

Supplemental table 1. Plasma concentrations of 15 adrenal steroids in the reference group compared to patients with PGL, PHEO, PA and CS

Plasma steroids (nmol/L)	Reference Group	Endocrine hypertension			
	PHT	PGL	PHEO	PA	CS
Cortisol	257 (205-341)	249 (213-378)	354***\$¥ (274-459)	317***\$ (227-412)	496***† (390-636)
11-Deoxycortisol	0.47 (0.29-0.71)	0.46 (0.26-0.95)	0.84***\$¥ (0.45-1.50)	0.88***\$ (0.54-1.61)	1.53***† (0.86-2.85)
21-Deoxycortisol	0.035 (0.017-0.069)	0.027 (0.017-0.049)	0.048 (0.016-0.089)	0.066***\$¥£ (0.028-0.188)	0.052*\$¥ (0.020-0.121)
Aldosterone	0.121 (0.068-0.190)	0.121 (0.043-0.209)	0.132 (0.060-0.228)	0.354***† (0.201-0.610)	0.093 (0.034-0.239)
Corticosterone	4.70 (3.05-8.41)	4.54 (3.10-9.07)	7.15*\$ (3.96-11.55)	6.61*\$ (3.62-12.15)	10.29***\$¤¥† (6.28-17.42)
11-Deoxycorticosterone	0.102 (0.052-0.184)	0.151 (0.095-0.220)	0.180***\$ (0.098-0.276)	0.218***\$¥ (0.146-0.345)	0.207***\$ (0.134-0.383)
18-Oxocortisol	0.022 (0.013-0.037)	0.026 (0.013-0.057)	0.026 (0.015-0.058)	0.053***† (0.026-0.230)	0.030 (0.011-0.047)
18-Hydroxycortisol	1.60 (1.11-2.28)	1.23*\$ (0.80-1.59)	1.28*\$ (0.85-1.98)	2.12***\$¥† (1.28-4.01)	2.16***\$¥† (1.21-3.53)
Cortisone	49.52 (42.93-58.61)	49.07 (44.75-58.84)	53.17 (44.00-62.56)	49.11*† (39.12-59.23)	55.70*\$¤ (42.67-70.02)
DHEA	8.37 (5.30-13.90)	12.48*\$ (8.74-20.76)	8.66*¥ (3.85-13.04)	7.76*¥ (4.19-12.5)	6.25 (2.03-15.98)
DHEA-SO₄ (µmol/L)	8.31 (4.61-12.00)	7.63 (4.80-9.27)	4.09***\$¥ (2.24-7.78)	5.41*\$ (3.24-8.48)	5.82 (1.45-13.80)
Androstenedione	2.97*£ (2.19-4.15)	2.32 (1.85-3.27)	2.22***\$ (1.51-3.05)	2.69*† (1.78-4.03)	3.83*† (1.95-7.73)
Pregnenolone	3.72 (2.40-6.01)	3.89 (1.77-8.27)	1.25***\$ (0.01-5.15)	2.12*\$† (0.66-6.29)	4.69 ***†¤ (1.27-10.00)
17-Hydroxyprogesterone	1.70 (0.58-2.60)	1.93 (1.16-3.28)	1.41 (0.65-2.47)	2.01*\$† (1.05-3.05)	1.41*¤ (0.74-2.71)
Progesterone	0.25 (0.18-0.36)	0.23 (0.07-0.48)	0.12***† (0.05-0.23)	0.25***† (0.13-0.50)	0.23*† (0.08-0.51)

Plasma concentrations are shown as medians, the 25th and 75th quartiles in parenthesis and are presented as in nmol/L except for DHEA-SO₄ which is presented in µmol/L * P< 0.005, *** P<0.0001, \$different than PHT, ¥ different than PGL, † different than PHEO, £different than CS, ¤different than PA, †different than all groups

Supplemental Table 2. Multivariate analysis of impact of age, sex and group on the plasma concentrations of the 15 steroids

Plasma steroids (nmol/L)	Age			Sex			Group	
	F-ratio	P- value	Impact	F-ratio	P- value	Impact	F-ratio	P- value
Cortisol	1.3	0.2422	-ve	4	0.0453	M<F	25.0	<0.0001
11-Deoxycortisol	0.0802	0.7710	-ve	1.4	0.2338	M<F	53.5	<0.0001
21-Deoxycortisol	0.0297	0.8633	no	0.15	0.6939	M=F	14.6	<0.0001
Aldosterone	14.6	<0.0001	-ve	13.1	0.0003	M<F	97.1	<0.0001
Corticosterone	9.1	<0.0001	-ve	5.4	0.0201	M=F	12.3	<0.0001
11-Deoxycorticosterone	10.1	0.0015	-ve	0.03	0.8559	M=F	46.6	<0.0001
18-Oxocortisol	11.5	0.0007	-ve	18.7	<0.0001	M<F	77.8	<0.0001
18-Hydroxycortisol	0.13	0.7176	no	0.05	0.8082	M=F	24	<0.0001
Cortisone	15.9	<0.0001	-ve	0.5	0.4572	M=F	6.9	<0.0001
DHEA	290.0	<0.0001	-ve	0.69	0.4055	M>F	6.2	<0.0001
DHEA-SO4 (µmol/L)	234.4	<0.0001	-ve	72	<0.0001	M>F	13.9	<0.0001
Androstenedione	149.5	<0.0001	-ve	11.8	0.0006	M>F	17.6	<0.0001
Pregnenolone	20.0	<0.0001	-ve	1.1	0.2898	M<F	28.3	<0.0001
17-Hydroxyprogesterone	42.3	<0.0001	-ve	307.5	<0.0001	M>F	10.2	<0.0001
Progesterone	72.8	<0.0001	-ve	72.8	<0.0001	M<F	13.0	<0.0001

Impacts for continuous data (age) are indicated as -ve for negative relationships or as "no" where there are no relationships. Impacts for categorical data (sex) are shown according to the increase of one or two categories above others or as "=" where there is no impact.