

Table S3. Metabolites differentially identified in KRAS-WT BxPC3 and KRAS-mutant PANC1 following treatment of ML-SI1 for 48 h (BxPC3 vs. PANC1).

| Compound | Log FC | p (corr) | Abundance (Log ₂) | |
|--|----------|-----------------------|-------------------------------|------------------|
| | | | SI-treated BxPC3 | SI-treated PANC1 |
| Creatine | 2.408625 | 2.49x10 ⁻⁴ | 20.19716 | 22.60578 |
| L-Aspartic Acid | 22.04454 | 1.26x10 ⁻⁸ | 0.250326 | 22.29487 |
| N-Carbamoyl-DL-aspartic acid | 21.6861 | 1.02x10 ⁻⁷ | 0.612549 | 22.29865 |
| PE(15:0/16:0) | 21.49742 | 9.09x10 ⁻⁸ | 0.612549 | 22.10997 |
| PE(18:0/15:1(9Z)) | 1.784996 | 1.59x10 ⁻³ | 19.33322 | 21.11821 |
| Pyrroline hydroxycarboxylic acid | 1.320992 | 2.64x10 ⁻³ | 19.67329 | 20.99428 |
| Octylamine | 20.25474 | 9.02x10 ⁻⁷ | 0.612549 | 20.86729 |
| 2-C-Methyl-D-erythritol 4-phosphate | 2.359703 | 3.09x10 ⁻⁴ | 18.35122 | 20.71092 |
| Pyrroline hydroxycarboxylic acid Esi-0.46333337 | 1.341156 | 3.52x10 ⁻³ | 18.65091 | 19.99207 |
| PE(18:0/15:1(9Z)) Esi+10.6830015 | 3.503849 | 5.86x10 ⁻⁵ | 16.1559 | 19.65975 |
| UDP-glucose | 1.521963 | 6.67x10 ⁻⁴ | 17.92674 | 19.4487 |
| PE(14:0/22:2(13Z,16Z)) | 18.6895 | 1.87x10 ⁻⁷ | 0.612549 | 19.30205 |
| Chlorophacinone | 18.60014 | 1.34x10 ⁻⁷ | 0.612549 | 19.21269 |
| PE(18:0/16:1(9Z)) | 18.04962 | 2.55x10 ⁻⁷ | 0.612549 | 18.66217 |
| Glutaryl glycine | 18.33183 | 1.86x10 ⁻⁸ | 0.250326 | 18.58215 |
| PE(18:0/15:0) | 17.9367 | 1.60x10 ⁻⁵ | 0.612549 | 18.54925 |
| PE(14:0/18:0) | 17.8727 | 1.62x10 ⁻⁷ | 0.612549 | 18.48525 |
| 5-Deoxy-5-(methylthio)adenosine | 2.67561 | 1.66x10 ⁻⁴ | 15.7379 | 18.41351 |
| PE(17:0/0:0) | 2.601787 | 2.48x10 ⁻⁴ | 15.67825 | 18.28004 |
| 4-Methylumbelliferyl-D-glucuronide | 17.86235 | 2.19x10 ⁻⁸ | 0.250326 | 18.11267 |
| Taurine | 17.70654 | 2.19x10 ⁻⁸ | 0.250326 | 17.95686 |
| N-HFG | 17.24822 | 2.01x10 ⁻⁷ | 0.612549 | 17.86077 |
| PS(O-20:0/17:0) | 17.5579 | 2.43x10 ⁻⁸ | 0.250326 | 17.80822 |
| PE(P-18:0/19:0) | 17.08223 | 2.68x10 ⁻⁷ | 0.612549 | 17.69478 |
| PE(16:0/0:0) | 1.127069 | 2.50x10 ⁻³ | 16.39835 | 17.52542 |
| PE(O-16:0/0:0) | 16.85867 | 2.13x10 ⁻⁷ | 0.612549 | 17.47122 |
| Maleamic acid | 16.67934 | 9.84x10 ⁻⁷ | 0.612549 | 17.29189 |
| PE(O-16:0/0:0) | 16.4783 | 3.17x10 ⁻⁸ | 0.250326 | 16.72862 |
| Propionyl glycine | 16.41448 | 3.26x10 ⁻⁸ | 0.250326 | 16.6648 |
| 2-Amino-3,7-dideoxy-D-threo-hept-6-ulosonic acid | 16.28381 | 3.72x10 ⁻⁸ | 0.250326 | 16.53413 |
| PE(18:0/16:1(9Z)) Esi+10.711333 | 15.81645 | 4.12x10 ⁻⁷ | 0.612549 | 16.429 |
| 4-Methylumbelliferyl sulfate | 16.16664 | 3.99x10 ⁻⁸ | 0.250326 | 16.41696 |
| PE(11:0/10:0)[U] | 15.74293 | 3.41x10 ⁻⁷ | 0.612549 | 16.35548 |
| PE(12:0/18:0)[U] | 15.71828 | 3.05x10 ⁻⁷ | 0.612549 | 16.33083 |
| PE(15:0/16:0) Esi+10.725001 | 15.51078 | 4.44x10 ⁻⁶ | 0.612549 | 16.12333 |
| PS(21:0/15:1(9Z)) | 15.66979 | 1.23x10 ⁻⁷ | 0.250326 | 15.92012 |
| PE(22:1(11Z)/19:1(9Z)) | 15.08739 | 4.03x10 ⁻⁷ | 0.612549 | 15.69994 |
| p-HydroxyPiroxicam glucuronide | 15.25595 | 5.31x10 ⁻⁸ | 0.250326 | 15.50628 |
| Tamarixetin 5-glucoside-7-glucuronide | 15.17412 | 1.06x10 ⁻⁶ | 0.250326 | 15.42444 |
| PE(O-18:0/0:0) | 14.71531 | 4.23x10 ⁻⁷ | 0.612549 | 15.32786 |
| PI(20:4(8Z,11Z,14Z,17Z)/16:0) | 14.53318 | 4.43x10 ⁻⁷ | 0.612549 | 15.14573 |

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| PS(20:4(5Z,8Z,11Z,14Z)/17:2(9Z,12Z)) | 14.50993 | 5.21x10 ⁻⁷ | 0.612549 | 15.12248 |
| PS(21:0/20:5(5Z,8Z,11Z,14Z,17Z)) | 14.09457 | 6.95x10 ⁻⁶ | 0.988203 | 15.08277 |
| 2,2-Dimethyl-3-(4-methoxyphenyl)-4-propyl-2H-1-benzopyran-7-ol acetate | 14.38857 | 2.63x10 ⁻⁶ | 0.612549 | 15.00112 |
| PS(20:1(11Z)/17:1(9Z)) | 14.68798 | 8.03x10 ⁻⁸ | 0.250326 | 14.93831 |
| PI(20:4(5Z,8Z,11Z,14Z)/18:4(6Z,9Z,12Z,15Z)) | 14.27554 | 1.04x10 ⁻⁶ | 0.612549 | 14.88809 |
| D-Glucosyldihydrosphingosine | 14.26756 | 7.36x10 ⁻⁷ | 0.612549 | 14.8801 |
| N-cis-octadec-9Z-enoyl-L-Homoserine lactone | 14.19759 | 9.65x10 ⁻⁷ | 0.612549 | 14.81014 |
| PS(20:4(5Z,8Z,11Z,14Z)/19:0) | 13.96552 | 8.17x10 ⁻⁷ | 0.612549 | 14.57806 |
| 2-Hydroxy-C18-cerebroside | 13.44691 | 7.23x10 ⁻⁷ | 0.612549 | 14.05946 |
| PS(16:0/13:0) | 12.09795 | 7.87x10 ⁻⁴ | 0.612549 | 12.7105 |
| Diglycolic acid | -1.70861 | 2.83x10 ⁻³ | 21.63849 | 19.92988 |
| N1-Acetylspermidine | -1.50728 | 2.11x10 ⁻³ | 19.38656 | 17.87929 |
| C17 Sphinganine | -1.60432 | 1.72x10 ⁻³ | 19.15855 | 17.55422 |
| PS(21:0/0:0) Esi-6.0281663 | -1.56272 | 8.18x10 ⁻⁴ | 18.99284 | 17.43012 |
| Citric acid | -3.80753 | 2.39x10 ⁻⁵ | 20.71918 | 16.91165 |
| PI(18:1(9Z)/0:0) Esi-6.5464993 | -2.80413 | 5.35x10 ⁻⁵ | 19.69727 | 16.89313 |
| PI(20:4(5Z,8Z,11Z,14Z)/0:0) | -1.1953 | 2.56x10 ⁻³ | 17.93491 | 16.73961 |
| 5-Oxoavermectin "1a" aglycone | -2.26876 | 3.90x10 ⁻⁴ | 18.85631 | 16.58755 |
| PI(18:0/0:0) | -2.9836 | 3.50x10 ⁻⁵ | 19.54138 | 16.55777 |
| PI(18:1(9Z)/0:0) | -4.26093 | 1.07x10 ⁻⁵ | 20.62956 | 16.36863 |
| PS(18:1(9Z)/0:0) | -1.34324 | 4.20x10 ⁻³ | 17.68472 | 16.34148 |
| 1-(10-methyl-hexadecanoyl)-2-(8-[3]-ladderane-octanyl)-sn-glycerophosphoethanolamine | -1.48597 | 2.64x10 ⁻³ | 17.69868 | 16.21271 |
| PG(18:1(9E)/0:0)[U] | -3.91442 | 2.23x10 ⁻⁵ | 19.98584 | 16.07142 |
| PS(O-16:0/19:0) | -2.75684 | 1.99x10 ⁻⁴ | 18.62548 | 15.86864 |
| 24-isopropenyl-22E-dehydrocholesterol | -3.83406 | 4.78x10 ⁻⁵ | 19.4447 | 15.61064 |
| Glycerophospho-N-Oleoyl Ethanolamine Esi-5.9839997 | -1.38235 | 1.29x10 ⁻³ | 16.87592 | 15.49357 |
| Erythrodiol Esi+8.9275 | -3.01737 | 1.11x10 ⁻⁴ | 17.80879 | 14.79142 |
| Erythrodiol | -3.14917 | 8.85x10 ⁻⁵ | 17.90201 | 14.75284 |
| PI(22:4(7Z,10Z,13Z,16Z)/0:0) | -1.21958 | 3.50x10 ⁻³ | 15.80057 | 14.58098 |
| Glycidyl oleate | -3.48563 | 3.28x10 ⁻⁴ | 17.97976 | 14.49413 |
| PE(14:0/10:0)[U] | -14.2634 | 3.77x10 ⁻⁵ | 16.87641 | 2.613026 |
| PS(P-16:0/13:0) | -11.7901 | 6.72x10 ⁻⁵ | 14.33697 | 2.546895 |
| PE(O-16:0/17:0) | -17.3045 | 5.91x10 ⁻⁷ | 18.48719 | 1.18272 |
| PI(18:1(9Z)/0:0) | -16.8142 | 7.04x10 ⁻⁷ | 17.99694 | 1.18272 |
| PS(P-16:0/17:2(9Z,12Z)) | -16.7023 | 1.26x10 ⁻⁶ | 17.88498 | 1.18272 |
| PE-NMe2(16:0/18:1(9Z)) | -16.3332 | 1.48x10 ⁻⁶ | 17.51594 | 1.18272 |
| Spermidine | -16.3121 | 8.40x10 ⁻⁷ | 17.49486 | 1.18272 |
| PS(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/17:2(9Z,12Z)) | -16.3062 | 9.40x10 ⁻⁷ | 17.48895 | 1.18272 |
| Sphinganine | -16.2402 | 8.19x10 ⁻⁷ | 17.42294 | 1.18272 |
| PG(18:1(9E)/0:0)[U] | -16.2338 | 8.67x10 ⁻⁷ | 17.41652 | 1.18272 |
| PE(11:0/14:0)[U] | -16.1332 | 8.35x10 ⁻⁷ | 17.31589 | 1.18272 |
| 3'-O-Aminopropyl-25-hydroxyvitamin D3 | -15.8078 | 9.46x10 ⁻⁷ | 16.99048 | 1.18272 |
| PE(P-18:0/17:2(9Z,12Z)) | -15.5054 | 9.92x10 ⁻⁷ | 16.68812 | 1.18272 |
| Guanosine | -15.5035 | 1.29x10 ⁻⁶ | 16.68623 | 1.18272 |

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| Succinoadenosine | -15.2775 | 1.11x10 ⁻⁶ | 16.46024 | 1.18272 |
| Dihydroceramide C2 | -15.2093 | 1.22x10 ⁻⁶ | 16.39204 | 1.18272 |
| PI(20:4(5Z,8Z,11Z,14Z)/0:0) | -15.1434 | 1.28x10 ⁻⁶ | 16.32613 | 1.18272 |
| PI(20:3(8Z,11Z,14Z)/0:0) | -15.1175 | 1.24x10 ⁻⁶ | 16.30021 | 1.18272 |
| PI(16:1(9Z)/0:0) | -15.0657 | 1.20x10 ⁻⁶ | 16.24838 | 1.18272 |
| 4,4'-Diapophytofluene | -14.9216 | 1.39x10 ⁻⁶ | 16.10434 | 1.18272 |
| LysoPE(0:0/20:4(5Z,8Z,11Z,14Z)) | -14.8136 | 1.33x10 ⁻⁶ | 15.9963 | 1.18272 |
| 3-Hydroxy-5-chola-7,9(11)-dien-24-oic Acid | -14.8029 | 1.25x10 ⁻⁶ | 15.98563 | 1.18272 |
| Arachidonoylmorpholine | -14.646 | 1.43x10 ⁻⁶ | 15.82872 | 1.18272 |
| 5beta-Pregnane-3alpha,17alpha,20alpha-triol | -14.6253 | 1.39x10 ⁻⁶ | 15.80803 | 1.18272 |
| PG(20:4(5Z,8Z,11Z,14Z)/0:0) | -14.5595 | 1.53x10 ⁻⁶ | 15.74227 | 1.18272 |
| PE(6:0/6:0) | -14.4439 | 1.43x10 ⁻⁶ | 15.62666 | 1.18272 |
| Butoctamide hydrogen succinate | -14.2966 | 1.72x10 ⁻⁶ | 15.47934 | 1.18272 |
| Dihydrojasmonic Acid, Methyl Ester | -14.144 | 1.63x10 ⁻⁶ | 15.32675 | 1.18272 |
| 17beta-Nitro-5alpha-androstane | -14.096 | 1.84x10 ⁻⁶ | 15.27868 | 1.18272 |
| Oleoyl Ethanolamide | -14.0279 | 1.85x10 ⁻⁶ | 15.21061 | 1.18272 |
| PE(O-18:1(9Z)/0:0) | -14.0173 | 1.84x10 ⁻⁶ | 15.19998 | 1.18272 |
| PI(18:2(9Z,12Z)/0:0) | -14.0048 | 1.73x10 ⁻⁶ | 15.1875 | 1.18272 |
| cyclic adenosine diphosphate ribose | -13.944 | 1.85x10 ⁻⁶ | 15.12675 | 1.18272 |
| 35-aminobacteriohopane-31,32,33,34-tetrol | -13.9413 | 1.83x10 ⁻⁶ | 15.12398 | 1.18272 |
| 26,27-Dihomo-1-hydroxy-24-epivitamin D2 | -13.931 | 1.87x10 ⁻⁶ | 15.11367 | 1.18272 |
| L-Tyrosine methyl ester 4-sulfate | -13.8462 | 1.80x10 ⁻⁶ | 15.02896 | 1.18272 |
| PA(16:0/13:0) | -13.8485 | 1.91x10 ⁻⁶ | 15.03126 | 1.18272 |
| 11beta-Chloromethylestradiol | -13.7388 | 1.91x10 ⁻⁶ | 14.9215 | 1.18272 |
| PA(P-16:0/13:0) | -13.8537 | 1.92x10 ⁻⁶ | 15.0364 | 1.18272 |
| LysoPE(0:0/22:4(7Z,10Z,13Z,16Z)) | -13.8845 | 1.98x10 ⁻⁶ | 15.06721 | 1.18272 |
| 5'-CMP | -13.7921 | 2.00x10 ⁻⁶ | 14.9748 | 1.18272 |
| N-pentadecanoyl-L-Homoserine lactone | -13.8123 | 2.03x10 ⁻⁶ | 14.99505 | 1.18272 |
| PI(20:4(5Z,8Z,11Z,14Z)/0:0) Esi+6.4506664 | -13.8595 | 2.10x10 ⁻⁶ | 15.04221 | 1.18272 |
| PE(20:4(5Z,8Z,11Z,14Z)/20:4(8Z,11Z,14Z,17Z)) | -15.1223 | 2.20x10 ⁻⁶ | 16.30504 | 1.18272 |
| PG(20:0/18:0) | -15.0363 | 2.24x10 ⁻⁶ | 16.21904 | 1.18272 |
| N-Arachidonoyl-3-hydroxy-Aminobutyric Acid | -13.4948 | 2.49x10 ⁻⁴ | 14.67747 | 1.18272 |
| 1-(O-alpha-D-glucopyranosyl)-(1,3R,29S,31R)-dotriacontanetetraol | -14.2198 | 1.26x10 ⁻⁸ | 15.40248 | 1.18272 |
| PS(12:0/22:0) | -13.7681 | 1.02x10 ⁻⁷ | 14.9508 | 1.18272 |
| Anandamide (20:2, n-6) | -13.4764 | 9.09x10 ⁻⁸ | 14.65911 | 1.18272 |
| PS(20:1(11Z)/0:0) | -13.5416 | 1.59x10 ⁻³ | 14.72431 | 1.18272 |
| PA(O-16:0/13:0) | -13.3924 | 2.64x10 ⁻³ | 14.57509 | 1.18272 |
| PE(P-18:0/17:1(9Z)) | -14.1653 | 9.02x10 ⁻⁷ | 15.34805 | 1.18272 |
| cis-Caryophyllene | -13.6633 | 3.09x10 ⁻⁴ | 14.84604 | 1.18272 |
| PA(20:0/19:0) | -15.9172 | 3.52x10 ⁻³ | 17.09994 | 1.18272 |
| Bisabolol Acetate | -14.1936 | 5.86x10 ⁻⁵ | 15.37629 | 1.18272 |
| C-2 Ceramide | -12.5002 | 6.67x10 ⁻⁴ | 13.68289 | 1.18272 |
| Ramipril glucuronide | -11.4355 | 1.87x10 ⁻⁷ | 12.61823 | 1.18272 |
| TG(16:1(9Z)/16:1(9Z)/18:2(9Z,12Z))[iso3] | -11.1788 | 1.34x10 ⁻⁷ | 12.36151 | 1.18272 |
| PE(22:5(7Z,10Z,13Z,16Z,19Z)/P-16:0) | -11.6815 | 2.55x10 ⁻⁷ | 12.86423 | 1.18272 |
| PGF2 diethyl amide | -11.7179 | 1.86x10 ⁻⁸ | 12.90063 | 1.18272 |

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| LysoPE(0:0/20:4(5Z,8Z,11Z,14Z)) | | | | |
| Esi+6.0856667 | -11.5957 | 1.60x10 ⁻⁵ | 12.77847 | 1.18272 |
| N-Hexadecyl-L-hydroxyproline | -11.7188 | 1.62x10 ⁻⁷ | 12.90157 | 1.18272 |
| 3-alpha,20-alpha-dihydroxy-5-beta-pregnane | | | | |
| 3-glucuronide | -9.65701 | 1.66x10 ⁻⁴ | 10.83973 | 1.18272 |
| PG(18:1(9E)/0:0)[U] Esi-7.413 | -16.9111 | 2.48x10 ⁻⁴ | 17.55582 | 0.644715 |
| PI(18:2(9Z,12Z)/0:0) | -16.9687 | 2.19x10 ⁻⁸ | 17.61337 | 0.644715 |
| PI(16:1(9Z)/0:0) | -16.7752 | 2.19x10 ⁻⁸ | 17.41995 | 0.644715 |
| Fumaric acid | -17.4563 | 2.01x10 ⁻⁷ | 18.10099 | 0.644715 |
| cyclic adenosine diphosphate ribose Esi-0.364 | -16.2486 | 2.43x10 ⁻⁸ | 16.8933 | 0.644715 |
| 2-Furoic acid | -16.5087 | 2.68x10 ⁻⁷ | 17.15342 | 0.644715 |
| PI(18:2(9Z,12Z)/0:0) Esi-5.955667 | -15.3259 | 2.50x10 ⁻³ | 15.9706 | 0.644715 |
| PG(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/0:0) | -15.1333 | 2.13x10 ⁻⁷ | 15.77801 | 0.644715 |
| S-(1,2-Dicarboxyethyl)Glutathione | -15.3312 | 9.84x10 ⁻⁷ | 15.97592 | 0.644715 |
| PS(10:0/10:0) | -14.7061 | 3.17x10 ⁻⁸ | 15.35079 | 0.644715 |
| PI(18:0/0:0) Esi-7.2636666 | -14.4583 | 3.26x10 ⁻⁸ | 15.10299 | 0.644715 |
| PI(20:3(8Z,11Z,14Z)/0:0) Esi-6.3836665 | -14.0279 | 3.72x10 ⁻⁸ | 14.6726 | 0.644715 |
| Flavin adenine dinucleotide (FAD) | -14.3712 | 4.12x10 ⁻⁷ | 15.01596 | 0.644715 |
| PG(20:4(5Z,8Z,11Z,14Z)/0:0) | -14.0422 | 3.99x10 ⁻⁸ | 14.68689 | 0.644715 |
| PI(18:0/0:0) Esi-10.740334 | -15.4614 | 3.41x10 ⁻⁷ | 16.10608 | 0.644715 |
| 1,2-Distearoyl phosphatidyl serine | -15.3473 | 3.05x10 ⁻⁷ | 15.99203 | 0.644715 |
| PG(18:2(9Z,12Z)/0:0) | -14.2829 | 4.44x10 ⁻⁶ | 14.92764 | 0.644715 |
