

**Supplemental Table S1.** Comparative Quantification from Serum Steroid Profiles between Groups

| Steroid, ng/mL   | NFA (n=92)          | CS (n=30)                         | PA (n=40)                    | P value |
|------------------|---------------------|-----------------------------------|------------------------------|---------|
| 17 $\alpha$ -OHP | 0.7 (0.3–1.3)       | 0.8 (0.6–1.3)                     | 1.0 (0.6–1.5)                | 0.235   |
| Corticosterone   | 2.3 (1.4–4.8)       | 3.7 (1.7–8.2)                     | 3.2 (1.9–6.2)                | 0.115   |
| 11-DeoxyF        | 0.4 (0.2–0.7)       | 0.7 (0.3–1.0) <sup>a</sup>        | 0.6 (0.2–0.7)                | 0.020   |
| THE              | 39.2 (23.8–48.7)    | 20.4 (13.0–51.1) <sup>b</sup>     | 10.0 (7.1–30.5) <sup>a</sup> | <0.001  |
| 20 $\alpha$ -DHF | 2.2 (1.2–3.0)       | 2.6 (1.2–5.5) <sup>b</sup>        | 1.7 (1.2–2.3)                | 0.041   |
| 18-OHF           | 0.5 (0.3–0.8)       | 0.4 (0.2–0.6) <sup>b</sup>        | 1.0 (0.5–1.4) <sup>a</sup>   | <0.001  |
| THF              | 22.0 (16.3–28.4)    | 26.1 (13.4–35.6) <sup>b</sup>     | 15.2 (12.4–21.8)             | 0.006   |
| Allo-THF         | 20.3 (10.4–32.5)    | 14.5 (9.1–21.9)                   | 18.7 (13.8–25.4)             | 0.126   |
| Cortisol (F)     | 87.3 (57.3–123.1)   | 93.9 (60.1–135.5)                 | 95.5 (55.0–111.2)            | 0.668   |
| Cortisone (E)    | 18.3 (13.9–21.1)    | 15.3 (12.2–20.1)                  | 15.7 (11.7–19.8)             | 0.289   |
| 6 $\beta$ -OHF   | 0.6 (0.4–0.7)       | 0.7 (0.4–1.6) <sup>b</sup>        | 0.4 (0.3–0.6)                | 0.006   |
| DHEA             | 1.3 (0.6–2.0)       | 0.4 (0.1–1.6) <sup>*b</sup>       | 2.4 (1.8–4.2) <sup>a</sup>   | <0.001  |
| Androstenedione  | 1.1 (0.8–1.6)       | 0.9 (0.5–1.4)                     | 1.1 (0.9–1.4)                | 0.260   |
| DHEA-S           | 549.9 (245.9–895.9) | 276.4 (88.9–713.9) <sup>a,b</sup> | 1,130.3 (518.9–1,903.9)      | <0.001  |
| Preg-S           | 22.4 (13.5–31.5)    | 22.4 (9.2–46.5) <sup>b</sup>      | 28.4 (22.3–62.9)             | 0.003   |

Values are expressed as median (interquartile range). The *P* value indicates group differences by the analysis of covariance (ANCOVA) adjusted by age and gender between NFA, CS and PA. The serum levels of steroids are expressed as ng/mL.

NFA, nonfunctioning adenoma; CS, Cushing's syndrome; PA, primary aldosteronism; 17 $\alpha$ -OHP, 17 $\alpha$ -hydroxypregnenolone; 11-deoxyF, 11-deoxycortisol; THE, tetrahydrocortisone; 20 $\alpha$ -DHF, 20 $\alpha$ -dihydrocortisol; 18-OHF, 18-hydroxycortisol; THF, tetrahydrocortisol; 6 $\beta$ -OHF, 6 $\beta$ -hydroxycortisol; DHEA, dehydroepiandrosterone; DHEA-S, DHEA-sulfate; Preg-S, pregnenolone sulfate.

<sup>a</sup>Difference (*P*<0.05) from NFA; <sup>b</sup>Difference (*P*<0.05) from PA.