

## Prediagnostic body-mass index, plasma C-peptide concentration, and prostate cancer-specific mortality in men with prostate cancer: a long-term survival analysis

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	Plasma C-peptide quartile				p value
	1	2	3	4	
Total patients with prostate cancer, n (%)	207/827 (25.0)	206/827 (24.9)	208/827 (25.2)	206/827 (24.9)	..
Pre-PSA era (1982–1990), n (%)	42/220 (19.1)	64/220 (29.1)	49/220 (22.3)	65/220 (29.5)	0.02
PSA era (1991–2007), n (%)	165/607 (27.2)	142/607 (23.4)	159/607 (26.2)	141/607 (23.2)	..
Deaths due to prostate cancer, n (%)	21/207 (10.1)	32/206 (15.5)	20/208 (9.6)	44/206 (21.4)	0.002
Median overall follow-up (range), years					
Baseline to diagnosis	10.3 (0.3–22.6)	9.9 (0.0–22.3)	10.6 (0.1–23.5)	9.6 (0.1–23.4)	..
Diagnosis to end of follow-up	11.9 (1.2–22.5)	11.1 (0.6–24.1)	10.8 (0.1–24.2)	10.2 (0.0–20.1)	..
Mean age at baseline (SD), years	57.7 (8.2)	59.3 (8.3)	58.7 (8.0)	60.4 (7.5)	0.005
Mean age at diagnosis (SD), years	68.5 (8.2)	69.4 (7.4)	69.8 (7.5)	70.5 (6.7)	0.04
Smoking status at baseline, n (%)					
Non-smoker	113/207 (54.6)	87/206 (42.2)	95/208 (45.7)	86/206 (41.7)	0.15
Past smoker	79/207 (38.2)	101/206 (49.0)	92/208 (44.2)	100/206 (48.5)	..
Current smoker	15/207 (7.2)	18/206 (8.7)	21/208 (10.1)	20/206 (9.7)	..
Baseline diabetes, n (%)	1/207 (0.5)	4/206 (1.9)	1/208 (0.5)	5/206 (2.4)	0.19
Disease stage, n (%)*					
T1/T2	174/191 (91.1)	160/182 (87.9)	167/182 (91.8)	160/186 (86.0)	0.37
T3/T4	13/191 (6.8)	14/182 (7.7)	9/182 (4.9)	14/186 (7.5)	..
N1/M1	4/191 (2.1)	8/182 (4.4)	6/182 (3.3)	12/186 (6.5)	..
Gleason score, n (%)†					
2–6	139/202 (68.8)	120/196 (61.2)	136/201 (67.7)	127/197 (64.5)	0.41
7	39/202 (19.3)	52/196 (26.5)	45/201 (22.4)	40/197 (20.3)	..
8–10	24/202 (11.9)	24/196 (12.2)	20/201 (10.0)	30/197 (15.2)	..
Baseline PSA (ng/mL), n (%)‡					
4.0–9.9	26/123 (21.1)	31/132 (23.5)	27/121 (22.3)	31/141 (22.0)	0.98
≥10	15/123 (12.2)	20/132 (15.2)	17/121 (14.0)	23/141 (16.3)	0.81
PSA at diagnosis (ng/mL), n (%)§					
4.0–9.9	76/153 (49.7)	67/143 (46.9)	72/147 (49.0)	56/116 (48.3)	0.97
≥10	55/153 (35.9)	61/143 (42.7)	56/147 (38.1)	49/116 (42.2)	0.60
Median plasma C-peptide concentration (10th–90th percentile), ng/mL¶	0.8 (0.5–1.0)	1.3 (1.0–1.7)	2.1 (1.7–2.7)	3.9 (2.8–5.9)	<0.0001

\*86 of 827 men (10%) had unknown clinical stage. †31 of 827 men (4%) had unknown Gleason grade. ‡Data for plasma PSA concentrations at baseline were available for 718 men. §Data for plasma PSA concentrations at baseline were available for 718 men. ¶Data for plasma C-peptide concentrations at baseline were available for 827 men.

**Webtable: Characteristics of 827 patients with prostate cancer (1982–2007) by baseline C-peptide quartile**