

## List of Abbreviations

AR- Androgen receptor	HPrE cells- Human prostate epithelial cells
ARE- Androgen Response Elements	HSP- Heat shock proteins
BERKO- Beta Estrogen Receptor Knockout	HWE- Hardy Weinberg equilibrium
BMI- Body Mass Index	IARC- International Agency for Research on Cancer
BPH- Benign Prostatic Hyperplasia	ICC- Immunocytochemistry
cCDK- Cyclin dependent kinases	IGF- insulin-like growth factors
Cd- Cadmium	IGFBP- IGF-binding protein
CD- cluster designation	IHC- Immunohistochemistry
cDNA- Complementary DNA	<i>i.p.</i> - Intra peritoneal
CI- confidence interval	KGF- keratinocyte growth factor
CK- cytokeratins	LBD- Ligand binding domain
CTD- C-terminal domain	LPO- Lipid peroxidation
DAPI- 4'6'-diamidino-2-phenylindole dihydrochloride	LUTS- Lower Urinary Track Symptoms
DBD- DNA binding domain	MMP- Matrix Metalloproteinase
DHEA- dehydroepiandrosterone	MNU- Methyl Nitrosuria
DHT- dihydrotestosterone	MTT- 3-(4,5-Dimethylthiazol-2-yl)-2,5- Diphenyltetrazolium
DMEM- Dulbecco's modified Eagle's medium	NADPH- nicotinamide adenine dinucleotide phosphate
DMSO- Dimethyl sulfoxide	NE- Neuroendocrine
EDTA- Ethylene diamine tetra-acetic acid	NSF- neuron-specific enolase
EGF- epidermal growth factor	NTD- N-terminal regulatory domain
EMT- Epithelial to Mesenchymal Transition	ONS- Oct3/4, Nanog, Sox2
ER- Estrogen receptor	OR- odds ratio
ERE- Estrogen response elements	PAP- prostatic acid phosphatase
FACS- Fluorescence-activated cell sorting	Pb- Lead
FBS- Fetal Bovine Serum	PBS- Phosphate buffered saline
GAPDH- Glyceraldehyde Phosphate Dehydrogenase	PCa- Prostate Cancer
HGF- hepatocyte growth factor	

PCR- Polymerase chain reaction

PFA- Para-Formaldehyde

PIN- intraepithelial neoplasia

PNP- p- Nitrophenol

PNPP- p- Nitrophenyl Phosphate

PSA- prostate-specific antigen

PSCs- prostate stem cells

PZ- peripheral zone

Qmax- urinary flow rate

ROS- Reactive oxygen species

RT-PCR- Reverse transcriptase polymerase chain

reaction

SCF- stem cell factor

SERMs- Selective Estrogen Receptor Modulators

SNP- single nucleotide polymorphism

TA- Transit-Amplifying

TERT- Telomerase reverse transcriptase

TF- transcription factors

TGF- $\beta$  - transforming growth factor- $\beta$

TUIP- Transurethral incision of the prostate

TURP- Transurethral resection of the prostate

TZ- transitional zone

UGM- Urogenital Mesenchyme

UGS- Urogenital sinus