Table W1. Characteristics of Human Prostate Tumor Samples.

Patient No.	Age at dg (yr)	PSA at dg	Neoadjuvant Therapy	Tissue	рТ	рN	GS
1	55	83.5	HFM	Both	pT3b	pN0	5 + 3
2	68	108.4	BIC	Both	pT3b	pN1	3 + 4
3	54	60	HFM, LHRH	Both	pT4	pN0	3 + 3
4	60	9.7	BIC, HFM, LHRH	Both	pT2b	pN0	3 + 4
5	64	52	HFM	After	pT3a	pN1	4 + 5
6	58	29.1	HFM	After	pT2b	pN0	3 + 4
7	50	47.2	HFM	After	pT3b	pN1	4 + 5
8	54	24.39	HFM, CPA	After	pT3b	pN0	4 + 5
9	66	8.2	HFM	After	pT2b	pN0	3 + 5
10	63	5.7	BIC, HFM	After	pT2b	pN0	3 + 4
11	59	8.5	None	Before	pT2b	pNx	3 + 4
12	66	7.07	None	Before	pT2b	pN0	4 + 4
13	69	8.22	None	Before	pT3a	pN0	2 + 2
14	63	9.8	None	Before	pT2c	pNx	3 + 4
15	66	32	None	Before	pT2b	pN0	3 + 2
16	66	8.29	None	Before	pT2b	pN0	4 + 5

BIC indicates bicalutamide; CPA, cyproterone acetate; dg, diagnosis; GS, Gleason score; HFM, hydroxyflutamide; LHRH, luteinizing hormone-releasing hormone analog; pNx, no lymphadenectomy; pT, pathologic T stage; Tissue, type of tissue available with respect to the neoadjuvant therapy (before, after, both).



Figure W1. Expression of markers of senescence in human foreskin fibroblasts (HFF-1) cells after exposure to $200 \,\mu$ M hydrogen peroxide (H₂O₂). (A) SA-β-gal staining of control and H₂O₂-treated HFF-1 cells. (B) Confocal images of P-H2AX (S139) and HP1β immunofluorescence in control and H₂O₂-treated HFF-1 cells. White arrow and arrowhead, positive signal for P-H2AX (S139) staining and formation of HP1β foci, respectively.



Figure W2. Senescence induced by androgen depletion is irreversible. (A) Cytochemical detection of SA- β -gal activity in long-term cultivated LNCaP cells after reseeding. Cytochemical analysis of SA- β -gal activity showed false positivity in the case of highly confluent cells, when such cells were negative after their dissociation followed by cytospin. (B) The cells were cultivated for 16 days and then reseeded at a low density (10,000 cells/cm²) in appropriate media. The cells grown in FBS were reseeded in medium with FBS; cells grown in CS were reseeded in medium containing either CS or FBS. Reseeded cells were grown for an additional 2, 4, and 8 days (16 + 2, 16 + 4, and 16 + 8, respectively) without reseeding. (C) Analysis of cell numbers in response to reseeding. Data represent mean \pm SD of two independent experiments.



Figure W2. (continued).



Figure W3. Western blot analysis of expression of cytokeratins in LNCaP and LAPC-4 cells cultivated in the presence (FBS) or absence (CS) of androgens. (A) Expression of cytokeratins detected by a pan-reactive cytokeratin antibody. (B) Cytokeratin 7 + 17, cytokeratin 8, and cytokeratin 18 expression in LNCaP cells. α -Tubulin was used as a loading control.