

The Burden of Tolvaptan Treatment for Autosomal Dominant Polycystic Kidney Disease (ADPKD)

Muto S. ¹⁾, Kawano S. ²⁾, Sugiura S. ¹⁾, Kitamura K. ¹⁾, Kimura M. ¹⁾, Isotani S. ¹⁾, Ide H. ¹⁾, Yamaguchi R. ¹⁾, Horie S. ²⁾

1) Department of Urology, Teikyo University School of Medicine

2) Department of Urology, Juntendo University, Graduate School of Medicine

OBJECTIVES

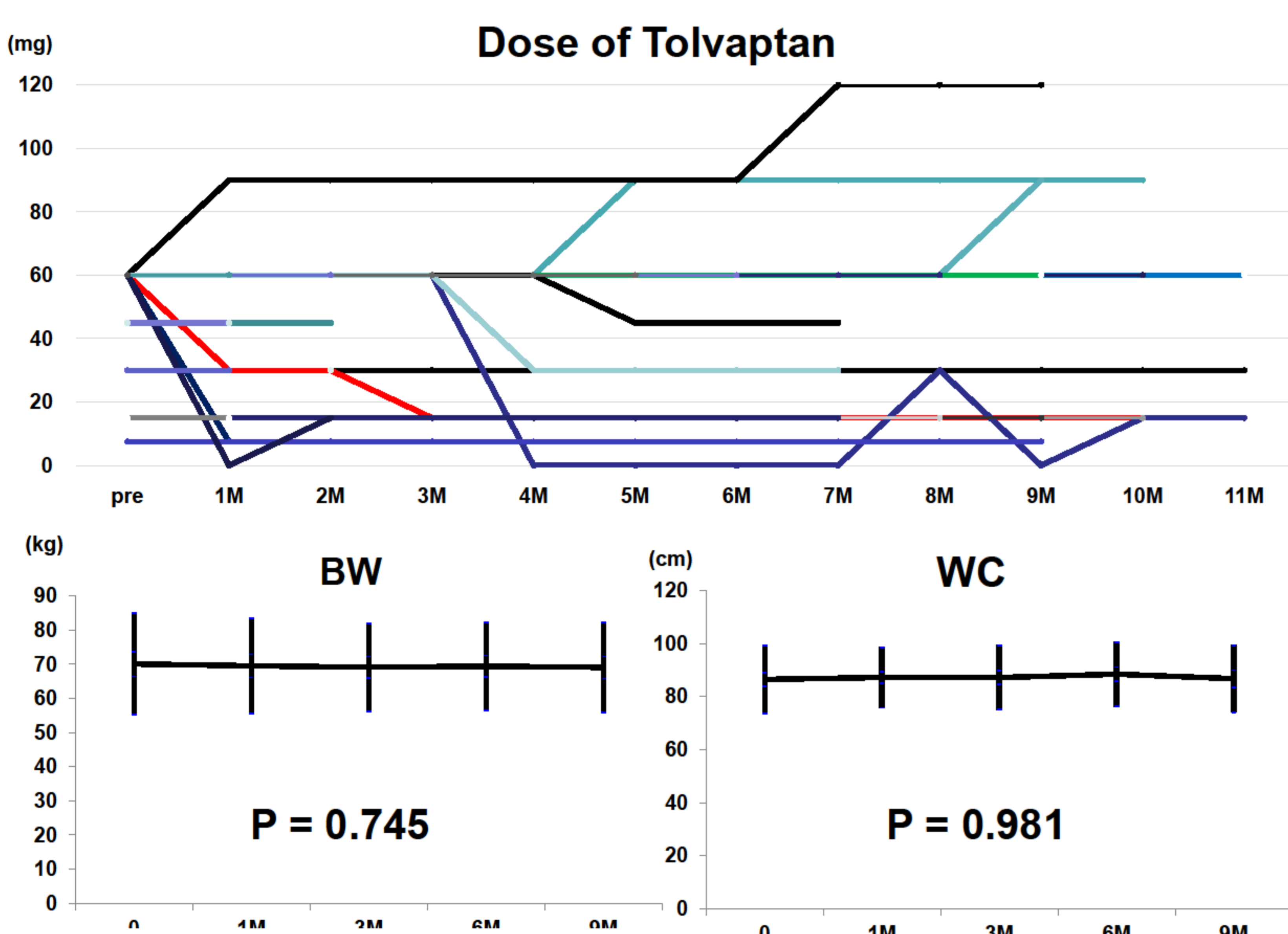
In 2014, Japan became the first country in the world to approve tolvaptan for the treatment of Autosomal Dominant Polycystic Kidney Disease (ADPKD). As the drug is a powerful diuretic many nephrologists are deeply concerned about patients' fluid intake to prevent dehydration. This study reports the burden of tolvaptan treatment on patients with ADPKD.

METHODS

This study targeted Japanese patients with ADPKD under tolvaptan treatment. We checked body weight (BW), waist circumference (WC), and estimated glomerular function rate (eGFR) at regular intervals. We also evaluated the burden of tolvaptan treatment on a scale of 1 to 100 using visual analog scales (VAS). Statistical analysis was performed using analysis of variance.

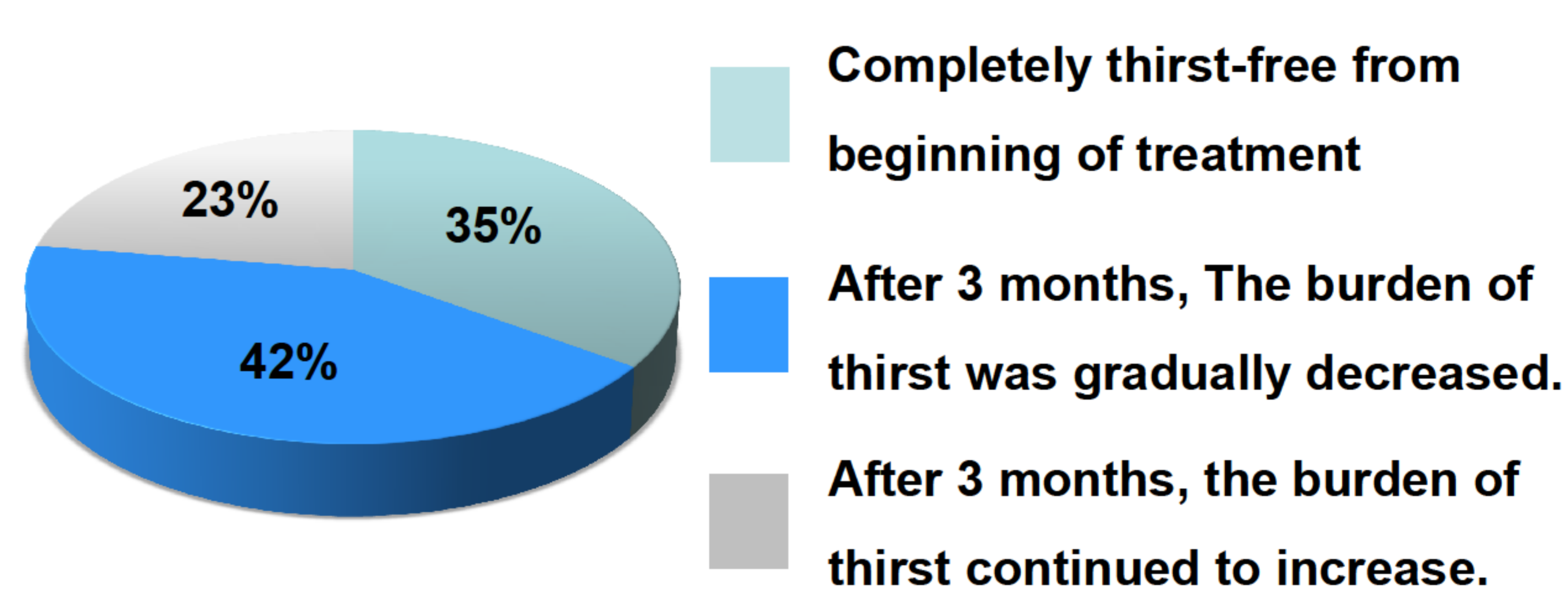
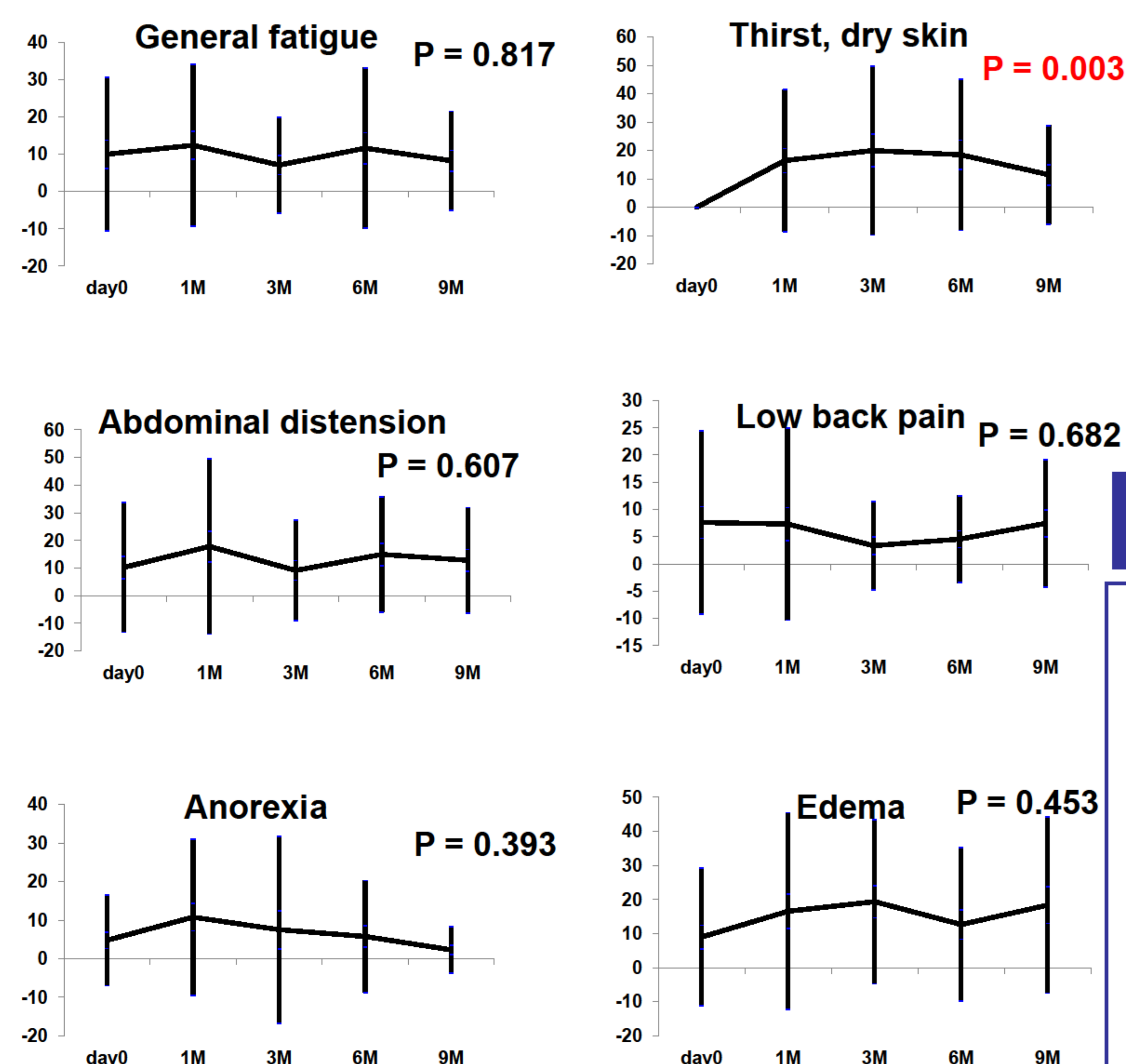
Patients Characteristics	N=40
Age, median (IQR) (year)	46.5 (24 - 69)
Male (%)	28 (70.0 %)
eGFR, median (IQR) (ml/min/1.73m ²)	43.4 (26.9 - 58.8)
TKV, median (IQR) (ml)	1917 (1378 - 2905)

RESULTS: Tolvaptan Tx



Initial daily Dose	60mg	29 (72.5%)	
	45mg	3 (7.5%)	
	30mg	2 (5.0%)	
	15mg	5 (12.5%)	
	7.5mg	1 (2.5%)	
Dose adjustment	escalation	3 (7.5%)	
	Reduction	Progression of CKD	2 (5.0%)
		edema	1 (2.5%)
		Itching	1 (2.5%)
		Nocturia	1 (2.5%)
		Liver injury	1 (2.5%)

RESULTS: The burden of Tolvaptan Tx



CONCLUSIONS

Although aquaretic adverse events including thirst and dry skin represent significant burden on continuing Tolvaptan treatment, the third part of patients did not completely sense thirst at all from beginning of treatment. After 3 months, for the remaining third part of patients, the burden of tolvaptan treatment on ADPKD patients such as thirst, dry skin spontaneously improved without any additional treatment or tolvaptan withdrawal.