

Analysing by decade, testosterone undecanoat depot injectable does not increase prostate volume. Study during up to 6 years on hypogonadic patients.

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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 173 men with hypogonadism (median age: 64 y). **B. Distribution:** by decade. **C. 1000 mg TUD** (Nebido^R-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 years (T6), 4 (T7), 5 (T8), and 6 years (T9). **F. Maximum increment** from P0 was noted Δ %. Average increment was noted Δ A %. **G. Statistical analysis** by Student test (p).

Results. **I.** All average data of prostatic volume are tabulated.

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	
18-29	21.00	17.33	3	15.00	3	17.33	3	17.33	3	19.50	3	17.33	3	17.33	3	14.00	2					
30-39	34.86	21.00	7	20.43	7	23.38	4	24.38	4	21.75	4	25.50	2	24.50	2	24.50	2	25.00	2	22.00	1	
40-49	46.36	27.36	14	28.21	14	29.23	11	31.11	9	33.08	6	34.40	5	35.88	4	58.00	2	28.00	1			
50-59	55.11	29.66	44	29.14	44	28.51	38	30.87	31	30.38	26	29.47	15	28.94	8	29.50	7	30.00	1			
60-69	64.88	36.98	52	34.86	52	36.29	38	35.66	25	34.83	23	36.63	16	41.57	7	47.25	2					
70-79	75.00	46.79	36	47.41	36	47.96	27	46.37	23	42.91	16	41.90	10	45.60	5	21.50	2					
80-89	83.41	47.41	16	43.31	16	47.42	12	48.22	9	57.86	7	68.08	6	83.00	2	80.50	1					
>90	96.00	32.00	1	34.00	1	40.00	1															
Total			173		173		134		104		85		57		31		18		4			1

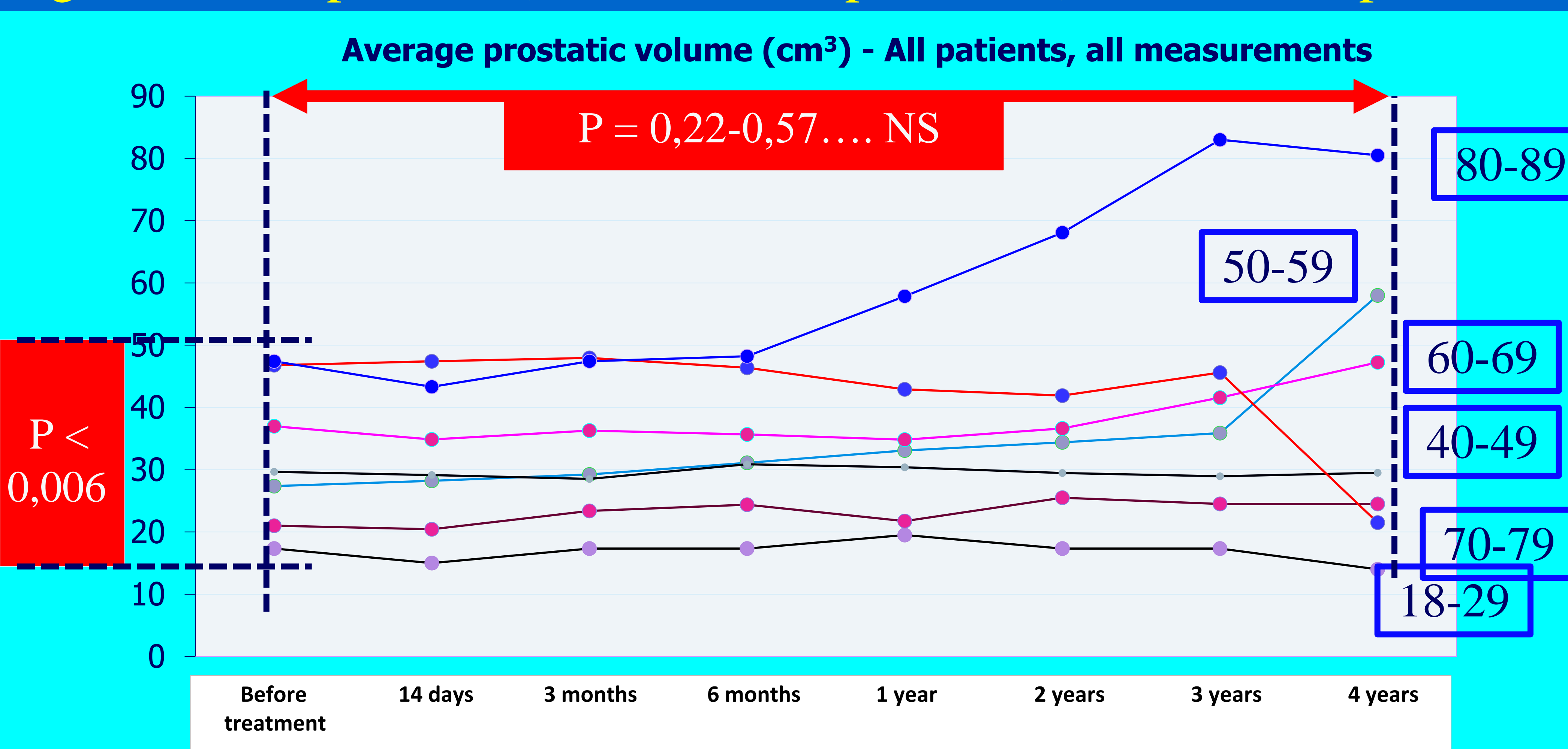
Maximum increment (Δ M %) per decade, including the moment (Δ M % at) and average increment (Δ A %).

II. PV at T0 increases with age, from 17,33 (19-29y) to 47,41 (80-89y), p=0,0007. **III.** Considering all observations (some at 5/6 years) TUD did not increase PV significantly (average of increment = 5,51).

IV. Inside a specific decade no significant increased in PV was registered: all p >0,05 (80-89 decade p = 0,057). **V.** In some patients, especially from 50-79 years, TUD could decrease slightly prostatic volume.

Decade	Δ M %	Δ M % at	p	Δ A %
18-29	16,67	T2	0,62	- 0,73
30-39	20	T3	0,71	1,09
40-49	40,35	T1	0,81	- 0,93
50-59	30,61	T4	0,90	-11,34
60-69	40	T4	0,61	-11,38
70-79	34,29	T3	0,61	- 57,27
80-89	39,56	T5	0,65	- 0,31
>90	5,88	T1		

IV. Inside a specific decade no significant increased in PV was registered: all p >0,05 (80-89 decade p = 0,057). **V.** In some patients, especially from 50-79 years, TUD could decrease slightly prostatic volume.



Conclusions

Considering the risk for prostate (in elderly), testosterone undecanoat 1000 mg depot injectable is a safe treatment, even after 3 to 6 years of administration. Precautions should be accorded to men over 80 y old, after the third administration. Further observation needed.