

# EP31: Primary Aldosteronism – results from the first Portuguese multicentre study

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## INTRODUCTION AND OBJECTIVES

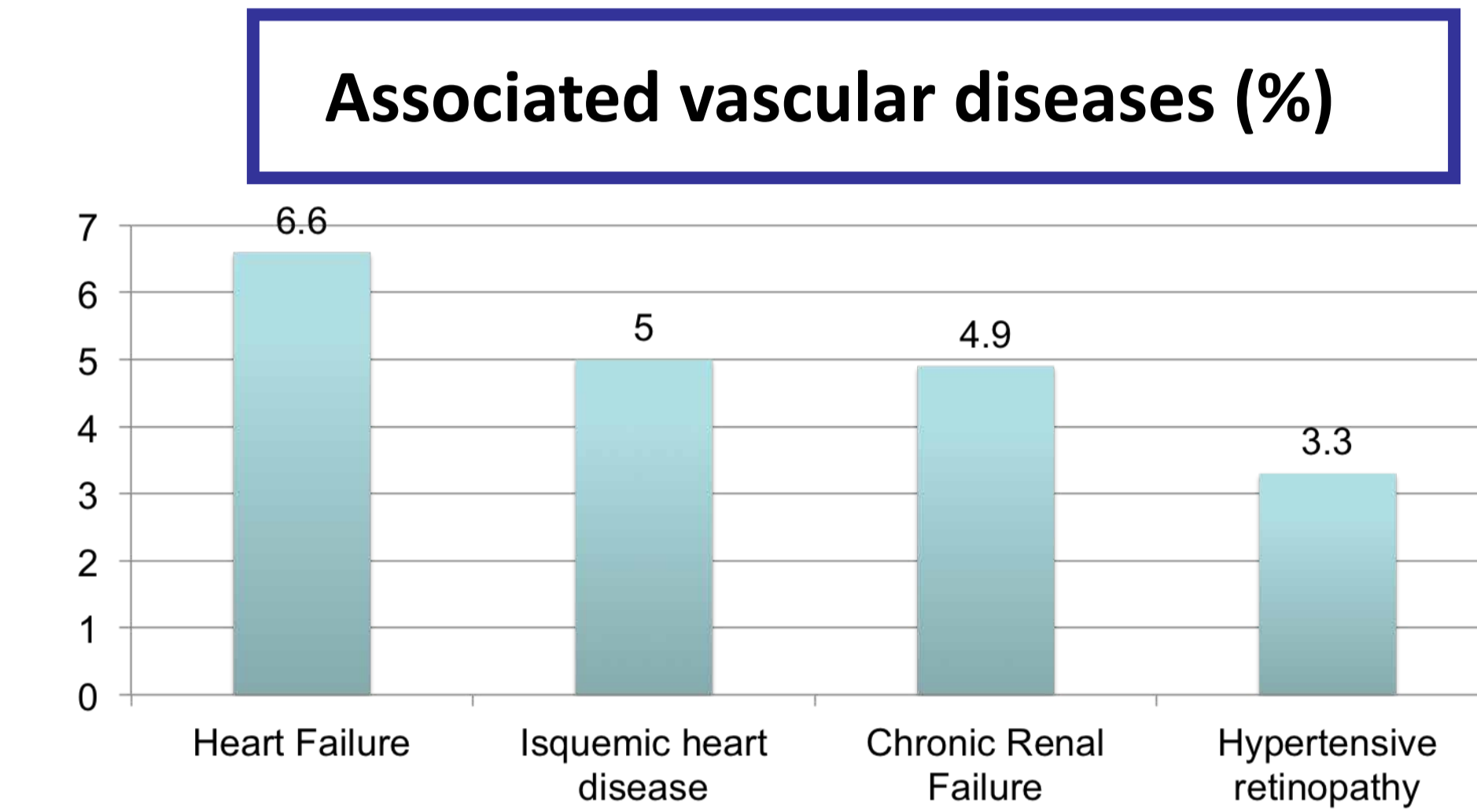
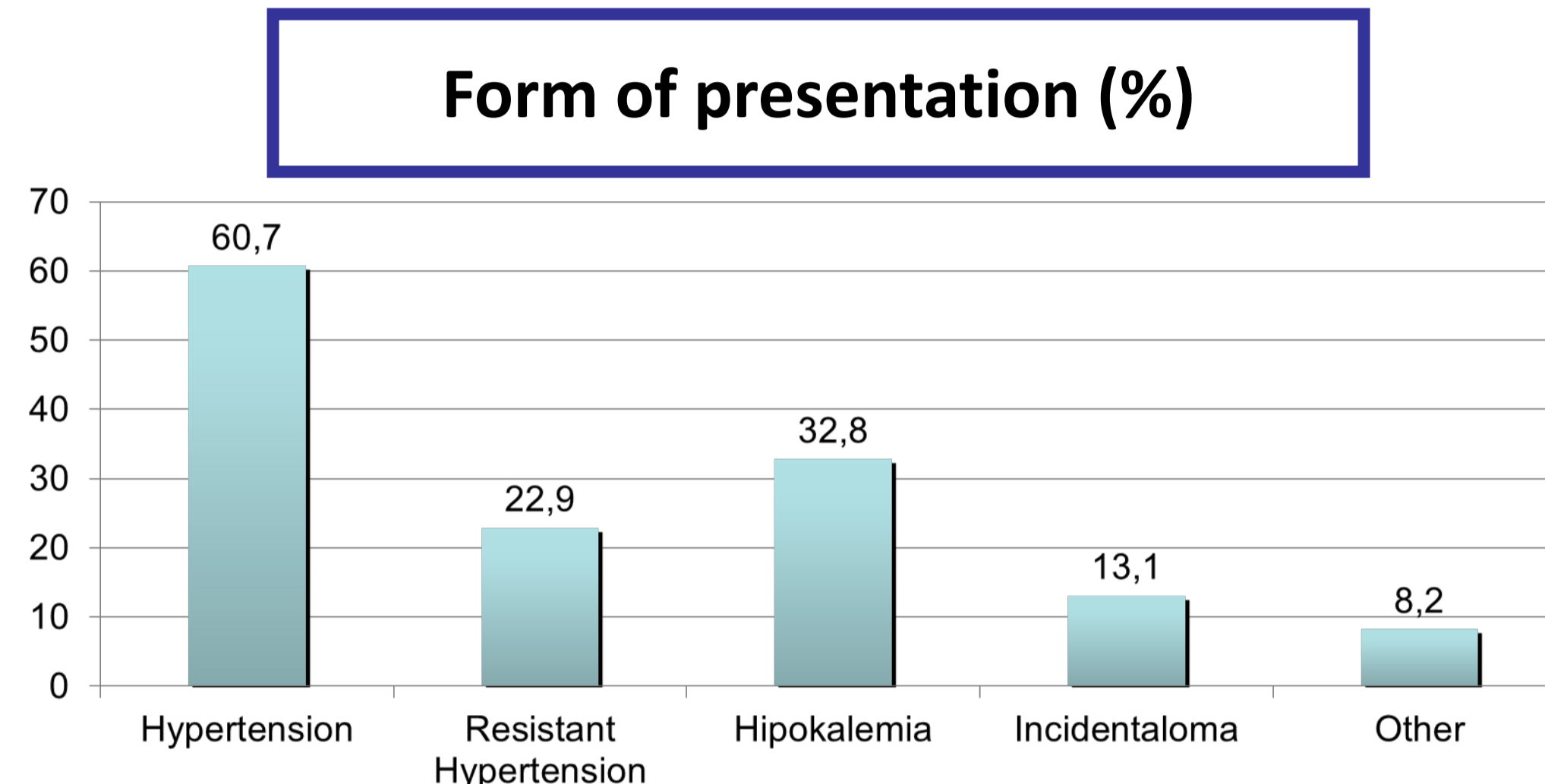
Primary Aldosteronism (PA) is the most prevalent cause of secondary hypertension. In Portugal there is no multicentre study characterizing PA patients. The aim of this study was to characterize the diagnostic workup, treatment and follow-up of patients with confirmed PA.

## METHODS

The adrenal tumour study group of the Portuguese Society of Endocrinology undertook the first retrospective multicentre study of PA patients. The inclusion criteria were a positive aldosterone/renin ratio and a positive confirmatory test. Data was gathered from 9 Portuguese Endocrinology centres. The data was analysed with SPSS 21®.

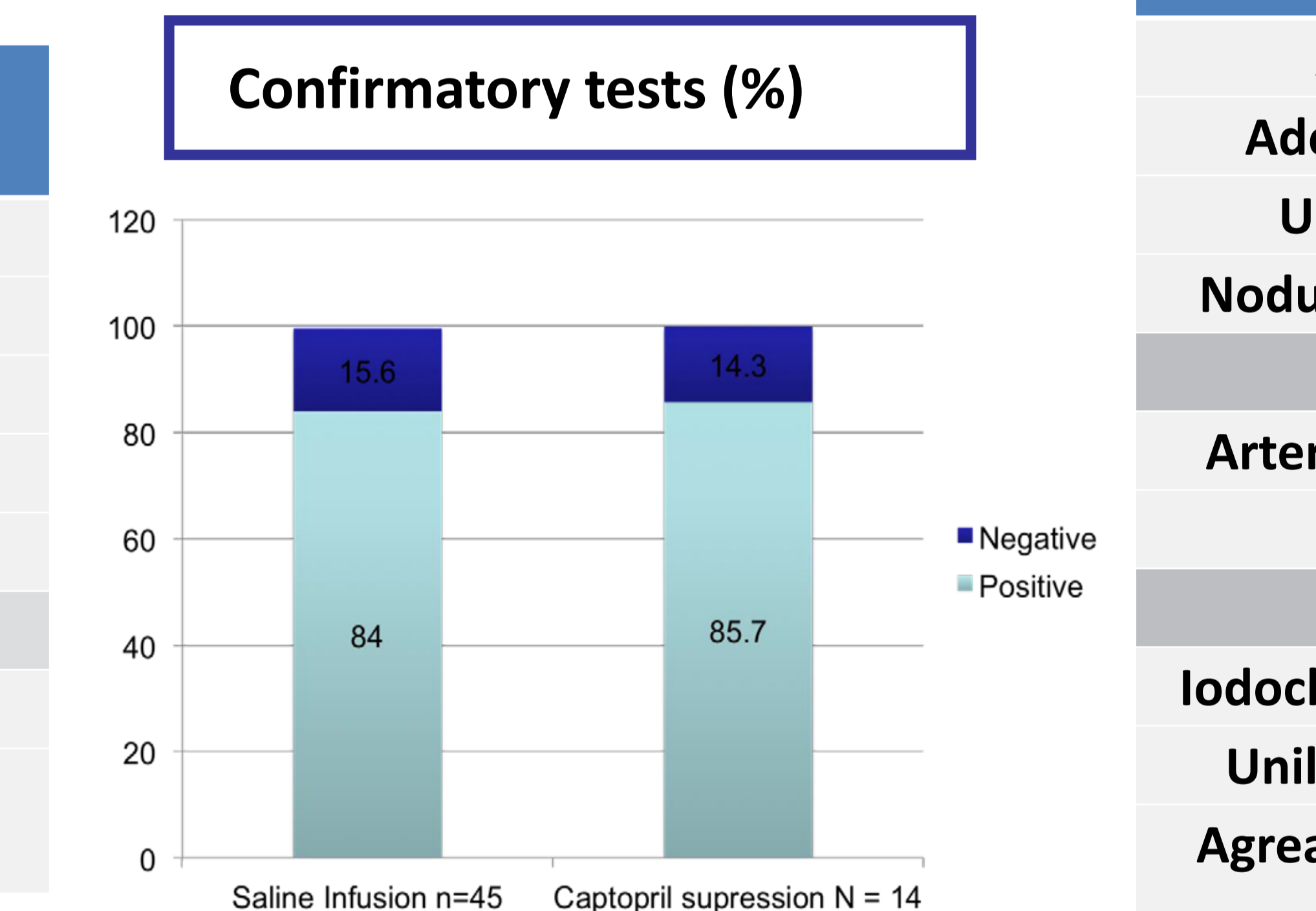
## RESULTS

Characteristics	Mean ± SD/ Median (P25-P75)	Min-Max
Age at diagnosis (years), n=62	52,1 ± 13,1	18-78
Age of hypertension diagnosis (years), n = 54	41,1 ± 10,6	16-68
Hypertension duration n= 55	9,9 (7-16)	0,6 - 45
IMC (Kg/m <sup>2</sup> ), n=35	26,1 (23,9-29,4)	21,5-33,8



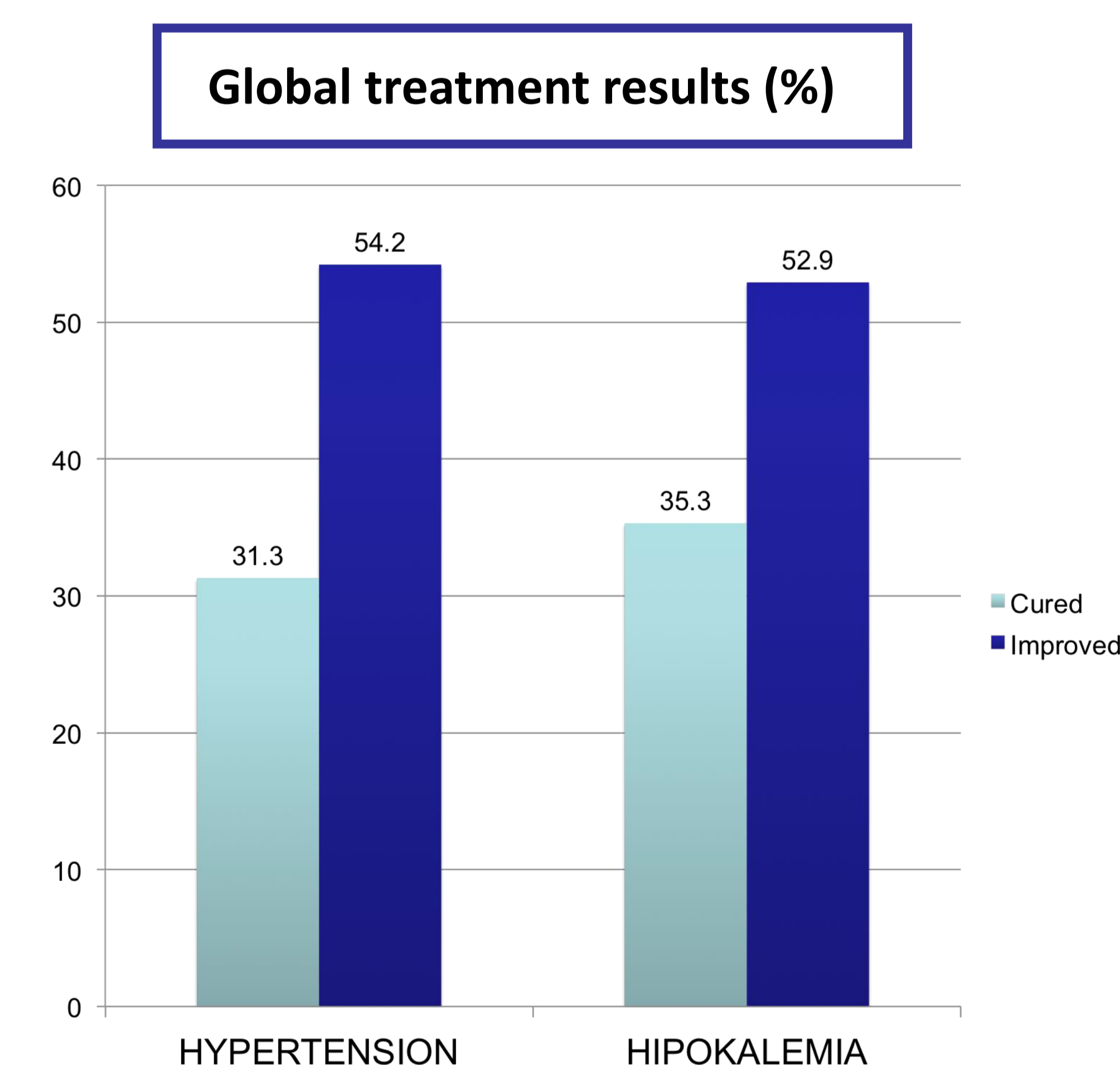
**Baseline laboratory values**

Baseline laboratory values	Mean ± SD/ Median (P25-P75)
Serum aldosterone (ng/dL), n=63	33,4 (20,4-53)
Urine aldosterone (mcg/24h), n=23	42 (25-59)
ARP (ng/mL/h), n=18	0,2 (0,2-0,2)
Aldosterone/ARP, n=20	97,1 (74-336,3)
Serum K (mmol/L), n=60	3,2 ± 0,7
Creatinine (mg/dL), n=58	0,77 (0,7-0,9)
Dexamethasone supression test 1 mg % positive tests, (>1,8 ng/mL) n=17	17,6%



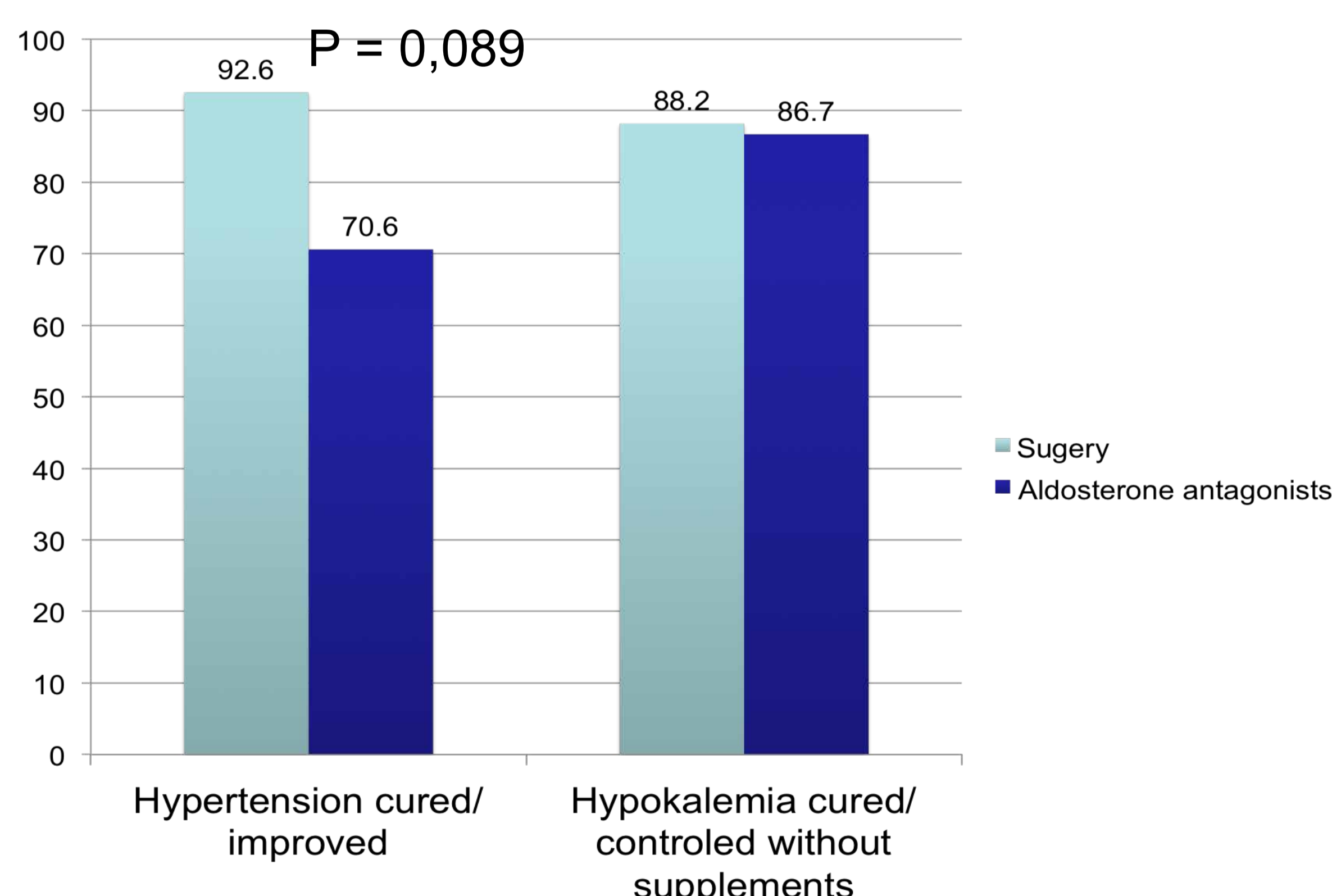
**Imaging method**

Imaging method	Results
Adrenal CT/MRI (%) n = 63	88,9/11,1
Adenoma/Hiperplasia (%) n = 63	87,3/3,2
Unilateral/bilateral (%) n = 59	86,4/13,6
Nodule size in cm (median min-max)	1,7 (0,7-8,3)
Arterial venous sampling (n) n = 62	9
Successful (n)	1
Iodocholesterol scintigraphy (n) n = 62	14
Unilateral fixation /no fixation (%)	64/29
Agreement between Iodocholesterol and CT (%)	50



## Differences between surgical and medical treated patients

Variable	Surgery (58,3%)	Aldosterone Antagonists (41,7%)	P
Age at diagnosis (years)	47 ± 9,3	54,2 ± 15,8	0,074
Sex (female)	78,6	50	0,038
Hypertension	85,2	42,1	0,002
Treated hypertension	100	75	0,009
Duration of Hypertension (years)	8 (4-13)	14 (10-21,5)	0,002
Tumor size (cm)	1,8 (1,5-2,4)	1,5 (1-1,8)	0,022



## CONCLUSIONS

This is the first Portuguese PA multicentre study. It shows that PA remains an under-diagnosed condition with a significant delay in diagnosis. Surgical treated patients were younger, had more hypertension, a longer duration of hypertension and bigger adenoma size with a trend towards better hypertension control.

## REFERENCES

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