APPENDIX

TITLE

Sprouty2 loss induced IL6 drives castration-resistant prostate cancer through scavenger receptor B1

AUTHORS

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1 Appendix Supplementary Information:

Study approval- All the animal experiments conducted for this study were carried out with 2 ethical approval from University of Glasgow under the revised Animal (Scientific 3 Procedures) Act 1986 and the EU Directive 2010/63/EU (PPL 30/3185). Animals were 4 housed in individual ventilated cages in a barrier facility proactive in environmental 5 6 enrichment. Tissue Microarrays (TMAs) were already available for analyses from a previous study. In brief, patients were retrospectively identified from Greater Glasgow and Clyde 7 8 NHS Trust and retrieved from the pathology archives. Patients were diagnosed between 1993 9 and 2002 and were only included if samples were surplus to diagnostic need and sufficient material was available for TMA construction. Areas of low and high Gleason score were 10 identified by pathologist to address tumour heterogeneity and 0.6 mm² cancer cores were 11 taken from each area for TMA construction. TMAs were constructed in triplicate resulting in 12 13 6 cores being available for analysis for each patient. Ethical approval was gained from the West of Scotland Research Ethics Committed (05/S0704/94). An informed consent was 14 15 obtained from all subjects and that the experiments conformed to the principles set out in the 16 WMA Declaration of Helsinki and the Department of Health and Human Services Belmont Report. 17

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Cell lines- All the human normal (RWPE-1) and prostate cancer (CWR22Res, CWR22RV1,
LNCaP, LNCaP AI and VCaP) cell lines were mycoplasma negative, authenticated by LGC
standards. CWR22Res and CWR22RV1 (22RV1) cells are cell lines derived from CWR-22
xenografts (Nagabhushan et al, 1996). CWR22Res cells (hormone responsive variant of
CWR22 cells) were obtained from Case Western Reserve University, Cleveland, Ohio.
RWPE-1 (ATCC® CRL-11609TM), LNCaP (ATCC® CRL-1740TM), VCaP (ATCC® CRL-

25 2876TM) and CWR22RV1 (22RV1) (ATCC® CRL-2505TM; the CRPC variant of CWR22) (Sramkoski et al, 1999) were obtained from ATCC. RWPE-1 cells were maintained in 26 Keratinocyte Serum Free Medium (K-SFM) (Invitrogen GIBCO: 17005-042) with (bovine 27 28 pituitary extract (BPE) and human recombinant epidermal growth factor (EGF). CWR22Res, LNCaP and VCaP prostate cancer cells were grown in RPMI with glutamine containing 10% 29 FBS. The androgen independent LNCaP AI cell line and CWR22RV1 were used as a model 30 31 to study the effects of chronic androgen deprivation treatment. LNCaP AI cells (generated from LNCaP cells through chronic steroid deprivation over a period of 9 months mimicking 32 33 androgen deprivation therapy were donated by Professor Craig Robson, University of Newcastle) were grown in phenol red free RPMI with glutamine containing 10% charcoal 34 stripped (steroid depleted) serum. CWR22RV1 cells were also maintained in phenol red free 35 36 RPMI medium with glutamine containing 10% charcoal stripped (steroid depleted) serum. The STR cell line authentication of CWR22Res and CWR22RV1 was done using Qiagen 37 Puregene Core Kit B for gDNA extraction with Promega Geneprint 10 kit for PCR and 38 39 Genemapper v4 software for gene fragment analysis on 3130xl Genetic Analyser (Applied Biosystems) (Appendix table 1). 40

LNCaP-SPRY2 cells were generated by transfecting LNCaP cells with human SPRY2 41 42 expressing plasmid (pCDNA3.1) as described previously (Patel et al, 2013). Stable Sprouty2 (SPRY2) knockdown in CWR22Res cells was achieved using pTER⁺ plasmid with hairpin 43 targeting SPRY2 as previously described (Patel et al, 2013) with nucleofection (Lonza-kit V). 44 CWR22Res cells stably expressing shSPRY2 (Clones- CL3 and Pool) and shNsi (non-45 targeting scrambled shRNA) were selected using zeocin (300 µg/ml; Invitrogen). Stable 46 47 shHER2 knockdown clones were generated by transfecting shHER (SantaCruz Biotechnology- sc-94978-SH) and shscram (SantaCruz Biotechnology- sc-108060) in 48 49 CWR22Res cells stably expressing shNsi or shSPRY2 (Pool). The HSD3B1 and SRB1 knock out CWR22Res cells were generated using CRISPR-Cas9 technology from Santa Cruz
Biotechnology: HSD3B1 CRISPR/Cas9 KO Plasmid (sc-400825), HSD3B1 HDR Plasmid
(sc-400825-HDR), SR-B1 CRISPR/Cas9 KO Plasmid (sc-400990) and SR-B1 HDR Plasmid
(sc-400990-HDR). The PTEN siRNA (6251) and control siRNA (6568) was obtained from
Cell Signaling. siRNA transfection was carried out with nucleofection (Lonza-kit V).

55 The pre-adipocyte 3T3-L1 cells (gift from Dr Ian Salt, Institute of Cardiovascular and 56 Medical Sciences, University of Glasgow) were differentiated into adipocytes using adipocyte differentiation protocol. Briefly, to differentiate the 3T3-L1 fibroblast cells into 57 adipocytes, the cells were grown to confluency and fed at confluency in DMEM with 10% 58 59 newborn calf serum (NCS). At 48 hr post-confluence, cell medium was aspirated and replaced with differentiation medium consisting of DMEM with 10% fetal calf serum (FCS) 60 containing dexamethasone, methyl isobutylxanthine (IBMX), troglitazone and insulin. After a 61 further three days, this medium was aspirated and replaced with DMEM containing 10% FCS 62 containing troglitazone and insulin only. The cells were incubated in this medium for a 63 64 further three days, and then the medium was aspirated and replaced with DMEM containing 10% FCS (no other additions). At 8-12 days, post-induction of differentiation, cells were 65 used for experimentation. 66

For growth rate assays, equal number of cells was seeded and counted using the CASY®cell counter (Innovatis) at two and four days post treatment. The treatments were initiated 12 hr after seeding the cells. The growth rate was calculated relative to the cell count at time 0 (T0, Day 0) i.e., cell number obtained at the time of treatment. The IC50 of ITX5061 was calculated using WST-1 reagent (Roche) to assay cell viability after 48 hr of treatment. The ITX5061 dose response was analysed relative to respective DMSO. IC50 was calculated vs. response -- Variable slope (four parameters) with Bottom
constraint=0.0 with GaphPad Prism software.

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Immunohistochemistry and Immunoblotting – Immunohistochemical (IHC) and 76 immunoblotting was performed as previously described (Patel et al, 2013). The additional 77 antibodies used for IHC were SPRY2 (Abcam, ab60719- 1:1000 dilution for 78 immunoblotting), AR (Santa Cruz Biotechnology, sc-816- - 1:1000 dilution for 79 80 immunoblotting and 1:100 dilution for IHC), IL6 (Abcam, ab6672- 1:60 dilution for IHC), HSD3B1 (Abcam, ab55268 (for human samples- 1:1000 dilution); ab65156 (for mouse 81 samples- 1:1000 dilution), Perilipin (Cell Signaling Technology, 9349- 1:1000 dilution), 82 Phospho-(Ser/Thr) PKA substrate (Cell Signaling Technology, 9621- 1:1000 dilution), 83 cleaved caspase 3 (Cell Signaling Technology, 9661-1:50 dilution for IHC), HSC70 (Santa 84 Cruz Biotechnology, sc-7298- 1:1000 dilution), p-p38 (Cell Signaling Technology, 4511-85 1:1000 dilution for immunoblotting and 1:50 dilution for IHC), HER2 (Cell Signaling 86 Technology, 2165-1:50 dilution for IHC), EGFR (Cell Signaling Technology, 4405-1:1000 87 dilution for immunoblotting), SRB1 (Novus Biologicals, NB400-104- 1:50 dilution for IHC 88 and 1:1000 dilution for immunoblotting), HSC70 (Santa Cruz Biotechnology, sc- sc-7298-89 1:1000 dilution for immunoblotting) and GAPDH (Sigma, G9295- 1:10,000 dilution for 90 91 immunoblotting).

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Human tissue microarray- The matched tissue microarray (TMA) comprised of formalinfixed, paraffin-embedded (FFPE) prostate cancer sections from 35 hormone naïve prostate
cancer (HNPC) at diagnosis and castration-resistant prostate cancer (CRPC) matched prostate
cancer patients (Tan et al, 2011). Hormone naïve samples are primary prostate tumour tissues

97 before the patients received ADT and the matched CRPC samples are primary prostate tumour tissue from the same individuals after biochemical evidence (rise in serum PSA) of 98 CRPC. In this TMA, the patients have received only ADT treatment. Ethical approval was 99 100 acquired from the Multicentre Research Ethics Committee for Scotland (MREC/01/0/36) and Local Research and Ethics Committees. These patients were selected based on their initial 101 response to hormone treatment (sub capsular bilateral orchidectomy or LHRH agonist +/-102 103 antiandrogens) and their subsequent relapse (2 rises in PSA >10%). CRPC samples were gained by TURP as a result of relieving bladder outflow obstruction. Clinico-pathological 104 105 data available included age (69.5, IQR 64.5-74.8), Gleason sum score at diagnosis (median 8, range 6-9), Gleason sum score at relapse (median 9, range 8-9), serum prostate specific 106 107 antigen (PSA) levels at diagnosis (34.5 ng/mL, IQR 9.9-130.5), and PSA at relapse (20 108 ng/mL, IQR 4.5-39). All patients relapsed, with a median time to disease recurrence being 2.6 years (IQR 1.7-4.8 years) and median overall survival being 5.5 years (IQR 3.4-7.2 years). 109 The CRPC samples from this TMA were used for correlation analyses of PTEN and SPRY2. 110

111 For assaying the effects of SPRY2 and SRB1 levels on response to treatment and survival, 112 SRB1 IHC was performed in prostate cancer TMA which included diagnostic biopsies from 90 prostate cancer patients treated with ADT, radiotherapy and chemotherapy. To assess the 113 effects of SPRY2 on overall survival, patients treated with hormone therapy and evidence of 114 biochemical relapse were selected (n=19). Patients were segregated into SPRY2 high (n=12) 115 with IHC scores above the average median IHC score and SPRY2 low (n=7) with IHC scores 116 below the average median IHC score. To assess the effects of SRB1 levels on treatment 117 resistance and survival, 37 patients treated with ADT (n=37) were selected for further 118 119 analyses. Out of these, 15 patients had prior surgeries and/or radiotherapy. To assess the time to biochemical relapse, patients with only ADT treatment (n=22) and no prior surgeries 120 and/or radiotherapy were selected for analyses. To investigate the effects of SR-B1 levels on 121

the overall survival post-diagnosis, patients with biochemical evidence of CRPC (n=27) were
selected for analyses. The CRPC samples from this TMA were used for IL6 correlations with
HER2 and SPRY2.

The stained slides were scored by two independent observers blinded to clinical parameters, using a weighted histoscore method, also known as the H-score, at 40X magnification. For each stained section, the staining intensity and percentage of cells stained were scored. For semi-quantitative classification of staining intensity, the histoscore was calculated as $(1 \times \%$ cells staining weakly positive) + $(2 \times \%$ cells staining moderately positive) + $(3 \times \%$ cells staining strongly positive). The TMA cores with insufficient tissue to attribute IHC score were not included in further analyses.

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Clinical datasets for gene alterations and survival analyses- Relapse-free survival based
on SPRY2 expression was queried using cBioPortal platform (Cerami et al, 2012; Gao et al,
2013) for cancer genomics using TCGA, provisional prostate cancer dataset. The data was
extracted and Kaplan-Meier survival curves were plotted in GraphPad Prism.

137

Microarray- mRNA was harvested from three biological replicates of CWR22Res prostate 138 cancer cells with Nsi (non-silencing vector control) expression or stable SPRY2 knockdown 139 (Pool). Samples for microarray were generated using Illumina sequencing reagents and 140 HumanHT-12 v4 Expression BeadChip Kit. Microarray hybridisation was performed at BHF 141 Glasgow Cardiovascular Research Centre (Taurino et al, 2010) and chips were scanned a 142 BeadArray Reader (Illumina). Bioinformatics analyses were carried out at CRUK Beatson 143 Institute, Glasgow, UK. The Illumina microarray data is deposited in Geo Gene Expression 144 145 Omnibu: GEO Submission (GSE108456).

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Gene Set Enrichment Analyses (GSEA)- GSEA was carried out using microarray data 147 obtained from Nsi (non- silencing vector control) and stable SPRY2 deficient (Pool) 148 CWR22Res cells. The GSEA v2.2.2 tool (Mootha et al, 2003; Subramanian et al, 2005) was 149 used for analysis and GSEA was performed as follows: - All genes assessed by microarray 150 were ranked using the difference of means scaled by the standard deviation (option 151 Signal2Noise in the GSEA program) and weighted scoring scheme was used. A null 152 distribution was created using the gene set permutation type and 1000 permutations. The 153 ranked datasets were tested against gene sets termed 'C2: curated gene sets' and 'C5: GO gene 154 155 sets' from Molecular Signatures Database (MSigDB) v5.1 as well as specifically against cytokine, lipase, lipid, lipoprotein and steroid related genesets extracted from MSigDB v5.1. 156

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Studies using clinical serum samples- Serum samples from 172 patients with HNPC and 158 129 patients with CRPC were obtained from ProMPT study (ethics committee approval: UK 159 MREC number 01/4/61). All clinical information including serum PSA levels were obtained 160 from patient medical records. IL6 was assayed in these serum samples in duplicates using 161 R&D (S6050) human IL6 ELISA kits as per the kit protocol. Serum free fatty acid levels 162 were assayed in duplicates using Abcam (ab65341) FFA colorimetric detection kit per 163 protocol provided. Serum levels of PSA, FFA and IL6 levels were carried out in the same 164 serum samples from individual patients. Data analyses were carried out using Graph Pad 165 Prism software. The HN patient cohort (n=172) included patients with localised prostate 166 cancer. Most of these HN patients (n=123) were untreated when the serum samples were 167 168 collected for the analyses presented here. A subset of HN patients were treated with radical prostatectomy (n=41) and EBRT (external beam radiation therapy) (n=8). All patients in 169

170 CRPC cohort (n=129) showed clinical or biochemical disease progression post ADT treatment. Majority of CRPC patients (n=121) were treated with ADT alone while few were 171 treated with EBRT (n=3) or radical prostatectomy (n=5) prior to ADT treatment. The 172 retrospective patient records were used to acquire the data on PSA levels. For IL6 and PSA 173 correlations, PSA values were obtained from the same serum samples (matched for sample 174 collection date) from individual patients (n=42). Same criteria were applied for IL6 and free 175 fatty acid (FFA) correlations. For this, FFA was measured in a subset of 18 ProMPT serum 176 samples (9 each of HNCP and CRPC cases) previously used for IL6 analyses. For survival 177 analyses, CRPC patients with no recorded evidence of metastases (M0) were selected. 178

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Genetically engineered mouse models (GEMM)- Nkx 3.1-Cre (Hsieh et al, 2010) mice 180 were crossed to those harbouring $Spry2^{fl/+}$ (Shim et al, 2005) and $Pten^{fl/+}$ (Lesche et al, 2002), 181 and mice were genotyped by PCR by TransnetyxTM. After approximately 50 weeks, the *Nkx* 182 3.1-Cre Pten^{fl/+} Spry2^{fl/+} (NPS) developed palpable prostate tumours (Gao et al, 2012). The 183 mice with palpable prostate tumours were randomised into two groups- mock (sham surgical 184 incision) and androgen deprivation therapy (ADT) which was achieved by orchiectomy. A 185 subset of mice (n=6) was euthanised at 1 month after (Mock or ADT) treatment, and 186 prostates and lymph nodes were placed in formalin for 24 hr fixation before paraffin 187 embedding. Rest the Mock (n=7) and ADT (n=6) treated mice were aged to clinical end 188 189 point. The clinical end point, based on the Animal licence (PPL 30/3185), comprised of either loss of more than 20% of the pre-treatment body weight, sluggish behaviour, loss of mobility 190 or excessive haematuria. 191

For anti-IL6 treatment, ADT treated mice were injected intraperitoneally twice weekly with a
500 μg rat anti-murine IL-6 mAb (R&D- MAB406) or control antibody in 200 μl PBS for

four weeks after which the mice were euthanised, with the prostates collected and formalin fixed. For ITX5061 treatment, ADT treated mice were gavaged with 25 mg/kg/day ITX5061 in 20% hydroxypropyl-Beta-cyclodextrin in 20 mM citric acid for a month after which the mice were euthanised, with the prostates collected and formalin fixed.

198

199 Orthograft prostate cancer model- Prostate orthograft model using CWR22Res cells was established. For prostate orthograft animal experiments, CD1-nude male mice (6 to 8 weeks 200 old) were obtained from Charles River Research Models & Services (UK). A midline lower 201 abdominal incision was made on the mice anesthetized by isoflurane inhalation. Using a 1-cc 202 syringe with a 27-gauge needle, 14×10^6 CWR22Res cells in 50 µl of serum free phenol red 203 free glutamine containing RPMI were injected in one of the anterior prostate lobes to form a 204 localized bleb within the injected prostatic lobe. The mice with injections forming an intact 205 prostatic bleb were retained for the study. The abdominal cavity was closed with surgical 206 sutures and the outer skin was closed using surgical staples. Mice were treated with 207 Carprofen (dose defined by the assigned veterinarian) as an analgesic agent prior to and 24 hr 208 post-surgery. After 30 days when a palpable tumour was felt with 100% tumour incidence, 209 210 the mice were randomised into two groups: Mock (sham surgical incision) and ADT (orchiectomy). For characterisation of the ADT treatment on CWR22Res cells, ultrasound 211 212 based analysis was carried out at 30 days post intra-prostatic injections and at 60 days (i.e., 30 days post Mock or ADT treatment). The ultrasound in vivo imaging was carried out using 213 Vevo 3100 Imaging System and prostate orthograft volume analyses was carried out using 214 FUJIFILM VisualSonics, Inc software. 215

To study the effects of SPRY2 deficiency on treatment response, a pilot experiment with 5 mice per treatment was performed. Here, approximately 14 million cells (Nsi control or

SPRY2 deficient clones -CL3 and Pool) were injected in one of the anterior prostate lobes of 218 CD-1 nude mice. Ten mice per clone were used for this experiment. The orthografts were 219 palpable around 30 days (4 weeks) post intra-prostatic injections with 100% incidence. These 220 221 mice were then randomised to receive Mock or ADT treatment (n=5 per treatment). All mock-treated animals achieved maximum permitted tumour burden around 73 days post-222 implantation. ADT treated mice with SPRY2 deficient orthografts showed adverse clinical 223 224 signs such as weight loss around 60 days post implantation. Based on this we used a refined 60 days timed protocol to carry out further detailed investigations. Since the tumour 225 226 incidence was 100% without considerable variation for Mock treated mice, we used n=5 per group in all our 60 days timed experiments. 227

The VCaP HN orthografts were generated in a similar manner by injecting $10x10^6$ cells in 50 µl of serum free phenol red free glutamine containing RPMI in one of the anterior prostate lobes of CD-1 nude mice. For VCaP CRPC orthografts, following orthotopic implantation of VCaP cells, the mice were castrated at the same time of intra-prostatic injections. The orthografts were collected at clinical endpoints.

Experimental treatments include Tocilizumab (100 µg in PBS given as I.P. injection 3 times a 233 234 week for 3 weeks), Simvastatin (80 mg/kg/day in 30% PEG400 + 0.5% Tween80 + 5% Propylene glycol in water, gavaged daily for 1 month) and ITX5061 (25 mg/kg/day in 20% 235 236 hydroxypropyl-Beta-cyclodextrin made in 20mM citric acid, gavaged once daily for 1 month). Individual treatments were initiated 3 days post-ADT. The mice were euthanised 60 237 days after drug or vehicle treatments; the prostates, epididymal adipose tissue, blood and 238 other organs of interest including liver were collected for further analyses. The prostate 239 240 orthografts were weighted and divided into two halves. One half was placed in formalin for 241 48 hr fixation before paraffin embedding. The rest of the orthograft was snapped frozen on

242 dry ice. The snap frozen prostate orthografts were pulverised for protein, RNA and steroid extraction and homogenised using micro-homogenizer for cholesterol (free and esterified) 243 extraction. Adipose tissue collected was weighted and snap frozen for protein extraction 244 (approximately 30 mg of adipose tissue was pulverised and used for protein extraction). 245 Livers were excised and one of the lobes (largest) was snap frozen and rest of the tissue was 246 formalin fixed for 48 hr before paraffin embedding. The frozen liver was further used for 247 cryo-sectioning followed by Oil-O staining and pulverised for RNA extraction. The blood 248 collected was allowed to stand (clot) for 15 min and then spun down at 4°C at 3000 r.p.m. for 249 250 15 min. The serum was collected and stored for further analyses of testosterone, alanine transaminase activity (ALT), triglycerides, cholesterol, IL6 and free fatty acids. 251

252

Treatment response in prostate cancer orthografts – The prostate orthografts were weighted and their dimensions (length & height) were measured using Vernier calliper. The tumour volume was calculated based as volume $cm^3 = (length X height X width)/2$.

To assess treatment response on established orthografts, we considered two aspects: (i) 256 Treatment induced cell death within tumour and (ii) Treatment induced decrease in tumour 257 growth. Assessment of a number of orthografts and treatments, both macroscopically and 258 microscopically, revealed treatment induced tumour necrosis as a consistent factor in addition 259 to tumour weight. After comparing different types of analyses to assess treatment response on 260 established orthografts, relative tumour necrosis was found to be a consistent measure of 261 response to treatment. Using Leica image analyser software the total tumour area and central 262 263 necrotic area was calculated. This was used to calculate the % necrosis. Since the size and growth of the tumour may also result in central tumour necrotic core, the % necrosis was 264

265 normalised with the weight of the tumour. Thus, the data was represented as %266 necrosis/tumour weight.

267

Visceral Metastases – The visceral metastases burden was assessed based on both 268 macroscopic and histological evidence of metastasis. The metastatic sites were broadly 269 270 classified as proximal and distal metastases based on the localisation of metastatic foci. The proximal sites included lumbar lymph nodes (draining lymph nodes for prostate) and 271 epididymal adipose tissue (present at a close proximity to prostate tumours). The distal sites 272 included area that were not in immediate proximity to prostate tumours such as diaphragm 273 and thoracic area which included lungs and thoracic lymph nodes. The metastatic foci were 274 confirmed based on histopathological (H&E) and evidence of AR by immunohistochemistry 275 analyses. For contingency analyses, each animal was analyses and scored for presence of 276 proximal or distal metastases. For cumulative visceral metastases, both proximal and distal 277 278 scores were assayed together i.e. 2 sites per mouse. Therefore, for experimental groups with 5 mice the contingency analyses is done based on 10 metastatic sites (2 sites x 5 mice= 10 279 280 sites).

281

Steroid Measurements- Serum and intra-tumoural testosterone levels were measured using Testosterone EIA kit (Cayman Chemicals, 582701). For intra-tumoural testosterone measurement, approximately 30 mg of tumour was pulverized and the fine powder was suspended in 100 μ l of PBS. The steroids were extracted from tissue homogenate or serum using five times the volume of diethyl ether twice. After thorough mixing and vortexing the upper layer was transferred to clean glass tube and allowed to dry at 30°C under gentle stream of N_2 . These tubes were left overnight for further drying so that the residue was completely free of any organic solvent. The remainder residue was dissolved in 500 µl of EIA buffer provided in the kit. The testosterone levels were measures by as per the protocol provided in the kit.

For LC-MS based steroid detections, the steroid extraction was carried out as described 292 293 before (Weng et al, 2010). Briefly, prostate orthografts were weighted and homogenised using Polytron model in sterile PBS at 100 mg/ml. 20 µl of homogenate was saved for protein 294 estimation by BCA method. To the rest of the homogenate for each biological sample, a mix 295 of internal standard was added. The internal standard was a mix of Androstenedione- ${}^{13}C_3$, 296 Dehydroepiandrosterone-D5, Testosterone ${}^{13}C_3$ and 5 alpha- Dihydrotestosterone-D3 steroids 297 (at 100 ng each). The fortified homogenates were extracted with 8 ml of 60% hexane/40% 298 ethyl acetate mix by shaking the tubes for 1 hour at room temperature. After centrifugation at 299 1000 g for 10 min, the organic phase was transferred to another tube and evaporated to 300 301 dryness under a steady stream of N₂. The residues were dissolved in 20 µl of methanol followed by addition of 150 µl of steroid depleted charcoal stripped serum. All samples were 302 303 precipitated with 300 µl of a solution of 4:1 methanol: 89 g/l ZnSO₄. After thoroughly 304 mixing to ensure complete precipitation, the samples were centrifuged at 3220 g for 10 min. To the 300 μ l of resultant supernatant, 900 μ l of 4% H₃PO₄ was added and the samples were 305 thoroughly mixed. The resultant samples were then directly applied to the solid phase 306 307 extraction plate, Oasis PRiME HLB µElution plate (Waters), in 2 aliquots. All used columns in the plate were washed twice with 200 µl of 25% methanol. The samples were then eluted 308 309 twice with 25 μ l of 90:10 acetonitrile:methanol and diluted with 25 μ l of double distilled water. 5 µl was injected into the mass spectrometer. A Q-Exactive Plus Orbitrap mass 310 spectrometer was used together with an UltiMate 3000 HPLC system (Thermo Scientific, 311 Waltham, MA, USA), with a HSS T3 UPLC column (50 x 2.1 mm, 1.8 µm, Waters). The 312

313 initial mobile phase was 70% aqueous (0.1% formic acid in water) and 30% organic (0.1% formic acid in acetonitrile) and steroids were separated over a 2.5 minute gradient, increasing 314 the organic mobile phase content to 95%. The flow rate of 0.6 ml/min and a column 315 316 temperature of 40°C were used throughout, and the total analysis time was 4.5 minutes. The steroids of interest and their labelled internal standards were detected using a targeted SIM 317 (Selected Ion Monitoring) method, where the accurate mass of each steroid ion across its 318 319 known retention time range were specifically measured. Electrospray (ESI) ionization in positive polarity was used with a mass resolution of 17,500. Data were acquired with Thermo 320 321 Xcalibur software and peak areas for the steroids were determined using Thermo TraceFinder software. Overall, androstenedione and testosterone were detected consistently in all the 322 samples. Using the same set up we could detect Dihydrotestosterone (DHT) in the standard 323 324 mix but failed to detect it consistently in the orthograft samples. Our set up was unable to detect Dehydroepiandrosterone (DHEA) with confidence even in standard mix. The relative 325 peak ratio was obtained by normalising the biological sample peak area to the peak area 326 327 obtained from the corresponding fortified internal standard.

328

329 Lipid staining- For detecting lipid accumulation, Oil Red-O (Sigma) and BODIPY (Life Technologies) staining was used. The frozen sections of tissues were fixed with 4% 330 331 paraformaldehyde (PFA) in PBS for 30 min at room temperature. For Oil Red-O staining, the stock solution of 1% dye in isopropanol was diluted with D.W. in 3:2 (dye: water) ratio and 332 filtered. The sections were washed three times with PBS after 4% PFA fixation and stained 333 with Oil-Red O for 5-10 min. The sections were then washed with water and counter stained 334 with haematoxylin. For BODIPY fluorescence staining, the sections or glass bottom plates, 335 336 after 4% PFA fixation, were washed with PBS followed by 10 min room temperature incubation with 1.5 mg/ml glycine in PBS to quench the PFA. The sections were then stained with BODIPY (10 μ g/ml in PBS) for 2 hr at room temperature. The sections were then washed with PBS and counterstained with DAPI. Confocal imaging was carried out using Nikon confocal microscope using 488 nm as the excitation wavelength and 505 nm as the emission wavelength.

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343 Lipoprotein uptake assay- Lipoprotein uptake was carried up by treating the cells for 5 hr in respective culture medium containing 10 µg/ml of Dil-HDL (high density lipoprotein) or Dil-344 345 LDL (low density lipoprotein). Both Dil-LDL and Dil-HDL were obtained from Biomedical Technologies Inc. HDL and LDL uptake assays were also carried out using HDL Uptake 346 Assay Kit (Fluorometric) (Abcam, ab204717) and LDL Uptake Assay Kit (Fluorometric) 347 (Abcam, ab204716) kits, respectively. Briefly, the cells were seeded at sub-confluent density 348 on glass bottom 96 well white plates. Next day, the cells were either treated with medium 349 containing 10% FBS or 10% CSS (steroid depleted charcoal stripped serum mimicking ADT 350 conditions). After two hours, the cells were washed with wash buffer provided in the 351 respective kits and treated with HDL or LDL containing respective media with and without 352 drugs (e.g. ITX5061). The cells were incubated for another 4 hours and washed with wash 353 buffer provided in the kit. The fluorescence was measured using Safire machine as indicated 354 in the kit. The standard curve was generated simultaneously and the amount of lipoprotein 355 uptake was analysed from the standard curve using Graph Pad Prism software. The protein 356 content in each well was measured using BCA protein estimation kit and amount of 357 358 lipoprotein taken up by cells in each well was normalised to amount of total protein in respective wells. 359

361 **Cholesterol efflux assay-** The effects of ITX5061 on cholesterol efflux were measures in 362 CWR22Res stable clones (as indicated) using Cholesterol Efflux Assay Kit (Cell-based) 363 (Abcam, ab196985). Briefly, the cells were loaded with labelled cholesterol as per the 364 protocol provided in the kit. The human serum was used as cholesterol acceptors. To assay 365 the effects of drugs on cholesterol efflux, the cells were treated with ITX5061 after 366 cholesterol loading along with serum for active efflux.

367

Real Time PCR- The RNA was extracted from ~70 mgs of pulverised orthografts using 368 369 RNeasy mini kit (Qiagen). For cell lines, RNA was extracted from sub-confluent plates using RNeasy mini kit (Qiagen). 10 ug of RNA was used for cDNA synthesis using High capacity 370 cDNA reverse transcription kit (Applied Biosystems). Real time PCR was carried out using 371 TaqMan® Gene Expression Master Mix (Life Technologies) in 7500 Fast Real-Time PCR 372 System (Applied Biosystems). The primers were designed using Universal Probe Library 373 Assay Design Center (Roche) and the respective probes were used from the universal probe 374 library. For all RT-PCR reactions, CACS3 was used as the house-keeping gene and the 375 relative quantities for each assay were obtained by normalising to one biological control 376 sample (as indicated in the figures). All results are presented as relative quantities (R.Q.) for 377 hSPRY2 (Fwd-TTTGCACATCGCAGAAAGAA & Rev-378 TCAGGTCTTGGAAGTGTGGTC; hIL6 (Fwd-GATGAGTACAAAAGTCCTGATCCA & 379 380 Rev-CTGCAGCCACTGG TTCTGT); hHSD3B1 (Fwd-TCTTCGGTGTCACTCACAGAG & Rev-GGCACACT AGCTTGGACACA); hHER2 (Fwd-GGGAAACCTGGAACTCACCT 381 & Rev-CCCTGCACCTCCTGGATA); hPSA (Fwd-GTGCTTGTGGCCTCTCGT & Rev-382 CAGCAAGATCACGCTTTTGT); hSCARB1/SRB1 (Fwd-CCTGAGGACACCGTGAGC & 383 Rev-GGTGTGCAACAGGCACAT); hLDLR (Fwd-CTACAAGTGGGTCTGCGATG & 384

385 Rev-TTTGCAGGTGACAGACAAGC); hCYP17A1 (Fwd-TCACCGTCAGTAAGCTATTTGC & Rev-GGGCCAGGATCTCACCTATAC); 386 hHMGCR (Fwd-GTTCGGTGGCCTCTAGTGAG & 387 Rev-388 TGCATTCGAAAAAGTCTTGACA); mHmgcr (Fwd- TGCGTAAGCGCAGTTCCT& Rev-TTGTAGCCTCACAGTCCTTGG); hAR full 389 length (Fwd-CATGTGGAAGCTGCAAGGTCT & Rev- TCTGTTTCCCTTCAGCGGC) and hAR-V7 390 (Fwd- AACAGAAGTACCTGTGCGCC & Rev- TCAGGGTCTGGTCATTTTGA). The AR 391 full length and AR-V7 variant (Jones et al, 2015) were assayed using BIO-RAD SYBR® 392 393 Green method.

Tissue Cholesterol Quantification- Free and esterified cholesterol quantification was 394 carried out using Cholesterol/Cholesteryl Ester quantitation assay kit (Abcam ab65359). For 395 the prostate orthografts, pre-weighed orthografts were thawed and homogenised using micro-396 397 homogenizer. The cholesterol was extracted in 200 µl (per 10 mg of tissue) of chloroform: isopropanol: NP-40 (7:11:0.1) by mixing thoroughly and vortexing. The organic phase was 398 399 collected in a separate tube after centrifugation for 10 min at 15,000x g. The samples were air 400 dried at 50°C to remove chloroform. The samples were further vacuum dried for 30 min to remove trace organic solvent. The residue obtained was dissolved by sonication and 401 vortexing with 200 µl of assay buffer provided in the kit. The quantitation assay was carried 402 out with and without cholesterol esterase to assay free and esterified cholesterol levels. 403

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Serum Analyses- Murine serum IL6 was measured using Interleukin-6 Mouse ELISA Kit
(Abcam, ab100712). The triglycerides from murine sera were measured using Triglyceride
Quantification Kit (Abcam, ab65336). Serum free fatty acids were measured using Free Fatty
Acid Quantification Kit (Abcam, ab65341). The serum cholesterol was measured using HDL

409	and LDL/VLDL Cholesterol Assay Kit (Abcam, ab65390). Cholesterol from both fractions
410	(HDL and LDL/VLDL) was added and presented as total serum cholesterol. Liver function
411	was measured in the form of serum alanine transaminase activity (ALT) using Alanine
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1 Appendix Figure S1- Visceral Metastases

A Presentation of visceral metastases observed in the prostate orthograft model. The
metastatic incidence is segregated as proximal (yellow dots) or distal (green dots).
Representative H&E images of the visceral metastases. Scale bar: 10µm.

5 B Proximal (upper panel) and distal (lower panel: Chi-square test p=0.002) metastases
6 incidence in the mice with indicated CWR22Res orthografts (n= 5 mice per group).

7 C Incidence of proximal and distal metastases incidence in ADT treated NPS mice (n= 5
8 mice per group).

D Incidence of cumulative visceral (proximal and distal) metastases was analysed from 10
sites per group (2 sites: proximal and distal x 5 mice per group) in the NPS. The proximal
metastases sites analysed were lumbar lymph nodes and epididymal or mesenteric adipose
tissue & the distal sites include thoracic lymph nodes and lungs. Chi-square test: p=0.02.

E IHC quantification of AR positive cells as presented in figure 3K (n=3 mice analysed per

14 group; *p<0.05 compared to respective controls; unpaired two-tailed Student's t-test).

Data Information: In (E), each data point represents one independent observation and the data
is presented as mean ± SD. In (B-D), data are presented as contingency graph.

17

18 Appendix Figure S2- Systemic IL6 and cholesterol homeostasis in CRPC

A Serum triglyceride levels in mice with CWR22Res prostate orthografts as indicated (n=3
mice per group; *p<0.05 ANOVA Tukey's test).

B Representative immunostained images (n=3) for IL6 of epididymal adipose tissue from
ADT treated NPS mice.

C Relative quantitation of murine IL6 mRNA in epididymal adipose tissues of indicated
 mice with CWR22Res orthografts (n=3 mice per group; *p<0.05 ANOVA Tukey's test).

D Relative quantitation of murine IL6 mRNA in 3T3-L1 adipocytes treated for 16 hr with
human 100 pmol/ml IL6 (n=3; *p<0.05; Unpaired two-tailed Student's t-test).

E The epididymal fat weights of NPS mice (n=5 mice per group; *p<0.05 unpaired two-
tailed Student's t-test).

F Representative confocal images (n=5) of Bodipy staining in IL6 (100 pmol/ml) treated
3T3-L1 adipocytes.

G Top: Schematic of experimental design for the data represented below. Briefly,
conditioned medium from EGF treated CWR22Res cells in serum-free RPMI medium (SFM)
with or without anti-IL6 neutralising antibody is added to 3T3-L1 adipocytes pre-stained with
Bodipy to test the effects of IL6 on adipocyte lipolysis.

Bottom: Representative confocal images (n=3) of Bodipy (for lipids) and DAPI (for nuclei to account for the presence of cells) staining in 3T3-L1 adipocytes treated for 24 hr with filtered cultured supernatant from Nsi and SPRY2 KD (CL3 and Pool) CWR22Res cells grown in SFM containing EGF (20 ng/ml) for 24 hr with Ctrl or anti-IL6 neutralising antibody (0.1 μ g/µl).

40 H Representative images (n=3) of immunoblots for indicated proteins in whole cell lysates
41 of 3T3-L1 adipocytes treated with IL6 (100 pmol/ml). GAPDH is used as loading control.

I Schematic representation of lipolytic effects of IL6 on adipocytes: IL6 via PKA activation
induces loss of perilipin. Normally perilipin forms a protective layer around lipid droplets and
protects triglycerides and cholesterol esters with in the lipid droplet from cytosolic lipases.
Upon perilipin loss, lipases can induce lipolysis within the cells.

J Representative images of Oil O stained liver sections from mice with CWR22Res prostate
orthografts.

48 K Serum alanine transaminase activity (ALT) in mice bearing CWR22Res orthografts 49 treated as indicated (n=3 mice per group). Sera from mice bearing liver tumours (age 50 associated tumours in wildtype colony mice) were used as a positive control (n=2 mice). Sera 51 from mock or ADT treated non-tumour bearing CD-1 nude mice (age matched) were used as 52 additional controls (n=2 mice). *p<0.05; ANOVA Tukey's test.</p>

L Relative quantitation of murine Hmgcr mRNA in murine livers from non-tumour bearing
 mice treated as indicated (n=3 mice per group; *p<0.05 ANOVA with Tukey's test).

M Representative images (n=3) of CWR22Res prostate orthograft sections immunostained
for AR and cleaved caspase 3 from Mock or ADT treated mice. Scale bar=10 µm.

N Heat map showing mean value of IHC quantifications in appendix figure S2M (n=3 mice
per group; *p<0.05 ANOVA Tukey's test).

59 O Representative immunoblot images for indicated proteins in lysates from indicated
60 CWR22Res orthografts. HSC70 is used as loading control.

Data Information: In (A, C, E, K, L), each data point represents one independent observation.
In (A, C, D, E, K), the data is presented as mean ± SD. In (N), data are presented as heat map
based on the mean of three independent observations.

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68 Appendix Figure S3- Targeting SRB1 in CRPC

A Relative quantitation of SRB1 mRNA in Nsi and SPRY2 (Pool) CWR22Res cells treated
for 16 hr with p38 inhibitor SB203580 (20 μM) (n=3; *p<0.05 compared to respective
DMSO controls; unpaired two-tailed Student's t-test).

B-C IHC quantifications of indicated proteins shown in (B) figure 5G and (C) figure 5H
(n=3 mice per group; *p<0.05 compared to respective HN samples; unpaired two-tailed
Student's t-test).

75 D IHC quantifications of indicated proteins shown in figure 6G (n=3 mice per group;
 76 *p<0.05 ANOVA Tukey's test).

77 E Incidence of cumulative visceral (proximal and distal as shown in Appendix S1A)
78 metastases are analysed from 10 sites per group (2 sites x 5 mice per group) in the NPS mice.

F Growth rate of indicated prostate cancer cells relative to Day 0 (T0) in medium
containing 10% CSS (hormone deprived conditions) (n=3; *p<0.05 compared to respective
DMSO/VC; #p<0.05 compared to all treatments; ANOVA Tukey's test).

Data Information: In (B-D), each data point represents one independent observation. In (F), each data point is presented as mean of three independent observations and data presented as mean \pm SD. In (A), the data is presented as mean \pm SD. In (E), data are presented contingency graph.

86

87 Appendix Table S1- STR analyses of CWR22Res and CWR22RV1 cells.

88 Appendix Table S2- Detailed statistical analyses and p values for groups compared.

Appendix Table SI				
Cell lines	Markers	Allele 1	Allele 2	Allele 3
CWR22Res	AMEL	Х	Y	
	CSF1PO	10	11	
	D13S317	9	12	
	D16S539	12		
	D21S11	30		
	D5S818	11	12	13
	D7S820	9	10	
	TH01	6	9.3	
	ΤΡΟΧ	8		
	vWA	15	21	
CWR22RV1	AMEL	Х	Y	
	CSF1PO	10	11	
	D13S317	9	12	
	D16S539	12		
	D21S11	30		
	D5S818	11	12	
	D7S820	10	11	
	TH01	6	9.3	
	ТРОХ	8		
	vWA	15	21	

Appendix Table S1

Results

CWR22Res and CWR22RV1 Matched >95% with 22Rv1 (prostate epithelial)

Appendix Table S2

Figure number Figure 1H	Statistical test used ANOVA Tukey's Test	Experimental groups compared Time 0	P Value
		CTRL FBS vs. SPRY2 FBS	>0.9999
		CTRL FBS vs. CTRL CSS	>0.9999
		CTRL FBS vs. SPRY2 CSS	>0.9999
		SPRY2 FBS vs. CTRL CSS	>0.9999
		SPRY2 FBS vs. SPRY2 CSS	>0.9999
		CTRL CSS vs. SPRY2 CSS	>0.9999
		Time 2 days	
		CTRL FBS vs. SPRY2 FBS	0.0401
		CTRL FBS vs. CTRL CSS	0.0061
		CTRL FBS vs. SPRY2 CSS	< 0.0001
		SPRY2 FBS vs. CTRL CSS	0.8457
		SPRY2 FBS vs. SPRY2 CSS	< 0.0001
		CTRL CSS vs. SPRY2 CSS	0.0002
		Tme 4 days	
		CTRL FBS vs. SPRY2 FBS	0.0001
		CTRL FBS vs. CTRL CSS	< 0.0001
		CTRL FBS vs. SPRY2 CSS	< 0.0001
		SPRY2 FBS vs. CTRL CSS	0.0004
		SPRY2 FBS vs. SPRY2 CSS	< 0.0001
		CTRL CSS vs. SPRY2 CSS	<0.0001
Figure number	Statistical test used	Experimental groups compared	P Value
Figure 1I	ANOVA Tukey's Test	Time 0	
C C		Nsi FBS vs. SPRY2 KD CL3 FBS	>0.9999
		Nsi FBS vs. SPRY2 KD Pool FBS	>0.9999
		Nsi FBS vs. Nsi CSS	>0.9999
		Nsi FBS vs. SPRY2 KD CL3 CSS	>0.9999
		Nsi FBS vs. SPRY2 KD Pool CSS	>0.9999
		SPRY2 KD CL3 FBS vs. SPRY2 KD Pool FBS	>0.9999
		SPRY2 KD CL3 FBS vs. Nsi CSS	>0.9999
		SPRY2 KD CL3 FBS vs. SPRY2 KD CL3 CSS	>0.9999
		SPRY2 KD CL3 FBS vs. SPRY2 KD Pool CSS	>0.9999
		SPRY2 KD Pool FBS vs. Nsi CSS	>0.9999
		SPRY2 KD Pool FBS vs. SPRY2 KD CL3 CSS	>0.9999
		SPRY2 KD Pool FBS vs. SPRY2 KD Pool CSS	>0.9999
		Nsi CSS vs. SPRY2 KD CL3 CSS	>0.9999
		Nsi CSS vs. SPRY2 KD Pool CSS	>0.9999

SPRY2 KD CL3 CSS vs. SPRY2 KD Pool CSS

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Time 2 days	
Nsi FBS vs. SPRY2 KD CL3 FBS	0.9614
Nsi FBS vs. SPRY2 KD Pool FBS	0.9961
Nsi FBS vs. Nsi CSS	0.0028
Nsi FBS vs. SPRY2 KD CL3 CSS	0.9951
Nsi FBS vs. SPRY2 KD Pool CSS	>0.9999
SPRY2 KD CL3 FBS vs. SPRY2 KD Pool FBS	0.9994
SPRY2 KD CL3 FBS vs. Nsi CSS	0.0003
SPRY2 KD CL3 FBS vs. SPRY2 KD CL3 CSS	0.9996
SPRY2 KD CL3 FBS vs. SPRY2 KD Pool CSS	0.9675
SPRY2 KD Pool FBS vs. Nsi CSS	0.0007
SPRY2 KD Pool FBS vs. SPRY2 KD CL3 CSS	>0.9999
SPRY2 KD Pool FBS vs. SPRY2 KD Pool CSS	0.9972
Nsi CSS vs. SPRY2 KD CL3 CSS	0.0006
Nsi CSS vs. SPRY2 KD Pool CSS	0.0026
SPRY2 KD CL3 CSS vs. SPRY2 KD Pool CSS	0.9964
Time 4 days	
Nsi FBS vs. SPRY2 KD CL3 FBS	0.4478
Nsi FBS vs. SPRY2 KD Pool FBS	0.7515
Nsi FBS vs. Nsi CSS	< 0.0001
Nsi FBS vs. SPRY2 KD CL3 CSS	0.8635
Nsi FBS vs. SPRY2 KD Pool CSS	0.2292
SPRY2 KD CL3 FBS vs. SPRY2 KD Pool FBS	0.0309
SPRY2 KD CL3 FBS vs. Nsi CSS	< 0.0001
SPRY2 KD CL3 FBS vs. SPRY2 KD CL3 CSS	0.0528
SPRY2 KD CL3 FBS vs. SPRY2 KD Pool CSS	0.0026
SPRY2 KD Pool FBS vs. Nsi CSS	< 0.0001
SPRY2 KD Pool FBS vs. SPRY2 KD CL3 CSS	>0.9999

SPRY2 KD CL3 FBS vs. Nsi CSS	< 0.0001
SPRY2 KD CL3 FBS vs. SPRY2 KD CL3 CSS	0.0528
SPRY2 KD CL3 FBS vs. SPRY2 KD Pool CSS	0.0026
SPRY2 KD Pool FBS vs. Nsi CSS	< 0.0001
SPRY2 KD Pool FBS vs. SPRY2 KD CL3 CSS	>0.9999
SPRY2 KD Pool FBS vs. SPRY2 KD Pool CSS	0.9385
Nsi CSS vs. SPRY2 KD CL3 CSS	< 0.0001
Nsi CSS vs. SPRY2 KD Pool CSS	< 0.0001
SPRY2 KD CL3 CSS vs. SPRY2 KD Pool CSS	0.8599

Figure number	Statistical test used	Experimental groups compared	P Value
Figure 1J	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. Pool Mock	0.9796
		Nsi Mock vs. Nsi ADT	0.0014
		Nsi Mock vs. CL3 ADT	0.9988

		Nsi Mock vs. Pool ADT	0.9999
		CL3 Mock vs. Pool Mock	0.9502
		CL3 Mock vs. Nsi ADT	0.0021
		CL3 Mock vs. CL3 ADT	>0.9999
		CL3 Mock vs. Pool ADT	>0.9999
		Pool Mock vs. Nsi ADT	0.0002
		Pool Mock vs. CL3 ADT	0.8811
		Pool Mock vs. Pool ADT	0.9283
		Nsi ADT vs. CL3 ADT	0.0036
		Nsi ADT vs. Pool ADT	0.0026
		CL3 ADT vs. Pool ADT	>0.9999
Figure 1K	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	0.2544
8		Nsi Mock vs. Pool Mock	0.7985
		Nsi Mock vs. Nsi ADT	< 0.0001
		Nsi Mock vs. CL3 ADT	0.9547
		Nsi Mock vs. Pool ADT	0.9272
		CL3 Mock vs. Pool Mock	0.9207
		CL3 Mock vs. Nsi ADT	< 0.0001
		CL3 Mock vs. CL3 ADT	0.7286
		CL3 Mock vs. Pool ADT	0.7873
		Pool Mock vs. Nsi ADT	< 0.0001
		Pool Mock vs. CL3 ADT	0.9981
		Pool Mock vs. Pool ADT	0.9995
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	>0.9999
Figure 2B	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	<0.0001
		Nsi Mock vs. Pool Mock	0.0026
		Nsi Mock vs. Nsi ADT	0.0007
		Nsi Mock vs. CL3 ADT	<0.0001
		Nsi Mock vs. Pool ADT	0.0031
		CL3 Mock vs. Pool Mock	0.0495
		CL3 Mock vs. Nsi ADT	<0.0001
		CL3 Mock vs. CL3 ADT	0.9342
		CL3 Mock vs. Pool ADT	0.0423
		Pool Mock vs. Nsi ADT	<0.0001
		Pool Mock vs. CL3 ADT	0.0058
		Pool Mock vs. Pool ADT	>0.9999
		Nsi ADT vs. CL3 ADT	<0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	0.0049

Figure 2E	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	0.866
		Nsi Mock vs. Pool Mock	0.9821
		Nsi Mock vs. Nsi ADT	< 0.0001
		Nsi Mock vs. CL3 ADT	< 0.0001
		Nsi Mock vs. Pool ADT	< 0.0001
		CL3 Mock vs. Pool Mock	0.9976
		CL3 Mock vs. Nsi ADT	< 0.0001
		CL3 Mock vs. CL3 ADT	< 0.0001
		CL3 Mock vs. Pool ADT	< 0.0001
		Pool Mock vs. Nsi ADT	< 0.0001
		Pool Mock vs. CL3 ADT	< 0.0001
		Pool Mock vs. Pool ADT	< 0.0001
		Nsi ADT vs. CL3 ADT	>0.9999
		Nsi ADT vs. Pool ADT	0.9904
		CL3 ADT vs. Pool ADT	0.9956

Figure 2F	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. Pool Mock	0.5422
		Nsi Mock vs. Nsi ADT	< 0.0001
		Nsi Mock vs. CL3 ADT	0.0431
		Nsi Mock vs. Pool ADT	0.9653
		CL3 Mock vs. Pool Mock	0.6794
		CL3 Mock vs. Nsi ADT	< 0.0001
		CL3 Mock vs. CL3 ADT	0.0695
		CL3 Mock vs. Pool ADT	0.9919
		Pool Mock vs. Nsi ADT	< 0.0001
		Pool Mock vs. CL3 ADT	0.6938
		Pool Mock vs. Pool ADT	0.9408
		Nsi ADT vs. CL3 ADT	0.0008
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	0.2087

Figure 2G	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	0.4299
		Nsi Mock vs. Pool Mock	0.9966
		Nsi Mock vs. Nsi ADT	>0.9999
		Nsi Mock vs. CL3 ADT	< 0.0001
		Nsi Mock vs. Pool ADT	0.0003
		CL3 Mock vs. Pool Mock	0.6902

		CL3 Mock vs. Nsi ADT	0.357
		CL3 Mock vs. CL3 ADT	0.0004
		CL3 Mock vs. Pool ADT	0.0064
		Pool Mock vs. Nsi ADT	0.9877
		Pool Mock vs. CL3 ADT	< 0.0001
		Pool Mock vs. Pool ADT	0.0006
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	0.0003
		CL3 ADT vs. Pool ADT	0.4699
Figure 21	ANOVA Tukay's Test	Nai Maak ya CL2 Maak	0.0080
Figure 2H	ANOVA Tukey's Test	NSI MOCK VS. CL5 MOCK	0.9989
		NSI MOCK VS. POOI MOCK	0.264
		Nsi Mock vs. Nsi ADT	>0.9999
		Nei Meek va Deel ADT	<0.0001
		CL 2 Magle vs. Pool AD1	< 0.0001
		CL3 Mock vs. Pool Mock	>0.4558
		CL3 Mock vs. NSI ADT	~0.0001
		CL3 Mock vs. CL3 ADT	<0.0001
		Pool Mock vs. Nsi ADT	0 3345
		Pool Mock vs. CL3 ADT	<0.0040
		Pool Mock vs. CLS ADT	<0.0001
		Nsi ADT vs. CL3 ADT	<0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	0.9914
Figure 2J	ANOVA Tukey's Test	Nsi	
		Time 0	
		CTRL VC vs. CTRL 10µM Abiraterone	>0.9999
		CTRL VC vs. HSD3B1 KO VC CTRL VC vs. HSD3B1 KO 10 μM	>0.9999
		Abiraterone CTRL 10 µM Abiraterone vs. HSD3B1 KO	>0.9999
		VC CTRL 10 µM Abiraterone vs. HSD3B1 KO	>0.9999
		10 μM Abiraterone HSD3B1 KO VC vs. HSD3B1 KO 10 μM	>0.9999
		Abiraterone	>0.9999
		Time 2 days	
		CTRL VC vs. CTRL 10 µM Abiraterone	0.066
		CTRL VC vs. HSD3B1 KO VC CTRL VC vs. HSD3B1 KO 10 uM	0.1582

CTRL VC vs. HSD3B1 KO VC0.1382CTRL VC vs. HSD3B1 KO 10 μM0.0865CTRL 10 μM Abiraterone vs. HSD3B1 KO0.9692CTRL 10 μM Abiraterone vs. HSD3B1 KO0.9991

HSD3B1 KO	VC vs. HSD3B1	KO 10 µM
Abiraterone		

0.9888

Time 4 days

CTRL VC vs. CTRL 10 µM Abiraterone	< 0.0001
CTRL VC vs. HSD3B1 KO VC CTRL VC vs. HSD3B1 KO 10 μM	0.0001
Abiraterone CTRL 10 µM Abiraterone vs. HSD3B1 KO	< 0.0001
VC CTRL 10 uM Abiraterope vs HSD3R1 KO	0.5738
$10 \mu\text{M}$ Abiraterone USD2D1 KO 10 M	0.5335
Abiraterone	0.0616

SPRY2 KD Pool

Time 0

CTRL VC vs. CTRL 10 µM Abiraterone	>0.9999
CTRL VC vs. HSD3B1 KO VC CTRL VC vs. HSD3B1 KO 10 μM	>0.9999
Abiraterone CTRL 10 µM Abiraterone vs. HSD3B1 KO	>0.9999
VC CTRL 10 µM Abiraterone vs. HSD3B1 KO	>0.9999
10 µM Abiraterone HSD3B1 KO VC vs. HSD3B1 KO 10 µM	>0.9999
Abiraterone	>0.9999

Time 2 days

0.0052
0.0011
< 0.0001
0.9233
0.2245
0.54

Time 4 days

CTRL VC vs. CTRL 10mM Abiraterone	< 0.0001
CTRL VC vs. HSD3B1 KO VC	< 0.0001
CTRL VC vs. HSD3B1 KO 10 µM	
Abiraterone	< 0.0001
CTRL 10 µM Abiraterone vs. HSD3B1 KO	
VC	0.54
CTRL 10 µM Abiraterone vs. HSD3B1 KO	
10 µM Abiraterone	< 0.0001
HSD3B1 KO VC vs. HSD3B1 KO 10 µM	
Abiraterone	0.0002

Figure 2K	Paired t test	CRPC Vs HN	< 0.0001	
Figure 2L	Unpaired t test Two-tailed	Nsi shHER2 vs Nsi shSc	0.0076	
Figure 2M	ANOVA Tukey's Test	Nsi Mock shScram vs. Nsi ADT shScram	< 0.0001	
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		Nsi Mock shScram vs. Pool Mock shScram	0.4378	
		Nsi Mock shScram vs. Pool ADT shScram	0.9433	
		Nsi Mock shScram vs. Nsi Mock shHER2	0.5236	
		Nsi Mock shScram vs. Nsi ADT shHER2	< 0.0001	
		Nsi Mock shScram vs. Pool Mock shHER2	0.5647	
		Nsi Mock shScram vs. Pool ADT shHER2	0.0001	
		Nsi ADT shScram vs. Pool Mock shScram	< 0.0001	
		Nsi ADT shScram vs. Pool ADT shScram	< 0.0001	
		Nsi ADT shScram vs. Nsi Mock shHER2	< 0.0001	
		Nsi ADT shScram vs. Nsi ADT shHER2	0.9999	
		Nsi ADT shScram vs. Pool Mock shHER2	< 0.0001	
		Nsi ADT shScram vs. Pool ADT shHER2	0.5303	
		Pool Mock shScram vs. Pool ADT shScram	0.9769	
		Pool Mock shScram vs. Nsi Mock shHER2	>0.9999	
		Pool Mock shScram vs. Nsi ADT shHER2 Pool Mock shScram vs. Pool Mock	< 0.0001	
		shHER2	>0.9999	
		Pool Mock shScram vs. Pool ADT shHER2	< 0.0001	
		Pool ADT shScram vs. Nsi Mock shHER2	0.9905	
		Pool ADT shScram vs. Nsi ADT shHER2	< 0.0001	
		Pool ADT shScram vs. Pool Mock shHER2	0.9942	
		Pool ADT shScram vs. Pool ADT shHER2	< 0.0001	
		Nsi Mock shHER2 vs. Nsi ADT shHER2	< 0.0001	
		Nsi Mock shHER2 vs. Pool Mock shHER2	>0.9999	
		Nsi Mock shHER2 vs. Pool ADT shHER2	< 0.0001	
		Nsi ADT shHER2 vs. Pool Mock shHER2	< 0.0001	
		Nsi ADT shHER2 vs. Pool ADT shHER2	0.2869	
		Pool Mock shHER2 vs. Pool ADT shHER2	< 0.0001	
Figure 3A	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	0.5034	
		Nsi Mock vs. Pool Mock	0.0457	
		Nsi Mock vs. Nsi ADT	>0.9999	
		Nsi Mock vs. CL3 ADT	0.0016	
		Nsi Mock vs. Pool ADT	< 0.0001	
		CL3 Mock vs. Pool Mock	0.7465	
		CL3 Mock vs. Nsi ADT	0.6387	
		CL3 Mock vs. CL3 ADT	0.0966	
		CL3 Mock vs. Pool ADT	< 0.0001	
		Pool Mock vs. Nsi ADT	0.073	
		Pool Mock vs. CL3 ADT	0.7209	
		Pool Mock vs. Pool ADT	0.0029	
		Nsi ADT vs. CL3 ADT	0.0028	

Nsi ADT vs. Pool ADT	< 0.0001
CL3 ADT vs. Pool ADT	0.0743

Figure 3B	ANOVA Tukey's Test	Nsi Mock shScram vs. Nsi ADT shScram	>0.9999
		Nsi Mock shScram vs. Pool Mock shScram	0.0013
		Nsi Mock shScram vs. Pool ADT shScram	< 0.0001
		Nsi Mock shScram vs. Nsi Mock shHER2	>0.9999
		Nsi Mock shScram vs. Nsi ADT shHER2	>0.9999
		Nsi Mock shScram vs. Pool Mock shHER2	>0.9999
		Nsi Mock shScram vs. Pool ADT shHER2	0.9972
		Nsi ADT shScram vs. Pool Mock shScram	0.0025
		Nsi ADT shScram vs. Pool ADT shScram	< 0.0001
		Nsi ADT shScram vs. Nsi Mock shHER2	0.9993
		Nsi ADT shScram vs. Nsi ADT shHER2	>0.9999
		Nsi ADT shScram vs. Pool Mock shHER2	>0.9999
		Nsi ADT shScram vs. Pool ADT shHER2	>0.9999
		Pool Mock shScram vs. Pool ADT shScram	< 0.0001
		Pool Mock shScram vs. Nsi Mock shHER2	0.0009
		Pool Mock shScram vs. Nsi ADT shHER2 Pool Mock shScram vs. Pool Mock	0.0023
		shHER2	0.0018
		Pool Mock shScram vs. Pool ADT shHER2	0.0045
		Pool ADT shScram vs. Nsi Mock shHER2	<0.0001
		Pool ADT shScram vs. Nsi ADT shHER2	< 0.0001
		Pool ADT shScram vs. Pool Mock shHER2	< 0.0001
		Pool ADT shScram vs. Pool ADT shHER2	< 0.0001
		Nsi Mock shHER2 vs. Nsi ADT shHER2	0.9997
		Nsi Mock shHER2 vs. Pool Mock shHER2	>0.9999
		Nsi Mock shHER2 vs. Pool ADT shHER2	0.9894
		Nsi ADT shHER2 vs. Pool Mock shHER2	>0.9999
		Nsi ADT shHER2 vs. Pool ADT shHER2	>0.9999
		Pool Mock shHER2 vs. Pool ADT shHER2	0.9997
Figure 3C	Unpaired t test Two-tailed	CWR Nsi p38MAPKi Vs CWR Nsi DMSO	0.0009
		DMSO	0.004
Figure 3D	Paired t test Two-tailed	CRPC vs HN	0.05
Figure 3E	ANOVA Dunnett's test	Pool ADT Tocilizumab vs. Nsi Mock vehicle	0.0007
		Pool ADT Tocilizumab vs. Nsi ADT vehicle Pool ADT Tocilizumab vs. Pool Mock	0.9997
		vehicle Pool ADT Tocilizumab vs. Pool ADT	0.0007
		vehicle	0.0201

		Pool ADT Tocilizumab vs. Nsi Mock Tocilizumab Pool ADT Tocilizumab vs. Nsi ADT Tocilizumab Pool ADT Tocilizumab vs. Pool Mock Tocilizumab	0.1408 0.9938 0.0028
		Nsi Mock vehicle vs. Nsi ADT vehicle	0.0004
		Nsi Mock vehicle vs. Pool Mock vehicle	0.9999
		Nsi Mock vehicle vs. Pool ADT vehicle Nsi Mock vehicle vs. Nsi Mock	0.6635
		Tocilizumab Nsi Mock vehicle vs. Nsi ADT Tocilizumab	0.1762
		Nsi Mock vehicle vs. Pool Mock Tocilizumab	0.9934
		Nsi Mock vehicle vs. Pool ADT Tocilizumab	0.0007
Figure 3F	ANOVA Tukey's Test	Nsi Mock vehicle vs. Nsi ADT vehicle	0.998
		Nsi Mock vehicle vs. Pool Mock vehicle	0.0032
		Nsi Mock vehicle vs. Pool ADT vehicle Nsi Mock vehicle vs. Nsi Mock	< 0.0001
		Tocilizumab Nsi Mock vehicle vs. Nsi ADT Tocilizumab Nsi Mock vehicle vs. Pool Mock Tocilizumab	>0.9999 0 9971
			0.9163
		Tocilizumab	0.9969
		Nsi ADT vehicle vs. Pool Mock vehicle	0.0005
		Nsi ADT vehicle vs. Pool ADT vehicle Nsi ADT vehicle vs. Nsi Mock	< 0.0001
		Tocilizumab	0.9962
		Nsi ADT vehicle vs. Nsi ADT Tocilizumab Nsi ADT vehicle vs. Pool Mock Tocilizumab	>0.9999
		Nsi ADT vehicle vs. Pool ADT Tocilizumab	>0.99999
		Pool Mock vehicle vs. Pool ADT vehicle Pool Mock vehicle vs. Nsi Mock	0.0071
		Tocilizumab Pool Mock vehicle vs. Nsi ADT	0.0038
		Tocilizumab Pool Mock vehicle vs. Pool Mock Tocilizumab	0.0005
		Pool Mock vehicle vs. Pool ADT Tocilizumab	0.0005
		Pool ADT vehicle vs. Nsi Mock Tocilizumab Pool ADT vehicle vs. Nsi ADT	< 0.0001
		Tocilizumab Pool ADT vehicle vs. Pool Mock	< 0.0001
		Tocilizumab Pool ADT vehicle vs. Pool ADT	<0.0001
		Tocilizumab Nsi Mock Tocilizumab vs. Nsi ADT Tocilizumab	<0.0001
		Nsi Mock Tocilizumab vs. Pool Mock Tocilizumab	0.9371

		Nsi Mock Tocilizumab vs. Pool ADT Tocilizumab Nsi ADT Tocilizumab vs. Pool Mock Tocilizumab Nsi ADT Tocilizumab vs. Pool ADT Tocilizumab Pool Mock Tocilizumab vs. Pool ADT Tocilizumab	0.9944 0.5561 >0.99999 0.5517
Figure 3G	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.0021
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.9879
		Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock	0.9183
		Tocilizumab	>0.9999
		Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	0.0003
		Tocilizumab	0.7335
		Tocilizumab	0.0015
		Nsi ADT Vehicle vs. Pool Mock Vehicle	0.0002
		Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	0.0042
		Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.9959
		Nsi ADT Vehicle vs. Pool Mock Tocilizumab	< 0.0001
		Nsi ADT Vehicle vs. Pool ADT Tocilizumab	>0.9999
		Pool Mock Vehicle vs. Pool ADT Vehicle	>0.9999
		Tocilizumab	0.9501
		Pool Mock Vehicle vs. Nsi ADT Tocilizumab	< 0.0001
		Pool Mock Vehicle vs. Pool Mock Tocilizumab	0.9938
		Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.0001
		Pool ADT Vehicle vs. Nsi Mock Tocilizumab	0.8135
		Pool ADT Vehicle vs. Nsi ADT Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Pool Mock Tocilizumab	>0.9999
		Pool ADT Vehicle vs. Pool ADT Tocilizumab	< 0.0001
		Nsi Mock Tocilizumab vs. Nsi ADT Tocilizumab	0.0006
		Nsi Mock Tocilizumab vs. Pool Mock Tocilizumab	0.5767
		Nsi Mock Tocilizumab vs. Pool ADT Tocilizumab	0.003
		Nsi ADT Tocilizumab vs. Pool Mock Tocilizumab	<0.0001
		Nsi ADT Tocilizumab vs. Pool ADT Tocilizumab	0.0001
		Pool Mock Tocilizumab vs. Pool ADT	0.7707
		Tocilizumab	< 0.0001
			0.9067
Figure 3H	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	< 0.0001

		Nsi Mock Vehicle vs. Pool Mock Vehicle	< 0.0001
		Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock	0.9999
		Tocilizumab Nsi Mock Vehicle vs. Nsi ADT	0.9113
		Tocilizumab Nsi Mock Vehicle vs. Pool Mock	0.8805
		Tocilizumab Nsi Mock Vehicle vs. Pool ADT	>0.9999
		Tocilizumab	< 0.0001
		Nsi ADT Vehicle vs. Pool Mock Vehicle	< 0.0001
		Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock	0.992
		Tocilizumab Nsi ADT Vehicle vs. Nsi ADT	>0.9999
		Tocilizumab	0.2387
		Tocilizumab Nsi ADT Vehicle vs. Pool ADT	0.9612
		Tocilizumab	0.0168
		Pool Mock Vehicle vs. Pool ADT Vehicle Pool Mock Vehicle vs. Nsi Mock	< 0.0001
		Tocilizumab Pool Mock Vehicle vs. Nsi ADT	<0.0001
		Tocilizumab Pool Mock Vehicle vs. Pool Mock	< 0.0001
		Tocilizumab Pool Mock Vehicle vs. Pool ADT	< 0.0001
		Tocilizumab Pool ADT Vehicle vs. Nsi Mock	< 0.0001
		Tocilizumab Pool ADT Vehicle vs. Nsi ADT	< 0.0001
		Tocilizumab Pool ADT Vehicle vs. Pool Mock	< 0.0001
		Tocilizumab Pool ADT Vehicle vs. Pool ADT	< 0.0001
		Tocilizumab	0.9928
		Tocilizumab	0.6983
		Tocilizumab	>0.9999
		Tocilizumab	0.2442
		NSI ADT Tocilizumab vs. Pool Mock Tocilizumab	0.9636
		Nsi ADT Tocilizumab vs. Pool ADT Tocilizumab	0.84
		Pool Mock Tocilizumab vs. Pool ADT Tocilizumab	
Figure 3I	Unpaired t test Two-tailed	Anti-IL6 ADT vs Ctrl IgG ADT	0.0003
Figure 3J	Chi-square test	Metastatic incidence in Tocilizumab treated set	<0.001
Figure 3L	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.5382
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.6282
		Nsi Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi Mock Vehicle vs. Nsi Mock	>0.9999

Tocilizumab

Nsil	Mock Vehicle vs. Nsi ADT	
Toci Nsi l	lizumab Mock Vehicle vs. Pool Mock	0.9958
Toci Nsi I	lizumab Mock Vehicle vs. Pool ADT	0.9988
Toci	lizumab	>0.9999
Nsi .	ADT Vehicle vs. Pool Mock Vehicle	0.0288
Nsi . Nsi .	ADT Vehicle vs. Pool ADT Vehicle ADT Vehicle vs. Nsi Mock	< 0.0001
Toci	lizumab	0.642
Toci Nsi	ADT Vehicle vs. Nsi ADT lizumab ADT Vehicle vs. Pool Mock	0.9032
Toci Nsi	ilizumab ADT Vehicle vs. Pool ADT	0.2525
Toci	lizumab	0.3721
Pool Pool	Mock Vehicle vs. Pool ADT Vehicle Mock Vehicle vs. Nsi Mock	< 0.0001
Toci	ilizumab	0.5246
Toci	I Mock Vehicle vs. Nsi AD1 Ilizumab	0.2621
Toci	llizumab	0.9115
Pool Toci Pool	Mock Vehicle vs. Pool ADT ilizumab	0.7977
Toci	lizumab	< 0.0001
Toci	ilizumab	< 0.0001
Toci	lizumab	< 0.0001
Pool Toci	ADT Vehicle vs. Pool ADT	< 0.0001
Toci	Mock Tocilizumab vs. Nsi ADI ilizumab Mock Tocilizumah vs. Dool Mock	0.9993
Toci	lizumab	0.9937
Nsi I Toci	Mock Tocilizumab vs. Pool ADT ilizumab	0.9996
Nsi . Toci	ADT Tocilizumab vs. Pool Mock	0.8965
Nsi . Toci	ADT Tocilizumab vs. Pool ADT ilizumab	0.9675
Toci	ilizumab	>0.9999
Nsi I	Mock vs. CL3 Mock	0.9052
Nsi	Mock vs. Pool Mock	0.0367
Nsi I	Mock vs. Nsi ADT	0.0002
Nsi I	Mock vs. CL3 ADT	0.0005
Nsi I	Mock vs. Pool ADT	0.0012
CL3	Mock vs. Pool Mock	0.1895
CL3	Mock vs. Nsi ADT	0.0008
CL3	Mock vs. CL3 ADT	0.0023
CL3	Mock vs. Pool ADT	0.0063
Pool	Mock vs. Nsi ADT	0.0513
Pool	Mock vs. CL3 ADT	0.1476
Pool	Mock vs. Pool ADT	0.3661

Figure 4A

ANOVA Tukey's Test

		Nsi ADT vs. CL3 ADT	0.9844
		Nsi ADT vs. Pool ADT	0.7888
		CL3 ADT vs. Pool ADT	0.9861
Figure 4B	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. Pool Mock	>0.9999
		Nsi Mock vs. Nsi ADT	>0.9999
		Nsi Mock vs. CL3 ADT	< 0.0001
		Nsi Mock vs. Pool ADT	< 0.0001
		CL3 Mock vs. Pool Mock	>0.9999
		CL3 Mock vs. Nsi ADT	>0.9999
		CL3 Mock vs. CL3 ADT	< 0.0001
		CL3 Mock vs. Pool ADT	< 0.0001
		Pool Mock vs. Nsi ADT	0.9991
		Pool Mock vs. CL3 ADT	< 0.0001
		Pool Mock vs. Pool ADT	< 0.0001
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	0.9498
Figure 4C	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. Pool Mock	0.9951
		Nsi Mock vs. Nsi ADT	0.9921
		Nsi Mock vs. CL3 ADT	0.0026
		Nsi Mock vs. Pool ADT	0.0038
		CL3 Mock vs. Pool Mock	0.9996
		CL3 Mock vs. Nsi ADT	0.9991
		CL3 Mock vs. CL3 ADT	0.0015
		CL3 Mock vs. Pool ADT	0.0023
		Pool Mock vs. Nsi ADT	>0.9999
		Pool Mock vs. CL3 ADT	0.0007
		Pool Mock vs. Pool ADT	0.0011
		Nsi ADT vs. CL3 ADT	0.0006
		Nsi ADT vs. Pool ADT	0.0009
		CL3 ADT vs. Pool ADT	>0.9999
Figure 4D	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.9873
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.9996
		Nsi Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi Mock Vehicle vs. Nsi Mock Tocilizumab	>0.9999
		Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	>0.9999
		Nsi Mock Vehicle vs. Pool Mock Tocilizumab	0.9745
		Nsi Mock Vehicle vs. Pool ADT Tocilizumab	0.3934
		Nsi ADT Vehicle vs. Pool Mock Vehicle	>0.9999

Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	0.9612
Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.9994
Nsi ADT Vehicle vs. Pool Mock Tocilizumab	>0.9999
Nsi ADT Vehicle vs. Pool ADT Tocilizumab	0.079
Pool Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
Pool Mock Vehicle vs. Nsi Mock Tocilizumab	0.9965
Pool Mock Vehicle vs. Nsi ADT Tocilizumab	>0.9999
Pool Mock Vehicle vs. Pool Mock Tocilizumab	0.9997
Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.1661
Pool ADT Vehicle vs. Nsi Mock Tocilizumab	< 0.0001
Pool ADT Vehicle vs. Nsi ADT Tocilizumab	< 0.0001
Pool ADT Vehicle vs. Pool Mock Tocilizumab	< 0.0001
Pool ADT Vehicle vs. Pool ADT Tocilizumab	< 0.0001
Tocilizumab	0.9994
Nsi Mock Tocilizumab vs. Pool Mock Tocilizumab Nei Mock Tocilizumab vs. Pool ADT	0.9348
Tocilizumab	0.5095
Nsi ADT Tocilizumab vs. Pool Mock Tocilizumab	0.9979
Tocilizumab	0.228
Pool Mock Tocilizumab vs. Pool ADT	0.0612
locilizumab	0.0613

Figure 4E	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.9963
		Nsi Mock Vehicle vs. Pool Mock Vehicle	>0.9999
		Nsi Mock Vehicle vs. Pool ADT Vehicle	0.0004
		Nsi Mock Vehicle vs. Nsi Mock Tocilizumab	>0.9999
		Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	>0.9999
		Nsi Mock Vehicle vs. Pool Mock Tocilizumab	0.9998
		Nsi Mock Vehicle vs. Pool ADT Tocilizumab	0.834
		Nsi ADT Vehicle vs. Pool Mock Vehicle	0.9962
		Nsi ADT Vehicle vs. Pool ADT Vehicle	0.003
		Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	0.9843
		Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.9998
		Nsi ADT Vehicle vs. Pool Mock Tocilizumab	>0.9999
		Nsi ADT Vehicle vs. Pool ADT Tocilizumab	0.9953
		Pool Mock Vehicle vs. Pool ADT Vehicle	0.0004
		Pool Mock Vehicle vs. Nsi Mock Tocilizumab	>0.9999
		Pool Mock Vehicle vs. Nsi ADT Tocilizumab	>0.9999
		Pool Mock Vehicle vs. Pool Mock Tocilizumab	0.9998
		Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.8328
		Pool ADT Vehicle vs. Nsi Mock Tocilizumab	0.0002
		Pool ADT Vehicle vs. Nsi ADT Tocilizumab	0.0009

Pool ADT Vehicle vs. Pool Mock Tocilizumab	0.0015
Pool ADT Vehicle vs. Pool ADT Tocilizumab	0.0207
Nsi Mock Tocilizumab vs. Nsi ADT	
Tocilizumab	0.9998
Nsi Mock Tocilizumab vs. Pool Mock	
Tocilizumab	0.998
Nsi Mock Tocilizumab vs. Pool ADT	
Tocilizumab	0.731
Nsi ADT Tocilizumab vs. Pool Mock	
Tocilizumab	>0.9999
Nsi ADT Tocilizumab vs. Pool ADT	
Tocilizumab	0.9358
Pool Mock Tocilizumab vs. Pool ADT	
Tocilizumab	0.9727

Figure 4F	Unpaired t test Two-tailed	CRPC vs HN	0.0002
		IL6	
Figure 4G	Pearson r	vs. PSA	< 0.0001
-			
Figure 4I	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. Pool Mock	0.9905
		Nsi Mock vs. Nsi ADT	0.9824
		Nsi Mock vs. Pool ADT	< 0.0001
		Nsi Mock vs. CL3 ADT	< 0.0001
		CL3 Mock vs. Pool Mock	0.9968
		CL3 Mock vs. Nsi ADT	0.9639
		CL3 Mock vs. Pool ADT	< 0.0001
		CL3 Mock vs. CL3 ADT	< 0.0001
		Pool Mock vs. Nsi ADT	0.7953
		Pool Mock vs. Pool ADT	< 0.0001
		Pool Mock vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		Nsi ADT vs. CL3 ADT	< 0.0001
		Pool ADT vs. CL3 ADT	0.9994
Figure 4J	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	< 0.0001
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.9694
		Nsi Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi Mock Vehicle vs. Nsi Mock Tocilizumab	0.2392
		Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	0.2652
		Nsi Mock Vehicle vs. Pool Mock Tocilizumab	0.6724
		Nsi Mock Vehicle vs. Pool ADT Tocilizumab	0.9985
		Nsi ADT Vehicle vs. Pool Mock Vehicle	< 0.0001
		Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	< 0.0001

		Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.0482
		Nsi ADT Vehicle vs. Pool Mock Tocilizumab	< 0.0001
		Nsi ADT Vehicle vs. Pool ADT Tocilizumab	0.0004
		Pool Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
		Pool Mock Vehicle vs. Nsi Mock Tocilizumab	0.8164
		Pool Mock Vehicle vs. Nsi ADT Tocilizumab	0.0316
		Pool Mock Vehicle vs. Pool Mock Tocilizumab	0.996
		Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.7352
		Pool ADT Vehicle vs. Nsi Mock Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Nsi ADT Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Pool Mock Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Pool ADT Tocilizumab Nsi Mock Tocilizumab vs. Nsi ADT	< 0.0001
		Tocilizumab Nai Mook Tocilizumah ya Bool Mook	0.0006
		Tocilizumab	0.9941
		Nsi Mock Tocilizumab vs. Pool ADT Tocilizumab	0.0701
		Nsi ADT Tocilizumab vs. Pool Mock Tocilizumab Nsi ADT Tocilizumab vs. Pool ADT	0.0051
		Tocilizumab	0.6162
		Pool Mock Tocilizumab vs. Pool ADT Tocilizumab	0.3076
Figure 4L	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. Pool Mock	0.9999
		Nsi Mock vs. Nsi ADT	0.9766
		Nsi Mock vs. CL3 ADT	< 0.0001
		Nsi Mock vs. Pool ADT	< 0.0001
		CL3 Mock vs. Pool Mock	>0.9999
		CL3 Mock vs. Nsi ADT	0.9789
		CL3 Mock vs. CL3 ADT	< 0.0001
		CL3 Mock vs. Pool ADT	< 0.0001
		Pool Mock vs. Nsi ADT	0.9959
		Pool Mock vs. CL3 ADT	< 0.0001
		Pool Mock vs. Pool ADT	< 0.0001
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	0.9929
Figure 4M	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.0694
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.4763
		Nsi Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi Mock Vehicle vs. Nsi Mock Tocilizumab	0.9974
		Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	0.1745
		Nsi Mock Vehicle vs. Pool Mock Tocilizumab	0.9855
		Nsi Mock Vehicle vs. Pool ADT Tocilizumab	0.003

		Nsi ADT Vehicle vs. Pool Mock Vehicle	0.9603
		Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
		Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	0.014
		Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.9998
		Nsi ADT Vehicle vs. Pool Mock Tocilizumab	0.3721
		Nsi ADT Vehicle vs. Pool ADT Tocilizumab	0.914
		Pool Mock Vehicle vs. Pool ADT Vehicle	< 0.0001
		Pool Mock Vehicle vs. Nsi Mock Tocilizumab	0.1602
		Pool Mock Vehicle vs. Nsi ADT Tocilizumab	0.9983
		Pool Mock Vehicle vs. Pool Mock Tocilizumab	0.9401
		Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.3247
		Pool ADT Vehicle vs. Nsi Mock Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Nsi ADT Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Pool Mock Tocilizumab	< 0.0001
		Pool ADT Vehicle vs. Pool ADT Tocilizumab Nsi Mock Tocilizumab vs. Nsi ADT	< 0.0001
		Tocilizumab Nsi Mock Tocilizumab vs. Pool Mock Tocilizumab	0.0417
		Nsi Mock Tocilizumab vs. Pool ADT	0.7702
		Tocilizumab	0.0005
		Tocilizumab	0.6443
		Nsi ADT Tocilizumab vs. Pool ADT Tocilizumab	0 6991
		Pool Mock Tocilizumab vs. Pool ADT	0.0771
		Tocilizumab	0.0303
		FFA nMol/ul	
Figure 4N	Spearman r	IL6 pMol/ml	0.037
Figure 5A			
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.6195
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle	0.6195 0.9666
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle	0.6195 0.9666 <0.0001
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool Mock Vehicle	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999 >0.9999 0.979
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool Mock Vehicle Nsi ADT Vehicle vs. Pool ADT Vehicle	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999 >0.9999 0.979 0.0022
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999 >0.9999 0.979 0.0022 0.2154
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999 >0.9999 0.979 0.0022 0.2154 0.4849
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.6195 0.9666 < 0.0001 0.9913 0.9999 > 0.9999 > 0.9999 0.979 0.0022 0.2154 0.4849 0.6614
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Pool Mock Tocilizumab Nsi ADT Vehicle vs. Pool Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999 >0.9999 0.979 0.0022 0.2154 0.4849 0.6614 0.4106
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Pool Mock Vehicle vs. Pool ADT Vehicle	0.6195 0.9666 < 0.0001 0.9913 0.9999 > 0.9999 > 0.9999 0.979 0.0022 0.2154 0.4849 0.6614 0.4106 0.0001
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Pool Mock Vehicle vs. Pool ADT Vehicle Pool Mock Vehicle vs. Nsi Mock Tocilizumab	0.6195 0.9666 <0.0001 0.9913 0.9999 >0.9999 >0.9999 0.979 0.0022 0.2154 0.4849 0.6614 0.4106 0.0001 0.5914
	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle Nsi Mock Vehicle vs. Pool Mock Vehicle Nsi Mock Vehicle vs. Pool ADT Vehicle Nsi Mock Vehicle vs. Nsi Mock Tocilizumab Nsi Mock Vehicle vs. Nsi ADT Tocilizumab Nsi Mock Vehicle vs. Pool Mock Tocilizumab Nsi Mock Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Pool ADT Vehicle Nsi ADT Vehicle vs. Nsi Mock Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Nsi ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Nsi ADT Vehicle vs. Pool ADT Tocilizumab Pool Mock Vehicle vs. Pool ADT Vehicle Pool Mock Vehicle vs. Nsi Mock Tocilizumab Pool Mock Vehicle vs. Nsi Mock Tocilizumab	0.6195 0.9666 < 0.0001 0.9913 0.9999 > 0.9999 > 0.9999 0.979 0.0022 0.2154 0.4849 0.6614 0.4106 0.0001 0.5914 0.8751

Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.87
Pool ADT Vehicle vs. Nsi Mock Tocilizumab	< 0.0001
Pool ADT Vehicle vs. Nsi ADT Tocilizumab	< 0.0001
Pool ADT Vehicle vs. Pool Mock Tocilizumab	< 0.0001
Pool ADT Vehicle vs. Pool ADT Tocilizumab	< 0.0001
Nsi Mock Tocilizumab vs. Nsi ADT	0.0000
Tocilizumab	>0.9999
NSI MOCK TOCILIZUMAD VS. POOL MOCK	
Tocilizumab	0.9859
Nsi Mock Tocilizumab vs. Pool ADT	
Tocilizumab	0.9981
Nsi ADT Tocilizumab vs. Pool Mock	
Tocilizumab	0.9996
Nsi ADT Tocilizumab vs. Pool ADT	
Tocilizumab	>0.9999
Pool Mock Tocilizumab vs. Pool ADT	
Tocilizumab	>0.9999

Figure 5B	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.0003
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.9821
		Nsi Mock Vehicle vs. Pool ADT Vehicle	>0.9999
		Nsi Mock Vehicle vs. Nsi Mock Simvastatin	0.9957
		Nsi Mock Vehicle vs. Nsi ADT Simvastatin	< 0.0001
		Nsi Mock Vehicle vs. Pool Mock Simvastatin	0.3581
		Nsi Mock Vehicle vs. Pool ADT Simvastatin	0.0016
		Nsi ADT Vehicle vs. Pool Mock Vehicle	< 0.0001
		Nsi ADT Vehicle vs. Pool ADT Vehicle	0.0002
		Nsi ADT Vehicle vs. Nsi Mock Simvastatin	0.0026
		Nsi ADT Vehicle vs. Nsi ADT Simvastatin	0.0077
		Nsi ADT Vehicle vs. Pool Mock Simvastatin	< 0.0001
		Nsi ADT Vehicle vs. Pool ADT Simvastatin	0.9993
		Pool Mock Vehicle vs. Pool ADT Vehicle	0.9982
		Pool Mock Vehicle vs. Nsi Mock Simvastatin	0.7241
		Pool Mock Vehicle vs. Nsi ADT Simvastatin	< 0.0001
		Pool Mock Vehicle vs. Pool Mock Simvastatin	0.8849
		Pool Mock Vehicle vs. Pool ADT Simvastatin	0.0001
		Pool ADT Vehicle vs. Nsi Mock Simvastatin	0.969
		Pool ADT Vehicle vs. Nsi ADT Simvastatin	< 0.0001
		Pool ADT Vehicle vs. Pool Mock Simvastatin	0.5325
		Pool ADT Vehicle vs. Pool ADT Simvastatin Nsi Mock Simvastatin vs. Nsi ADT	0.0007
		Simvastatin	< 0.0001
		Nsi Mock Simvastatin vs. Pool Mock Simvastatin Nsi Mock Simvastatin vs. Pool ADT	0.0939
		Simvastatin Nsi ADT Simvastatin vs. Pool Mock	0.0109
		Simvastatin Nsi ADT Simvastatin vs. Pool ADT	< 0.0001
		Simvastatin	0.0018

		Pool Mock Simvastatin vs. Pool ADT Simvastatin	<0.0001
		Sinivastatin	<0.0001
Figure 5E	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	0.1827
C		Nsi Mock vs. Pool Mock	0.6922
		Nsi Mock vs. Nsi ADT	0.1475
		Nsi Mock vs. CL3 ADT	0.0007
		Nsi Mock vs. Pool ADT	0.0005
		CL3 Mock vs. Pool Mock	0.9197
		CL3 Mock vs. Nsi ADT	0.0005
		CL3 Mock vs. CL3 ADT	0.1816
		CL3 Mock vs. Pool ADT	0.1405
		Pool Mock vs. Nsi ADT	0.006
		Pool Mock vs. CL3 ADT	0.024
		Pool Mock vs. Pool ADT	0.0174
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	>0.9999
Figure 5F	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.9984
		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.9806
		Nsi Mock Vehicle vs. Pool ADT Vehicle	0.0074
		Nsi Mock Vehicle vs. Nsi Mock Tocilizumab	0.9975
		Nsi Mock Vehicle vs. Nsi ADT Tocilizumab	0.8658
		Nsi Mock Vehicle vs. Pool Mock Tocilizumab	>0.9999
		Nsi Mock Vehicle vs. Pool ADT Tocilizumab	0.6028
		Nsi ADT Vehicle vs. Pool Mock Vehicle	0.7935
		Nsi ADT Vehicle vs. Pool ADT Vehicle	0.0023
		Nsi ADT Vehicle vs. Nsi Mock Tocilizumab	>0.9999
		Nsi ADT Vehicle vs. Nsi ADT Tocilizumab	0.9934
		Nsi ADT Vehicle vs. Pool Mock Tocilizumab	0.9931
		Nsi ADT Vehicle vs. Pool ADT Tocilizumab	0.9054
		Pool Mock Vehicle vs. Pool ADT Vehicle	0.043
		Pool Mock Vehicle vs. Nsi Mock Tocilizumab	0.7696
		Pool Mock Vehicle vs. Nsi ADT Tocilizumab	0.3692
		Pool Mock Vehicle vs. Pool Mock Tocilizumab	0.9937
		Pool Mock Vehicle vs. Pool ADT Tocilizumab	0.1758
		Pool ADT Vehicle vs. Nsi Mock Tocilizumab	0.0021
		Pool ADT Vehicle vs. Nsi ADT Tocilizumab	0.0006
		Pool ADT Vehicle vs. Pool Mock Tocilizumab	0.0102
		Pool ADT Vehicle vs. Pool ADT Tocilizumab Nsi Mock Tocilizumab vs. Nsi ADT	0.0002
		Tocilizumab Nsi Mock Tocilizumab vs. Pool Mock	0.9955
		Tocilizumab Nsi Mock Tocilizumab vs. Pool ADT Tocilizumab	0.9903
		TOCHIZHIIIAD	0.9704

Nsi ADT Tocilizumab vs. Pool Mock	
Tocilizumab	0.7904
Nsi ADT Tocilizumab vs. Pool ADT	
Tocilizumab	0.9995
Pool Mock Tocilizumab vs. Pool ADT	
Tocilizumab	0.5076

Figure 6A

0	
Nsi VC vs. Pool VC	>0.9999
Nsi VC vs. Nsi SRB1KO	>0.9999
Nsi VC vs. Pool SRB1 KO	>0.9999
Nsi VC vs. Nsi 10 µM ITX5061	>0.9999
Nsi VC vs. Pool 10 µM ITX5061	>0.9999
Nsi VC vs. Nsi SRB1KO 10 µM ITX5061	>0.9999
Nsi VC vs. Pool SRB1 KO 10 µM ITX5061	>0.9999
Pool VC vs. Nsi SRB1KO	>0.9999
Pool VC vs. Pool SRB1 KO	>0.9999
Pool VC vs. Nsi 10 µM ITX5061	>0.9999
Pool VC vs. Pool 10 µM ITX5061	>0.9999
Pool VC vs. Nsi SRB1KO 10 µM ITX5061	>0.9999
Pool VC vs. Pool SRB1 KO 10 µM ITX5061	>0.9999
Nsi SRB1KO vs. Pool SRB1 KO	>0.9999
Nsi SRB1KO vs. Nsi 10 µM ITX5061	>0.9999
Nsi SRB1KO vs. Pool 10 µM ITX5061	>0.9999
Nsi SRB1KO vs. Nsi SRB1KO 10 μM ITX5061 Nsi SRB1KO vs. Pool SRB1 KO 10 μM	>0.9999
ITX5061	>0.9999
Pool SRB1 KO vs. Nsi 10 μM ITX5061	>0.9999
Pool SRB1 KO vs. Pool 10 μM ITX5061 Pool SRB1 KO vs. Nsi SRB1KO 10 μM	>0.9999
ITX5061	>0.9999
1001 SKB1 KO Vs. P001 SKB1 KO 10 μM ITX5061	>0.9999
Nsi 10 μM ITX5061 vs. Pool 10 μM ITX5061	>0.9999
Nsi 10 μM ITX5061 vs. Nsi SRB1KO 10 μM	> 0.0000
Nsi 10 μM ITX5061 vs. Pool SRB1 KO 10 μM	>0.9999
ITX5061 Bool 10 uM ITX5061 vg. Noi SPR1KO 10 uM	>0.9999
ITX5061	>0.9999
μM ITX5061 Ngi SPB1KO 10 μM ITX5061 vg Dool SPD1	>0.9999
KO 10 μM ITX5061	>0.9999

2

Nsi VC vs. Pool VC	< 0.0001
Nsi VC vs. Nsi SRB1KO	0.9993
Nsi VC vs. Pool SRB1 KO	0.9999
Nsi VC vs. Nsi 10 µM ITX5061	0.99
Nsi VC vs. Pool 10 µM ITX5061	>0.9999

N WC N CDD1KO 10 MITVEOCI	0.00/2
NSI VC VS. NSI SRBIKO 10 µM II X5061	0.9963
Nsi VC vs. Pool SRB1 KO 10 µM ITX5061	0.9988
Pool VC vs. Nsi SRB1KO	< 0.0001
Pool VC vs. Pool SRB1 KO	< 0.0001
Pool VC vs. Nsi 10 µM ITX5061	< 0.0001
Pool VC vs. Pool 10 µM ITX5061	< 0.0001
Pool VC vs. Nsi SRB1KO 10 µM ITX5061	< 0.0001
Pool VC vs. Pool SRB1 KO 10 µM ITX5061	< 0.0001
Nsi SRB1KO vs. Pool SRB1 KO	>0.9999
Nsi SRB1KO vs. Nsi 10 µM ITX5061	0.8608
Nsi SRB1KO vs. Pool 10 μM ITX5061 Nsi SRB1KO vs. Nsi SRB1KO 10 μM	0.9841
ITX5061 Nsi SRB1KO vs. Pool SRB1 KO 10 µM	0.9107
ITX5061	0.9448
Pool SRB1 KO vs. Nsi 10 μM ITX5061	0.9067
Pool SRB1 KO vs. Pool 10 µM ITX5061	0.9929
Pool SRB1 KO vs. Nsi SRB1KO 10 μM ITX5061	0.9448
Pool SRB1 KO vs. Pool SRB1 KO 10 μM ITX5061	0.9687
Nsi 10 μM ITX5061 vs. Pool 10 μM ITX5061 Nsi 10 μM ITX5061 vs. Nsi SRB1KO 10 μM	0.9997
ITX5061	>0.9999
Nsi 10 μM ITX5061 vs. Pool SRB1 KO 10 μM ITX5061	>0.9999
Pool 10 μM ITX5061 vs. Nsi SRB1KO 10 μM	
11X5061 Pool 10 µM ITX5061 vs. Pool SRB1 KO 10	>0.9999
μM ITX5061	>0.9999
Nsi SRB1KO 10 μM ITX5061 vs. Pool SRB1 KO 10 μM ITX5061	>0.9999
4	
Nsi VC vs. Pool VC	< 0.0001
Nsi VC vs. Nsi SRB1KO	0.8556
Nsi VC vs. Pool SRB1 KO	>0.9999
Nsi VC vs. Nsi 10 µM ITX5061	0.0248
Nsi VC vs. Pool 10 uM ITX5061	0.9841
Nsi VC vs. Nsi SRB1KO 10 uM ITX5061	0.0416
Nsi VC vs. Pool SRB1 KO 10 uM ITX5061	0.2467
Pool VC vs. Nsi SRB1KO	< 0.0001
Pool VC vs. Pool SRB1 KO	< 0.0001

Pool VC vs. Nsi 10 µM ITX5061

Pool VC vs. Pool 10 µM ITX5061

Nsi SRB1KO vs. Pool SRB1 KO

Nsi SRB1KO vs. Nsi 10 µM ITX5061

Nsi SRB1KO vs. Pool 10 µM ITX5061

Pool VC vs. Nsi SRB1KO 10 µM ITX5061

Pool VC vs. Pool SRB1 KO 10 µM ITX5061

 $<\!0.0001$

 $<\!0.0001$

 $<\!\!0.0001$

< 0.0001

0.8556

0.4644 0.9997

Nsi SRB1KO vs. Nsi SRB1KO 10 μM	
ITX5061	0.5925
Nsi SRB1KO vs. Pool SRB1 KO 10 µM	0.0447
11X5061	0.9647
Pool SRB1 KO vs. Nsi 10 µM ITX5061	0.0248
Pool SRB1 KO vs. Pool 10 μM ITX5061 Pool SRB1 KO vs. Nsi SRB1KO 10 μM	0.9841
ITX5061	0.0416
Pool SRB1 KO vs. Pool SRB1 KO 10 µM	0.2467
	0.2407
Nsi 10 µM ITX5061 vs. Pool 10 µM ITX5061	0.2071
ITX5061	>0.9999
Nsi 10 µM ITX5061 vs. Pool SRB1 KO 10 µM	
ITX5061	0.9724
Pool 10 μM ITX5061 vs. Nsi SRB1KO 10 μM	0.2070
Pool 10 µM ITX5061 vs. Pool SRB1 KO 10	0.2969
μM ITX5061	0.7858
Nsi SRB1KO 10 μM ITX5061 vs. Pool SRB1	
KO 10 μM ITX5061	0.9922
FM	
Nsi CTRL vs. Pool SPRY2 KD CTRL	0.9043
Nsi CTRL vs. Nsi SRB1 KO	0.9806
Nsi CTRL vs. Pool SPRY2 KD SRB1 KO	0.7746
Pool SPRY2 KD CTRL vs. Nsi SRB1 KO	0.9906
Pool SPRY2 KD CTRL vs. Pool SPRY2 KD	
SRB1 KO	0.3883

SRB1 KO	0.3883
Nsi SRB1 KO vs. Pool SPRY2 KD SRB1 KO	0.5533

FM ITX5061

Nsi CTRL vs. Pool SPRY2 KD CTRL	0.9917
Nsi CTRL vs. Nsi SRB1 KO	0.6755
Nsi CTRL vs. Pool SPRY2 KD SRB1 KO	0.9865
Pool SPRY2 KD CTRL vs. Nsi SRB1 KO Pool SPRY2 KD CTRL vs. Pool SPRY2 KD	0.5079
SRB1 KO	>0.9999
Nsi SRB1 KO vs. Pool SPRY2 KD SRB1 KO	0.4783

ADT

Nsi CTRL vs. Pool SPRY2 KD CTRL	0.0065
Nsi CTRL vs. Nsi SRB1 KO	< 0.0001
Nsi CTRL vs. Pool SPRY2 KD SRB1 KO	< 0.0001
Pool SPRY2 KD CTRL vs. Nsi SRB1 KO Pool SPRY2 KD CTRL vs. Pool SPRY2 KD	< 0.0001
SRB1 KO	< 0.0001
Nsi SRB1 KO vs. Pool SPRY2 KD SRB1 KO	0.8823

ADT ITX5061

Nsi CTRL vs. Pool SPRY2 KD CTRL	0.9317
Nsi CTRL vs. Nsi SRB1 KO	0.9834

Figure 6B ANOVA Tukey's Test

		Nsi CTRL vs. Pool SPRY2 KD SRB1 KO	0.9761
		Pool SPRY2 KD CTRL vs. Nsi SRB1 KO Pool SPRY2 KD CTRL vs. Pool SPRY2 KD	0.9952
		SRB1 KO	0.9976
		Nsi SRB1 KO vs. Pool SPRY2 KD SRB1 KO	>0.9999
Figure 6C	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.0039
		Nsi Mock Vehicle vs. Pool Mock Vehicle	>0.9999
		Nsi Mock Vehicle vs. Pool ADT Vehicle	>0.9999
		Nsi Mock Vehicle vs. Nsi Mock ITX5061	0.5485
		Nsi Mock Vehicle vs. Nsi ADT ITX5061	0.0009
		Nsi Mock Vehicle vs. Pool Mock ITX5061	0.9978
		Nsi Mock Vehicle vs. Pool ADT ITX5061	0.016
		Nsi ADT Vehicle vs. Pool Mock Vehicle	0.0036
		Nsi ADT Vehicle vs. Pool ADT Vehicle	0.0014
		Nsi ADT Vehicle vs. Nsi Mock ITX5061	0.3146
		Nsi ADT Vehicle vs. Nsi ADT ITX5061	0.9993
		Nsi ADT Vehicle vs. Pool Mock ITX5061	0.0007
		Nsi ADT Vehicle vs. Pool ADT ITX5061	0.9994
		Pool Mock Vehicle vs. Pool ADT Vehicle	>0.9999
		Pool Mock Vehicle vs. Nsi Mock ITX5061	0.5246
		Pool Mock Vehicle vs. Nsi ADT ITX5061	0.0008
		Pool Mock Vehicle vs. Pool Mock ITX5061	0.9985
		Pool Mock Vehicle vs. Pool ADT ITX5061	0.0146
		Pool ADT Vehicle vs. Nsi Mock ITX5061	0.3232
		Pool ADT Vehicle vs. Nsi ADT ITX5061	0.0003
		Pool ADT Vehicle vs. Pool Mock ITX5061	>0.9999
		Pool ADT Vehicle vs. Pool ADT ITX5061	0.0059
		Nsi Mock ITX5061 vs. Nsi ADT ITX5061	0.1163
		Nsi Mock ITX5061 vs. Pool Mock ITX5061	0.2046
		Nsi Mock ITX5061 vs. Pool ADT ITX5061	0.6331
		Nsi ADT ITX5061 vs. Pool Mock ITX5061	0.0001
		Nsi ADT ITX5061 vs. Pool ADT ITX5061	0.9586
		Pool Mock ITX5061 vs. Pool ADT ITX5061	0.0029
Figure 6D	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.0802
-		Nsi Mock Vehicle vs. Pool Mock Vehicle	0.0446
		Nsi Mock Vehicle vs. Pool ADT Vehicle	0.0327
		Nsi Mock Vehicle vs. Nsi Mock Simvastatin	0.9389
		Nsi Mock Vehicle vs. Nsi ADT Simvastatin	0.095
		Nsi Mock Vehicle vs. Pool Mock Simvastatin	0.6123
		Nsi Mock Vehicle vs. Pool ADT Simvastatin	0.0867
		Nsi Mock Vehicle vs. Nsi Mock ITX5061	>0.9999
		Nsi Mock Vehicle vs. Nsi ADT ITX5061	0.0798

Nsi Mock Vehicle vs. Pool Mock ITX5061	>0.9999
Nsi Mock Vehicle vs. Pool ADT ITX5061	0.0901
Nsi ADT Vehicle vs. Pool Mock Vehicle	< 0.0001
Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
Nsi ADT Vehicle vs. Nsi Mock Simvastatin	0.7336
Nsi ADT Vehicle vs. Nsi ADT Simvastatin	>0.9999
Nsi ADT Vehicle vs. Pool Mock Simvastatin	0.9772
Nsi ADT Vehicle vs. Pool ADT Simvastatin	>0.9999
Nsi ADT Vehicle vs. Nsi Mock ITX5061	0.248
Nsi ADT Vehicle vs. Nsi ADT ITX5061	>0.9999
Nsi ADT Vehicle vs. Pool Mock ITX5061	0.2212
Nsi ADT Vehicle vs. Pool ADT ITX5061	>0.9999
Pool Mock Vehicle vs. Pool ADT Vehicle	>0.9999
Pool Mock Vehicle vs. Nsi Mock Simvastatin	0.0015
Pool Mock Vehicle vs. Nsi ADT Simvastatin	< 0.0001
Pool Mock Vehicle vs. Pool Mock Simvastatin	0.0003
Pool Mock Vehicle vs. Pool ADT Simvastatin	< 0.0001
Pool Mock Vehicle vs. Nsi Mock ITX5061	0.0115
Pool Mock Vehicle vs. Nsi ADT ITX5061	< 0.0001
Pool Mock Vehicle vs. Pool Mock ITX5061	0.0134
Pool Mock Vehicle vs. Pool ADT ITX5061	< 0.0001
Pool ADT Vehicle vs. Nsi Mock Simvastatin	0.0011
Pool ADT Vehicle vs. Nsi ADT Simvastatin	< 0.0001
Pool ADT Vehicle vs. Pool Mock Simvastatin	0.0002
Pool ADT Vehicle vs. Pool ADT Simvastatin	< 0.0001
Pool ADT Vehicle vs. Nsi Mock ITX5061	0.0082
Pool ADT Vehicle vs. Nsi ADT ITX5061	< 0.0001
Pool ADT Vehicle vs. Pool Mock ITX5061	0.0097
Pool ADT Vehicle vs. Pool ADT ITX5061	< 0.0001
Nsi Mock Simvastatin vs. Nsi ADT Simvastatin	0 7804
Nsi Mock Simvastatin vs. Pool Mock	
Simvastatin Nsi Mock Simvastatin vs. Pool ADT	>0.9999
Simvastatin	0.7555
Nsi Mock Simvastatin vs. Nsi Mock ITX5061	0.999
Nsi Mock Simvastatin vs. Nsi ADT ITX5061	0.7322
Nsi Mock Simvastatin vs. Pool Mock ITX5061	0.9981
Nsi Mock Simvastatin vs. Pool ADT ITX5061	0.766
Nsi ADT Simvastatin vs. Pool Mock Simvastatin	0.9863
Nsi ADT Simvastatin vs. Pool ADT	0.0000
Simvastatin	>0.9999
NSI AD I SIMVASTATIN VS. NSI MOCK ITX5061	0.2843
NSI ADT Simuratati D. IN. J. JTV2021	>0.9999
NSI AD I SIMVASIAIN VS. POOL MOCK ITX5061	0.2548
NSI ADT SIMVastatin vs. Pool ADT ITX5061	>0.9999

		Pool Mock Simvastatin vs. Pool ADT Simvastatin	0.9818
		Pool Mock Simvastatin vs. Nsi Mock ITX5061	0.9189
		Pool Mock Simvastatin vs. Nsi ADT ITX5061 Pool Mock Simvastatin vs. Pool Mock	0.9769
		ITX5061	0.8959
		Pool Mock Simvastatin vs. Pool ADT ITX5061	0.9838
		Pool ADT Simvastatin vs. Nsi Mock ITX5061	0.2642
		Pool ADT Simvastatin vs. Nsi ADT ITX5061	>0.9999
		Pool ADT Simvastatin vs. Pool Mock ITX5061	0.2362
		Pool ADT Simvastatin vs. Pool ADT ITX5061	>0.9999
		Nsi Mock ITX5061 vs. Nsi ADT ITX5061	0.247
		Nsi Mock ITX5061 vs. Pool Mock ITX5061	>0.9999
		Nsi Mock ITX5061 vs. Pool ADT ITX5061	0.2725
		Nsi ADT ITX5061 vs. Pool Mock ITX5061	0.2203
		Nsi ADT ITX5061 vs. Pool ADT ITX5061	>0.9999
		Pool Mock ITX5061 vs. Pool ADT ITX5061	0.2438
		Nsi ADT Vehicle vs Nsi Mock Vehicle	
Figure 6E	Unpaired t test Two-tailed	(Testosterone) Nsi ADT Simvastatin vs Nsi Mock Simvastatin	0.0075
		(Testosterone) Nsi ADT ITX5061 vs Nsi Mock ITX5061 (Testosterone)	<0.0001
		(resusterone)	0.0322
Figure 6E	ANOVA Tukey's Test	Nsi Mock Vehicle vs. Nsi ADT Vehicle	0.931
		Nsi Mock Vehicle vs. Pool Mock Vehicle	>0.9999
		Nsi Mock Vehicle vs. Pool ADT Vehicle	0.0303
		Nsi Mock Vehicle vs. Nsi Mock Simvastatin	>0.9999
		Nsi Mock Vehicle vs. Nsi ADT Simvastatin	0.9389
		Nsi Mock Vehicle vs. Pool Mock Simvastatin	>0.9999
		Nsi Mock Vehicle vs. Pool ADT Simvastatin	0.9371
		Nsi Mock Vehicle vs. Nsi Mock ITX5061	>0.9999
		Nsi Mock Vehicle vs. Nsi ADT ITX5061	0.9272
		Nsi Mock Vehicle vs. Pool Mock ITX5061	0.9481
		Nsi Mock Vehicle vs. Pool ADT ITX5061	0.9404
		Nsi ADT Vehicle vs. Pool Mock Vehicle	0.9012
		Nsi ADT Vehicle vs. Pool ADT Vehicle	0.0009
		Nsi ADT Vehicle vs. Nsi Mock Simvastatin	0.9974
		Nsi ADT Vehicle vs. Nsi ADT Simvastatin	>0.9999
		Nsi ADT Vehicle vs. Pool Mock Simvastatin	0.9905
		Nsi ADT Vehicle vs. Pool ADT Simvastatin	>0.9999
		Nsi ADT Vehicle vs. Nsi Mock ITX5061	0.9872
		Nsi ADT Vehicle vs. Nsi ADT ITX5061	>0.9999
		Nsi ADT Vehicle vs. Pool Mock ITX5061	0.2011
		Nsi ADT Vehicle vs. Pool ADT ITX5061	>0.9999

Pool Mock Vehicle vs. Pool ADT Vehicle	0.0372
Pool Mock Vehicle vs. Nsi Mock Simvastatin	>0.9999
Pool Mock Vehicle vs. Nsi ADT Simvastatin	0.9113
Pool Mock Vehicle vs. Pool Mock Simvastatin	>0.9999
Pool Mock Vehicle vs. Pool ADT Simvastatin	0.9089
Pool Mock Vehicle vs. Nsi Mock ITX5061	>0.9999
Pool Mock Vehicle vs. Nsi ADT ITX5061	0.8966
Pool Mock Vehicle vs. Pool Mock ITX5061	0.9669
Pool Mock Vehicle vs. Pool ADT ITX5061	0.9131
Pool ADT Vehicle vs. Nsi Mock Simvastatin	0.009
Pool ADT Vehicle vs. Nsi ADT Simvastatin	0.001
Pool ADT Vehicle vs. Pool Mock Simvastatin	0.0132
Pool ADT Vehicle vs. Pool ADT Simvastatin	0.001
Pool ADT Vehicle vs. Nsi Mock ITX5061	0.0146
Pool ADT Vehicle vs. Nsi ADT ITX5061	0.0009
Pool ADT Vehicle vs. Pool Mock ITX5061	0.4328
Pool ADT Vehicle vs. Pool ADT ITX5061 Nsi Mock Simvastatin vs. Nsi ADT	0.001
Simvastatin	0.998
Nsi Mock Simvastatin vs. Pool Mock Simvastatin	>0.9999
Nsi Mock Simvastatin vs. Pool ADT Simvastatin	0.9979
Nsi Mock Simvastatin vs. Nsi Mock ITX5061	>0.9999
Nsi Mock Simvastatin vs. Nsi ADT ITX5061	0.9971
Nsi Mock Simvastatin vs. Pool Mock ITX5061	0.7212
Nsi Mock Simvastatin vs. Pool ADT ITX5061 Nsi ADT Simvastatin vs. Pool Mock	0.9981
Simvastatin	0.9923
Nsi ADT Simvastatin vs. Pool ADT Simvastatin	>0.9999
Nsi ADT Simvastatin vs. Nsi Mock ITX5061	0.9894
Nsi ADT Simvastatin vs. Nsi ADT ITX5061	>0.9999
Nsi ADT Simvastatin vs. Pool Mock ITX5061	0.2117
Nsi ADT Simvastatin vs. Pool ADT ITX5061 Pool Mock Simvastatin vs. Pool ADT	>0.9999
Simvastatin	0.9919
Pool Mock Simvastatin vs. Nsi Mock ITX5061	>0.9999
Pool Mock Simvastatin vs. Nsi ADT ITX5061 Pool Mock Simvastatin vs. Pool Mock	0.9896
	0.8113
Pool Mock Simvastatin vs. Pool ADT 11X5061	0.9926
Pool ADT Simvastatin vs. Nsi Mock ITX5061	0.9889
Pool ADT Simvastatin vs. Nsi ADT 11X5061	>0.9999
Pool ADT Simulated vs. Pool Mock 11X5061	0.2091
Pool AD I Simvastatin vs. Pool AD I TIX5061	>0.9999
NSI MOCK ITX5061 VS. NSI ADT ITX5061	0.9861
NSI MOCK 11X5061 VS. Pool Mock 11X5061	0.833
Nsi Mock ITX5061 vs. Pool ADT ITX5061	0.9898

		Nsi ADT ITX5061 vs. Pool Mock ITX5061	0.1966
		Nsi ADT ITX5061 vs. Pool ADT ITX5061	>0.9999
		Pool Mock ITX5061 vs. Pool ADT ITX5061	0.2137
Figure 6F	ANOVA Tukey's Test	Mock vs. ADT Vehicle	< 0.0001
		Mock vs. ADT ITX5061	< 0.0001
		ADT Vehicle vs. ADT ITX5061	< 0.0001
Figure EV1G	ANOVA Sidak's test	Mock Vs ADT :-	
		Nuclear Ki67	0.815
		Membrane p-AKT	0.6301
		p-ERK1/2	0.2867
		Nuclear AR	0.0008
Figure EV1H	ANOVA Sidak's test	Mock vs ADT:-	
		WT	0.0014
		Ptenfl/+	< 0.0001
		Spry2fl/+	0.025
Figure EV1J	ANOVA Tukey's Test	Membrane p-AKT	
		WT Mock vs. WT ADT	0.9972
		Ptenfl/+ Mock vs. Ptenfl/+ ADT	0.0011
		Spry2fl/+ Mock vs. Spry2fl/+ ADT	0.0537
		p-ERK1/2	
		WT Mock vs. WT ADT	0.0274
		Ptenfl/+ Mock vs. Ptenfl/+ ADT	0.0404
		Spry2fl/+ Mock vs. Spry2fl/+ ADT	0.1318
		Nuclear AR	
		WT Mock vs. WT ADT	< 0.0001
		Ptenfl/+ Mock vs. Ptenfl/+ ADT	< 0.0001
		Spry2fl/+ Mock vs. Spry2fl/+ ADT	< 0.0001
Figure EV2B	ANOVA Sidak's test	AR	
		LNCaP vs. LNCaP AI	>0.9999
		LNCaP vs. CWR22Res	0.8356
		LNCaP vs. CWR22RV1	0.9581
		LNCaP vs. VCaP	< 0.0001
		AR V7	
		LNCaP vs. LNCaP AI	>0.9999
		LNCaP vs. CWR22Res	< 0.0001
		LNCaP vs. CWR22RV1	< 0.0001
		LNCaP vs. VCaP	< 0.0001

Figure EV2C	ANOVA Sidak's test	CWR22Res FBS - CWR22Res CSS	
		0	>0.9999
		2	< 0.0001
		4	< 0.0001
		CWR22RV1 FBS - CWR22RV1 CSS	
		0	>0.9999
		2	0.8839
		4	0.759
Figure EV2D	ANOVA Dunnett's test	CWR Nsi vs. CWR CL3	0.0001
		CWR Nsi vs. CWR Pool	0.0001
		CWR22Res Mock - CWR22Res ADT	
Figure EV2E	ANOVA Sidak's test	0	>0.9999
		30	0.9948
		60	< 0.0001
Figure EV2F	Log-rank (Mantel-Cox) test	Comparison between ADT treated mice	0.0004
	Log-rank (Mantel-Cox) test	Comparison between Mock Vs ADT(Nsi)	0.0007
	Log-rank (Mantel-Cox) test	Comparison between Mock Vs ADT(Cl3)	0.0044
	Log-rank (Mantel-Cox) test	Comparison between Mock Vs ADT(Pool)	0.0064
Figure EV2I	ANOVA Tukey's Test	Nsi Mock vs. CL3 Mock	0.8564
		Nsi Mock vs. Pool Mock	0.9935
		Nsi Mock vs. Nsi ADT	0.0893
		Nsi Mock vs. CL3 ADT	0.0005
		Nsi Mock vs. Pool ADT	< 0.0001
		CL3 Mock vs. Pool Mock	0.9899
		CL3 Mock vs. Nsi ADT	0.0068
		CL3 Mock vs. CL3 ADT	0.0077
		CL3 Mock vs. Pool ADT	0.0005
		Pool Mock vs. Nsi ADT	0.0276
		Pool Mock vs. CL3 ADT	0.0018
		Pool Mock vs. Pool ADT	0.0001
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 ADT vs. Pool ADT	0.8682
Figure EV2O	ANOVA Tukey's Test	Nsi siCTRL vs. Pool siCTRL	0.0013
		Nsi siCTRL vs. Nsi siPTEN	0.0475
		Nsi siCTRL vs. Pool siPTEN	0.0004
		Pool siCTRL vs. Nsi siPTEN	0.0821
		Pool siCTRL vs. Pool siPTEN	0.6384

0.0154

Figure EV3B	ANOVA Sidak's test	Nuclear AR	
		Nsi Mock vs. Nsi ADT	< 0.0001
		Nsi Mock vs. CL3 Mock	>0.9999
		Nsi Mock vs. CL3 ADT	0.0591
		Nsi Mock vs. Pool Mock	0.9994
		Nsi Mock vs. Pool ADT	0.174
		Nsi ADT vs. CL3 Mock	< 0.0001
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool Mock	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 Mock vs. CL3 ADT	0.0139
		CL3 Mock vs. Pool Mock	>0.9999
		CL3 Mock vs. Pool ADT	0.0453
		CL3 ADT vs. Pool Mock	0.0069
		CL3 ADT vs. Pool ADT	>0.9999
		Pool Mock vs. Pool ADT	0.0229
		Cleaved Caspase 3	
		Nsi Mock vs. Nsi ADT	0.0298
		Nsi Mock vs. CL3 Mock	0.4154
		Nsi Mock vs. CL3 ADT	0.0754
		Nsi Mock vs. Pool Mock	0.3632
		Nsi Mock vs. Pool ADT	0.2433
		Nsi ADT vs. CL3 Mock	0.0001
		Nsi ADT vs. CL3 ADT	< 0.0001
		Nsi ADT vs. Pool Mock	< 0.0001
		Nsi ADT vs. Pool ADT	< 0.0001
		CL3 Mock vs. CL3 ADT	0.9996
		CL3 Mock vs. Pool Mock	>0.9999
		CL3 Mock vs. Pool ADT	>0.9999
		CL3 ADT vs. Pool Mock	0.9999
		CL3 ADT vs. Pool ADT	>0.9999
		Pool Mock vs. Pool ADT	>0.9999
Figure EV3C	Unpaired t test Two-tailed	CL3 vs Nsi (HSD3B1)	0.0001
		Pool vs Nsi (HSD3B1)	0.0306
		Pool vs Nsi (CYP17A1)	0.0078
Figure EV3I	ANOVA Tukey's Test	0 FBS	
		CTRL VC vs. CTRL 10µM Abiraterone	>0.9999
		CTRL VC vs. CTRL 20 µM Abiraterone CTRL VC vs. SPRY2 VC	>0.9999 >0.9999

CTRL VC vs. SPRY2 10 µM Abiraterone	>0.9999
CTRL VC vs. SPRY2 20 µM Abiraterone	>0.9999
CTRL 10 µM Abiraterone vs. CTRL 20 µM Abiraterone	>0.9999
CTRL 10 µM Abiraterone vs. SPRY2 VC	>0.9999
CTRL 10 μM Abiraterone vs. SPRY2 μM Abiraterone	>0.9999
Abiraterone	>0.9999
CTRL 20 µM Abiraterone vs. SPRY2 VC	>0.9999
CTRL 20 µM Abiraterone vs. SPRY2 10 µM Abiraterone CTRL 20 µM Abiraterone vs. SPRY2 20 µM	>0.9999
Abiraterone	>0.9999
SPRY2 VC vs. SPRY2 10 µM Abiraterone	>0.9999
SPRY2 VC vs. SPRY2 20 μM Abiraterone	>0.9999
Abiraterone vs. SPR Y2 20 µM	>0.9999

2 FBS

CTRL VC vs. CTRL 10µM Abiraterone	< 0.0001
CTRL VC vs. CTRL 20 µM Abiraterone	< 0.0001
CTRL VC vs. SPRY2 VC	0.0004
CTRL VC vs. SPRY2 10 µM Abiraterone	< 0.0001
CTRL VC vs. SPRY2 20 µM Abiraterone	< 0.0001
CTRL 10 µM Abiraterone vs. CTRL 20 µM Abiraterone	0.4881
CTRL 10 µM Abiraterone vs. SPRY2 VC	0.0001
CTRL 10 μM Abiraterone vs. SPRY2 μM Abiraterone CTRL 10 μM Abiraterone vs. SPRY2 20 μM	0.9858
Abiraterone	0.4973
CTRL 20 µM Abiraterone vs. SPRY2 VC CTRL 20 µM Abiraterone vs. SPRY2 10 µM	< 0.0001
Abiraterone CTRL 20 µM Abiraterone vs. SPRY2 20 µM	0.8656
Abiraterone	>0.9999
SPRY2 VC vs. SPRY2 10 µM Abiraterone	< 0.0001
SPRY2 VC vs. SPRY2 20 μM Abiraterone SPRY2 10 μM Abiraterone vs. SPRY2 20 μM	< 0.0001
Abiraterone	0.8719

4 FBS

CIKE VC VS. CIKE TOµINI ADITALETOILE (0.0	100
CTRL VC vs. CTRL 20 µM Abiraterone <0.0	001
CTRL VC vs. SPRY2 VC <0.0	001
CTRL VC vs. SPRY2 10 µM Abiraterone <0.0	001
CTRL VC vs. SPRY2 20 µM Abiraterone <0.0	001
CTRL 10 µM Abiraterone vs. CTRL 20 µM Abiraterone 0.00	003
CTRL 10 µM Abiraterone vs. SPRY2 VC <0.0	001
CTRL 10 μM Abiraterone vs. SPRY2 μM Abiraterone 0.74 CTRL 10 μM Abiraterone vs. SPRY2 20 μM	453
Abiraterone 0.0	409
CTRL 20 µM Abiraterone vs. SPRY2 VC <0.0	001

CTRL 20 µM Abiraterone vs. SPRY2 10 µM Abiraterone	< 0.0001
CTRL 20 μM Abiraterone vs. SPRY2 20 μM Abiraterone	0.4699
SPRY2 VC vs. SPRY2 10 µM Abiraterone	< 0.0001
SPRY2 VC vs. SPRY2 20 μM Abiraterone SPRY2 10 μM Abiraterone vs. SPRY2 20 μM	< 0.0001
Abiraterone	0.001

0 CSS

CTRL VC vs. CTRL 10µM Abiraterone	>0.9999
CTRL VC vs. CTRL 20 µM Abiraterone	>0.9999
CTRL VC vs. SPRY2 VC	>0.9999
CTRL VC vs. SPRY2 10 µM Abiraterone	>0.9999
CTRL VC vs. SPRY2 20 µM Abiraterone	>0.9999
CTRL 10 µM Abiraterone vs. CTRL 20 µM Abiraterone	>0.9999
CTRL 10 µM Abiraterone vs. SPRY2 VC	>0.9999
CTRL 10 μM Abiraterone vs. SPRY2 μM Abiraterone CTRL 10 μM Abiraterone vs. SPRY2 20 μM	>0.9999
Abiraterone	>0.9999
CTRL 20 µM Abiraterone vs. SPRY2 VC	>0.9999
CTRL 20 µM Abiraterone vs. SPRY2 10 µM Abiraterone CTRL 20 µM Abiraterone vs. SPRY2 20 µM	>0.9999
Abiraterone	>0.9999
SPRY2 VC vs. SPRY2 10 µM Abiraterone	>0.9999
SPRY2 VC vs. SPRY2 20 μM Abiraterone SPRY2 10 μM Abiraterone vs. SPRY2 20 μM	>0.9999
Abiraterone	>0.9999

2 CSS

CTRL VC vs. CTRL 10µM Abiraterone	< 0.0001
CTRL VC vs. CTRL 20 µM Abiraterone	0.2233
CTRL VC vs. SPRY2 VC	0.282
CTRL VC vs. SPRY2 10 µM Abiraterone	0.2878
CTRL VC vs. SPRY2 20 µM Abiraterone	0.9389
CTRL 10 µM Abiraterone vs. CTRL 20 µM Abiraterone	< 0.0001
CTRL 10 µM Abiraterone vs. SPRY2 VC	0.0037
CTRL 10 μM Abiraterone vs. SPRY2 μM Abiraterone CTRL 10 μM Abiraterone vs. SPRY2 20 μM	< 0.0001
Abiraterone	< 0.0001
CTRL 20 µM Abiraterone vs. SPRY2 VC CTRL 20 µM Abiraterone vs. SPRY2 10 µM	0.001
Abiraterone VS. SPRV2 20 uM	>0.9999
Abiraterone	0.0306
SPRY2 VC vs. SPRY2 10 µM Abiraterone	0.0016
SPRY2 VC vs. SPRY2 20 μM Abiraterone SPRY2 10 μM Abiraterone vs. SPRY2 20 μM	0.8151
Abiraterone	0.0437

4 CSS

CTRL VC vs. CTRL 10µM Abiraterone	< 0.0001
CTRL VC vs. CTRL 20 µM Abiraterone	< 0.0001
CTRL VC vs. SPRY2 VC	0.6308
CTRL VC vs. SPRY2 10 µM Abiraterone	< 0.0001
CTRL VC vs. SPRY2 20 µM Abiraterone	0.1299
CTRL 10 µM Abiraterone vs. CTRL 20 µM Abiraterone	< 0.0001
CTRL 10 µM Abiraterone vs. SPRY2 VC	< 0.0001
CTRL 10 μM Abiraterone vs. SPRY2 μM Abiraterone CTRL 10 μM Abiraterone vs. SPRY2 20 μM	< 0.0001
Abiraterone	< 0.0001
CTRL 20 µM Abiraterone vs. SPRY2 VC	< 0.0001
CTRL 20 µM Abiraterone vs. SPRY2 10 µM Abiraterone CTRL 20 µM Abiraterone vs. SPRY2 20 µM	0.8151
Abiraterone	< 0.0001
SPRY2 VC vs. SPRY2 10 µM Abiraterone	< 0.0001
SPRY2 VC vs. SPRY2 20 μM Abiraterone SPRY2 10 μM Abiraterone vg. SPRY2 20 μM	0.0026
Abiraterone	< 0.0001

Figure EV3J ANOVA Tukey's Test

FBS 0

Nsi VC vs. Pool SPRY2 KD VC	>0.9999
Nsi VC vs. Nsi 10 µM Abiraterone	>0.9999
Nsi VC vs. Pool SPRY2 KD 10 µM Abiraterone	>0.9999
Nsi VC vs. Nsi 20 µM Abiraterone	>0.9999
Nsi VC vs. Pool SPRY2 KD 20 µM Abiraterone	>0.9999
Pool SPRY2 KD VC vs. Nsi 10 µM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 10 µM	>0.9999
Abiraterone	>0.9999
Pool SPRY2 KD VC vs. Nsi 20 µM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 20 µM	>0.9999
Abiraterone	>0.9999
Nsi 10 μM Abiraterone vs. Pool SPR Y2 KD 10 μM Abiraterone	>0.9999
Nsi 10 µM Abiraterone vs. Nsi 20 µM Abiraterone	>0.9999
Abiraterone	>0.9999
Pool SPRY2 KD 10 µM Abiraterone vs. Nsi 20 µM	. 0.0000
Abiraterone Pool SPRY2 KD 10 uM Abiraterone vs. Pool SPRY2	>0.99999
KD 20 µM Abiraterone	>0.9999
Nsi 20 µM Abiraterone vs. Pool SPRY2 KD 20 µM	>0.000
	>0.9999
Nsi VC vs. Pool SPRY2 KD VC	0.7776
Nsi VC vs. Nsi 10 µM Abiraterone	< 0.0001
Nsi VC vs. Pool SPRY2 KD 10 µM Abiraterone	< 0.0001
Nsi VC vs. Nsi 20 µM Abiraterone	< 0.0001
Nsi VC vs. Pool SPRY2 KD 20 µM Abiraterone	< 0.0001
Pool SPRY2 KD VC vs. Nsi 10 µM Abiraterone	< 0.0001

Pool SPRY2 KD VC vs. Pool SPRY2 KD 10 µM	
Abiraterone	< 0.0001
Pool SPRY2 KD VC vs. Nsi 20 μM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 20 μM	< 0.0001
Abiraterone Nsi 10 μM Abiraterone vs. Pool SPRY2 KD 10 μM	< 0.0001
Abiraterone	< 0.0001
Nsi 10 μM Abiraterone vs. Nsi 20 μM Abiraterone Nsi 10 μM Abiraterone vs. Pool SPRY2 KD 20 μM	< 0.0001
Abiraterone Pool SPRY2 KD 10 µM Abiraterone vs. Nsi 20 µM	< 0.0001
Abiraterone Pool SPRY2 KD 10 uM Abiraterone vs. Pool SPRY2	0.9983
KD 20 μM Abiraterone Nsi 20 μM Abiraterone vs. Pool SPRY2 KD 20 μM	0.9966
Abiraterone	>0.9999
FBS 4	
Nsi VC vs. Pool SPRY2 KD VC	0.0112
Nsi VC vs. Nsi 10 µM Abiraterone	< 0.0001
Nsi VC vs. Pool SPRY2 KD 10 µM Abiraterone	< 0.0001
Nsi VC vs. Nsi 20 µM Abiraterone	< 0.0001
Nsi VC vs. Pool SPRY2 KD 20 µM Abiraterone	< 0.0001
Pool SPRY2 KD VC vs. Nsi 10 μM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 10 μM	< 0.0001
Abiraterone	< 0.0001
Pool SPRY2 KD VC vs. Nsi 20 μM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 20 μM	< 0.0001
Abiraterone Nsi 10 μM Abiraterone vs. Pool SPRY2 KD 10 μM	< 0.0001
Abiraterone	< 0.0001
Nsi 10 μM Abiraterone vs. Nsi 20 μM Abiraterone Nsi 10 μM Abiraterone vs. Pool SPRY2 KD 20 μM	< 0.0001
Abiraterone	< 0.0001
Abiraterone VS. NSI 20 µM Abiraterone VS. NSI 20 µM Abiraterone Pool SPRV2 KD 10 µM Abiraterone VS. Pool SPRV2	0.0074
KD 20 µM Abiraterone Nsi 20 µM Abiraterone vs. Pool SPRY2 KD 20 µM	0.0025
Abiraterone	0.9987

CSS 0

Nsi VC vs. Pool SPRY2 KD VC	>0.9999
Nsi VC vs. Nsi 10 µM Abiraterone	>0.9999
Nsi VC vs. Pool SPRY2 KD 10 µM Abiraterone	>0.9999
Nsi VC vs. Nsi 20 µM Abiraterone	>0.9999
Nsi VC vs. Pool SPRY2 KD 20 µM Abiraterone	>0.9999
Pool SPRY2 KD VC vs. Nsi 10 µM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 10 µM	>0.9999
Abiraterone	>0.9999
Pool SPRY2 KD VC vs. Nsi 20 µM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 20 µM	>0.9999
Abiraterone	>0.9999
Abiraterone vs. Pool SPRY2 KD 10 µM	>0.9999
Nsi 10 µM Abiraterone vs. Nsi 20 µM Abiraterone	>0.9999
Nsi 10 µM Abiraterone vs. Pool SPRY2 KD 20 µM	>0.9999

Abiraterone

>0.9999
>0.9999
>0.9999

CSS 2

Nsi VC vs. Pool SPRY2 KD VC	< 0.0001
Nsi VC vs. Nsi 10 µM Abiraterone	0.2233
Nsi VC vs. Pool SPRY2 KD 10 µM Abiraterone	0.282
Nsi VC vs. Nsi 20 µM Abiraterone	0.2878
Nsi VC vs. Pool SPRY2 KD 20 µM Abiraterone	0.9389
Pool SPRY2 KD VC vs. Nsi 10 µM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 10 µM	< 0.0001
Abiraterone	0.0037
Pool SPRY2 KD VC vs. Nsi 20 μM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 20 μM	< 0.0001
Abiraterone	< 0.0001
Abiraterone VS. Pool SPR Y2 KD 10 µM	0.001
Nsi 10 µM Abiraterone vs. Nsi 20 µM Abiraterone Nsi 10 µM Abiraterone vs. Pool SPRY2 KD 20 µM	>0.9999
Abiraterone	0.0306
Abiraterone Vs. Nsi 20 µM	0.0016
Pool SPRY2 KD 10 μM Abiraterone vs. Pool SPRY2	0.0151
Nsi 20 uM Abiraterone vs. Pool SPRY2 KD 20 uM	0.8151
Abiraterone	0.0437

CSS 4

Nsi VC vs. Pool SPRY2 KD VC	< 0.0001
Nsi VC vs. Nsi 10 µM Abiraterone	< 0.0001
Nsi VC vs. Pool SPRY2 KD 10 µM Abiraterone	0.6308
Nsi VC vs. Nsi 20 µM Abiraterone	< 0.0001
Nsi VC vs. Pool SPRY2 KD 20 µM Abiraterone	0.1299
Pool SPRY2 KD VC vs. Nsi 10 μM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 10 μM	< 0.0001
Abiraterone	< 0.0001
Pool SPRY2 KD VC vs. Nsi 20 μM Abiraterone Pool SPRY2 KD VC vs. Pool SPRY2 KD 20 μM	< 0.0001
Abiraterone	< 0.0001
Nsi 10 μM Abiraterone vs. Pool SPRY2 KD 10 μM Abiraterone	< 0.0001
Nsi 10 µM Abiraterone vs. Nsi 20 µM Abiraterone Nsi 10 µM Abiraterone vs. Pool SPRY2 KD 20 µM	0.8151
Abiraterone Pool SPRY2 KD 10 µM Abiraterone vs. Nsi 20 µM	< 0.0001
Abiraterone	< 0.0001
Pool SPRY2 KD 10 µM Abiraterone vs. Pool SPRY2 KD 20 µM Abiraterone	0.0026
Nsi 20 µM Abiraterone vs. Pool SPRY2 KD 20 µM	
Abiraterone	< 0.0001

Figure EV3M	ANOVA Dunnett's test	CWR Nsi FBS vs. CWR Pool FBS	0.6704
		CWR Nsi FBS vs. CWR Nsi HSD3B1 KO FBS	0.9997
		CWR Nsi FBS vs. CWR Pool HSD3B1 KO FBS	0.9234
		CWR Nsi FBS vs. CWR Nsi CSS	0.0021
		CWR Nsi FBS vs. CWR Pool CSS	0.5651
		CWR Nsi FBS vs. CWR Nsi HSD3B1 KO CSS	0.0011
		CWR Nsi FBS vs. CWR Pool HSD3B1 KO CSS	0.001
Figure EV3O	Unpaired t test Two-tailed	Nsi shHER2 vs Nsi shSc	0.0064
		Pool shHER2 vs Pool shSc	0.0001
Figure EV4B	Unpaired t test Two-tailed	CTRL vs SPRY2	0.0498
Figure EV4F	ANOVA Tukey's test	LNCaP vs. CWR22Res	0.1678
		LNCaP vs. CWR22RV1	< 0.0001
		LNCaP vs. DU145	0.0002
		CWR22Res vs. CWR22RV1	0.0002
		CWR22Res vs. DU145	0.0017
		CWR22RV1 vs. DU145	0.2321
Figure EV4G	Unpaired t test Two-tailed	IL6 Vs CTRL	0.0222
Figure EV4H	Unpaired t test Two-tailed	anti-IL6 vs ctrl IgG (hIL6)	0.014
		anti-IL6 vs ctrl IgG (HSD3B1)	0.0489
Figure EV4K	ANOVA Tukey's test	AR	
		Nsi Mock VC vs. Nsi ADT VC	< 0.0001
		Nsi Mock VC vs. Pool Mock VC	0.987
		Nsi Mock VC vs. Pool ADT VC	0.0954
		Nsi Mock VC vs. Nsi Mock Tocilizumab	>0.9999
		Nsi Mock VC vs. Nsi ADT Tocilizumab	< 0.0001
		Nsi Mock VC vs. Pool Mock Tocilizumab	0.2401
		Nsi Mock VC vs. Pool ADT Tocilizumab	< 0.0001
		Nsi ADT VC vs. Pool Mock VC	< 0.0001
		Nsi ADT VC vs. Pool ADT VC	< 0.0001
		Nsi ADT VC vs. Nsi Mock Tocilizumab	< 0.0001
		Nsi ADT VC vs. Nsi ADT Tocilizumab	0.9987
		Nsi ADT VC vs. Pool Mock Tocilizumab	< 0.0001
		Nsi ADT VC vs. Pool ADT Tocilizumab	0.99
		Pool Mock VC vs. Pool ADT VC	0.012
		Pool Mock VC vs. Nsi Mock Tocilizumab	0.9746
		Pool Mock VC vs. Nsi ADT Tocilizumab	< 0.0001
		Pool Mock VC vs. Pool Mock Tocilizumab	0.0388

Pool Mock VC vs. Pool ADT Tocilizumab	< 0.0001
Pool ADT VC vs. Nsi Mock Tocilizumab	0.12
Pool ADT VC vs. Nsi ADT Tocilizumab	< 0.0001
Pool ADT VC vs. Pool Mock Tocilizumab	0.9997
Pool ADT VC vs. Pool ADT Tocilizumab	< 0.0001
Nsi Mock Tocilizumab vs. Nsi ADT Tocilizumab	< 0.0001
Nsi Mock Tocilizumab vs. Pool Mock Tocilizumab	0.2894
Nsi Mock Tocilizumab vs. Pool ADT Tocilizumab	< 0.0001
Nsi ADT Tocilizumab vs. Pool Mock Tocilizumab	< 0.0001
Nsi ADT Tocilizumab vs. Pool ADT Tocilizumab	>0.9999
Pool Mock Tocilizumab vs. Pool ADT Tocilizumab	< 0.0001

Cleaved caspase 3

Nsi Mock VC vs. Nsi ADT VC	0.0001
Nsi Mock VC vs. Pool Mock VC	>0.9999
Nsi Mock VC vs. Pool ADT VC	>0.9999
Nsi Mock VC vs. Nsi Mock Tocilizumab	>0.9999
Nsi Mock VC vs. Nsi ADT Tocilizumab	0.0002
Nsi Mock VC vs. Pool Mock Tocilizumab	0.9894
Nsi Mock VC vs. Pool ADT Tocilizumab	< 0.0001
Nsi ADT VC vs. Pool Mock VC	0.0003
Nsi ADT VC vs. Pool ADT VC	0.0001
Nsi ADT VC vs. Nsi Mock Tocilizumab	0.0001
Nsi ADT VC vs. Nsi ADT Tocilizumab	>0.9999
Nsi ADT VC vs. Pool Mock Tocilizumab	0.0013
Nsi ADT VC vs. Pool ADT Tocilizumab	>0.9999
Pool Mock VC vs. Pool ADT VC	>0.9999
Pool Mock VC vs. Nsi Mock Tocilizumab	>0.9999
Pool Mock VC vs. Nsi ADT Tocilizumab	0.0005
Pool Mock VC vs. Pool Mock Tocilizumab	0.9994
Pool Mock VC vs. Pool ADT Tocilizumab	0.0002
Pool ADT VC vs. Nsi Mock Tocilizumab	>0.9999
Pool ADT VC vs. Nsi ADT Tocilizumab	0.0002
Pool ADT VC vs. Pool Mock Tocilizumab	0.9903
Pool ADT VC vs. Pool ADT Tocilizumab	< 0.0001
Nsi Mock Tocilizumab vs. Nsi ADT Tocilizumab	0.0002
Nsi Mock Tocilizumab vs. Pool Mock Tocilizumab	0.9931
Nsi Mock Tocilizumab vs. Pool ADT Tocilizumab	0.0001
Nsi ADT Tocilizumab vs. Pool Mock Tocilizumab	0.002
Nsi ADT Tocilizumab vs. Pool ADT Tocilizumab	>0.9999
Pool Mock Tocilizumab vs. Pool ADT Tocilizumab	0.001

Figure EV4M Unpaired Two- tailed t test

AR Cleaved Caspase 3 0.000144008 0.004478318

Ki67	

0.004986585

Figure EV5G	Unpaired Two- tailed t test	15μM ITX5061 vs DMSO	0.0145
Figure EV5H	Unpaired Two- tailed t test	15μM ITX5061 vs DMSO	0.0419
Figure EV5I	Unpaired Two- tailed t test	15μM ITX5061 vs DMSO	0.0493
Figure EV5J	ANOVA Tukey's test	Nsi Ctrl Vs Nsi SRB1 KO (DMSO) Nsi Ctrl Vs Pool Ctrl (ITX-5061) Nsi Ctrl Vs Pool Ctrl (DMSO) Nsi Ctrl Vs Pool SRB1 KO (ITX-5061) Nsi Ctrl Vs Pool SRB1 KO (DMSO)	0.021327346 0.035819009 0.035819009 0.027102703 0.027102703
Figure EV5K	ANOVA Tukey's test	 0 LNCaP-VC CTRL vs. LNCaP-SPRY2 VC LNCaP-VC CTRL vs. LNCaP-VC 10μM ITX5061 LNCaP-VC CTRL vs. LNCaP-SPRY2 10 μM ITX5061 LNCaP-VC CTRL vs. LNCaP-VC 15 μM ITX5061 LNCaP-VC CTRL vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC CTRL vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC CTRL vs. LNCaP-VC 10 μM ITX5061 LNCaP-SPRY2 VC vs. LNCaP-VC 10 μM ITX5061 LNCaP-SPRY2 VC vs. LNCaP-VC 15 μM ITX5061 LNCaP-SPRY2 VC vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 VC vs. LNCaP-VC 15 μM ITX5061 LNCaP-SPRY2 VC vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 VC vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 15 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 15 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 15 μM ITX5061 LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 15 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 	>0.9999 >0.9999

LNCaP-VC 15 µM ITX5061 vs. LNCaP-SPRY2 20 µM	
ITX5061	>0.9999
LNCaP-SPRY2 15 µM ITX5061 vs. LNCaP-VC 20 µM	
ITX5061	>0.9999
LNCaP-SPRY2 15 µM ITX5061 vs. LNCaP-SPRY2 20	
μM ITX5061	>0.9999
LNCaP-VC 20 µM ITX5061 vs. LNCaP-SPRY2 20 µM	
ITX5061	>0.9999

2

	0001
LNCaP-VC CTRL vs. LNCaP-VC 10µM ITX5061 <0	0.0001
LNCaP-VC CTRL vs. LNCaP-SPRY2 10 µM ITX5061 <0	0.0001
LNCaP-VC CTRL vs. LNCaP-VC 15 µM ITX5061 <0	0.0001
LNCaP-VC CTRL vs. LNCaP-SPRY2 15 µM ITX5061 <0	0.0001
LNCaP-VC CTRL vs. LNCaP-VC 20 µM ITX5061 <0	0.0001
LNCaP-VC CTRL vs. LNCaP-SPRY2 20 µM ITX5061 <0	0.0001
LNCaP-SPRY2 VC vs. LNCaP-VC 10 µM ITX5061 0	.1117
LNCaP-SPRY2 VC vs. LNCaP-SPRY2 10 µM ITX5061 0	.0011
LNCaP-SPRY2 VC vs. LNCaP-VC 15 µM ITX5061 0	.0007
LNCaP-SPRY2 VC vs. LNCaP-VC 20 µM ITX5061 <0	0.0001
LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 µM ITX5061 <0	0.0001
LNCaP-VC 10 µM ITX5061 vs. LNCaP-SPRY2 10 µM	0001
LNCaP-VC 10 µM ITX5061 vs. LNCaP-VC 15 µM	0.0001
ITX5061 0).713
LNCaP-VC 10 µM ITX5061 vs. LNCaP-SPRY2 15 µM	
ITX5061 0.	.6137
LNCaP-VC 10 µM ITX5061 vs. LNCaP-VC 20 µM	0100
11X5061 U. I NCaD VC 10M ITX5061 I NCaD SDDV2 20M	.0192
LINCAP-VC 10 µM 11X5001 VS. LINCAP-SPK 12 20 µM ITX 5061 0	2649
I NCaP-SPRY2 10 µM ITX5061 vs I NCaP-VC 15 µM	.2047
ITX 5061 <(0001
LNCaP-SPRY2 10 µM ITX5061 vs. LNCaP-SPRY2 15	
μM ITX5061 >0).9999
LNCaP-SPRY2 10 µM ITX5061 vs. LNCaP-VC 20 µM	
ITX5061 0.	.5754
LNCaP-SPRY2 10 µM ITX5061 vs. LNCaP-SPRY2 20	
μM ITX5061 0.	.9952
LNCaP-VC 15 µM ITX5061 vs. LNCaP-SPRY2 15 µM	
ITX5061 0.	.0117
LNCaP-VC 15 µM ITX5061 vs. LNCaP-VC 20 µM	(7)
11X5061 0.	.6/66
LNCaP-VC 15 µM 11X5061 VS. LNCaP-SPK Y2 20 µM	0080
I NC2P-SPRV2 15 µM ITX5061 yr I NC2P-VC 20 µM	.9909
ITX 5061	0182
LNCaP-SPRY2 15 µM ITX5061 vs. LNCaP-SPRY2 20	.0102
uM ITX5061 0	.9464
LNCaP-VC 20 µM ITX5061 vs. LNCaP-SPRY2 20 µM	
ITX5061	

0.601

4

LNCaP-VC CTRL vs. LNCaP-SPRY2 VC

< 0.0001

LINCaP-VC CTRL vs. LNCaP-SPRY2 10 μ M ITX5061<0.000	LNCaP-VC CTRL vs. LNCaP-VC 10µM ITX5061	< 0.0001
LNCaP-VC CTRL vs. LNCaP-VC 15 μ M ITX5061<0.000LNCaP-VC CTRL vs. LNCaP-SPRY2 15 μ M ITX5061<0.000	LNCaP-VC CTRL vs. LNCaP-SPRY2 10 µM ITX5061	< 0.0001
LNCaP-VC CTRL vs. LNCaP-SPRY2 15 μ M ITX5061<0.000LNCaP-VC CTRL vs. LNCaP-VC 20 μ M ITX5061<0.000	LNCaP-VC CTRL vs. LNCaP-VC 15 μM ITX5061	< 0.0001
LNCaP-VC CTRL vs. LNCaP-VC 20 μ M ITX5061<0.000LNCaP-VC CTRL vs. LNCaP-SPRY2 20 μ M ITX5061<0.000	LNCaP-VC CTRL vs. LNCaP-SPRY2 15 µM ITX5061	< 0.0001
LNCaP-VC CTRL vs. LNCaP-SPRY2 20 μ M ITX5061<0.000LNCaP-SPRY2 VC vs. LNCaP-VC 10 μ M ITX5061<0.000	LNCaP-VC CTRL vs. LNCaP-VC 20 μΜ ITX5061	< 0.0001
LNCaP-SPRY2 VC vs. LNCaP-VC 10 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-SPRY2 10 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-VC 15 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-VC 20 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 μ M ITX5061 <0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 10 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000	LNCaP-VC CTRL vs. LNCaP-SPRY2 20 µM ITX5061	< 0.0001
LNCaP-SPRY2 VC vs. LNCaP-SPRY2 10 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-VC 15 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-VC 20 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 μ M ITX5061 <0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 10 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.910 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.0000	LNCaP-SPRY2 VC vs. LNCaP-VC 10 µM ITX5061	< 0.0001
LNCaP-SPRY2 VC vs. LNCaP-VC 15 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-VC 20 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 μ M ITX5061 <0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 10 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.015 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000	LNCaP-SPRY2 VC vs. LNCaP-SPRY2 10 µM ITX5061	< 0.0001
LNCaP-SPRY2 VC vs. LNCaP-VC 20 μ M ITX5061 <0.000 LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 μ M ITX5061 <0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 10 μ M ITX5061 0.9666 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.911 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.111 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.626 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.010 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.526 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.712 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.712 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.0000	LNCaP-SPRY2 VC vs. LNCaP-VC 15 μM ITX5061	< 0.0001
LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 μ M ITX5061 < 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 10 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.111 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.626 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.715 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.015 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.711 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.010	LNCaP-SPRY2 VC vs. LNCaP-VC 20 μM ITX5061	< 0.0001
LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 10 μ M ITX5061 (0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 (0.111 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 (0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 (0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 (0.626 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 (0.626 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.010 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.010 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 (0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 (0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 (0.000 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 (0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.115 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.117 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.117 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 (0.117 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 (0.712 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 (0.712)	LNCaP-SPRY2 VC vs. LNCaP-SPRY2 20 µM ITX5061	< 0.0001
LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.966 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.111 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.000 LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 0.626 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.626 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.010 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.010 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.010 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.524 LNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 0.715 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.715 LNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 0.000	LNCaP-VC 10 μM ITX5061 vs. LNCaP-SPRY2 10 μM ITX5061	< 0.0001
$\begin{array}{llllllllllllllllllllllllllllllllllll$	LNCaP-VC 10 µM ITX5061 vs. LNCaP-VC 15 µM	0.0667
ITX50610.111LNCaP-VC 10 μM ITX5061 vs. LNCaP-VC 20 μM0.000LNCaP-VC 10 μM ITX5061 vs. LNCaP-SPRY2 20 μM0.000LNCaP-VC 10 μM ITX5061 vs. LNCaP-SPRY2 20 μM <0.000 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 15 μM <0.000 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 15 <0.000 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 15 <0.000 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM 0.010 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM <0.000 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 15 μM <0.000 LNCaP-VC 15 μM ITX5061 vs. LNCaP-SPRY2 15 μM <0.000 LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM <0.000 LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM <0.000 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-VC 20 μM <0.000 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-SPRY2 20 <0.000 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-SPRY2 20 <0.000 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-SPRY2 20 <0.000 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM <0.000 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM <0.000 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM <0.000 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM <0.000	LNCaP-VC 10 µM ITX5061 vs. LNCaP-SPRY2 15 µM	0.9007
	ITX5061 I NCaP VC 10 uM ITX5061 up I NCaP VC 20 uM	0.1117
LNCaP-VC 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 (0.000 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 15 μ M ITX5061 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 LNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-SPRY2 10 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 15 μ M ITX5061 vs. LNCaP-SPRY2 15 μ M ITX5061 UNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-VC 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-VC 20 μ M ITX5061 UNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-SPRY2 15 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 UNCaP-VC 20 μ M ITX5061 vs. LNCaP-SPRY2 20 μ M ITX5061 <td>ITX5061</td> <td>0.0004</td>	ITX5061	0.0004
$\begin{array}{c} < 0.000 \\ < \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	LNCaP-VC 10 µM ITX5061 vs. LNCaP-SPRY2 20 µM	<0.0001
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	LNCaP-SPRY2 10 µM ITX5061 vs. LNCaP-VC 15 µM	<0.0001
LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 15 0.626 μM ITX5061 0.626 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM 0.010 ITX5061 0.000 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 20 40.000 μM ITX5061 <0.000	ITX5061	< 0.0001
LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM 0.010 ITX5061 0.010 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 20 <0.000	μM ITX5061	0.6264
11X5061 0.010 LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 μM ITX5061 <0.000	LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-VC 20 μM	0.0105
μΜ ITX5061 <0.000	LNCaP-SPRY2 10 μM ITX5061 vs. LNCaP-SPRY2 20	0.0105
LNCaP-VC 15 μM 11X5061 vs. LNCaP-SPRY2 15 μM <0.000	μM ITX5061	< 0.0001
LNCaP-VC 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 0.524 LNCaP-VC 15 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.015 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 <<0.000 μM ITX5061 0.715 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.000	LNCaP-VC 15 µM 11X5061 vs. LNCaP-SPR Y2 15 µM ITX5061	< 0.0001
11X5061 0.524 LNCaP-VC 15 μM ITX5061 vs. LNCaP-SPRY2 20 μM 0.015 ITX5061 0.015 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-VC 20 μM <0.000	LNCaP-VC 15 µM ITX5061 vs. LNCaP-VC 20 µM	0.52.42
ITX5061 0.015 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-VC 20 μM <0.000	LNCaP-VC 15 µM ITX5061 vs. LNCaP-SPRY2 20 µM	0.5243
LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061 <<0.000 LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.713 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.000	ITX5061	0.0155
LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.713 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.000	LNCaP-SPRY2 15 μM ITX5061 vs. LNCaP-VC 20 μM ITX5061	< 0.0001
μΜ 11 X5061 0.713 LNCaP-VC 20 μM ITX5061 vs. LNCaP-SPRY2 20 μM ITX5061 0.000	LNCaP-SPRY2 15 µM ITX5061 vs. LNCaP-SPRY2 20	0.510
ITX5061 0.000	μΜ 11 X 5061 LNCaP-VC 20 μΜ ITX5061 vs. LNCaP-SPRY2 20 μΜ	0.713
	ITX5061	0.0007

Figure EV5L ANOVA Tukey's test 0

VC vs. 10μΜ ITX5061	>0.9999
VC vs. 15μΜ ITX5061	>0.9999
VC vs. 20μM ITX5061	>0.9999
10μΜ ITX5061 vs. 15μΜ ITX5061	>0.9999
10μΜ ITX5061 vs. 20μΜ ITX5061	>0.9999
15μΜ ITX5061 vs. 20μΜ ITX5061	>0.9999

2

VC vs. 10µM ITX5061	0.0786
VC vs. 15μΜ ITX5061	< 0.0001

		VC vs. 20µM ITX5061	< 0.0001
		10μΜ ITX5061 vs. 15μΜ ITX5061	0.0153
		10μΜ ITX5061 vs. 20μΜ ITX5061	0.0006
		15μΜ ITX5061 vs. 20μΜ ITX5061	0.5623
		4	
		VC vs. 10μΜ ITX5061	< 0.0001
		VC vs. 15µM ITX5061	< 0.0001
		VC vs. 20µM ITX5061	< 0.0001
		10μΜ ITX5061 vs. 15μΜ ITX5061	0.0017
		10μΜ ITX5061 vs. 20μΜ ITX5061	< 0.0001
		15μΜ ITX5061 vs. 20μΜ ITX5061	0.0006
Figure EV5N	Unpaired Two- tailed t test	Nsi Mock Vehicle Vs Nsi ADT Vehicle:	
0		Nuclear AR	0.00014056
		Cleaved Capase 3	0.00609197
		Nsi Mock ITX5061 Vs Nsi ADT ITX5061:	
		Nuclear AR	0.00014244
		Cleaved Capase 3	0.007401964
		Pool Mock ITX5061 Vs Pool ADT ITX5061 :	
		Nuclear AR	0.000237895
		Cleaved Capase 3	0.002315735
Appendix		Proximal	
Figure S1E	Unpaired Two- tailed t test	Mets Distal mets	0.001184277
		(Thoracic Mets)	0.007256289
		Distal mets (Lungs)	0.008962484
Appendix Figure S2A	ANOVA Tukey's test	Nsi Mock vs. Pool (SPRY2 KD) Mock	0.3753
		Nsi Mock vs. Nsi ADT	0.0036
		Nsi Mock vs. Pool (SPRY2 KD) ADT	0.001
		Pool (SPRY2 KD) Mock vs. Nsi ADT	0.0329
		Pool (SPRY2 KD) Mock vs. Pool (SPRY2 KD) ADT	0.0077
		Nsi ADT vs. Pool (SPRY2 KD) ADT	0.7078
Appendix			
Figure S2C	ANOVA Tukey's test	Nsi Mock vs. Nsi ADT	0.9747
		Nsi Mock vs. Pool Mock	>0.9999
		NSI MOCK VS. POOLADT	0.0074
		NSI ADT vs. Pool Mock	0.9802
		NS1 ADT VS. POOLADT	0.0125

Appendix Figure S2D	Unpaired Two- tailed t test	IL6 vs Ctrl	0.0287
Appendix Figure S2E	Unpaired Two- tailed t test	ADT Vs Mock	<0.0001
Appendix	ANOVA Tukey's test	Liver tumour vs. Normal	0.0073
Figure 52K	ANOVA TUREY S USI	Liver tumour vs. ADT	0.0234
		Liver tumour vs. Nsi VC	0.0137
		Liver tumour vs. Nsi + $ITX5061$	0.028
		Liver tumour vs. Nsi Simvastatin	0.0039
		Liver tumour vs. Nsi ADT	0.0198
		Liver tumour vs. Nsi ADT + ITX 5061	0.016
		Liver tumour vs. Nsi ADT + Sinvastatin	0.0031
		Liver tumour vs. Pool	0.0141
		Liver tumour vs. Pool ITX5061	0.0076
		Liver tumour vs. Pool Simvastatin	0.0129
		Liver tumour vs. Pool ADT	>0.9999
		Liver tumour vs. Pool ADT + ITX5061	0.0027
		Liver tumour vs. Pool ADT + Simvastatin	0.2344
		Normal vs. ADT	>0.9999
		Normal vs. Nsi VC	>0.9999
		Normal vs. Nsi + ITX5061	0.9995
		Normal vs. Nsi Simvastatin	>0.9999
		Normal vs. Nsi ADT	>0.9999
		Normal vs. Nsi ADT + ITX5061	>0.9999
		Normal vs. Nsi ADT + Simvastatin	>0.9999
		Normal vs. Pool	>0.9999
		Normal vs. Pool ITX5061	>0.9999
		Normal vs. Pool Simvastatin	>0.9999
		Normal vs. Pool ADT	0.005
		Normal vs. Pool ADT + ITX5061	>0.9999
		Normal vs. Pool ADT + Simvastatin	0.8098
		ADT vs. Nsi VC	>0.9999
		ADT vs. Nsi + ITX5061	>0.9999
		ADT vs. Nsi Simvastatin	>0.9999
		ADT vs. Nsi ADT	>0.9999
		ADT vs. Nsi ADT + ITX5061	>0.9999
		ADT vs. Nsi ADT + Simvastatin	>0.9999
		ADT vs. Pool	>0.9999
		ADT vs. Pool ITX5061	>0.9999

ADT vs. Pool Simvastatin

Pool Mock vs. Pool ADT

0.0077

>0.9999

ADT vs. Pool ADT	0.0183		
ADT vs. Pool ADT + ITX5061	>0.9999		
ADT vs. Pool ADT + Simvastatin	0.9752		
Nsi VC vs. Nsi + ITX5061	>0.9999		
Nsi VC vs. Nsi Simvastatin	>0.9999		
Nsi VC vs. Nsi ADT	>0.9999		
Nsi VC vs. Nsi ADT + ITX5061	>0.9999		
Nsi VC vs. Nsi ADT + Simvastatin	>0.9999		
Nsi VC vs. Pool	>0.9999		
Nsi VC vs. Pool ITX5061	>0.9999		
Nsi VC vs. Pool Simvastatin	>0.9999		
Nsi VC vs. Pool ADT	0.0086		
Nsi VC vs. Pool ADT + ITX5061	>0.9999		
Nsi VC vs. Pool ADT + Simvastatin	0.9771		
Nsi + ITX5061 vs. Nsi Simvastatin	>0.9999		
Nsi + ITX5061 vs. Nsi ADT	>0.9999		
Nsi + ITX5061 vs. Nsi ADT + ITX5061	>0.9999		
Nsi + ITX5061 vs. Nsi ADT + Simvastatin	0.9995		
Nsi + ITX5061 vs. Pool	>0.9999		
Nsi + ITX5061 vs. Pool ITX5061	>0.9999		
Nsi + ITX5061 vs. Pool Simvastatin	>0.9999		
Nsi + ITX5061 vs. Pool ADT	0.0195		
Nsi + ITX5061 vs. Pool ADT + ITX5061	>0.9999		
Nsi + ITX5061 vs. Pool ADT + Simvastatin	0.9979		
Nsi Simvastatin vs. Nsi ADT	>0.9999		
Nsi Simvastatin vs. Nsi ADT + ITX5061	>0.9999		
Nsi Simvastatin vs. Nsi ADT + Simvastatin	>0.9999		
Nsi Simvastatin vs. Pool	>0.9999		
Nsi Simvastatin vs. Pool ITX5061	>0.9999		
Nsi Simvastatin vs. Pool Simvastatin	>0.9999		
Nsi Simvastatin vs. Pool ADT	0.0018		
Nsi Simvastatin vs. Pool ADT + ITX5061	>0.9999		
Nsi Simvastatin vs. Pool ADT + Simvastatin	0.8697		
Nsi ADT vs. Nsi ADT + ITX5061	>0.9999		
Nsi ADT vs. Nsi ADT + Simvastatin	>0.9999		
Nsi ADT vs. Pool	>0.9999		
Nsi ADT vs. Pool ITX5061	>0.9999		
Nsi ADT vs. Pool Simvastatin	>0.9999		
Nsi ADT vs. Pool ADT	0.0131		
Nsi ADT vs. Pool ADT + ITX5061	>0.9999		
Nsi ADT vs. Pool ADT + Simvastatin	0.9922		
Nsi ADT + ITX5061 vs. Nsi ADT + Simvastatin	>0.9999		
Nsi ADT + ITX5061 vs. Pool	>0.9999		
Nsi ADT + ITX5061 vs. Pool ITX5061	>0.9999		
		Nsi ADT + ITX5061 vs. Pool Simvastatin	>0.9999
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		Nsi ADT + ITX5061 vs. Pool ADT	0.0103
		Nsi ADT + ITX5061 vs. Pool ADT + ITX5061	>0.9999
		Nsi ADT + ITX5061 vs. Pool ADT + Simvastatin	0.9852
		Nsi ADT + Simvastatin vs. Pool	>0.9999
		Nsi ADT + Simvastatin vs. Pool ITX5061	>0.9999
		Nsi ADT + Simvastatin vs. Pool Simvastatin	>0.9999
		Nsi ADT + Simvastatin vs. Pool ADT	0.0016
		Nsi ADT + Simvastatin vs. Pool ADT + ITX5061	>0.9999
		Nsi ADT + Simvastatin vs. Pool ADT + Simvastatin	0.7434
		Pool vs. Pool ITX5061	>0.9999
		Pool vs. Pool Simvastatin	>0.9999
		Pool vs. Pool ADT	0.0089
		Pool vs. Pool ADT + ITX5061	>0.9999
		Pool vs. Pool ADT + Simvastatin	0.9791
		Pool ITX5061 vs. Pool Simvastatin	>0.9999
		Pool ITX5061 vs. Pool ADT	0.0044
		Pool ITX5061 vs. Pool ADT + ITX5061	>0.9999
		Pool ITX5061 vs. Pool ADT + Simvastatin	0.9217
		Pool Simvastatin vs. Pool ADT	0.0081
		Pool Simvastatin vs. Pool ADT + ITX5061	>0.9999
		Pool Simvastatin vs. Pool ADT + Simvastatin	0.9737
		Pool ADT vs. Pool ADT + ITX5061	0.001
		Pool ADT vs. Pool ADT + Simvastatin	0.2213
		Pool ADT + ITX5061 vs. Pool ADT + Simvastatin	0.847
Appendix Figure S21	ANOVA Tukey's test	Mack vs. 48 hrs post-ADT	0.0784
I Iguie 52L	Theory in the states	Mock vs. 4 weeks post-ADT	0.0005
		48 hrs post-ADT vs. 4 weeks post-ADT	0.0048
Appendix	ANOVA Tabasia taat		
Figure S2N	ANOVA Tukeys test	Nuclear AK	> 0.0000
		Nei Moek Vehicle vs. Nei ADT Vehicle	~0.0001
		Nei Moek Vehicle vs. Nei ADT Simuestetin	<0.0001
		Nei Moek Vehiele vs. Doel Moek Vehiele	< 0.0001
		Nsi Mock Vehicle vs. Pool Mock Simulation	0.9997
		Nsi Mock Vehicle vs. Pool ADT Vehicle	0.0001
		Nsi Mock Vehicle vs. Pool ADT Simustatin	<0.0911
		Nei Mock Simvactatin ve Nei ADT Vahiala	<0.0001
		Nei Mock Sinivastatin vs. Nei ADT Ventete	<0.0001
		Nei Mock Simvastatin ve Dool Mock Vehicle	0.0001
		Nei Mock Simvastatin vs. Dool Mock Cimvastation	0.777
		Nei Mock Simvastatin ve. Pool ADT Vehiolo	0.0078
		The Proof Shirvastaun vs. FUULADT Venicle	0.7473

Nsi Mock Simvastatin vs. Pool ADT Simvastatin	< 0.0001
Nsi ADT Vehicle vs. Nsi ADT Simvastatin	0.9702
Nsi ADT Vehicle vs. Pool Mock Vehicle	< 0.0001
Nsi ADT Vehicle vs. Pool Mock Simvastation	< 0.0001
Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
Nsi ADT Vehicle vs. Pool ADT Simvastatin	0.9996
Nsi ADT Simvastatin vs. Pool Mock Vehicle	< 0.0001
Nsi ADT Simvastatin vs. Pool Mock Simvastation	< 0.0001
Nsi ADT Simvastatin vs. Pool ADT Vehicle	< 0.0001
Nsi ADT Simvastatin vs. Pool ADT Simvastatin	0.9995
Pool Mock Vehicle vs. Pool Mock Simvastation	0.0017
Pool Mock Vehicle vs. Pool ADT Vehicle	0.3967
Pool Mock Vehicle vs. Pool ADT Simvastatin	< 0.0001
Pool Mock Simvastation vs. Pool ADT Vehicle	0.2835
Pool Mock Simvastation vs. Pool ADT Simvastatin	< 0.0001
Pool ADT Vehicle vs. Pool ADT Simvastatin	< 0.0001

Cleaved Capase 3

Nsi Mock Vehicle vs. Nsi Mock Simvastatin	0.9393
Nsi Mock Vehicle vs. Nsi ADT Vehicle	< 0.0001
Nsi Mock Vehicle vs. Nsi ADT Simvastatin	< 0.0001
Nsi Mock Vehicle vs. Pool Mock Vehicle	0.9998
Nsi Mock Vehicle vs. Pool Mock Simvastation	0.4755
Nsi Mock Vehicle vs. Pool ADT Vehicle	0.9889
Nsi Mock Vehicle vs. Pool ADT Simvastatin	< 0.0001
Nsi Mock Simvastatin vs. Nsi ADT Vehicle	< 0.0001
Nsi Mock Simvastatin vs. Nsi ADT Simvastatin	< 0.0001
Nsi Mock Simvastatin vs. Pool Mock Vehicle	0.7405
Nsi Mock Simvastatin vs. Pool Mock Simvastation	0.0562
Nsi Mock Simvastatin vs. Pool ADT Vehicle	>0.9999
Nsi Mock Simvastatin vs. Pool ADT Simvastatin	< 0.0001
Nsi ADT Vehicle vs. Nsi ADT Simvastatin	0.3702
Nsi ADT Vehicle vs. Pool Mock Vehicle	< 0.0001
Nsi ADT Vehicle vs. Pool Mock Simvastation	0.007
Nsi ADT Vehicle vs. Pool ADT Vehicle	< 0.0001
Nsi ADT Vehicle vs. Pool ADT Simvastatin	>0.9999
Nsi ADT Simvastatin vs. Pool Mock Vehicle	< 0.0001
Nsi ADT Simvastatin vs. Pool Mock Simvastation	< 0.0001
Nsi ADT Simvastatin vs. Pool ADT Vehicle	< 0.0001
Nsi ADT Simvastatin vs. Pool ADT Simvastatin	0.4977
Pool Mock Vehicle vs. Pool Mock Simvastation	0.7597
Pool Mock Vehicle vs. Pool ADT Vehicle	0.8914
Pool Mock Vehicle vs. Pool ADT Simvastatin	< 0.0001
Pool Mock Simvastation vs. Pool ADT Vehicle	0.1108

Pool Mock Simvastation vs. Pool ADT Simvastatin	0.0039
Pool ADT Vehicle vs. Pool ADT Simvastatin	< 0.0001