

Analysing by decade, testosterone undecanoat depot injectable does not increase prostate volume. Study during up to 7 years on hypogonadic patients.

Matei Pisoschi¹, Mara Carșote², Cătălina Poiană², Cristina Daniela Staicu³, Dan Peretiianu³

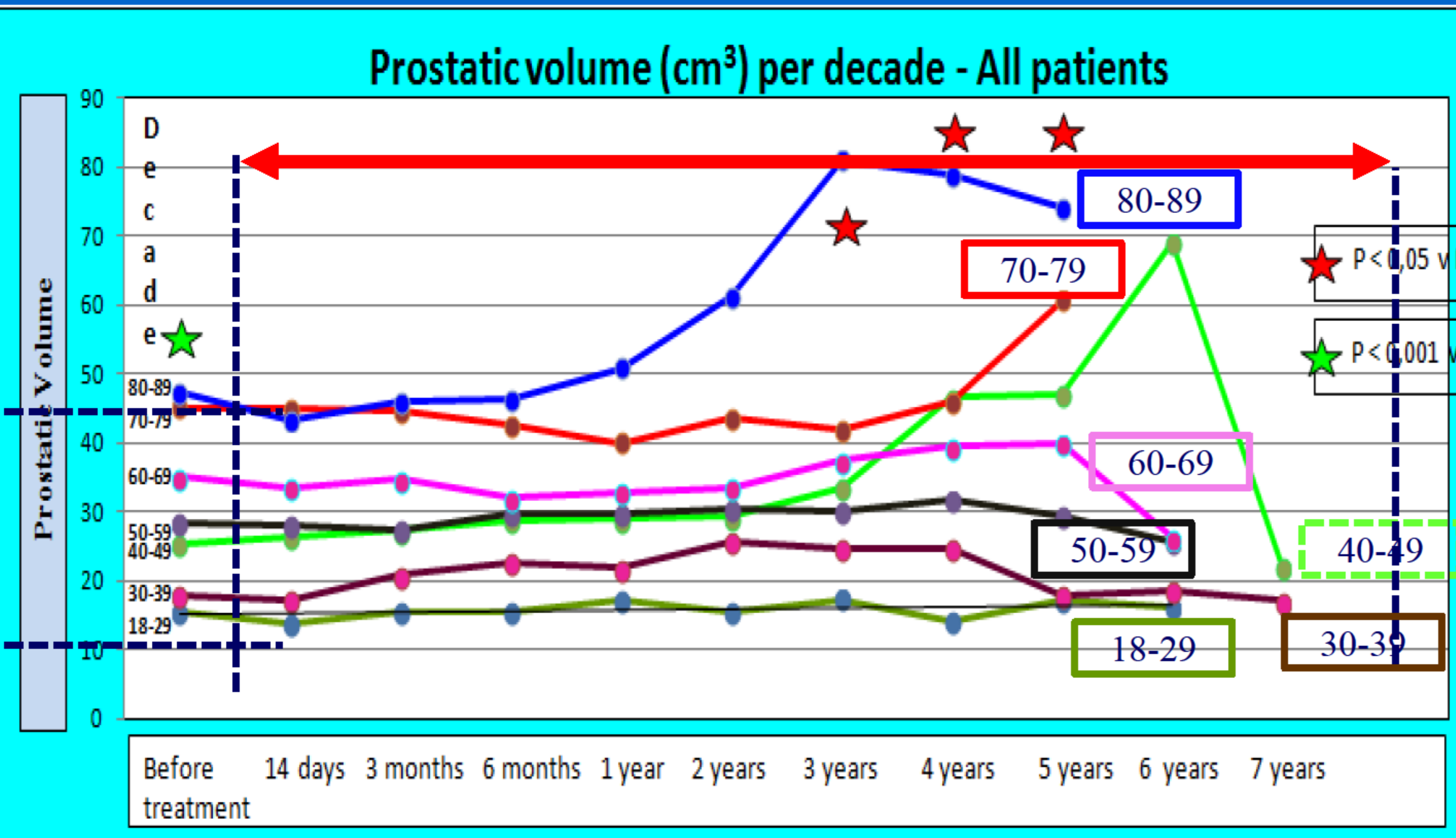
1. Hospital "T. Burchele"; 2. Inst. Endocrinology "Parhon", 3. SCM "Povernei", Bucharest – Romania

Aim. Re-Analyzing the effect on prostatic volume of injectable testosterone undecanoat depot (TUD) in hypogonadic patients without prostatic cancer.

Material&Method. **A. Patients** at onset 210 men with hypogonadism (median age: 61.5 y). **B. Distribution:** by decade (no): 4, 12, 21, 54, 59, 43, 16, 1. **C. 1000 mg TUD** (Nebido[®]-Bayer-Schering Pharma) was administrated at 3 months i.m. **D. Prostate volume (PV)** appreciated by per-abdominal ultrasound: 3,5 MHz probe, elliptical volume (cm³), Aloka 550. **E. Time of analysis:** before starting testosterone (T0), after ½ (T1), 3 (T2), 6 months (T3), 1 (T4), 2 (T5), 3 (T6), 4 (T7), 5 (T8), 6 (T9) and 7 years (T10). **F. Maximum increment** from P0 was noted Δ M%. Average increment was noted Δ A %. **G. Statistical analysis** by Student test (p).

Results. **I.** All average data of prostatic volume, maximum increment (Δ M %) per decade, including the moment (Δ M % at) and average increment (Δ A %)-tabulated. PV at T0 increases with age, from minimum 15.38 (19-29y) to maximum 47,41 (80-89y), p=0.0007. **III.** Considering all observations (some at 5/6/7 years), TUD did not increase PV significantly (in fact the average of

Decade	Age at onset Av	PV 0	No	PV 14d	No	PV 3m	No	PV 6m	No	PV 12m	No	PV 2Y	No	PV 3Y	No	PV 4Y	No	PV 5Y	No	PV 6Y	No	PV 7Y	No	
		T0		T1		T2		T3		T4		T5		T6		T7		T8		T9		T10		
18-29	23.00	15.38	4	13.75	4	15.50	4	15.50	4	17.13	4	15.50	4	17.33	3	14.00	2	17.00	1	16.00	1			
30-39	35.92	17.83	12	17.29	12	20.75	6	22.70	5	21.75	4	25.50	2	24.50	2	24.50	2	18.00	2	18.50	2	17.00	2	
40-49	46.00	25.33	21	26.33	21	27.30	15	28.73	14	29.00	12	29.28	9	33.50	6	46.50	4	47.17	3	69.00	2	22.00	1	
50-59	55.17	28.31	54	28.02	54	27.49	48	29.60	37	29.72	31	30.55	20	29.97	17	31.61	14	29.45	10	25.63	4	22.00	1	
60-69	64.49	34.99	59	33.60	59	34.84	44	32.08	33	32.91	28	33.60	21	37.40	10	39.44	10	39.93	7	26.33	3	0	0	
70-79	74.98	45.12	43	45.03	43	44.49	34	42.54	28	40.03	21	43.71	13	41.88	9	46.08	6	60.67	3					
80-89	83.41	47.41	16	43.31	16	46.00	14	46.40	11	50.83	9	61.07	7	81.00	4	78.75	2	74.00	2					
>90	96.00	32.00	1	34.00	1	40.00	1																	
Total			210		210		166		132		109		76		51		40		28		12		4	



increment in all patients was negative = -12,54%). Δ M % per decade: 45,95; 20; 40,35; 42,5; 45,45; 64,41; 39,56; 20. **IV.** Inside a specific decade no significant increased in PV was registered: all p >0,05; exception: 80-89 decade, p = 0,002, at 3-5 y. **V.** In some patients, especially from 50-79 years, TUD could decrease slightly prostatic volume.

Decade	Δ M %	Δ M % at	P (T test) T0 v T max	Δ A %
18-29	45.95	T4	0.68	-3.72
30-39	20.00	T3	0.26	-11.42
40-49	40.35	T2	0.68	2.62
50-59	42.50	T2	0.72	-12.76
60-69	45.45	T1	0.64	-14.95
70-79	64.41	T2	0.92	-34.25
80-89	39.56	T6	0.22	-0.02
>90	20.00	T2		12.94

Conclusions. Considering the risk for prostate (in elderly), testosterone undecanoat 1000 mg depot injectable is a safe treatment, even after 3 to 7 years of administration. Precautions should be accorded to men over 70 y, after 4 years and 80 y old, after 6 months administration.