Absence of metabolic syndrome, preoperative urinary symptoms and flow predict positive trifecta outcome after transurethral resection of prostate: development of a clinical nomogram

De Nunzio C. Cancrini F. Lobardo R. Sica A. Tema G. D'Annunzio S. Baldassarre V. Tubaro A.

Sant'Andrea Hospital, Sapienza University of Rome, Rome, Italy

Aim

Aim of our study was to evaluate favourable factors for a good trifecta outcome in patients with lower urinary tract symptoms due to benign prostatic enlargement (LUTS-BPE) underwent transurethral resection of prostate (TURP) to develop a clinical nomogram.

Materials & Methods

✓ Study period: From April 2015 to January 2019
✓ Population: 143 patients with LUTS-BPE undergoing TURP
✓ Patients data: Age, IPSS, uroflowmetry and TRUS, Metabolic syndrome (MetS) defined according to Adult Treatment Panel III (ATP III).
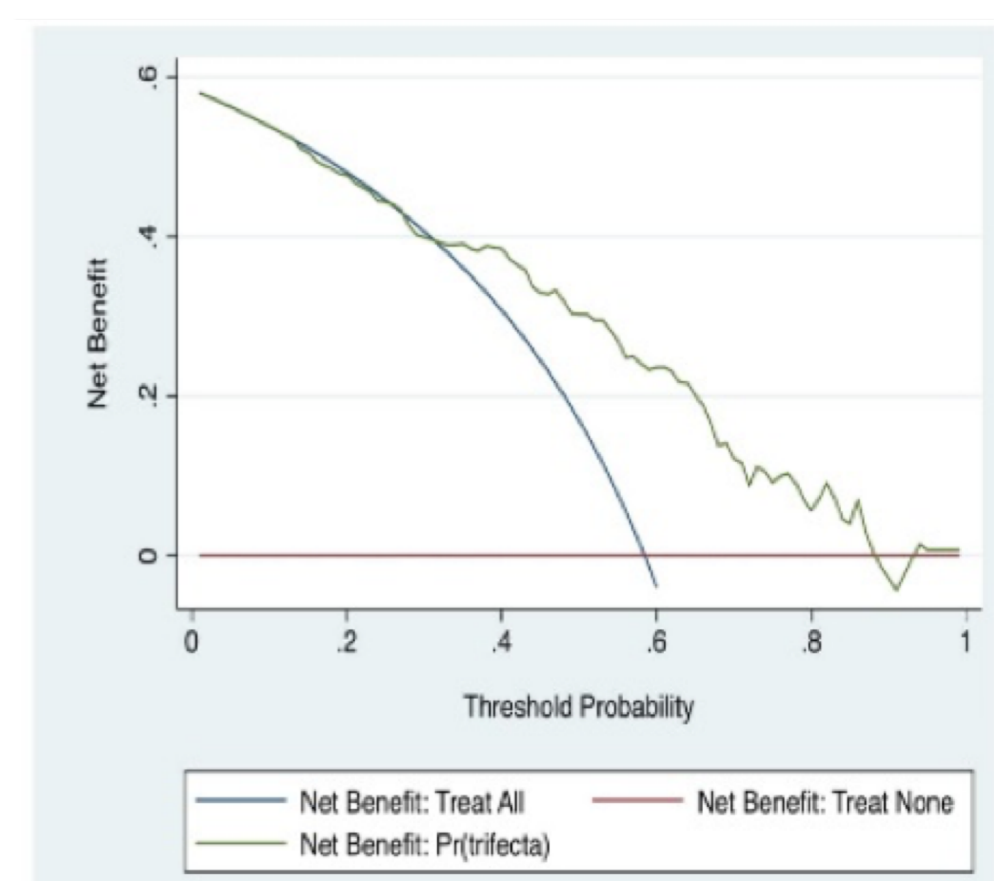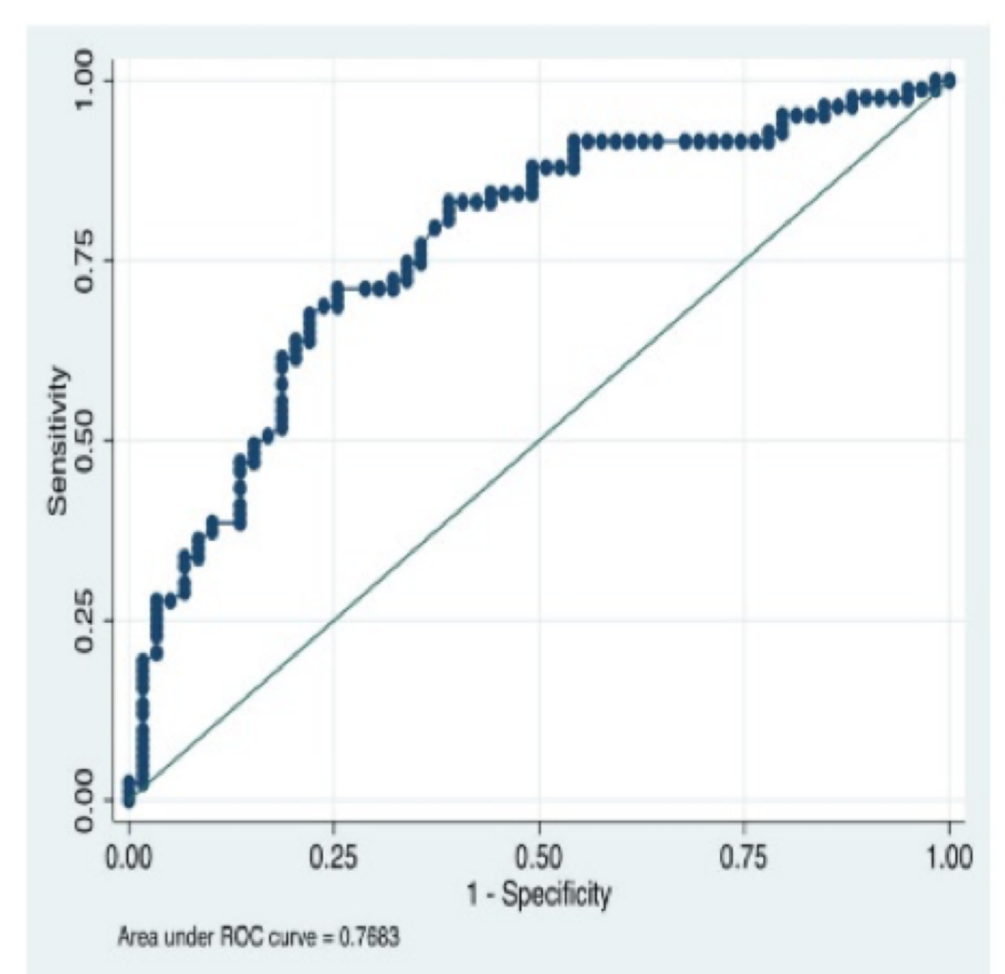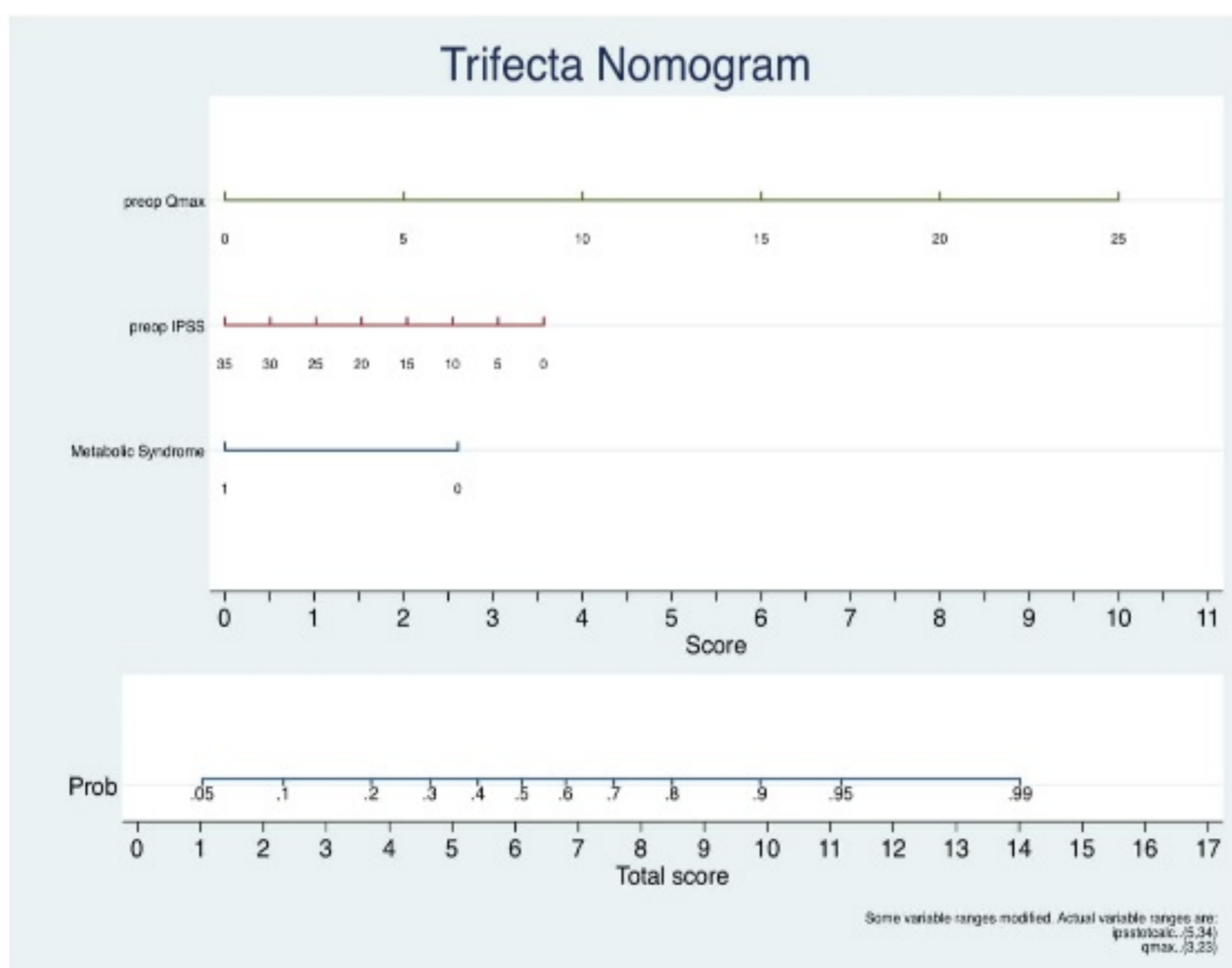
TRIFECTA
1. No perioperative complications
2. Postoperative IPSS <8
3. Postoperative Q_{max} >15ml/s

General Characteristics of the cohort Number of patients: 143	
Age (years)	70 (65/74)
BMI (Kg/m2)	25 (24/28)
VP (ml)	60 (48/83)
IPSS	17 (13/23)
Qmax (ml/s)	8 (6/11)
MetS patients	36%
Good Trifecta Outcome	60%
Complications (Clavien≥2)	18%
Postoperative Qmax >15	86%
Postoperative IPSS <8	85%

Results

	UNIVARIATE Analysis		MULTIVARIATE Analysis	
	Odds Ratio	p	Odds Ratio	p
Age	0,97(0.92-1.02)	0.258		
Preop IPSS	0,94(0,89-0,99)	0.025	0.94(0.88-0.99)	0.046
Prostate Volume	0,99(0,98-1.01)	0.528		
Residual Volume	1.00(0.99-1.01)	0.828		
Preop Qmax	1.21(1.07-1.36)	0.002	1.26(1.10-1.44)	0.001
Metabolic Syndrome	0,29(0,14-0,59)	0.001	0.21(0.10-0.48)	0.001

Trifecta Nomogram

Conclusion

In our study absence of Metabolic Syndrome, symptoms and urinary flow are predictors of favourable trifecta outcome. If externally validated our nomogram may help in the preoperative counseling of patients.