p value	Cluster 1 (n=825)	Cluster 2 (n=504)	p value
Untreated patients, n (%)	746 (56.9)	428 (87.2)	<0.001	487 (59.0)	201 (39.9)	<0.001
Cystectomy	155 (11.8)	83 (16.9)	0.004	120 (14.6)	58 (11.5)	0.115
Radical cystectomy	155 (11.8)	82 (16.7)	0.006	118 (14.3)	56 (11.1)	0.094
Nephroureterectomy	54 (4.1)	15 (3.1)	0.296	53 (6.4)	20 (4.0)	0.057
Radical nephroureterectomy	29 (2.2)	7 (1.4)	0.289	30 (3.6)	8 (1.6)	0.030
Ureterorenoscopy	81 (6.2)	31 (6.3)	0.913	96 (11.6)	42 (8.3)	0.055
Cystoscopy	234 (17.8)	127 (25.9)	<0.001	235 (28.5)	106 (21.0)	0.003
Lymph node dissection	59 (4.5)	22 (4.5)	0.988	58 (7.0)	22 (4.4)	0.047
Nephrectomy	79 (6.0)	23 (4.7)	0.274	72 (8.7)	24 (4.8)	0.007
Percutaneous nephrostomy	133 (10.1)	88 (17.9)	<0.001	116 (14.1)	30 (6.0)	<0.001
Cutaneous urinary drainage	147 (11.2)	92 (18.7)	<0.001	101 (12.2)	40 (7.9)	0.013
Surgical evacuation of a urinary bladder tamponade	65 (5.0)	46 (9.4)	0.001	55 (6.7)	20 (4.0)	0.039
Transurethral resection of the bladder	637 (48.6)	273 (55.6)	0.008	444 (53.8)	266 (52.8)	0.712
Continuous irrigation of the bladder	360 (27.4)	155 (31.6)	0.084	340 (41.2)	175 (34.7)	0.018
Ureter splint	234 (17.8)	127 (25.9)	<0.001	234 (28.4)	105 (20.8)	0.002
Transfusions	179 (13.6)	160 (32.6)	<0.001	165 (20.0)	51 (10.1)	<0.001