1. MicroRNA-135b overexpression effect on prostate cancer cell line: time course

Analysis of LNCaP prostate cancer (PCa) cells overexpressing miRNA-135b for up to 36 hours. LNCaP cells express the androgen receptor (AR). MiRNA-135b overexpression in AR+ PCa cells results in slower growth compared to AR knockdown. Results provide insight into the basis of this slower growth.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 protocol, 3 time sets

Platform: GPL10558 Series: GSE57820 12 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS6nnn/GDS6100/

DataSet Accession: GDS6100 ID: 6100

2. Peptidyl-prolyl cis/trans isomerase Pin1 deficiency effect on prostate cancer cells

Analysis of prostate cancer (PC) cell lines LNCap (androgen-dependent) and DU145 (androgen-independent) following siRNA-mediated knockdown of Peptidyl-prolyl cis/trans isomerase Pin1. Results provide insight into molecular mechanisms underlying Pin1 modulation of both PC two cell lines.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 cell line, 3 protocol sets

Platform: GPL6244 Series: GSE67457 6 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5805/

DataSet Accession: GDS5805 ID: 5805

3. PI3K/mTOR Inhibitor NVP-BEZ235 and taxotere effects on prostate cancer xenograft tumors

Analysis of DU145 xenograft tumors in NOD/SCID mice treated with NVP-BEZ235, taxotere, or both. NVP-BEZ235 targets prostate cancer progenitor cells. Taxotere targets the bulk tumor. Results provide insight into potential biomarkers associated with cancer stem cells in these xenograft tumors.

Organism: Homo sapiens

Type: Expression profiling by array, count, 4 agent sets

Platform: GPL570 Series: GSE49232 4 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5804/

DataSet Accession: GDS5804 ID: 5804

4. Androgen effect on runt-related transcription factor 1-deficient prostate cancer cell line

Analysis of androgen receptor (AR)-positive prostate cancer (PC) LNCaP cells depleted for runt-related transcription factor (RUNX1) by siRUNX1 transfection then treated with 10nM dihydrotestosterone (DHT). Results provide insight into the role of RUNX1 in AR-dependent PC.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 agent, 2 genotype/variation sets

Platform: GPL6244 Series: GSE62454 4 Samples

FTP download: GEO (CEL, CHP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5606/

DataSet Accession: GDS5606 ID: 5606

5. Androgen effect on carboxyl terminal-binding protein 2-deficient prostate cancer cell line

Analysis of androgen receptor (AR)-positive LNCaP prostate cancer cells depleted for carboxyl terminal-binding protein 2 (CTBP2) then treated with the androgen, dihydrotestosterone (DHT). Results provide insight into the molecular effects of CtBP2 knockdown on AR-mediated gene regulation.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 agent, 4 genotype/variation sets

Platform: GPL6244 Series: GSE58309 10 Samples

FTP download: GEO (CEL, CHP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5440/

DataSet Accession: GDS5440 ID: 5440

6. miR-221 expression effect on prostate cancer cell line

Analysis of PC-3 prostate cancer cells expressing pre-miR-221. miR-221 is frequently downregulated in primary prostate cancer. Results provide insight into the role of miR-221 in the pathogenesis of prostate cancer.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 protocol sets

Platform: GPL570 Series: GSE45627 4 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5373/

DataSet Accession: GDS5373 ID: 5373

7. Cyclin-dependent kinase inhibitor R547 effect on prostate cancer cell line: dose response and time course

Analysis of DU145 prostate cancer cells treated with the CDK inhibitor R547 at 3 doses for up to 24 hours. R547 exerts an antiproliferative effect on various cell lines. Results compared with those from PBMCs (GDS5266) and HCT116 cells (GDS5268) to identify pharmacodynamic biomarkers for R547.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 agent, 4 dose, 4 time sets

Platform: GPL570 Series: GSE15392 45 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5267/

DataSet Accession: GDS5267 ID: 5267

8. U2OS osteosarcoma cell line response to strigolactone analogs ST362 and MEB55: 24 hours

Analysis of U2OS cells treated with strigolactone (SL) analog ST362 or MEB55 for 24hr. SL is a plant hormone. SL analogs potently inhibit growth of breast cancer cells. Results provide insight into molecular mechanisms underlying the anti-tumorigenic effects of SL analogs towards cancer cells.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 agent sets

Platform: GPL10558 Series: GSE54820 6 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5222/

DataSet Accession: GDS5222 ID: 5222

9. U2OS osteosarcoma cell line response to strigolactone analogs ST362 and MEB55: 6 hours

Analysis of U2OS cells treated with strigolactone (SL) analog ST362 or MEB55 for 6hr. SL is a plant hormone. SL analogs potently inhibit growth of breast cancer cells. Results provide insight into molecular mechanisms underlying the anti-tumorigenic effects of SL analogs towards cancer cells.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 agent sets

Platform: GPL10558 Series: GSE54820 6 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5221/

DataSet Accession: GDS5221 ID: 5221

10. G-protein coupled receptor kinase 3 expression effect on prostate cancer cell line

Analysis of PC3 prostate cancer cells expressing G-protein coupled receptor kinase 3 (GRK3). Results provide insight into the role of GRK3 in prostate cancer progression and metastasis.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent sets

Platform: GPL6883 Series: GSE36022 6 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5173/

DataSet Accession: GDS5173 ID: 5173

11. High grade prostate cancer

Analysis of prostate cancer cells microdissected from high grade prostate cancer tumor samples. Results identify a gene expression signature for high grade prostate cancer.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 disease state, 3 other sets

Platform: GPL570 Series: GSE45016 11 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS5nnn/GDS5072/

DataSet Accession: GDS5072 ID: 5072

# 12. Telomere-elongated, prostate cancer cells

Analysis of telomere-elongated PC-3 prostate cancer cells in the presence of exogenous human telomerase reverse transcriptase (hTERT). Forced elongation of telomeres promotes PC-3 cell differentiation. Results provide insight into the influence of telomere length on tumor malignancy.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 genotype/variation, 2 protocol sets

Platform: GPL570 Series: GSE41559 16 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4964/

DataSet Accession: GDS4964 ID: 4964

### 13. Transcription factor ETS fusion EWS/FLI1 knockdown in Ewing sarcoma cell line: time course

Analysis of A673 Ewing Sarcoma cell line for up to 96hrs after inducible EWSR1/FLI1 knockdown. Oncogenic ETS fusions are driver mutations in diverse cancers, including Ewing sarcoma. Results provide insight into the molecular mechanisms underlying ETS-driven tumorigenesis.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 protocol, 6 time sets

Platform: GPL571 Series: GSE27524 16 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4962/

DataSet Accession: GDS4962 ID: 4962

#### 14. FOXA1 overexpression effect on prostate cancer cell line

Analysis of LNCaP prostate cancer cells overexpressing FOXA1. FOXA1 is a key member of the androgen receptor (AR) transcription factor complex. Results provide insight into the role of FOXA1 in prostate cancer.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 protocol sets

Platform: GPL10558 Series: GSE49153 12 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4957/

DataSet Accession: GDS4957 ID: 4957

### 15. BET bromodomain inhibitor I-BET762 effect on prostate cancer cell lines: dose response

Analysis of prostate cancer (PC) cell lines (NCI-H660, VCaP, LNCaP, PC-3) treated with I-BET762 at 0.5uM or 10uM for 24hr. I-BET762 is a highly specific inhibitor of BET (bromodomain and extra-terminal) proteins. Results provide insight into molecular pathways regulated by I-BET762 treatment in PC.

Organism: Homo sapiens

Type: Expression profiling by array, count, 4 cell line, 3 dose sets

Platform: GPL570 Series: GSE56352 24 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4952/

DataSet Accession: GDS4952 ID: 4952

# 16. Lysophosphatidic acid effect on breast and prostate cancer cell lines

Analysis of MDA-MB-231, MCF7 and PC3 cells treated with lysophosphatidic acid (LPA). LPA activates six different G protein-coupled receptors (LPA receptors 1-6). Results provide insight into LPA-induced genes among three unrelated cancer cell lines expressing different patterns of LPA receptors.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent, 3 cell line sets

Platform: GPL570 Series: GSE56265 12 Samples

FTP download: GEO (CEL, CHP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4951/

DataSet Accession: GDS4951 ID: 4951

# 17. MED1 overexpression effect on prostate cancer cell line

Analysis of LNCaP prostate cancer cells overexpressing the Mediator of RNA polymerase II transcription factor 1 (MED1). MED1 is a coactivator of the androgen receptor and other signal-activated transcription factors. Results provide insight into the role of MED1 overexpression in prostate cancer.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 protocol sets

Platform: GPL571 Series: GSE41150 4 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4846/

DataSet Accession: GDS4846 ID: 4846

### 18. VprBP depletion effect on prostate cancer cell line

Analysis of DU145 prostate cancer cells depleted for Vpr binding protein (VPRBP). VPRBP knockdown decreases histone H2A threonine 120 (H2AT120) phosphorylation and impairs the viability of DU145 cells. Results provide insight into the role of VprBP in regulating gene transcription.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 genotype/variation sets

Platform: GPL10558 Series: GSE50414 4 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4829/

DataSet Accession: GDS4829 ID: 4829

#### 19. Prostate cancer

Analysis of malignant and benign prostate tissues. Results provide insight into a gene expression signature for prostate cancer.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 disease state, 3 genotype/variation sets

Platform: GPL570 Series: GSE55945 21 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4824/

DataSet Accession: GDS4824 ID: 4824

#### 20. External beam radiation therapy effect on prostate cancer patients: peripheral white blood cells

Analysis of peripheral blood from men with non-metastatic prostate cancer (PC) on days 1, 7, 14, 21, 42 of external beam radiation therapy (EBRT), and at 30 days post-EBRT. Fatigue is a common side effect of EBRT. Results provide insight into molecular basis of fatigue in men with PC during EBRT.

Organism: Homo sapiens

Type: Expression profiling by array, count, 20 individual, 2 protocol, 8 time sets

Platform: GPL570 Series: GSE30174 80 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4395/

DataSet Accession: GDS4395 ID: 4395

# 21. LNCap prostate cancer cell line response to loss of COnstitutive Photomorphogenic-1, ETV1 and c-JUN

Analysis of LNCap prostate cancer cells following siRNA-mediated knockdown of COP1, ETV1, and c-JUN. Ubiquitin ligase COP1 (RFWD2) negatively regulates the abundance of ETV1 and c-JUN, both of which have been linked to PC. Results provide insight into the role of COP1 as a tumor suppressor in PC.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 3 genotype/variation sets

Platform: GPL570 Series: GSE27914 15 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4159/

DataSet Accession: GDS4159 ID: 4159

#### 22. LNCap prostate cancer cell line response to loss of COnstitutive Photomorphogenic-1 and ETV1

Analysis of LNCap prostate cancer (PC) cells following siRNA-mediated knockdown of COP1 and ETV1. Ubiquitin ligase COP1 (RFWD2) negatively regulates proto-oncogene ETV1 which has been linked to PC. Results provide insight into the role of COP1 as a tumor suppressor in PC.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 3 genotype/variation sets

Platform: GPL570 Series: GSE27914 16 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4158/

DataSet Accession: GDS4158 ID: 4158

# 23. Genetic reprogramming of prostate cancer-associated stromal cells

Analysis of induced pluripotent stem cells (iPSCs) obtained from sorted CD90+ prostate cancer (CP)-associated stromal cells cultured and transfected with stem cell transcription factor POU5F1/LIN28/NANOG/SOX2 expression vectors. Results provide insight into the stemness of CP stromal-derived iPSCs.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 5 cell type, 2 protocol sets

Platform: GPL570 Series: GSE35373 6 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4124/

DataSet Accession: GDS4124 ID: 4124

# 24. Isoflavone and 3,3'-diindolylmethane effect on C4-2B prostate cancer cells

Analysis of C4-2B prostate cancer (PCa) cells treated with isoflavone (IsoF) and 3,3'- diindolylmethane (B-DIM) for up to 72 hours. IsoF and B-DIM inhibited the signal transductions in PCa signaling. Results provide insight into molecular mechanisms underlying PCa growth.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 agent, 4 time sets

Platform: GPL570 Series: GSE35324 5 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4123/

DataSet Accession: GDS4123 ID: 4123

### 25. Hepatocyte growth factor treatment of prostate cancer DU145 cell line: time course

Analysis of DU145 prostate cancer cells treated with hepatocyte growth factor (HGF) for up to 24 hrs. HGF receptor c-MET is specifically expressed in immature prostate cells. Results provide insight into the role of immature cells in prostate cancer by analysis of the HGF/c-MET pathway.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent, 3 time sets

Platform: GPL570 Series: GSE16659 6 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4121/

DataSet Accession: GDS4121 ID: 4121

26. Androgen deprivation effect on prostate xenograft tumor LuCaP35

NOD/SCID mice with established LuCaP35 xenografts were castrated, and tumors were isolated 4 weeks later. Androgen deprivation regresses androgen-dependent disease, but relapse often occurs in an androgen-independent manner. Results provide insight into the molecular basis of castration resistance.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 protocol sets

Platform: GPL570 Series: GSE33316 10 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4120/

DataSet Accession: GDS4120 ID: 4120

#### 27. Reactive stroma of breast and prostate cancer

Analysis of stroma associated with prostate and breast invasive tumors. Stromal reaction (tumor-associated tissue remodeling) occurs in various cancers. Results provide insight into whether this stromal response is largely a generic phenomenon or whether it reflects tumor-specific properties.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 disease state, 2 tissue sets

Platform: GPL570 Series: GSE26910 24 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4114/

DataSet Accession: GDS4114 ID: 4114

28. Late passage LNCaP prostate tumor cells treated with androgen receptor shRNA or androgen R1881

Analysis of late passage (LP50) LNCaP cells treated with AR shRNA or control shRNA, grown in hormone-free media to deplete androgen, and treated with androgen R1881 or vehicle. Results provide insight into molecular mechanisms underlying acquired androgen independence of late passage LNCaP cells.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 genotype/variation sets

Platform: GPL570 Series: GSE22483 6 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4113/

DataSet Accession: GDS4113 ID: 4113

29. Inactivation of wt-p53 function in hTERT immortalized prostate epithelial EP156T cells: time course

Temporal analysis of EP156T cells infected with a recombinant retrovirus encoding either p53R175H mutant (M cells), dominant-negative p53 peptide GSE56 (G cells) or control vector (C cells). Results provide insight into molecular mechanisms underlying early stages of transformation.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 7 genotype/variation, 3 infection, 27 other, 9

time sets

Platform: GPL571 Series: GSE23038 27 Samples

FTP download: GEO (CEL, CHP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4110/

DataSet Accession: GDS4110 ID: 4110

30. Recurrent and non-recurrent prostate cancer primary tumors

Analysis of prostate cancer primary tumors of known disease recurrence status. Results provide insight into the molecular mechanisms underlying recurrent and non-recurrent prostate cancer primary tumors.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 disease state sets

Platform: GPL96 Series: GSE25136 79 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4109/

DataSet Accession: GDS4109 ID: 4109

31. KUCaP-2 xenograft model of castration-resistant prostate cancer: various stages

Analysis of KUCaP-2 xenograft tissues transplanted into mice and collected during androgen-dependent growth (AD), castration-induced regression nadir (ND), and castration-resistant regrowth (CR) stages. Results provide insight into molecular basis of castration-resistant prostate cancer development.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 3 development stage sets

Platform: GPL570 Series: GSE21887 12 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4107/

DataSet Accession: GDS4107 ID: 4107

32. Docetaxel resistant prostate cancer cell line

Analysis of prostate cancer cell lines resistant to docetaxel chemotherapy, DU-145R and PC-3R, which were derived from cell lines DU-145 and PC-3, respectively. Results provide insight into the molecular mechanisms underlying docetaxel resistance.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 4 cell line sets

Platform: GPL570 Series: GSE33455 12 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3973/

DataSet Accession: GDS3973 ID: 3973

#### 33. Synthetic androgen R1881 effect on transcription factor SRF-deficient prostate cancer cells

Analysis of LNCaP androgen-sensitive prostate adenocarcinoma cells, SRF (serum response factor)-silenced and treated with synthetic androgen R1881. Effects of androgens on prostate cancer (PCa) cells can be mediated by SRF. Results provide insight into targets for androgen action in PCa cells.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 agent, 2 protocol sets

Platform: GPL570 Series: GSE22606 12 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3861/

DataSet Accession: GDS3861 ID: 3861

# 34. beta-TrCP inhibition and androgen ablation effects on prostate cancer cell line LAPC4

Analysis of androgen-sensitive LAPC4 prostate cancer cells following beta-TrCP knockdown and androgen ablation. beta-TrCP inhibition reduces prostate cancer growth, showing an additive effect with androgen ablation. Results provide insight into the molecular basis of beta-TrCP inhibition.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 genotype/variation, 2 growth protocol sets

Platform: GPL571 Series: GSE19141 4 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3797/

DataSet Accession: GDS3797 ID: 3797

#### 35. 1,25 dihydroxyvitamin D effect on prostate epithelial cell line RWPE1: time course

Analysis of RWPE1 cells, an immortalized, non-tumorigenic prostate epithelial cell line, treated with 1,25(OH)2D (i.e., the active form of vitamin D), for up to 48 hrs. RWPE1 cells are growth arrested by 1,25(OH)2D. Results provide insight into the role of vitamin D in prostate cancer prevention.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 agent, 3 time sets

Platform: GPL570 Series: GSE15947 24 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3761/

DataSet Accession: GDS3761 ID: 3761

36. miR-205 expression effect on prostate cancer cell line

Analysis of DU145 prostate cancer cells with restored miR-205 expression. miR-205 expression is lower in prostate cancer cell lines than in normal cell lines, as well as in prostate tumors than in matched normal prostate tissues. Results provide insight into the role of miR-205 in prostate cancer.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 protocol sets

Platform: GPL6104 Series: GSE11701 8 Samples

FTP download: GEO (TXT) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3634/

DataSet Accession: GDS3634 ID: 3634

#### 37. Claudin-1 overexpression effect on lung adenocarcinoma cell line

Analysis of lung adenocarcinoma CL1-5 cells overexpressing Claudin-1 (CLDN1), a component of tight junction complexes. Low CLDN1 expression in lung adenocarcinomas is associated with shorter overall survival. Results provide insight into the role of CLDN1 in the progression of lung adenocarcinoma.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 protocol sets

Platform: GPL570 Series: GSE10309 4 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3510/

DataSet Accession: GDS3510 ID: 3510

# 38. Androgen deprivation effect on LNCaP prostate cancer cells: time course

Analysis of cultured LNCaP prostate cancer cells during 12 months of androgen deprivation. Following androgen ablation therapy, most prostate cancer patients develop treatment resistance. Results provide insight into prostate cancer cell survival and androgen-independence.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 growth protocol, 6 time sets

Platform: GPL570 Series: GSE8702 15 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3358/

DataSet Accession: GDS3358 ID: 3358

# 39. Low-dose cadmium effect on prostate epithelial cells: time course

Analysis of immortalized normal prostate epithelial cell line NPrEC exposed to non-cytotoxic levels of cadmium (2.5uM CdCl2) for up to 32hrs. Cadmium is implicated in prostate carcinogenesis. Results provide insight into mechanisms underlying the initiation of carcinogenesis by Cd in the prostate.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 2 agent, 5 time sets

Platform: GPL570 Series: GSE9951 19 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3354/

DataSet Accession: GDS3354 ID: 3354

# 40. Prostate cancer progression at the cellular level

Analysis of LCM-captured epithelial cell populations representing prostate cancer progression from benign epithelium to metastatic disease. Stromal cell populations also examined. Results provide insight into molecular mechanisms underlying the different aspects of prostate cancer progression.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 2 cell type, 6 disease state, 14 other sets

Platform: GPL2013 Series: GSE6099 104 Samples

FTP download: GEO (GPR) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3289/

DataSet Accession: GDS3289 ID: 3289

#### 41. Colon epithelial biopsies of ulcerative colitis patients

Analysis of inflamed and un-inflamed colon epithelial biopsies of 67 ulcerative colitis (UC) patients from different anatomical locations of the gastrointestinal (GI) tract. Results provide insight into the regional variation of gene expression in UC patients and the pathogenesis of UC.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 2 disease state, 2 other, 4 tissue sets

Platform: GPL1708 Series: GSE11223 202 Samples

FTP download: GEO (TXT) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3268/

DataSet Accession: GDS3268 ID: 3268

# 42. Dasatinib resistant and sensitive prostatic cancer cell lines

Analysis of 16 prostatic cancer cell lines treated with anti-tumor agent dasatinib. The cell lines display sensitivity or resistance to dasatinib. Results used to define a gene expression profile associated with sensitivity to dasatinib.

Organism: Homo sapiens

Type: Expression profiling by array, transformed count, 16 cell line, 2 other sets

Platform: GPL571 Series: GSE9633 16 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3155/

DataSet Accession: GDS3155 ID: 3155

# 43. Prostate cancer cell line response to dihydrotestosterone: time course

Analysis of LNCaP prostate cancer cells treated with the androgen dihydrotestosterone (DHT). DHT binds to androgen receptor (AR), a ligand dependent transcription factor that plays a key role in prostate cancer. Results provide insight into mechanisms underlying AR-dependent prostate cancer growth.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent, 3 time sets

Platform: GPL570 Series: GSE7868 9 Samples

FTP download: GEO (CEL, CHP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3111/

DataSet Accession: GDS3111 ID: 3111

#### 44. Zinc effect on malignant and non-malignant prostate cell lines: time course

Analysis of malignant PC-3 and non-malignant HPR-1 prostate cells treated for up to 6 hours with zinc. Zinc exposure induces apoptosis in PC-3 cells, but not in HPR-1 cells. Results provide insight into the molecular mechanisms underlying zinc-induced prostatic cell apoptosis.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent, 2 cell line, 4 time sets

Platform: GPL2986 Series: GSE5590 8 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3095/

DataSet Accession: GDS3095 ID: 3095

# 45. Hemiasterlin analog HTI-286 effect on docetaxel-resistant prostate cancer cell line

Analysis of prostate cancer LNCaP cells treated with the chemotherapeutic agent docetaxel or the hemiasterlin analog HTI-286. Like docetaxel, HTI-286 disrupts microtubule dynamics. But unlike docetaxel, HTI-286 exhibits reduced multidrug resistance.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 2 agent sets

Platform: GPL3877 Series: GSE8325 12 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2971/

DataSet Accession: GDS2971 ID: 2971

### 46. Metastatic prostate tumor model

Comparison of poorly and highly metastatic prostate subcutaneous tumors derived from xenotransplanted human PC-3 prostate cancer cells. Results provide insight into the molecular mechanisms contributing to prostate cancer metastasis.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 disease state sets

Platform: GPL96 Series: GSE7930 6 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2865/

DataSet Accession: GDS2865 ID: 2865

47. Androgen response element specific DNA-binding polyamide effect on dihydrotestoterone-stimulated prostate cell line

Analysis of DHT-stimulated LNCaP prostate cells treated with an androgen response (AR) element (ARE) specific DNA binding polyamide. Polyamide designed to target the sequence 5'-WGWWCW-3' and disrupt AR-mediated gene expression. Effects of the synthetic antiandrogen bicalutamide also examined.

Organism: Homo sapiens

Type: Expression profiling by array, count, 5 agent sets

Platform: GPL570 Series: GSE7708 14 Samples

FTP download: GEO (CEL, CHP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2782/

DataSet Accession: GDS2782 ID: 2782

# 48. Tumorigenic breast cancer cells (HG-U133B)

Analysis of breast cancer cells that have high tumorigenic capacity. These cells express CD44 and low or undetectable levels of CD24. Results used to define a gene expression signature associated with metastasis.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 disease state sets

Platform: GPL97 Series: GSE6883 12 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2618/

DataSet Accession: GDS2618 ID: 2618

# 49. Tumorigenic breast cancer cells (HG-U133A)

Analysis of breast cancer cells that have high tumorigenic capacity. These cells express CD44 and low or undetectable levels of CD24. Results used to define a gene expression signature associated with metastasis.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 disease state sets

Platform: GPL96 Series: GSE6883 12 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2617/

DataSet Accession: GDS2617 ID: 2617

# 50. Metastatic prostate cancer (HG-U95C)

Analysis of metastatic prostate tumors and primary prostate tumors. Normal tissue adjacent to the tumor and normal donor tissue also examined. Metastasis reflects the most adverse clinical outcome. Results provide insight into the molecular mechanisms underlying the metastatic process.

Organism: Homo sapiens

Type: Expression profiling by array, count, 4 tissue sets

Platform: GPL93 Series: GSE6919 164 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2547/

DataSet Accession: GDS2547 ID: 2547

#### 51. Metastatic prostate cancer (HG-U95B)

Analysis of metastatic prostate tumors and primary prostate tumors. Normal tissue adjacent to the tumor and normal donor tissue also examined. Metastasis reflects the most adverse clinical outcome. Results provide insight into the molecular mechanisms underlying the metastatic process.

Organism: Homo sapiens

Type: Expression profiling by array, count, 4 tissue sets

Platform: GPL92 Series: GSE6919 167 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2546/

DataSet Accession: GDS2546 ID: 2546

# 52. Metastatic prostate cancer (HG-U95A)

Analysis of metastatic prostate tumors and primary prostate tumors. Normal tissue adjacent to the tumor and normal donor tissue also examined. Metastasis reflects the most adverse clinical outcome. Results provide insight into the molecular mechanisms underlying the metastatic process.

Organism: Homo sapiens

Type: Expression profiling by array, count, 4 tissue sets

Platform: GPL8300 Series: GSE6919 171 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2545/

DataSet Accession: GDS2545 ID: 2545

# 53. Xenograft model of prostate carcinoma progression

Analysis of prostate cancer (PC) xenografts collected from male mice up to 14 days after castration. The androgen receptor (AR) plays a pivotal role in the growth and survival of prostate carcinoma. Results provide insight into the role of selective adaptations of the AR pathway in PC progression.

Organism: Homo sapiens; Mus musculus

Type: Expression profiling by array, log2 ratio, 4 disease state, 3 other, 10 protocol, 14 specimen sets

Platform: GPL3349 Series: GSE4084 52 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2384/

DataSet Accession: GDS2384 ID: 2384

# 54. Prostate adenocarcinomas of various Gleason patterns

Analysis of prostate adenocarcinoma specimens with Gleason patterns 3, 4, or 5. Adenocarcinoma specimens obtained by radical prostatectomy. Results identify molecular alterations underlying prostate cancer grades.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 3 disease state sets

Platform: GPL3834 Series: GSE5132 31 Samples

FTP download: GEO (GPR) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2171/

DataSet Accession: GDS2171 ID: 2171

#### 55. Prostate cancer cell line LNCaP response to synthetic androgen R1881: time course

Expression profiling of prostate cancer cell line LNCaP treated for up to 8 hours with the synthetic androgen R1881. LNCaP cells grow slowly in medium devoid of steroids but resume growth upon the addition of androgens. The study aims to identify direct targets of the androgen receptor.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 4 time sets

Platform: GPL3349 Series: GSE4027 8 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2034/

DataSet Accession: GDS2034 ID: 2034

#### 56. Primary epithelial cell cultures from prostate tumors

Analysis of epithelial cell cultures from prostate tumor explants. Results identify an epithelial-restricted transcription profile that can be integrated with tumor grade and clinical information with the aim of discriminating indolent and aggressive prostate tumors that are histologically similar.

Organism: Homo sapiens

Type: Expression profiling by array, count, 7 disease state, 2 protocol sets

Platform: GPL96 Series: GSE3868 30 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1746/

DataSet Accession: GDS1746 ID: 1746

# 57. Arachidonic acid effect on prostate cancer cells

Analysis of PC-3 prostate cancer cells incubated with arachidonic acid (AA). AA is an omega-6 fatty acid shown to induce cancer cell proliferation. Results suggest AA plays an important role in stimulation of growth-related genes and proliferation via phosphatidylinositol 3-kinase (PI3K) signaling.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent sets

Platform: GPL96 Series: GSE3737 8 Samples

FTP download: GEO (CEL, EXP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1736/

DataSet Accession: GDS1736 ID: 1736

#### 58. Androgen sensitive and insensitive prostate cancer cell lines: expression profiles

Analysis of androgen sensitive (AS) and insensitive (AI) prostate cancer cell lines. Despite the wide use of these cell lines as model systems, a global genotypic characterization of these cell lines is currently lacking. Results identify differences in gene expression profiles.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 8 cell line, 2 cell type sets

Platform: GPL3341 Series: GSE4016 8 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1699/

DataSet Accession: GDS1699 ID: 1699

# 59. DNA methyltransferase inhibitor 5-aza-2'-deoxycytidine effect on prostate cancer cell lines

Analysis of prostate cancer cell lines after treatment with the DNA methyltransferase inhibitor 5-Aza-2'-deoxycytidine (5-aza-dC). Aberrant DNA methylation is an early event in the development of prostate cancer. Results identify hypermethylated genes whose expression is induced by 5-aza-dC.

Organism: Homo sapiens

Type: Expression profiling by array, log2 ratio, 4 cell line sets

Platform: GPL3295 Series: GSE4089 4 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1697/

DataSet Accession: GDS1697 ID: 1697

# 60. Prostate cancer progression

Expression profiling of prostate cancer tumors that are benign, clinically localized, or metastatic and refractory to hormones. Results compared to those obtained from immunoblotting to identify concordant changes in mRNA and protein levels.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 disease state sets

Platform: GPL570 Series: GSE3325 19 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1439/

DataSet Accession: GDS1439 ID: 1439

# 61. Lunasin effect on prostate epithelial cells

Expression profiling of normal prostate epithelial RWPE1 cells and tumorigenic prostate cancer RWPE2 cells treated with 2 uM lunasin for 24 hours. Lunasin is a soybean peptide shown to suppress carcinogenesis. Results provide insight into the chemopreventive properties of lunasin.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 agent, 2 disease state sets

Platform: GPL96 Series: GSE2992 4 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1423/

DataSet Accession: GDS1423 ID: 1423

#### 62. Prostate cancer progression after androgen ablation

Analysis of prostate cancer progression following androgen ablation treatment. 10 treated androgen-independent primary prostate tumors compared to 10 untreated androgen-dependent primary prostate tumors. Results provide insight into progression of prostate cancer to aggressive androgen-independent

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 disease state sets

Platform: GPL96 Series: GSE2443 20 Samples

FTP download: GEO (CEL, EXP) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1390/

DataSet Accession: GDS1390 ID: 1390

# 63. Prostate adenocarcinoma and ionizing radiation

Time course of androgen-independent LNCaP C4-2 prostate adenocarcinoma cells following a dose of 10 Sv ionizing radiation (IR). Cells harvested at several time points up to 24 hours after IR.

Organism: Homo sapiens

Type: Expression profiling by array, count, 10 time sets

Platform: GPL8300 Series: GSE770 10 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS725/

DataSet Accession: GDS725 ID: 725

### 64. Prostate adenocarcinoma response to radiation (HG-U95E)

Time course of androgen-independent LNCaP C4-2 prostate adenocarcinoma cells following ionizing radiation (IR) to a dose of 10 Sv. Cells harvested 6 or 24 hours after IR. Dose applied in 1 or 4 fractions.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 cell line, 3 dose, 3 time sets

Platform: GPL95 Series: GSE762 5 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS723/

DataSet Accession: GDS723 ID: 723

### 65. Prostate adenocarcinoma response to radiation (HG-U95D)

Time course of androgen-independent LNCaP C4-2 prostate adenocarcinoma cells following ionizing radiation (IR) to a dose of 10 Sv. Cells harvested 6 or 24 hours after IR. Dose applied in 1 or 4 fractions.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 cell line, 3 dose, 3 time sets

Platform: GPL94 Series: GSE762 5 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS722/

DataSet Accession: GDS722 ID: 722

#### 66. Prostate adenocarcinoma response to radiation (HG-U95C)

Time course of androgen-independent LNCaP C4-2 prostate adenocarcinoma cells following ionizing radiation (IR) to a dose of 10 Sv. Cells harvested 6 or 24 hours after IR. Dose applied in 1 or 4 fractions.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 cell line, 3 dose, 3 time sets

Platform: GPL93 Series: GSE762 5 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS721/

DataSet Accession: GDS721 ID: 721

# 67. Prostate adenocarcinoma response to radiation (HG-U95B)

Time course of androgen-independent LNCaP C4-2 prostate adenocarcinoma cells following ionizing radiation (IR) to a dose of 10 Sv. Cells harvested 6 or 24 hours after IR. Dose applied in 1 or 4 fractions.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 cell line, 3 dose, 3 time sets

Platform: GPL92 Series: GSE762 5 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS720/

DataSet Accession: GDS720 ID: 720

# 68. Prostate adenocarcinoma response to radiation (HG-U95A)

Time course of androgen-independent LNCaP C4-2 prostate adenocarcinoma cells following ionizing radiation (IR) to a dose of 10 Sv. Cells harvested 6 or 24 hours after IR. Dose applied in 1 or 4 fractions.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 cell line, 3 dose, 3 time sets

Platform: GPL91 Series: GSE762 5 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS719/

DataSet Accession: GDS719 ID: 719

#### 69. Androgen receptor antagonist to agonist conversion

Examination of antagonist to agonist conversion in androgen receptor-expressing hormone-sensitive LNCaP prostate cancer cells. Cells challenged with increasing doses of R1881, or bicalutamide.

Organism: Homo sapiens

Type: Expression profiling by array, count, 3 agent, 2 cell type, 7 dose sets

Platform: GPL96 Series: GSE846 17 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS536/

DataSet Accession: GDS536 ID: 536

#### 70. Prostate cancer antiandrogen resistance

Analysis of mechanisms of prostate cancer resistance to antiandrogen therapy. Isogenic hormone-sensitive and drug-resistant hormone-refractory xenograft pairs examined.

Organism: Homo sapiens

Type: Expression profiling by array, count, 2 cell type sets

Platform: GPL91 Series: GSE847 14 Samples

FTP download: GEO ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS535/

DataSet Accession: GDS535 ID: 535

### 71. Large-scale analysis of the human transcriptome (HG-U95A)

Gene expression profiles from a diverse array of tissues, organs, and cell lines, from the normal physiological state. Represents a preliminary description of the normal mammalian transcriptome.

Organism: Homo sapiens

Type: Expression profiling by array, count, 39 tissue sets

Platform: GPL91 Series: GSE96 84 Samples

FTP download: GEO (CEL) ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS181/

DataSet Accession: GDS181 ID: 181