

APPENDIX A: DESCRIPTION OF DATA SET

50 Patients (identified prospectively) who received some sort of hormonal treatment of their prostatic carcinoma (e.g., orchiectomy, DES) were then followed (for a minimum of 24 months) with serial measurements of their prostate specific antigen (PSA). For each patient, we identified the lowest value of PSA observed post-therapy. In addition, information is available on patients' age (in years), performance status (scale 0 to 100), tumor grade (1, 2, or 3), and bone scan score (1, 2, or 3). Performance status is a grading of the general ambulatory status of the patient, tumor grade measures the appearance of the tumor at pathological examination, and since prostate cancer frequently metastasizes to the bone, the bone scan score measures the extent of the spread of the cancer.

The dataset contains data on the following variables. Each line in the file corresponds to a single patient.

- **nadirpsa**: lowest PSA value attained post therapy
- **pretxpsa**: PSA value prior to therapy
- **ps**: performance status (0= worst, 100= best)
- **bss**: bone scan score (1= least disease, 3= most)
- **grade**: tumor grade (1= least aggressive, 3= most)
- **age**: patient's age
- **obstime**: time observed in remission in months
- **inrem**: indicator whether patient still in remission at last follow-up (0= not in remission, 1= remission)

From those variables, the following additional variables were computed.

- **lognadir= log(nadirpsa)**: natural log of nadirpsa
- **diffpsa= nadirpsa - pretxpsa**: difference in PSA
- **inrem24**: indicator whether patient still in remission at 24 months (0 = not in remission, 1= remission)

APPENDIX B: DESCRIPTIVE STATISTICS

Descriptive Statistics for all variables

	n	msg	mean	std dev	min	25%-ile	median	75%-ile	maximum
age	50	0	67.44	5.77	58.0	63.25	66.00	70.00	86.0
ps	50	2	80.83	11.08	50.0	80.00	80.00	90.00	100.0
bss	50	2	2.52	0.68	1.0	2.00	3.00	3.00	3.0
grade	50	9	2.15	0.79	1.0	2.00	2.00	3.00	3.0
pretxpsa	50	7	670.75	1287.64	4.8	52.00	127.00	408.00	4797.0
nadirpsa	50	0	16.36	39.25	0.1	0.20	0.95	9.50	183.0
lognadir	50	0	0.57	2.15	-2.30	-1.61	-0.05	2.25	5.2
diffpsa	50	7	-655.88	1269.31	-4614.0	-407.05	-126.80	-44.35	-4.3
obstime	50	0	28.46	18.39	1.0	12.50	28.00	42.00	75.0
inrem	50	0	0.28	0.45	0.0	0.00	0.00	1.00	1.0
inrem24	50	0	0.54	0.50	0.0	0.00	1.00	1.00	1.0

Frequency table for Performance Status (ps)

	Total	Msg	50	60	70	80	90	100
Count	50	2	2.00	2.00	6.0	21.00	14.00	3.00
Pct	NA	NA	4.17	4.17	12.5	43.75	29.17	6.25

Frequency table for Bone Scan Score (bss)

	Total	Msg	1	2	3
Count	50	2	5.00	13.00	30.0
Pct	NA	NA	10.42	27.08	62.5

Frequency table for Grade (grade)

	Total	Msg	1	2	3
Count	50	9	10.00	15.00	16.00
Pct	NA	NA	24.39	36.59	39.02

Frequency table for In Remission at last follow-up (inrem)

	Total	Msg	0	1
Count	50	0	36	14
Pct	NA	NA	72	28

Frequency table for In Remission at 24 months (inrem24)

	Total	Msg	0	1
Count	50	0	23	27
Pct	NA	NA	46	54

APPENDIX C: ANALYSES OF TIME IN REMISSION

ALL SUBJECTS

Kaplan-Meier Estimates (and standard errors) for all subjects at selected times

Time	Surv	Std.Err
22	0.560	0.070
26	0.519	0.071
30	0.498	0.071

STRATIFIED BY PERFORMANCE STATUS < 90 or >= 90

Kaplan-Meier Estimates (and standard errors) for subjects with Performance Status below 90 at selected times

Time	Surv	Std.Err
22	0.484	0.090
26	0.449	0.090
30	0.415	0.089

Kaplan-Meier Estimates (and standard errors) for subjects with Performance Status at or above 90 at selected times

Time	Surv	Std.Err
21	0.765	0.103
26	0.706	0.111
30	0.647	0.116

APPENDIX D: ANALYSES OF NADIRPSA BY INREM24 and PS

ALL SUBJECTS

Descriptive statistics for NADIRPSA by INREM24 status in all subjects

	n	msng	mean	std dev	min	25%-ile	median	75%-ile	maximum
all	50	0	16.36	39.25	0.1	0.20	0.95	9.50	183
0	23	0	30.56	51.72	0.2	1.15	10.00	32.50	183
1	27	0	4.26	17.59	0.1	0.20	0.20	0.95	92

STRATIFIED BY PERFORMANCE STATUS < 90 or >= 90

Descriptive statistics for NADIRPSA by INREM24 status in PS < 90

	n	msng	mean	std dev	min	25%-ile	median	75%-ile	maximum
all	33	2	23.93	48.08	0.2	0.25	1.70	14.50	183
0	19	2	37.68	58.35	0.2	1.70	11.00	40.00	183
1	16	2	7.24	24.41	0.2	0.20	0.25	0.98	92

Descriptive statistics for NADIRPSA by INREM24 status in PS >= 90

	n	msng	mean	std dev	min	25%-ile	median	75%-ile	maximum
all	19	2	3.96	9.46	0.1	0.20	0.5	1.6	38
0	6	2	13.42	17.52	0.5	1.02	7.6	20.0	38
1	15	2	1.05	1.87	0.1	0.20	0.2	0.9	7