



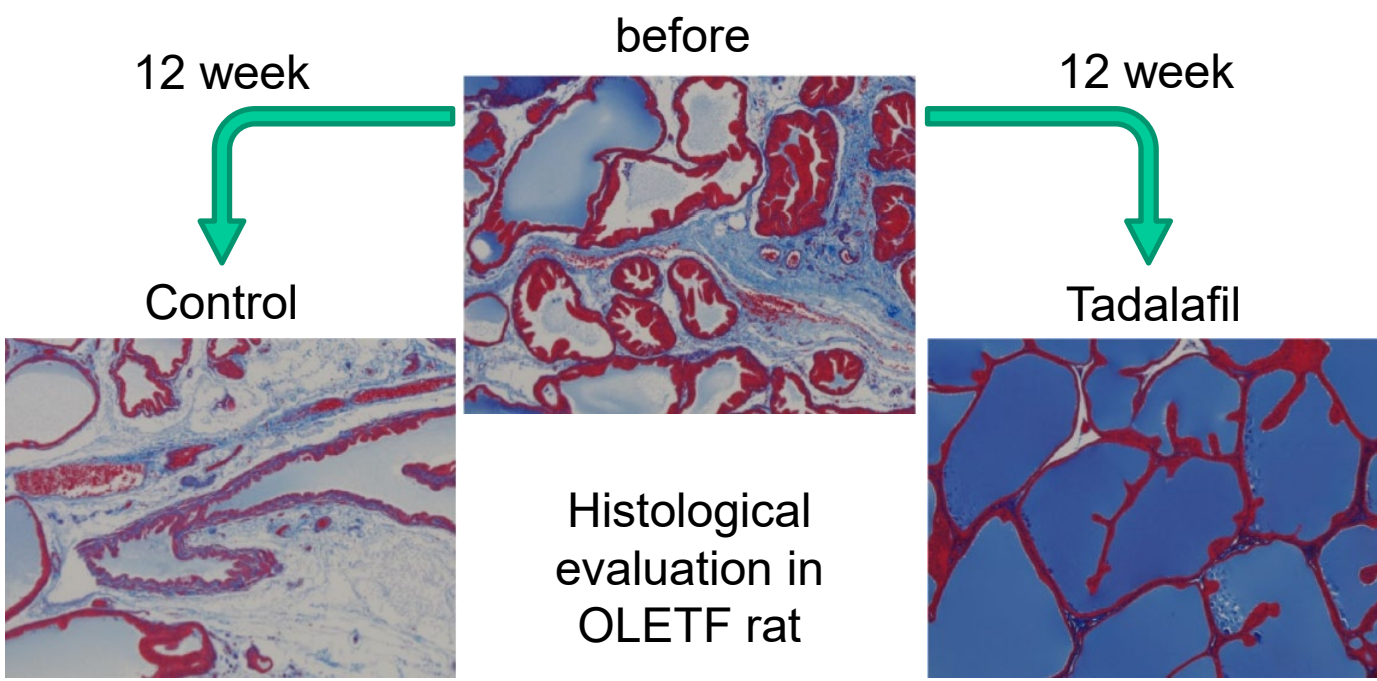
# #349 Tadalafil treatment might potentially be effective for BPH patients with metabolic syndrome.

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## INTRODUCTION

Evaluating the effect of tadalafil for type 2 DM rats (OLETF) and normal rats (LETO)



Histological evaluation in OLETF rat

**Tadalafil suppressed the progression of BPH and prostatic inflammation in both type 2 DM rats and normal rats**

Kobayashi H et al. Life Sci 2022

**The Impacts of Metabolic Syndrome for LUTS**

Progression of BPH and LUTS  
Systemic arteriosclerosis  
Chronic inflammation

**The Effects of Tadalafil for BPH**

Relieving BOO  
Improving pelvic blood flow  
Suppressing inflammation

Patients with Mets are more possible to have arteriosclerosis, thus they would receive more benefits from tadalafil

**Tadalafil would be more effective for BPH patients with metabolic syndromes.**

## PATIENTS and METHODS

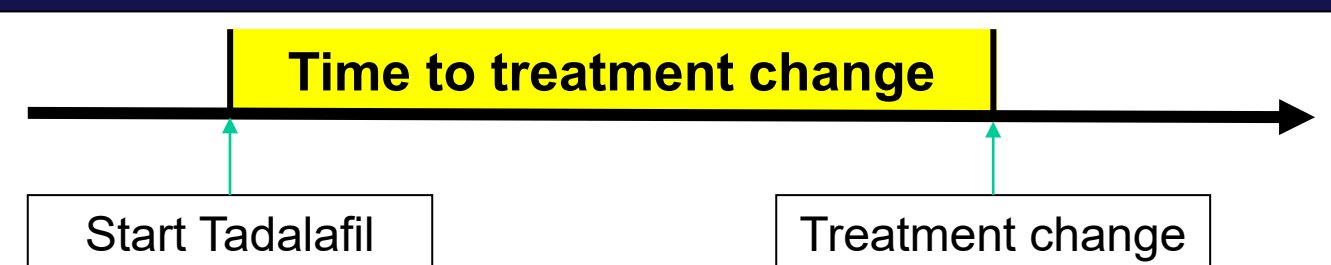
### Patients

The BPH patients who received tadalafil treatment from January 2018 to December 2022 in our institution were enrolled in the study.

Examining the time of treatment change for evaluating the efficacy of tadalafil therapy.

### Items for evaluation

BMI, diabetes, hypertension, dyslipidemia



### Definition of treatment change

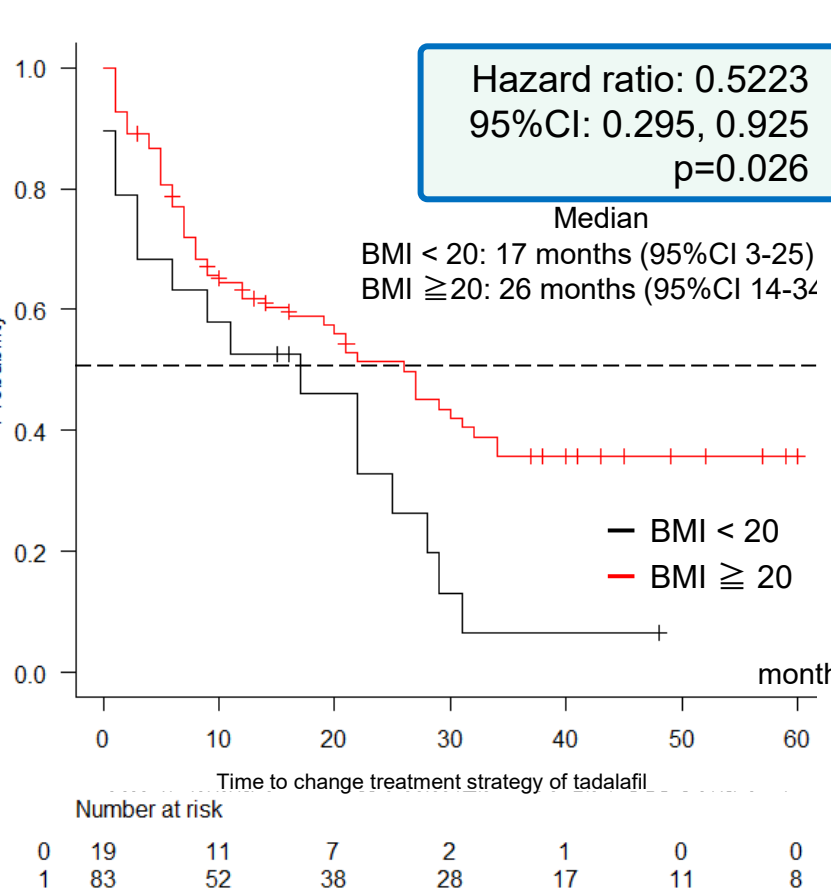
Additions or changes of anticholinergic agent, cholinergic agent, beta-3 adrenergic agonists, 5 alpha reductase inhibitors and surgical treatment.

## RESULTS

### Patients Background

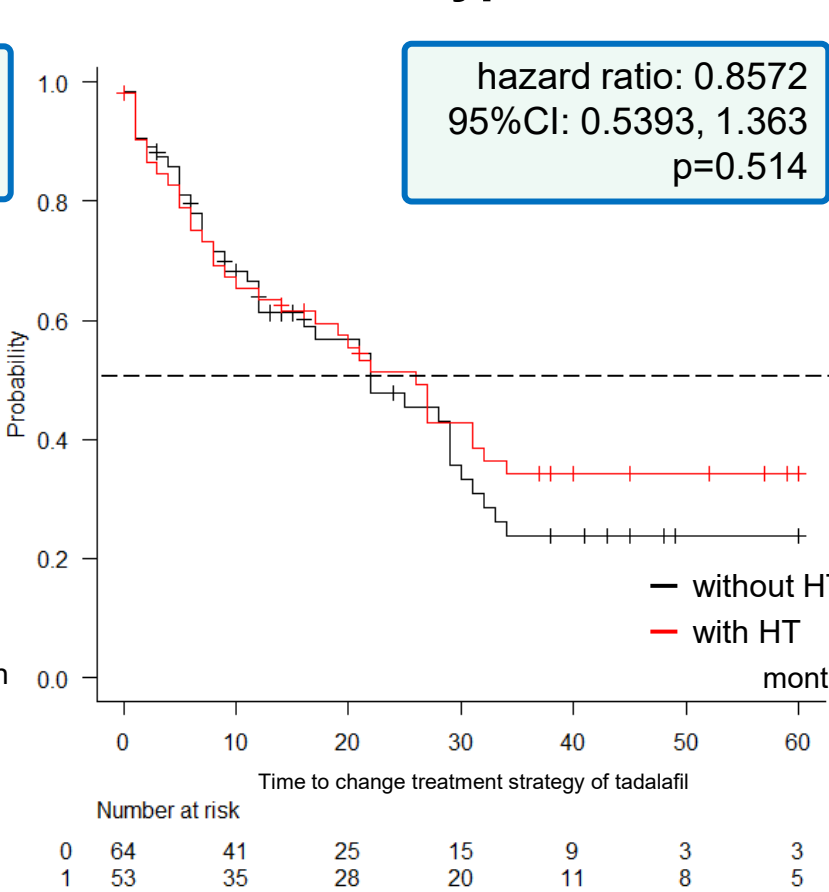
Number of Patients		IPSS at start of tadalafil		Uroflowmetry at start of tadalafil	
Age	71.00 (44.00-89.00)	Total	15.00 (3.00-33.00)	Qmax (mL/sec)	13.70 (3.90-24.30)
BMI	23.61 (15.70-35.60)	Incomplete emptying	2.00 (0.00-5.00)	Qave (mL/sec)	5.45 (2.10-11.50)
<20	19	Frequency	3.00 (0.00-5.00)	Voided Volume (mL)	179.00 (43.00-566.00)
≥20	83	Intermittency	2.00 (0.00-5.00)	Residual urine (mL)	35.00 (0.00-300.00)
Lifestyle Diseases		Urgency	2.00 (0.00-5.00)	Prostatic Volume	
Hypertension	47	Weak stream	4.00 (0.00-5.00)	Total (mL)	31.85 (7.70-101.00)
Diabetes	23	Straining	2.00 (0.00-5.00)	Adenoma (mL)	19.00 (2.00-67.20)
Dyslipidemia	15	Nocturia	2.00 (0.00-5.00)		
		QOL score	5.00 (1.00-6.00)		

### Result 1. BMI



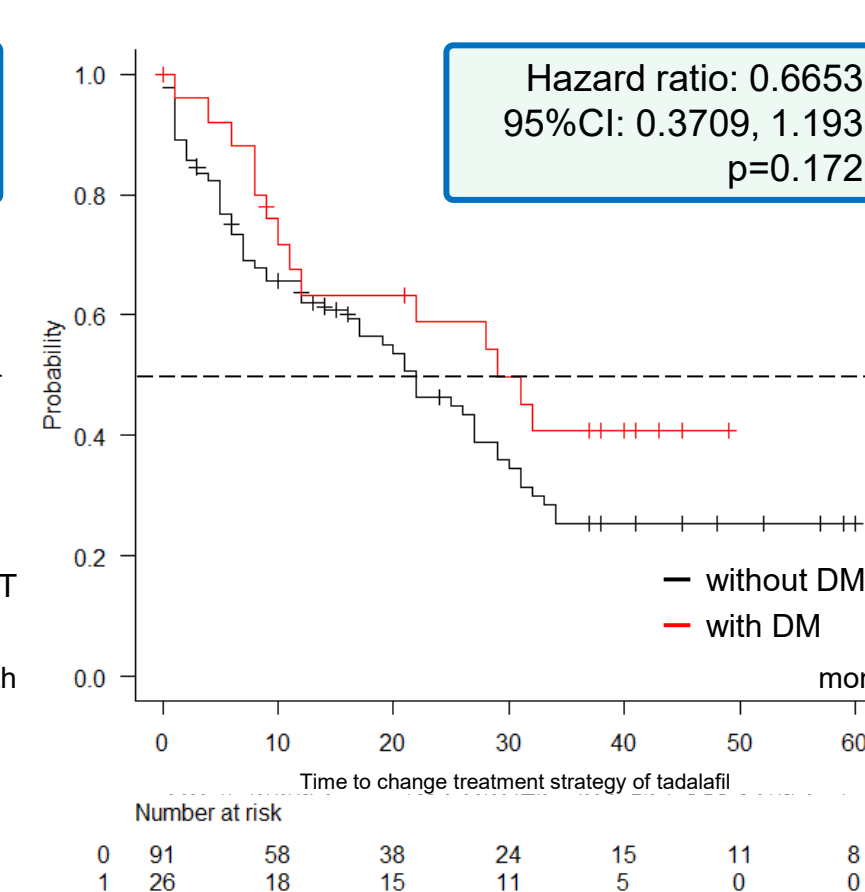
**Tadalafil was more effective in patients with BMI ≥ 20**

### Result 2. Hypertension



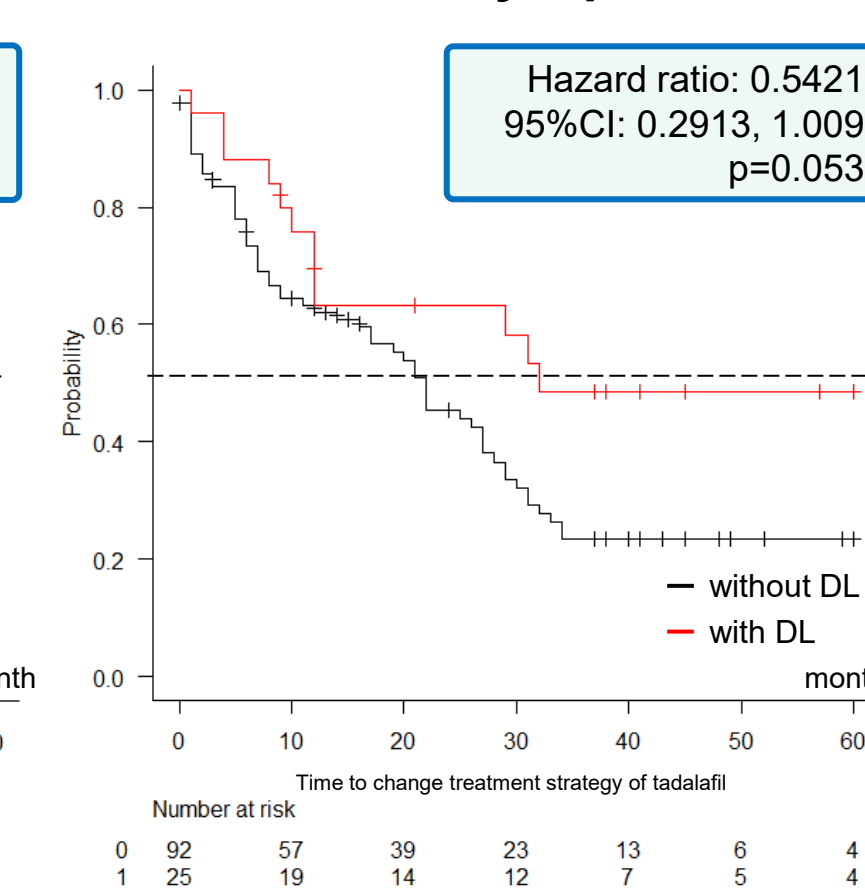
**The existence of HT tended to be a factor in tadalafil response**

### Result 3. Diabetes



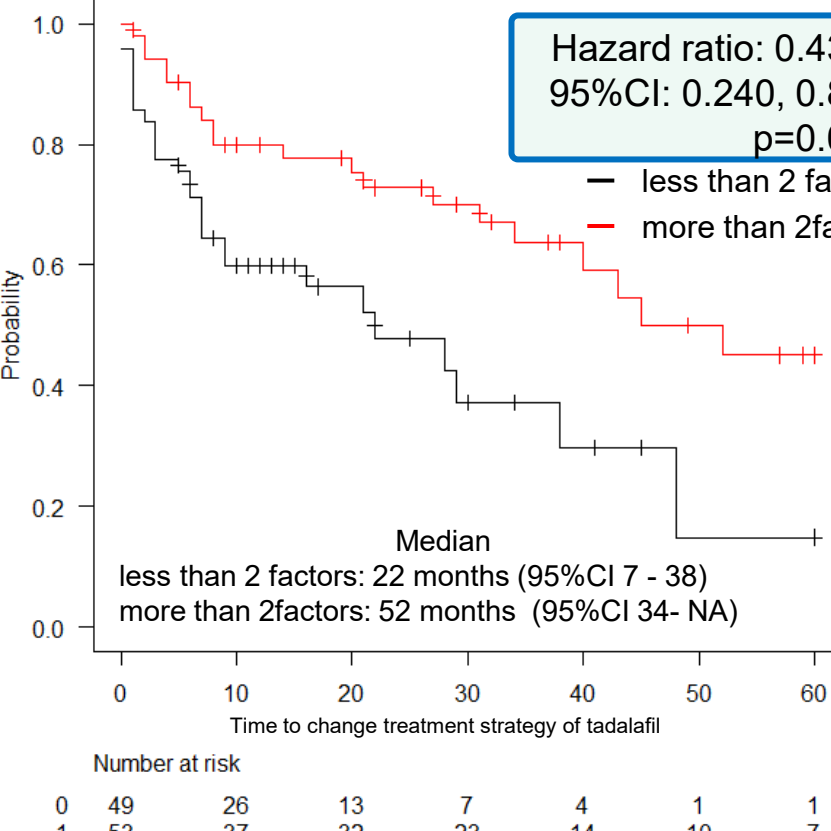
**The existence of DM tended to be a factor in tadalafil response**

### Result 4. Dyslipidemia



**The existence of DL tended to be a factor in tadalafil response**

### Result 5. the number of risk factors



**Tadalafil was more effective in patients with multiple risk factors**

### Why did tadalafil demonstrate better performance in patients with lifestyle diseases?

Patients with lifestyle diseases more likely have arteriosclerosis

II

Patients with lifestyle diseases more likely have worse pelvic blood flow

Tadalafil has the effect of improving pelvic blood flow

**Patients with lifestyle diseases would receive the effect of improving pelvic blood flow more intensely**

## CONCLUSIONS

**Tadalafil would be more effective in patients with lifestyle diseases.**

### Limitation

1. This was a retrospective study
2. small number of patients
3. We did not evaluate the effect of tadalafil by the subjective or objective clinical parameters, such as IPSS, OABSS, UFM and PFS.

### Disclosure Statement

**We have no COI concerning the present study.**