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Table 2. Studies comparing urine steroid profiling results in patients with adrenocortical carcinoma (ACC) and patients with adrenocortical adenoma (ACA)

Author, year	Period of data collection	Type of study	Sample size (n)	Women (n, %)	Age of diagnosis (years)	Tumor size (cm)	ACC		ACA	
							n	Hormone excess	n	Hormone excess
Arlt, 2011 ¹	2003-2006	Retro-spective 6 centers	147	84 (57%)	ACA (median, ranges): 60 (19-84) ACC (median, ranges): 55 (20-80)	ACA (median, ranges): 2.6 (0.9-7.8) ACC (median, ranges): 9 (1.4-23)	45	None – 12 (27%) Cortisol – 11 (24%) Androgen – 7 (16%) Cortisol + androgen – 12 (27%) (2 also with aldosterone) Estrogen – 3 (7%) (in combination with cortisol in 2 and androgen in 1 patient)	102	None – 69 (68%) Cortisol – 14 (14%) Aldosterone – 13 (13%) Cortisol + aldosterone – 4 (4%) Androgen – 2 (2%)
Kerkhofs, 2015 ²	2000-2011	Retro-spective 2 centers	152 (includes 18 non-cortical tumors)	100 (66%)	All adrenal tumors (mean, SD): 56(13)	All adrenal tumors (median, ranges): 3.5 (0.8-17)	27	None – 7 (26%) Hormone excess in 20 (74%) –single or in combination including: Cortisol – 18 (67%) Androgen in 14 (52%) Estrogen in 1 (4%)	107	None – 85 (79%) Cortisol – 19 (18%) Aldosterone – 3 (3%)
Velikanovala, 2016 ³	2014-2015	Retro-spective 3 centers	139	83 (60%)	Non-functioning ACA (median, ranges): 55 (50-61) Cortisol-secreting ACA (median, ranges): 48 (21-54) ACC (median, ranges): 43 (33-57)	Non-functioning ACA (median, ranges): 3.3 (2.3-4.5) Cortisol-secreting ACA (median, ranges):: 3 (2.5-4.2) ACC (median, ranges): 9.1 (7.2-11)	31	Hormone excess reported for cortisol only in 13 (42%) patients; other hormonal excess was not reported	108	None – 52 (48%) Cortisol - 44 (41%) Aldosterone - 12 (11%)

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