

Table S1

RT-PCR primers

Primer	Sequence
TMPRSS2-1f	5'- CAG GAG GCG GAG GCG GA -3';
ERG-1r	5'- GGC GTT GTA GCT GGG GGT GAG-3''.
TMPRSS2-2f	5'- TAG GCG CGA GCT AAG CAG GAG -3'
ERG-2r	5'- GTA GGC ACA CTC AAA CAA CGA CTG G -3'

Table S2

Real time PCR primers

Primer	Sequence
TMPRSS2-2f	5'- TAG GCG CGA GCT AAG CAG GAG -3'
ERG -2r	5'- GTA GGC ACA CTC AAA CAA CGA CTG G -3'

Table S3

ChIP PCR primers

Primer	Sequence
TMPRSS2 ChIP I f	5'- CCC AAA GCT GGC TCC TAG TC-3'
TMPRSS2 ChIP I r	5'- CCA AAC AAA GAA GCC AAC CGA C-3'
TMPRSS2 ChIP II f	5'-GCT GAA GAC AGG CTG GGT GAT C-3'
TMPRSS2 ChIP II r	5'-AGA ACC TCC CAC CCT CGG TAT CT-3'
ERG ChIP I f	5'-GAG CAT GGC CAG GGA TGA TC-3'
ERG ChIP I r	5'-GCA TCT CGG CCT TCA TCC TT-3'
ERG ChIP II(III)f	5'- CTG ATT CAT CCT GCC AGC CAC-3'
ERG ChIP II(III) r	5'- CCT GGC CTC AGC TTC TCA GAA G-3'
ERG ChIP IV f	5'-GAG GGA GAG GTG CAA ATT AGA G-3'
ERG ChIP IV r	5'-GGC TGA AGG ACA GGG ATT G-3'
GAPDH f	5'-CCA TCA CTG CCA CCC AGA AG-3'
GAPDH r	5'-AGC TTC CCG TTC AGC TCA GG-3'

Table S4 3C
primers

GENE	Forward Primer
RRP1B	5'-GCA CCT CAC ACT CAG GAT GCC-3'
PKNOX1	5'-CTT CCT CGC TGA AGA TGC TTC C-3'
TMPRSS3	5'-TCG GCT GGC TCA GCA GG-3'
ABCG1	5'-AAG GCC ATT GAA CAC CCA ACA CC-3'
TMPRSS2	5'-AAG TGC AGT CCT AAC CTC CTG G-3'
BACE2	5'-GTG GTC TTG GTG CAG CCA AC-3'
DSCAM	5'-TTC GCT ATT GTG GCG ATG CAA GG-3'
PCP4	5'-ATG ACT GTG TGG GTC TCC AGG-3'
SH3BGR	5'-CAT CCA TCC ATC TCT CCA TCC ATC C-3'
WRB	5'-AAG GCG GAG TCC TCA AAG ATT GG-3'
BRWD1	5'-CGT GCA CTG TGT GTT GAC TGC-3'
ETS2	5'-TAG CAC AGC CTC-3
Reverse Primer	
ERG	5'-AAG GTA CCA GAG GAG GAC CAG C-3'

Table S5 – ANOVA p-Values for ChIP Assays		
	Site IV	Site II/III
Figure 6		
AR	1.04×10^{-6}	0.019
LSD1	6.17×10^{-5}	0.00015
8-oxo-G	1.66×10^{-8}	3.64×10^{-8}
OGG1	1.91×10^{-12}	5.61×10^{-6}
Figure 8		
8a		
APE1	7.49×10^{-11}	0.0041
XRCC1	6.03×10^{-10}	3.00×10^{-5}
8b		
ATM	5.98×10^{-7}	8.60×10^{-6}
ATR	0.84	0.51
γ H2AX	1.49×10^{-12}	9.20×10^{-6}
8c		
MRE11	4.29×10^{-8}	0.0021
RAD51	7.29×10^{-6}	3.11×10^{-6}
NBS1	0.186	0.14
RPA	3.01×10^{-6}	6.59×10^{-6}
BRCA2	1.38×10^{-9}	4.89×10^{-6}
8d		
DNA-PK	9.74×10^{-7}	0.044
Ku80	1.23×10^{-14}	1.03×10^{-6}
Ku70	3.28×10^{-8}	0.0018
XRCC4	6.74×10^{-7}	0.0012
Histone H1	0.0028	0.060
8e		
IgG	0.0011	0.010
Figure S6		
OGG1	1.91×10^{-12}	5.61×10^{-6}
OGG1 + irradiation	4.00×10^{-9}	0.013
OGG1 + enzalutamide	1.88×10^{-11}	0.0060