



Figure 1. Flow of Participants

Table 1. Clinical characteristics between primary aldosteronism (PA) and non-PA patients (n=133)

	All (n=133)	PA (n=88)	Non-PA (n=45)	p-value
	Mean ± SD; Median (IQR); Frequency (%)			
Age, years	49.83±11.26	48.94±12.18	51.56±9.08	0.166*
Sex at birth				0.635**
Male	45 (33.8)	31 (35.2)	14 (31.1)	
Female	88 (66.2)	57 (64.8)	31 (68.9)	
Hypertension (n=123)	113 (91.9)	79 (94.0)	34 (87.2)	.286†
Diabetes mellitus (n=120)	37 (30.8)	27 (33.3)	10 (25.6)	.393**
eGFR ml/min/1.73 m ² (based from 2021 CKD-EPI) (n=111)				.625**
≥ 90	64 (57.7)	40 (54.1)	24 (64.9)	
60-89	32 (28.8)	23 (31.1)	9 (24.3)	
45-59	13 (11.7)	10 (13.5)	3 (8.1)	
30-44	2 (1.8)	1 (1.4)	1 (2.7)	
Spontaneous hypokalemia (n=129)	79 (61.2)	57 (65.5)	22 (52.4)	.151**
Baseline plasma aldosterone concentration (PAC), ng/dL	18.43 (11.74- 29.40)	20.47 (13.85- 33.78)	13.25 (9.49- 23.21)	0.002‡
Baseline plasma renin activity (PRA), ng/ml/h	0.28 (0.15- 0.52)	0.26 (0.16- 0.51)	0.31 (0.15- 0.56)	0.452‡
Baseline Aldosterone-renin ratio (ARR), ng/dL/ng/ml/h	61.95 (31.74- 142.61)	80.62 (38.72- 177.27)	39.80 (29.86- 84.42)	0.010‡

Statistical tests used: *, Independent t-test; **, Pearson Chi-Square test; †, Fisher's Exact test; ‡, Mann-Whitney U test

Table 2. CT-scan findings and histopathology in patients with positive saline infusion test (n=88)

	Frequency (%)
Abdominal CT done	72 (82.8)
Laterality	
Bilateral nodule	5 (6.94)
Unilateral nodule	52 (72.22)
No discrete nodule seen	15 (20.83)
Surgery done	20 (22.7)
Histopathology	
Adrenocortical adenoma	14 (73.68)
Adrenocortical carcinoma	1 (5.26)
Adrenocortical neoplasm*	2 (10.53)
Adrenocortical hyperplasia	1 (5.26)
Endothelial cyst	1 (5.26)

*Indeterminate findings (adenoma vs carcinoma)

Table 3. Diagnostic performance of laboratory findings for primary aldosteronism

	Sensitivity, %	Specificity, %	PPV, %	NPV, %	LR+	LR-	Accuracy, %
	Estimate (95% CI)						
3 combinations							
A1: PAC > 10 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	48.81% (37.74 – 59.96%)	70.27% (53.02 – 84.13%)	78.85% (68.44 – 86.50%)	37.68% (31.02 – 44.84%)	1.64 (0.96 - 2.82)	0.73 (0.54 – 0.98)	55.37% (46.06 - 64.41%)
A2: PAC > 15 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	44.05% (33.22 - 55.30%)	83.78% (67.99 – 93.81%)	86.05% (74.04 – 93.02%)	39.74% (34.23 – 45.53%)	2.72 (1.26 – 5.87)	0.67 (0.53 - 0.85)	56.20% (46.89 - 65.20%)
A3: PAC > 20 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	34.52% (24.48 – 45.69%)	89.19% (74.58 - 96.97%)	87.88% (73.30 – 95.04%)	37.50% (33.13 – 42.09%)	3.19 (1.21 - 8.43)	0.73 (0.61 - 0.89)	51.24% (41.99 - 60.43%)
A4: PAC > 25 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	27.38% (18.21 - 38.20%)	100.00% (90.51 - 100.00%)	100.00% (85.18 – 100.00%)	37.76% (34.72 – 40.89%)	-	0.73 (0.64 - 0.83)	49.59% (40.37 – 58.82%)
A5: PAC > 10 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	46.43% (35.47 – 57.65%)	72.97% (55.88 - 86.21%)	79.59% (68.65 – 87.41%)	37.50% (31.21 – 44.24%)	1.72 (0.96 – 3.06)	0.73 (0.56 – 0.97)	54.55% (45.24 – 63.62%)
A6: PAC > 15 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	41.67% (31.00 – 52.94%)	89.19% (74.58 – 96.97%)	89.74% (77.02 - 95.81%)	40.24% (35.25 - 45.45%)	3.85 (1.48 – 10.06)	0.65 (0.53 - 0.81)	56.20% (46.89 – 65.20%)
A7: PAC > 20 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	34.52% (24.48 – 45.69%)	94.59% (81.81 - 99.34%)	93.55% (78.49 – 98.29%)	38.89% (34.86 – 43.08%)	6.39 (1.61 – 25.38)	0.69 (0.58 - 0.82)	52.89% (43.61 - 62.03%)
A8: PAC > 25 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	27.38% (18.21 - 38.20%)	100.00% (90.51 - 100.00%)	100.00% (85.18 – 100.00%)	37.76% (34.72 – 40.89%)	-	0.73 (0.64 - 0.83)	49.59% (40.37 – 58.82%)
2 Combinations							
B1: PAC > 10 ng/dL + PRA < 1.0 ng/dL/hr	79.76% (69.59 - 87.75%)	35.90% (21.20 – 52.82%)	72.83% (67.42 – 77.63%)	45.16% (31.20 – 59.93%)	1.24 (0.96 - 1.61)	0.56 (0.31 - 1.02)	65.85% (56.76 – 74.16%)
B2: PAC > 15	66.67% (55.54 –	61.54% (44.62 –	78.87% (70.94 –	46.15% (36.69 –	1.73 (1.13 -	0.54 (0.37	65.04% (55.92 -

	Sensitivity, %	Specificity, %	PPV, %	NPV, %	LR+	LR-	Accuracy, %
	Estimate (95% CI)						
ng/dL + PRA < 1.0 ng/dL/hr	76.58%)	76.64%)	85.10%)	55.90%)	2.65)	- 0.80)	73.42%)
B3: PAC > 20 ng/dL + PRA < 1.0 ng/dL/hr	48.81% (37.74 – 59.96%)	79.49% (63.54 – 90.70%)	83.67% (72.68 – 90.80%)	41.89% (35.66 – 48.39%)	2.38 (1.24 - 4.58)	0.64 (0.50 - 0.84)	58.54% (49.31 - 67.35%)
B4: PAC > 25 ng/dL + PRA < 1.0 ng/dL/hr	41.67% (31.00 – 52.94%)	89.74% (75.78 – 97.13%)	89.74% (76.97 – 95.82%)	41.67% (36.68 – 46.83%)	4.06 (1.55 – 10.63)	0.65 (0.53 - 0.80)	56.91% (47.68 - 65.80%)
B5: PAC > 10 ng/dL + PRA < 0.6 ng/dL/hr	67.86% (56.78 – 77.64%)	43.59% (27.81 – 60.38%)	72.15% (65.46 – 77.98%)	38.64% (28.17 – 50.27%)	1.20 (0.88 - 1.64)	0.74 (0.46 - 1.18)	60.16% (50.95- 68.88%)
B6: PAC > 15 ng/dL + PRA < 0.6 ng/dL/hr	54.76% (43.52 – 65.66%)	69.23% (52.43 – 82.98%)	79.31% (69.73 – 86.45%)	41.54% (34.15 – 49.33%)	1.78 (1.07 - 2.96)	0.65 (0.48 - 0.90)	59.35% (50.12 – 68.11%)
B7: PAC > 20 ng/dL + PRA < 0.6 ng/dL/hr	41.67% (31.00 – 52.94%)	84.62% (69.47 – 94.14%)	85.37% (72.82 – 92.70%)	40.24% (34.97 – 45.75%)	2.71 (1.24 - 5.90)	0.69 (0.55 - 0.86)	55.28% (46.06 - 64.25%)
B8: PAC > 25 ng/dL + PRA < 0.6 ng/dL/hr	32.14% (22.36 – 43.22%)	97.44% (86.52 - 99.94%)	96.43% (79.19 - 99.48%)	40.00% (36.33 – 43.79%)	12.54 (1.77 – 88.95)	0.70 (0.60 - 0.81)	52.85% (43.64 - 61.91%)
Legend: PAC – plasma aldosterone concentration PRA – plasma renin activity Spont. hypoK – spontaneous hypokalemia PPV – positive predictive value NPV – negative predictive value LR+ – positive likelihood ratio LR- – negative likelihood ratio							

Table 4. Sparing confirmatory testing rate

3 combinations	Sparing confirmatory testing rate
A1: PAC > 10 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	48.8% (41/84)
A2: PAC > 15 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	44.0% (37/84)
A3: PAC > 20 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	34.5% (29/84)
A4: PAC > 25 ng/dL + PRA < 1.0 ng/dL/hr + spont. hypoK	27.4% (23/84)
A5: PAC > 10 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	46.4% (39/84)

A6: PAC > 15 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	41.7% (35/84)
A7: PAC > 20 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	34.5% (29/84)
A8: PAC > 25 ng/dL + PRA < 0.6 ng/dL/hr + spont. hypoK	27.4% (23/84)
2 combinations	
B1: PAC > 10 ng/dL + PRA < 1.0 ng/dL/hr	79.8% (67/84)
B2: PAC > 15 ng/dL + PRA < 1.0 ng/dL/hr	66.7% (56/84)
B3: PAC > 20 ng/dL + PRA < 1.0 ng/dL/hr	48.8% (41/84)
B4: PAC > 25 ng/dL + PRA < 1.0 ng/dL/hr	41.7% (35/84)
B5: PAC > 10 ng/dL + PRA < 0.6 ng/dL/hr	67.9% (57/84)
B6: PAC > 15 ng/dL + PRA < 0.6 ng/dL/hr	54.8% (46/84)
B7: PAC > 20 ng/dL + PRA < 0.6 ng/dL/hr	41.7% (35/84)
B8: PAC > 25 ng/dL + PRA < 0.6 ng/dL/hr	32.1% (27/84)
<p><i>Legend:</i> PAC – plasma aldosterone concentration PRA – plasma renin activity Spont. hypoK – spontaneous hypokalemia</p> <p>* The sparing confirmatory testing rate was defined as the number of patients who can skip the confirmatory test for PA based on each criterion divided by the number of patients who were diagnosed as PA based on SIT confirmatory test.</p>	