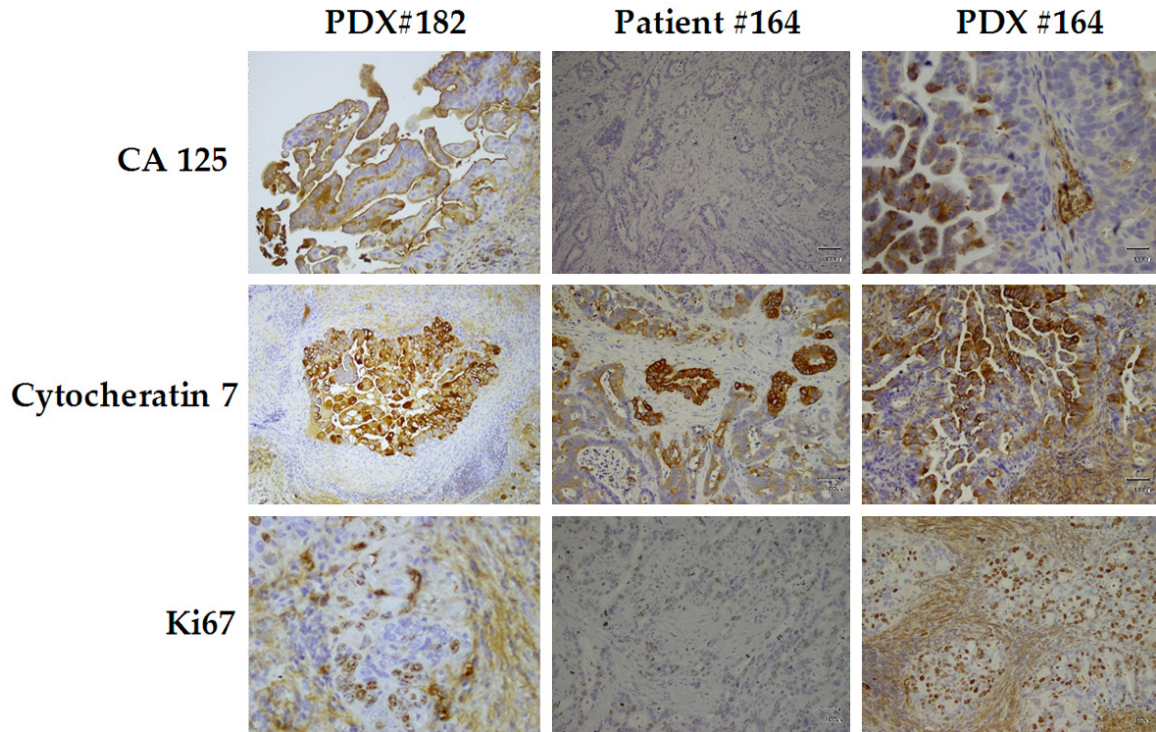


PDXs mucinous ovarian cancer models

Supplementary Table 1. Characteristics of patients #164 and #182 from which PDXs derived from

| Xeno ID | Age | Stage | Hystotype | Grade | Residual tumor | Chemotheapy | Schedule | No of cycles | PFS |
|---------|-----|-------|--------------------|-------|----------------|--------------|-----------|--------------|-----|
| 164 | 56 | IV | Mucinous carcinoma | 2 | na | neo-adjuvant | CBDCA/Tax | 6 | 5 |
| 182 | 44 | IC | Mucinous carcinoma | 1 | NED | - | - | - | 42 |

NED non evidence of disease. na not available.



Supplementary Figure 1. Immunohistochemical analysis on PDX and patient's #164, and on PDX's #182.

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Supplementary Table 2. CGH analysis. The table reports the alteration observed in #164 and #182, both in patients and PDXs samples

| ID | chrom | loc.start | loc.end | type | seg.mean | ID | chrom | loc.start | loc.end | type | seg.mean |
|--------------|-------|-----------|-----------|------|-------------|---------|-------|-----------|-----------|------|-------------|
| | | | | | | PDX#164 | 1 | 47226827 | 71195538 | LOSS | -0.23383612 |
| | | | | | | PDX#164 | 1 | 90373067 | 103454621 | LOSS | -0.200775 |
| | | | | | | PDX#164 | 1 | 220627747 | 222012950 | LOSS | -0.1729463 |
| patient #164 | 2 | 51951101 | 58264394 | LOSS | -0.13212025 | PDX#164 | 2 | 51751984 | 58192905 | LOSS | -0.2538235 |
| patient #164 | 2 | 88591175 | 98329197 | LOSS | -0.14849373 | PDX#164 | 2 | 88355735 | 90247720 | LOSS | -0.50372969 |
| | | | | | | PDX#164 | 2 | 91812834 | 98303915 | LOSS | -0.17649264 |
| | | | | | | PDX#164 | 2 | 115872796 | 116841792 | LOSS | -0.49634463 |
| | | | | | | PDX#164 | 2 | 159512538 | 162169631 | LOSS | -0.30143563 |
| | | | | | | PDX#164 | 3 | 24186625 | 93737580 | LOSS | -0.20101206 |
| patient #164 | 4 | 90421700 | 187866343 | LOSS | -0.11807837 | PDX#164 | 4 | 20714719 | 22435993 | LOSS | -0.37643872 |
| | | | | | | PDX#164 | 4 | 34595824 | 40598634 | LOSS | -0.21799649 |
| | | | | | | PDX#164 | 4 | 90958046 | 187866343 | LOSS | -0.23232617 |
| patient #164 | 5 | 43704556 | 152621660 | LOSS | -0.12453422 | PDX#164 | 5 | 28286502 | 28601552 | LOSS | -0.5111838 |
| | | | | | | PDX#164 | 5 | 49952847 | 135758057 | LOSS | -0.23260105 |
| | | | | | | PDX#164 | 5 | 135764923 | 136003152 | HDEL | -2.87880778 |
| | | | | | | PDX#164 | 5 | 140588373 | 153616916 | LOSS | -0.26152751 |
| patient #164 | 6 | 58738122 | 61929807 | HDEL | -0.83391937 | PDX#164 | 6 | 1374277 | 28521316 | LOSS | -0.20510848 |
| | | | | | | PDX#164 | 6 | 70137886 | 85181754 | LOSS | -0.21755622 |
| | | | | | | PDX#164 | 6 | 85205713 | 85518398 | HDEL | -2.47892978 |
| | | | | | | PDX#164 | 6 | 85521035 | 101562017 | LOSS | -0.23053892 |
| | | | | | | PDX#164 | 6 | 101568294 | 102417713 | HDEL | -2.16270399 |
| | | | | | | PDX#164 | 6 | 102423940 | 110447643 | LOSS | -0.23646079 |
| | | | | | | PDX#164 | 6 | 110532805 | 118091629 | GAIN | 0.120967829 |
| | | | | | | PDX#164 | 6 | 118103840 | 123172683 | LOSS | -0.21727506 |
| | | | | | | PDX#164 | 6 | 123183020 | 170898549 | GAIN | 0.101023285 |
| patient #164 | 7 | 55848790 | 66689729 | LOSS | -0.13485114 | PDX#164 | 7 | 34777714 | 37958289 | LOSS | -0.25117862 |
| patient #164 | 7 | 102828569 | 104289858 | LOSS | -0.18103569 | PDX#164 | 7 | 40054784 | 42283788 | LOSS | -0.30869191 |
| patient #164 | 8 | 70761794 | 72742860 | LOSS | -0.16135322 | PDX#164 | 8 | 176818 | 43646413 | LOSS | -0.17136785 |
| patient #164 | 8 | 144626533 | 144899538 | LOSS | -0.35671155 | PDX#164 | 8 | 70222636 | 72871111 | LOSS | -0.20269474 |
| | | | | | | PDX#164 | 8 | 72872544 | 77560474 | GAIN | 0.125503941 |
| | | | | | | PDX#164 | 8 | 77575477 | 79654145 | LOSS | -0.23937531 |
| | | | | | | PDX#164 | 8 | 79686236 | 80214806 | HDEL | -1.80037814 |
| patient #164 | 9 | 20793269 | 29112301 | LOSS | -0.22625262 | PDX#164 | 9 | 17444478 | 21150650 | LOSS | -0.15240683 |
| | | | | | | PDX#164 | 9 | 21157373 | 23092415 | HDEL | -2.60981006 |

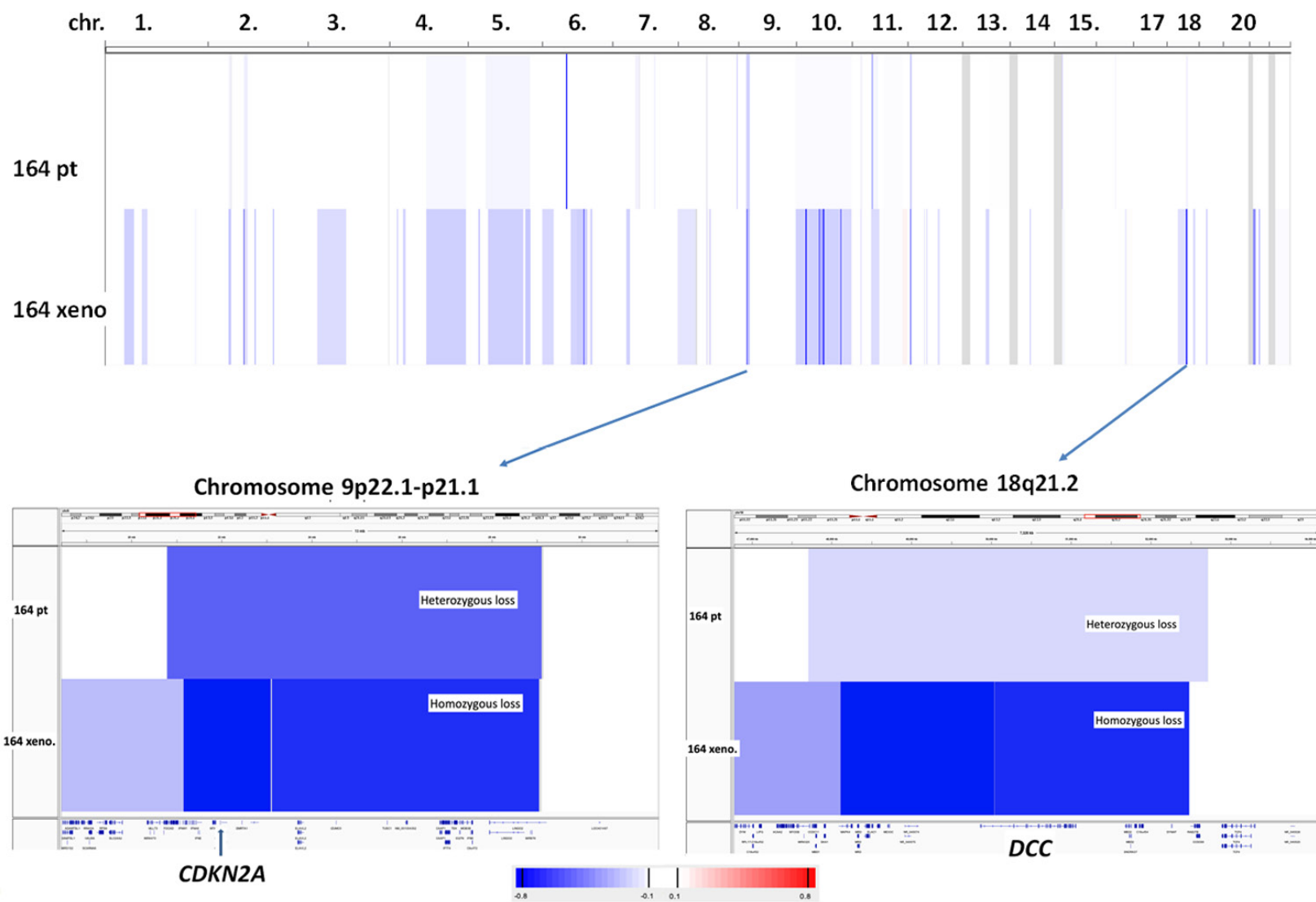
PDXs mucinous ovarian cancer models

| | | | | | | | | | | | |
|--------------|----|-----------|-----------|------|-------------|---------|----|-----------|-----------|------|-------------|
| | | | | | | PDX#164 | 9 | 23121911 | 29052442 | LOSS | -0.27108901 |
| patient #164 | 10 | 135708 | 135430043 | LOSS | -0.11131817 | PDX#164 | 10 | 135708 | 23708636 | LOSS | -0.22796377 |
| | | | | | | PDX#164 | 10 | 23755800 | 25705149 | HDEL | -2.09178179 |
| | | | | | | PDX#164 | 10 | 25740053 | 56018508 | LOSS | -0.22554604 |
| | | | | | | PDX#164 | 10 | 56076004 | 57628056 | HDEL | -2.5021768 |
| | | | | | | PDX#164 | 10 | 57667668 | 64602767 | LOSS | -0.32362268 |
| | | | | | | PDX#164 | 10 | 64615451 | 66612353 | LOSS | -0.31556414 |
| | | | | | | PDX#164 | 10 | 66702282 | 68680367 | HDEL | -1.90789248 |
| | | | | | | PDX#164 | 10 | 68687179 | 109115199 | LOSS | -0.22824603 |
| | | | | | | PDX#164 | 10 | 109173829 | 110688807 | HDEL | -1.88233379 |
| | | | | | | PDX#164 | 10 | 110697497 | 135430043 | LOSS | -0.20661974 |
| patient #164 | 11 | 21632174 | 26521821 | LOSS | -0.13287578 | PDX#164 | 11 | 21894814 | 23783338 | LOSS | -0.26411404 |
| patient #164 | 11 | 48647107 | 50467850 | LOSS | -0.20076055 | PDX#164 | 11 | 47983477 | 67408791 | LOSS | -0.19684138 |
| patient #164 | 11 | 50474459 | 51366191 | LOSS | -0.56786599 | PDX#164 | 11 | 67414492 | 74360030 | GAIN | 0.105256015 |
| patient #164 | 11 | 51372036 | 64147083 | LOSS | -0.11666955 | PDX#164 | 11 | 74366331 | 124190137 | LOSS | -0.10683956 |
| patient #164 | 11 | 77069746 | 124227543 | LOSS | -0.10617829 | PDX#164 | 11 | 124227543 | 134944006 | GAIN | 0.139078978 |
| patient #164 | 12 | 7520771 | 9813414 | LOSS | -0.31594017 | PDX#164 | 12 | 6128984 | 8023943 | LOSS | -0.23968702 |
| | | | | | | PDX#164 | 12 | 8029351 | 8274082 | HDEL | -2.31281488 |
| | | | | | | PDX#164 | 12 | 8280908 | 8509503 | HDEL | -0.65846985 |
| | | | | | | PDX#164 | 12 | 8609795 | 9428169 | HDEL | -2.41970498 |
| | | | | | | PDX#164 | 12 | 9451761 | 9816429 | LOSS | -0.32804057 |
| | | | | | | PDX#164 | 12 | 41723032 | 42942234 | LOSS | -0.22340097 |
| | | | | | | PDX#164 | 12 | 46670589 | 49512017 | LOSS | -0.20045613 |
| | | | | | | PDX#164 | 12 | 74690292 | 78768977 | LOSS | -0.18942913 |
| patient #164 | 13 | 66357912 | 115106996 | GAIN | 0.107197262 | PDX#164 | 13 | 57464113 | 66324372 | LOSS | -0.21301909 |
| patient #164 | 14 | 106681665 | 107023065 | AMPL | 1.127471562 | PDX#164 | 14 | 50563262 | 51195365 | LOSS | -0.36233976 |
| | | | | | | PDX#164 | 14 | 106681665 | 107023065 | AMPL | 0.780347864 |
| patient #164 | 15 | 20161372 | 20577494 | LOSS | -0.28658878 | PDX#164 | 15 | 20161372 | 26746446 | LOSS | -0.1201309 |
| | | | | | | PDX#164 | 15 | 26752373 | 26872259 | HDEL | -1.0675029 |
| patient #164 | 16 | 46820464 | 48132847 | LOSS | -0.14603658 | PDX#164 | 16 | 72911406 | 74171216 | LOSS | -0.24258104 |
| | | | | | | PDX#164 | 16 | 74183855 | 88302760 | GAIN | 0.114546239 |
| patient #164 | 17 | 44163925 | 44799962 | LOSS | -0.49388819 | | | | | | |
| patient #164 | 18 | 47709926 | 52717564 | LOSS | -0.1310454 | PDX#164 | 18 | 28109801 | 48111941 | LOSS | -0.17619072 |
| | | | | | | PDX#164 | 18 | 48114756 | 50039676 | HDEL | -2.47616174 |
| | | | | | | PDX#164 | 18 | 50043368 | 52483586 | LOSS | -0.27688464 |
| | | | | | | PDX#164 | 18 | 65009233 | 69958047 | LOSS | -0.20462023 |

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| | | | | | | PDX#164 | 19 | 19683350 | 20397555 | LOSS | -0.41962018 |
|--------------|-------|-----------|-----------|------|-------------|---------|-------|-----------|-----------|------|-------------|
| | | | | | | PDX#164 | 21 | 10734842 | 17242234 | LOSS | -0.42742183 |
| | | | | | | PDX#164 | 21 | 20415950 | 25158258 | LOSS | -0.12592933 |
| | | | | | | PDX#164 | 21 | 25165525 | 27414889 | LOSS | -0.51966215 |
| | | | | | | PDX#164 | 22 | 16079545 | 51169045 | LOSS | -0.11285165 |
| patient #164 | 23 | 7335191 | 7517325 | AMPL | 0.917457097 | PDX#164 | 23 | 126729969 | 127403730 | HDEL | -0.69614929 |
| ID | chrom | loc.start | loc.end | type | seg.mean | ID | chrom | loc.start | loc.end | type | seg.mean |
| patient #82 | 6 | 58738122 | 62230131 | LOSS | -0.33187307 | | | | | | |
| patient #82 | 7 | 61905009 | 64284502 | LOSS | -0.23511491 | | | | | | |
| patient #82 | 8 | 144670950 | 144899538 | LOSS | -0.46173432 | | | | | | |
| patient #82 | 9 | 10291546 | 12247973 | LOSS | -0.22640716 | | | | | | |
| patient #82 | 11 | 21712019 | 28237516 | LOSS | -0.12125467 | PDX#182 | 11 | 50345592 | 51366191 | LOSS | -0.37653636 |
| patient #82 | 11 | 48647107 | 50460079 | LOSS | -0.17863142 | | | | | | |
| patient #82 | 11 | 50467850 | 51366191 | HDEL | -0.76198416 | | | | | | |
| patient #82 | 14 | 106681665 | 106997898 | AMPL | 1.48395907 | PDX#182 | 14 | 106391073 | 107023065 | GAIN | 0.566176383 |
| patient #82 | 14 | 107023065 | 107282437 | GAIN | 0.124723335 | PDX#182 | 14 | 107032603 | 107282437 | LOSS | -0.14755029 |
| patient #82 | 19 | 23534190 | 24368053 | LOSS | -0.18175417 | | | | | | |
| patient #82 | 19 | 24368534 | 28379648 | LOSS | -0.46060025 | | | | | | |
| patient #82 | 22 | 18901004 | 19016663 | GAIN | 0.364652091 | | | | | | |
| patient #82 | 23 | 7335191 | 7528738 | AMPL | 1.203133776 | | | | | | |
| patient #82 | 23 | 7537276 | 8115453 | GAIN | 0.11469615 | | | | | | |

PDXs mucinous ovarian cancer models



Supplementary Figure 2. Copy number variation analysis in patients #164 and its corresponding PDX. Upper plot represents the heatmap of copy number changes across the genome. Lower plots focuses on CDKN2A and DCC genes loci. In both panels: white, normal copy number; blue, DNA loss; red, DNA gain.

PDXs mucinous ovarian cancer models

Supplementary Table 3. Pawthway enrichment analysis in mucinous PDXs as compared to hiugh grade serous/endometriod PDXs

| Gene Set Name | # Genes in Gene Set (K) | Description | # Genes in Overlap (k) | k/K | p-value | FDR q-value |
|---|-------------------------|---|------------------------|--------|----------|-------------|
| JAEGER_METASTASIS_UP | 44 | Genes up-regulated in metastases from malignant melanoma compared to the primary tumors. | 3 | 0.0682 | 3.61E-06 | 4.76E-02 |
| SATO_SILENCED_BY_METHYLATION_IN_PANCREATIC_CANCER_1 | 419 | Genes up-regulated in the pancreatic cancer cell lines (AsPC1, Hs766T, MiaPaCa2, Panc1) but not in the non-neoplastic cells (HPDE) by decitabine (5-aza-2'-deoxycytidine) [PubChem=451668]. | 5 | 0.0119 | 8.60E-06 | 4.76E-02 |
| GSE2706_LPS_VS_R848_AND_LPS_8H_STIM_DC_DN | 200 | Genes down-regulated in comparison of dendritic cells (DC) stimulated with LPS (TLR4 agonist) at 8 h versus DCs stimulated with LPS (TLR4 agonist) and R848 for 8 h. | 4 | 0.02 | 9.99E-06 | 4.76E-02 |
| Gene Set Name | # Genes in Gene Set (K) | Description | # Genes in Overlap (k) | k/K | p-value | FDR q-value |
| HALLMARK_TNFA_SIGNALING_VIA_NFKB | 200 | Genes regulated by NF-kB in response to TNF [GeneID=7124]. | 9 | 0.045 | 7.47E-09 | 3.74E-07 |
| HALLMARK_APICAL_JUNCTION | 200 | Genes encoding components of apical junction complex. | 8 | 0.04 | 1.30E-07 | 3.25E-06 |
| HALLMARK_IL2_STAT5_SIGNALING | 200 | Genes up-regulated by STAT5 in response to IL2 stimulation. | 7 | 0.035 | 1.98E-06 | 3.30E-05 |
| HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION | 200 | Genes defining epithelial-mesenchymal transition, as in wound healing, fibrosis and metastasis. | 6 | 0.03 | 2.62E-05 | 3.27E-04 |
| HALLMARK_APOPTOSIS | 161 | Genes mediating programmed cell death (apoptosis) by activation of caspases. | 5 | 0.0311 | 1.07E-04 | 1.07E-03 |
| HALLMARK_ESTROGEN_RESPONSE_LATE | 200 | Genes defining late response to estrogen. | 5 | 0.025 | 2.94E-04 | 1.83E-03 |
| HALLMARK_MITOTIC_SPINDLE | 200 | Genes important for mitotic spindle assembly. | 5 | 0.025 | 2.94E-04 | 1.83E-03 |
| HALLMARK_XENOBIOTIC_METABOLISM | 200 | Genes encoding proteins involved in processing of drugs and other xenobiotics. | 5 | 0.025 | 2.94E-04 | 1.83E-03 |
| HALLMARK_UV_RESPONSE_DN | 144 | Genes down-regulated in response to ultraviolet (UV) radiation. | 4 | 0.0278 | 8.19E-04 | 4.55E-03 |
| HALLMARK_UV_RESPONSE_UP | 158 | Genes up-regulated in response to ultraviolet (UV) radiation. | 4 | 0.0253 | 1.15E-03 | 5.77E-03 |
| HALLMARK_IL6_JAK_STAT3_SIGNALING | 87 | Genes up-regulated by IL6 [GeneID=3569] via STAT3 [GeneID=6774], e.g., during acute phase response. | 3 | 0.0345 | 2.06E-03 | 9.36E-03 |
| HALLMARK_ESTROGEN_RESPONSE_EARLY | 200 | Genes defining early response to estrogen. | 4 | 0.02 | 2.73E-03 | 9.73E-03 |
| HALLMARK_INFLAMMATORY_RESPONSE | 200 | Genes defining inflammatory response. | 4 | 0.02 | 2.73E-03 | 9.73E-03 |
| HALLMARK_KRAS_SIGNALING_UP | 200 | Genes up-regulated by KRAS activation. | 4 | 0.02 | 2.73E-03 | 9.73E-03 |
| HALLMARK_WNT_BETA_CATENIN_SIGNALING | 42 | Genes up-regulated by activation of WNT signaling through accumulation of beta catenin CTNNB1. | 2 | 0.0476 | 6.54E-03 | 2.18E-02 |

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Supplementary Table 4. Metabolomic analysis (untargeted and targeted) on high-grade serous/endometrioid (#124, #239) and mucinous ovarian carcinoma (#182, #164)

| Metabolites | Fold Change | Peak intensity | | | | | | | | | | Adduct | Mw_mean |
|--------------------------|-------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|----------|
| | | High grade serous | | | | | | Mucinous | | | | | |
| | | #124 | | #239 | | #182 | | #164 | | | | | |
| Creatine | 1.09 | 228833.2 | 305577.9 | 320288.7 | 432260.1 | 389198.2 | 406463.6 | 473933.4 | 407565 | 460742.7 | 174265.3 | M+H | 132.0769 |
| Spermine | -1.14 | 96460.75 | 146801.7 | 157175.1 | 337359.9 | 242466.4 | 279307.7 | 137152.4 | 250907.4 | 247377 | 103961.5 | M+H | 203.2232 |
| Acetylcarnitine | -1.16 | 366178.3 | 381830.2 | 468221.6 | 739855.9 | 703406.4 | 741415.5 | 665684.9 | 326560.6 | 292845.6 | 668086.6 | M+H | 204.1242 |
| N1-Acetylspermine | 17.63 | 0 | 0 | 0 | 2535.41 | 3609.909 | 2483.7 | 6745.919 | 58172.18 | 32011.23 | 4509.496 | M+H | 245.2334 |
| Hexanoylcarnitine | -5.31 | 265414.4 | 324020.5 | 345591.5 | 9672.969 | 7472.402 | 13976.67 | 40215.29 | 12546.24 | 12971.31 | 55460.85 | M+H | 260.1859 |
| Octanoylcarnitine | -4.02 | 70392.93 | 85899.29 | 88564.12 | 3057.612 | 2721.775 | 5525.541 | 13938.99 | 5289.471 | 4558.743 | 18646.87 | M+H | 288.2169 |
| Decanoylcarnitine | -2.40 | 44855.78 | 53548.33 | 59501.01 | 4322.136 | 4347.306 | 7166.844 | 11620.86 | 11302.45 | 10650.26 | 14628.94 | M+H | 316.2481 |
| Stearoylcarnitine | 1.03 | 104048.1 | 120308.5 | 201365.9 | 28442.79 | 24712.26 | 47338.2 | 51165.41 | 121550.9 | 173809.9 | 13164.46 | M+H | 428.3728 |
| pyruvate | -1.89 | 43953.1 | 47688.57 | 46379.98 | 27194.73 | 28971.02 | 21595.23 | 26191.38 | 12454.61 | 10085.34 | 27353.59 | M-H | 87.00887 |
| lactic acid | 1.34 | 72003.43 | 60500.05 | 60391.76 | 107347.1 | 90665.49 | 86154.4 | 123149.3 | 100769.9 | 105540.9 | 95471.23 | M-H | 89.02453 |
| Oxalacetic acid | 1.01 | 85551.33 | 90015.6 | 83150.14 | 90978.8 | 90982.21 | 88475.51 | 89708.87 | 85394.51 | 87838.23 | 92181.96 | M-H | 112.9856 |
| fumarate | -1.61 | 36537.71 | 39288.87 | 38162.33 | 26739.47 | 31083.41 | 22524.44 | 25259.82 | 15673.96 | 14512.53 | 25142.9 | M-H | 115.0036 |
| succinate | 2.89 | 7132.301 | 8456.018 | 7403.189 | 14638.82 | 9608.096 | 8801.011 | 21042.56 | 33688.93 | 35584.64 | 17810.19 | M-H | 117.0192 |
| Taurine | -1.10 | 177192 | 181394 | 161201 | 270453.4 | 215748.9 | 249176.1 | 223930.2 | 191422.2 | 160597.8 | 185014.9 | M-H | 124.0073 |
| Pyroglutamic acid | 2.33 | 7714.318 | 8293.904 | 7240.291 | 5707.378 | 6178.577 | 5632.256 | 16589.44 | 15084.66 | 10292.03 | 21377 | M-H | 128.0352 |
| malate | 1.04 | 52873.76 | 54826.86 | 58612.18 | 75048.6 | 99263.5 | 71718.49 | 71847.6 | 73192.88 | 76268.8 | 64056.33 | M-H | 133.0141 |
| Hypoxanthine | 2.11 | 9752.633 | 8634.266 | 9584.405 | 7834.029 | 6384.18 | 7489.89 | 9065.039 | 26797.52 | 21050.41 | 12823.1 | M-H | 135.0303 |
| Glutamine | 1.54 | 15068.73 | 11684.82 | 5935.058 | 10868.63 | 12511.1 | 12059.12 | 24047.5 | 6931.186 | 26322.21 | 12532.41 | M-H | 145.0617 |
| Xanthine | 5.45 | 4107.661 | 2760.118 | 4793.89 | 5393.98 | 2120.585 | 3778.583 | 5793.8 | 38559.95 | 27783.52 | 11299.31 | M-H | 151.0259 |
| Uric acid | 4.58 | 1880.298 | 991.4921 | 1724.652 | 2868.161 | 1359.515 | 1443.211 | 10060.69 | 5663.07 | 5063.052 | 10543.61 | M-H | 167.0209 |
| N-Acetyl-L-aspartic acid | -8.01 | 26361.08 | 25842.79 | 26555.23 | 87379.41 | 180810.1 | 127591.2 | 18244.34 | 2374.491 | 1857.783 | 17033.33 | M-H | 174.0407 |
| Citric acid | -1.92 | 23440.87 | 23287.9 | 27555.34 | 28437.22 | 48794.96 | 43898.11 | 25582.46 | 12331.08 | 12129.58 | 17880.49 | M-H | 191.0195 |
| Pantothenic acid | -1.44 | 182209.1 | 163429.7 | 149892 | 82019.9 | 62769.01 | 61679.26 | 108630.2 | 37952.23 | 48938.42 | 129097.6 | M-H | 218.1031 |
| Palmitic acid | -1.14 | 424097.1 | 263380.1 | 236264.9 | 130630 | 217812.3 | 177980 | 259444.7 | 182471.7 | 218265.3 | 187504.3 | M-H | 255.2329 |
| Linoleic acid | 2.65 | 14271.92 | 9028.383 | 12708.97 | 4896.332 | 7453.251 | 5095.058 | 15929.72 | 27061.11 | 27342.97 | 24104.9 | M-H | 279.2324 |
| Oleic acid | 1.41 | 35591.02 | 11022.09 | 17483.79 | 5406.544 | 11896.4 | 9392.697 | 14371.9 | 28910.29 | 29055.8 | 12784.84 | M-H | 281.248 |
| Stearic acid | -1.27 | 454076.9 | 298429.4 | 277048.6 | 152648.2 | 274069.5 | 223892.4 | 312610.4 | 157925.3 | 257256.1 | 154177.8 | M-H | 283.2642 |
| Arachidonic acid | 4.58 | 16950.42 | 10499.97 | 15985.38 | 12365.39 | 16992.79 | 10647.9 | 33696.31 | 69307.82 | 47879.95 | 103768.4 | M-H | 303.2323 |
| Glutathione | -1.02 | 35733.33 | 50362.12 | 48598.28 | 49568.08 | 51453.06 | 50315.18 | 30078.42 | 35096.96 | 95817.24 | 25226.16 | M-H | 306.0757 |
| | | µM | | | | | | | | | | | |
| Sample Identification | | High grade serous | | | | | | Mucinous | | | | | |
| | | #124 | | #239 | | #182 | | #164 | | | | | |
| | | | | | | | | | | | | | |
| lysoPC a C16:0 | 3.50 | 36.7 | 67.2 | 46.6 | 4.546667 | 3.546667 | 3.116667 | 3.796667 | 2.456667 | 105.55 | 159.35 | | |
| lysoPC a C16:1 | 51.54 | 0.860667 | 1.249 | 0.806667 | 0.090667 | 0.104667 | 0.091 | 0.085 | 0.076667 | 27.65 | 39.45 | | |
| lysoPC a C17:0 | 18.64 | 1.53 | 3.406667 | 1.768667 | 0.125 | 0.101333 | 0.093667 | 0.086 | 0.066333 | 30.3 | 38.35 | | |

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| | | | | | | | | | | | |
|----------------|-------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|
| lysoPC a C18:1 | 14.01 | 2.62 | 2.01 | 1.626667 | 0.711 | 0.58 | 0.624 | 0.541333 | 0.379 | 22.9 | 24.25 |
| lysoPC a C18:2 | 10.12 | 2.68 | 2.263333 | 1.52 | 0.824 | 0.469 | 0.438667 | 1.288333 | 0.906333 | 23.65 | 22.75 |
| PC aa C30:0 | 5.09 | 6.823333 | 5.343333 | 6.013333 | 0.392333 | 0.611 | 0.485 | 0.234667 | 0.109667 | 27.05 | 33.3 |
| PC aa C30:2 | 6.75 | 0.782 | 0.953667 | 0.819 | 0.015333 | 0.022 | 0.018333 | 0.007333 | 0.004667 | 3.665 | 5.2 |
| PC aa C32:0 | 2.70 | 61.8 | 44.13333 | 58.6 | 4.043333 | 4.683333 | 3.333333 | 2.666667 | 1.293 | 104 | 48.05 |
| PC aa C32:1 | 2.77 | 56.73333 | 33.86667 | 34.2 | 3.156667 | 6.993333 | 4.613333 | 4.876667 | 1.305 | 90.2 | 62 |
| PC aa C32:3 | 13.47 | 11.24333 | 10.61333 | 12.49 | 0.139 | 0.204667 | 0.149333 | 0.141333 | 0.034333 | 137.5 | 72.5 |
| PC aa C34:3 | 7.58 | 18.7 | 14.33333 | 13.38 | 1.35 | 2.623333 | 1.610333 | 2.49 | 0.674333 | 55.55 | 64.7 |
| PC aa C34:4 | 6.51 | 20.6 | 17.6 | 18.83333 | 0.310667 | 0.542667 | 0.4 | 0.411 | 0.115667 | 108 | 132.5 |
| PC aa C36:1 | 6.60 | 19.23333 | 13.53333 | 14.26667 | 1.297667 | 1.786667 | 1.408667 | 0.361 | 0.271333 | 67.8 | 77.65 |
| PC aa C36:3 | 2.08 | 40.66667 | 26.56667 | 21.96667 | 3.31 | 7.326667 | 3.846667 | 4.72 | 1.574667 | 47.55 | 64.1 |
| PC aa C36:5 | 4.64 | 22.03333 | 16.63333 | 14.93333 | 0.584333 | 1.141 | 0.726667 | 1.122333 | 0.263667 | 83.95 | 35 |
| PC aa C36:6 | 8.21 | 12.33 | 11.28667 | 13.91667 | 0.078667 | 0.118 | 0.097667 | 0.092 | 0.024333 | 106.9 | 58.9 |
| PC aa C38:3 | 10.29 | 8.176667 | 6.323333 | 6.873333 | 0.386667 | 0.671333 | 0.380667 | 0.268 | 0.123333 | 77.9 | 43.45 |
| PC aa C38:4 | 1.54 | 54.26667 | 35.8 | 28.56667 | 2.252 | 4.08 | 2.025 | 2.174 | 0.839333 | 42.25 | 56.05 |
| PC aa C38:5 | 3.58 | 39.5 | 25.5 | 23.36667 | 1.277667 | 2.64 | 1.4 | 1.879333 | 0.450667 | 120 | 44.5 |
| PC aa C40:4 | 10.71 | 6.563333 | 5.223333 | 5.25 | 0.109667 | 0.118333 | 0.085333 | 0.064667 | 0.025 | 9.1 | 64.15 |
| PC aa C40:5 | 12.57 | 7.333333 | 5.676667 | 5.96 | 0.106667 | 0.170667 | 0.101 | 0.096 | 0.025667 | 70.8 | 35.85 |
| PC ae C30:1 | 22.55 | 0.770333 | 0.707333 | 0.854667 | 0.039333 | 0.057333 | 0.041333 | 0.037667 | 0.016667 | 5.35 | 18.56 |
| PC ae C30:2 | 23.05 | 0.949333 | 1.071333 | 1.044 | 0.012667 | 0.014667 | 0.012 | 0.01 | 0.004667 | 16 | 28.45 |
| PC ae C32:1 | 16.14 | 10.33667 | 8.636667 | 10.61 | 0.375667 | 0.688333 | 0.495333 | 0.289 | 0.121333 | 149.8 | 65.7 |
| PC ae C34:1 | 6.37 | 15.96667 | 12.04667 | 12.73333 | 0.621667 | 1.09 | 0.670667 | 0.546667 | 0.202 | 66.25 | 78.5 |
| PC ae C34:2 | 5.14 | 11.33333 | 9.24 | 9.086667 | 0.444333 | 1.097667 | 0.575667 | 0.792667 | 0.338333 | 75.85 | 15.45 |
| PC ae C34:3 | 15.85 | 10.34 | 9.026667 | 11.58333 | 0.186333 | 0.468667 | 0.261667 | 0.385667 | 0.278 | 107.8 | 112.5 |
| PC ae C36:2 | 12.09 | 9.06 | 7.586667 | 8.26 | 0.348667 | 0.655667 | 0.373333 | 0.442 | 0.286333 | 137 | 41.95 |
| PC ae C36:3 | 9.38 | 9.313333 | 7.886667 | 8.68 | 0.179667 | 0.394 | 0.278 | 0.335667 | 0.144667 | 36.5 | 29.4 |
| PC ae C36:4 | 5.67 | 23.46667 | 16.36667 | 16.5 | 0.437 | 0.738667 | 0.392667 | 0.648667 | 0.217667 | 99.35 | 41.75 |
| PC ae C36:5 | 6.19 | 17.8 | 15.03333 | 15.96667 | 0.528333 | 1.727333 | 1.036333 | 0.473667 | 0.278 | 81.25 | 67.5 |
| PC ae C38:2 | 12.17 | 5.243333 | 4.106667 | 5.403333 | 0.044667 | 0.071667 | 0.041667 | 0.047 | 0.031333 | 6.75 | 19.4 |
| PC ae C38:3 | 10.97 | 7.266667 | 6.036667 | 7.18 | 0.092333 | 0.149667 | 0.085667 | 0.074 | 0.032 | 113.5 | 48.15 |
| PC ae C38:5 | 8.24 | 13.1 | 9.163333 | 9.283333 | 0.427 | 0.848667 | 0.55 | 0.52 | 0.140667 | 36.85 | 50.25 |
| PC ae C38:6 | 7.22 | 11.93333 | 9.663333 | 10.23333 | 0.155333 | 0.428 | 0.261 | 0.251667 | 0.068 | 87.5 | 30.75 |
| PC ae C40:1 | 7.11 | 7.006667 | 5.543333 | 5.226667 | 0.245 | 0.499667 | 0.297 | 0.437 | 0.146 | 47.45 | 23.95 |
| PC ae C40:5 | 8.90 | 5.763333 | 5.36 | 5.84 | 0.062333 | 0.084667 | 0.053667 | 0.051333 | 0.022667 | 57.45 | 37.5 |
| PC ae C42:2 | 11.18 | 4.29 | 3.503333 | 3.763333 | 0.034333 | 0.069667 | 0.05 | 0.030333 | 0.014 | 16.55 | 32.43 |
| PC ae C42:3 | 15.72 | 4.923333 | 4.21 | 4.406667 | 0.088333 | 0.143333 | 0.089667 | 0.091 | 0.041333 | 90.15 | 27.8 |
| PC ae C42:4 | 12.99 | 3.503333 | 3.223333 | 3.163333 | 0.005 | 0.007 | 0.003 | 0.003667 | 0.005 | 24.6 | 43.55 |
| sugars | 51.35 | 588.3333 | 498 | 270.3333 | 102.4333 | 122.8667 | 37.5 | 116.1 | 27.4 | 18503.5 | 23667.5 |
| Kynurenine | 2.86 | 0.421333 | 0.410667 | 0.518333 | 0.573667 | 0.251667 | 0.184667 | 2.026667 | 2.353333 | 0.4725 | 0.3715 |
| Met-SO | -2.96 | 4.933333 | 3.23 | 1.81 | 1.209 | 0.802 | 0.585667 | 0.314667 | 0.281667 | 0.4825 | 1.265 |
| Spermine | -3.80 | 2.264667 | 4.296667 | 35.3 | 3.203333 | 2.492333 | 2.59 | 1.09 | 1.15 | 2 | 4.195 |

PDXs mucinous ovarian cancer models

| | | | | | | | | | | | |
|---------------|--------|----------|----------|----------|----------|----------|----------|----------|----------|--------|-------|
| t4-OH-Pro | 2.24 | 7.41 | 6.963333 | 6.523333 | 3.293333 | 3.91 | 3.683333 | 4.7 | 4.743333 | 14.65 | 21.45 |
| Taurine | 1.04 | 813.3333 | 922 | 876.3333 | 190 | 196 | 201 | 204.6667 | 210.6667 | 704.5 | 831 |
| Cit | 3.96 | 12.66667 | 11.8 | 9.963333 | 2.44 | 1.53 | 1.553333 | 7.076667 | 3.773333 | 26.05 | 64.25 |
| Gly | 1.30 | 486.6667 | 445.6667 | 382.6667 | 396 | 443 | 427.6667 | 271.3333 | 348.6667 | 611 | 960 |
| His | 1.14 | 46.93333 | 40.73333 | 39.8 | 22.63333 | 18.57667 | 17.3 | 16.6 | 15.16667 | 29.7 | 66.45 |
| Met | -1.34 | 54.66667 | 48.2 | 41.63333 | 16.43333 | 11.74333 | 10.6 | 8.556667 | 9.19 | 25.15 | 41.8 |
| Pro | 1.05 | 157.3333 | 126.6667 | 122.7667 | 130.3333 | 104.1 | 126 | 54.76667 | 56 | 145 | 256 |
| SM (OH) C14:1 | 98.23 | 0.562667 | 0.613667 | 0.558333 | 0.067333 | 0.105333 | 0.055667 | 0.048 | 0.039 | 50.5 | 32.05 |
| SM (OH) C16:1 | 63.88 | 0.62 | 0.603 | 0.534 | 0.076 | 0.121333 | 0.078333 | 0.026333 | 0.022333 | 45.3 | 21.8 |
| SM (OH) C24:1 | 31.55 | 0.261667 | 0.295 | 0.233333 | 0.005333 | 0.006333 | 0.006333 | 0.005667 | 0.001333 | 0.6565 | 11.96 |
| SM C16:0 | 6.68 | 6.753333 | 6.693333 | 4.963333 | 2.443333 | 3.916667 | 2.833333 | 1.886667 | 1.171667 | 78.55 | 39.3 |
| SM C16:1 | 30.35 | 2.073333 | 1.716667 | 1.385 | 0.192 | 0.333667 | 0.207333 | 0.341 | 0.221 | 31.55 | 44.4 |
| SM C18:0 | 26.28 | 1.108333 | 1.186667 | 0.877667 | 0.389667 | 0.561 | 0.450667 | 0.159667 | 0.084333 | 29.95 | 46.1 |
| SM C18:1 | 21.61 | 1.03 | 0.702333 | 0.547667 | 0.077667 | 0.165333 | 0.104 | 0.062 | 0.041 | 5.11 | 15.05 |
| C16 | 2.17 | 2.803333 | 2.766667 | 4.493333 | 0.219 | 0.177667 | 0.231 | 0.695333 | 0.302 | 6.03 | 6.145 |
| C18 | 6.50 | 0.842667 | 0.650667 | 1.627667 | 0.118667 | 0.158 | 0.182667 | 0.195667 | 0.072333 | 6.53 | 7.64 |
| C18:1 | 22.52 | 0.418667 | 0.428333 | 0.758333 | 0.098667 | 0.071667 | 0.115667 | 0.460333 | 0.176 | 12.5 | 13.25 |
| C18:2 | 9.95 | 0.361 | 0.516667 | 0.608333 | 0.057333 | 0.042 | 0.059 | 0.312 | 0.207 | 4.375 | 4.88 |
| C2 | -1.94 | 11.89 | 12.5 | 15.9 | 16.66667 | 14.22 | 15.33333 | 11.73333 | 12.9 | 4.32 | 4.07 |
| C3 | 2.85 | 0.744667 | 0.662 | 0.691 | 0.486333 | 0.525667 | 0.453 | 0.274667 | 0.558667 | 2.66 | 2.405 |
| C3-DC (C4-OH) | 3.28 | 0.339333 | 0.334 | 0.356333 | 0.212667 | 0.179333 | 0.160667 | 0.180667 | 0.204 | 1.37 | 1.24 |
| C4 | -11.68 | 29.1 | 23.23333 | 23.03333 | 1.154 | 0.848 | 1.066667 | 0.676333 | 0.653333 | 1.52 | 1.405 |