Retrospective study of gene prolaris (myriad genetics) signature in prostate biopsy from 29 patients with low and intermediate risk adenocarcinoma Clar F₁, Bernet L₂, Morell L₃, Monserrat A₄, López J₁, Gonzalvo V₄, Benedicto A₁, Polo A₄, Cano R₃ Hospital de la Ribera. Dep of Urology ₁ and Dep of Pathology₃. Alzira. Spain.Hospital Lluis Alcanys. Dep. of Pathology₂ and Dep of Urology₄. Xativa. Spain

Prostate cancer is the most common malignancy diagnosed in western countries and the second leading cause of cancer death among men. Many prostate cancer, however, do not progress to a clinically meaningful stage even in abscense of treatment. Molecular testing of tumor samples to guide treatment decisions is of increasing importance. The cell cycle progression score (CCP) (Prolaris [™]) is a RNA-based marker which improved the prediction of prostate cancer agressiveness. **Objective**: To asses the relationship between cell cycle proliferation test (CCP-Prolaris) in prostate cancer with clinicopathologic variables currently used in the diagnosis and prognosis, and related to

agressiveness, biochemical relapse and survival

Material and Methods: Correlation study between gene expression signature and diagnostic clinical criteria, as digital rectal examination, PSA (total, free/total, density) as well as pathologycal (Gleason grade) in 29 patients diagnosed by transrectal biopsy of low or intermediate risk prostate adenocarcinoma. All patients were followed between 24 and 142 months.

Results: In 5 patients the material was insufficient for determination of genetic test. Three patients were follow-up loss The results are explained in the tables

	PROLARIS <0	PROLARIS 0 to 1	PROLARIS > 1	Statistic		FOLLOW Alive	FOLLOW Bg Relapse	FOLLOW Tumoral	Statistic
DRE : Suspicious		2	4		CAPRA:	9	7	Exitus	
Non	4	9	5	pns	low risk		-		

suspiscious				
CAPRA: low risk	2	7	5	
Intermed. risk		1	3	
High risk	2	3	1	pns
PSA D: <0.15	2	4	3	
0.16-0.20		1	2	
> 0.20	2	6	4	pns
GLEASON: 3+3	1	4	5	
3+4	3	7	4	pns

Interm. risk		5	1	
High risk	2	2	2	P= 0.04
Prolaris <0	4	0	0	
0 to 1	2	8	1	
> 1	4	4	1	P= 0.07
SG: 3+3	4	6	3	
3+4	7	8	0	pns

No significant differences with classical prognostic factors

All patients with Prolaris <0 are alive

Conclusion: The CCP (Prolaris) test behaves as an independent prognostic factor, that can add to take terapeutic decissions in low and intermediate risk patients with prostate cancer.

References:

Cuzick J et al: the lancet.com/oncology (2011),12: 245/55 Cuzick J et al: Br.J.Cancer (2012), 1-5 Cooperberg MR et al:J Clin Oncol (2013), 31:1428-1434 Crawford ED et al. Curr Med Res & opinion (2014),30,6:1025-1031

