**Supplemental Table 1A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **mRNA ID** | **Gene Symbol** | **DMD-Y-preTx  *vs.* CTRL-Y** | | |
| **p-value** | **Ratio** | **Fold-Change** |
| 8020684 | HRH4 | 0.00013291 | 0.640596 | -1.56105 |
| 7988672 | HDC | 5.50E-08 | 0.64421 | -1.55229 |
| 8083260 | CPA3 | 0.00010768 | 0.654924 | -1.52689 |
| 8141094 | PDK4 | 4.47E-05 | 0.688643 | -1.45213 |
| 7935058 | MYOF | 2.47E-05 | 0.717998 | -1.39276 |
| 8022118 | EPB41L3 | 2.49E-07 | 0.721985 | -1.38507 |
| 8115076 | CSF1R | 5.10E-08 | 0.7294 | -1.37099 |
| 8090469 | GATA2 | 1.17E-06 | 0.732439 | -1.3653 |
| 7965335 | DUSP6 | 1.12E-06 | 0.734174 | -1.36207 |
| 8165752 | IL3RA | 0.00029735 | 0.755994 | -1.32276 |
| 8176323 | IL3RA | 0.00029735 | 0.755994 | -1.32276 |
| 7953428 | CD4 | 1.32E-05 | 0.759384 | -1.31686 |
| 8059565 | PID1 | 2.29E-08 | 0.766008 | -1.30547 |
| 8076998 | PLXNB2 | 6.14E-07 | 0.769847 | -1.29896 |
| 7940226 | MS4A2 | 0.00016564 | 0.773716 | -1.29246 |
| 8065403 | CST3 | 2.05E-09 | 0.775212 | -1.28997 |
| 7956301 | LRP1 | 4.27E-05 | 0.775764 | -1.28905 |
| 8138805 | CPVL | 1.03E-05 | 0.776131 | -1.28844 |
| 8135734 | C7orf58 | 1.81E-08 | 0.783213 | -1.27679 |
| 7977786 | SLC7A7 | 0.00013155 | 0.784091 | -1.27536 |
| 8145470 | DPYSL2 | 4.22E-05 | 0.786185 | -1.27196 |
| 8101086 | NAAA | 0.00012294 | 0.791822 | -1.26291 |
| 7944931 | SLC37A2 | 2.15E-05 | 0.792058 | -1.26253 |
| 8070708 | LOC284837 | 6.38E-06 | 0.798357 | -1.25257 |
| 8108217 | TGFBI | 0.00026642 | 0.802832 | -1.24559 |
| 7896258 |  | 6.18E-05 | 0.806366 | -1.24013 |
| 8018189 | CD300E | 0.00011996 | 0.806639 | -1.23971 |
| 7896657 |  | 0.00015473 | 0.808151 | -1.23739 |
| 8011713 | CXCL16 | 0.0001748 | 0.808162 | -1.23738 |
| 8059578 |  | 0.00014077 | 0.810328 | -1.23407 |
| 8141768 | RASA4 | 2.17E-09 | 0.814215 | -1.22818 |
| 7981824 | CYFIP1 | 5.21E-06 | 0.81463 | -1.22755 |
| 8004510 | CD68 | 2.03E-05 | 0.814705 | -1.22744 |
| 8076403 | NAGA | 5.33E-05 | 0.81845 | -1.22182 |
| 8165011 | FCN1 | 0.00010927 | 0.82025 | -1.21914 |
| 8054308 | TBC1D8 | 0.00011966 | 0.82189 | -1.21671 |
| 7934196 | PSAP | 6.34E-06 | 0.822046 | -1.21648 |
| 8069880 | TIAM1 | 2.19E-06 | 0.822151 | -1.21632 |
| 7911178 | NLRP3 | 0.00015082 | 0.82678 | -1.20951 |
| 8141803 | RASA4 | 1.26E-08 | 0.827403 | -1.2086 |
| 7892830 |  | 4.61E-05 | 0.831329 | -1.20289 |
| 7908779 | RNPEP | 0.00012556 | 0.831593 | -1.20251 |
| 8010354 | GAA | 9.28E-05 | 0.831688 | -1.20237 |
| 8003861 | SPNS3 | 6.45E-06 | 0.832913 | -1.20061 |
| 8060503 | SNORD57 | 9.91E-06 | 1.23202 | 1.23202 |
| 7980304 |  | 0.00014596 | 1.23251 | 1.23251 |
| 8084945 |  | 0.00018536 | 1.23911 | 1.23911 |
| 7922418 | SNORD74 | 0.00015715 | 1.24071 | 1.24071 |
| 7895170 |  | 9.52E-05 | 1.24238 | 1.24238 |
| 8151935 | RPL30 | 0.00017961 | 1.26915 | 1.26915 |
| 7978824 | RPS29 | 0.00031663 | 1.28376 | 1.28376 |
| 7899160 | CD52 | 0.00015155 | 1.29004 | 1.29004 |
| 8010078 | SNORD1C | 0.00030858 | 1.29092 | 1.29092 |
| 7896159 |  | 0.00018028 | 1.29503 | 1.29503 |
| 7982006 | SNORD116-29 | 0.00027019 | 1.30513 | 1.30513 |
| 7981215 |  | 4.06E-05 | 1.30539 | 1.30539 |
| 7892986 |  | 0.00033468 | 1.3073 | 1.3073 |
| 8126905 | CRISP3 | 0.00024975 | 1.31047 | 1.31047 |
| 7951030 | SNORD6 | 0.00024805 | 1.3108 | 1.3108 |
| 7896174 |  | 0.0003352 | 1.31765 | 1.31765 |
| 8030360 | SNORD32A | 5.11E-05 | 1.33636 | 1.33636 |
| 7981481 | C14orf2 | 0.00015021 | 1.33855 | 1.33855 |
| 8044961 | RNU4ATAC | 0.00015025 | 1.34053 | 1.34053 |
| 7997940 | SNORD68 | 2.70E-05 | 1.37145 | 1.37145 |
| 7895787 |  | 0.00013076 | 1.37607 | 1.37607 |
| 7982129 | RPL41 | 1.08E-05 | 1.37954 | 1.37954 |
| 7965467 | RPL41 | 1.08E-05 | 1.37954 | 1.37954 |
| 8105432 | RPL41 | 1.75E-05 | 1.38101 | 1.38101 |
| 8075691 | RPL41 | 1.74E-05 | 1.38446 | 1.38446 |
| 8041168 | SNORD53 | 0.00024037 | 1.38691 | 1.38691 |
| 7893344 |  | 0.00021058 | 1.39187 | 1.39187 |
| 8061364 | RPL41 | 1.70E-05 | 1.39614 | 1.39614 |
| 7981955 | SNORD116-4 | 0.00021615 | 1.39963 | 1.39963 |
| 8085579 |  | 0.00017808 | 1.40177 | 1.40177 |
| 7895422 |  | 0.00023137 | 1.43953 | 1.43953 |
| 8127423 |  | 0.00018977 | 1.44016 | 1.44016 |
| 8174710 | RPL39 | 0.00033022 | 1.44248 | 1.44248 |
| 8105340 | GZMA | 0.00013247 | 1.4466 | 1.4466 |
| 7922414 | SNORD76 | 0.00029233 | 1.45018 | 1.45018 |
| 7893184 |  | 0.00014691 | 1.49955 | 1.49955 |
| 8127526 | RPL39 | 0.00032156 | 1.50702 | 1.50702 |
| 7951246 | MMP8 | 5.24E-05 | 1.5085 | 1.5085 |
| 7920238 | S100A12 | 3.11E-06 | 1.51139 | 1.51139 |
| 8091778 | SCARNA7 | 0.00026635 | 1.52304 | 1.52304 |
| 8106776 | COX7C | 0.00020991 | 1.54719 | 1.54719 |
| 7981994 | SNORD116-23 | 1.80E-05 | 1.55095 | 1.55095 |
| 8079019 | RPS27 | 1.36E-05 | 1.55572 | 1.55572 |
| 7928551 | RPS24 | 0.0001269 | 1.55998 | 1.55998 |
| 7920244 | S100A8 | 1.76E-05 | 1.57281 | 1.57281 |
| 7905691 | RPS27 | 6.63E-06 | 1.57862 | 1.57862 |
| 7900157 | RPS27 | 9.12E-06 | 1.58292 | 1.58292 |
| 7948902 | SNORD29 | 2.14E-05 | 1.58312 | 1.58312 |
| 7923438 | RPS27 | 1.08E-05 | 1.58751 | 1.58751 |
| 7922404 | SNORD80 | 4.63E-05 | 1.62796 | 1.62796 |
| 7895622 |  | 0.00031915 | 1.63429 | 1.63429 |
| 8095986 | ANXA3 | 5.28E-05 | 1.64573 | 1.64573 |
| 8034512 | SNORD41 | 1.18E-07 | 1.67113 | 1.67113 |
| 7960359 |  | 5.47E-05 | 1.71714 | 1.71714 |
| 8149137 | DEFA3 | 1.12E-05 | 1.91224 | 1.91224 |
| 8149116 | DEFA3 | 1.11E-05 | 2.00411 | 2.00411 |
| 8149126 | DEFA3 | 1.11E-05 | 2.00411 | 2.00411 |

**Supplemental Table 1B**

|  |  |  |  |
| --- | --- | --- | --- |
| **miRNA ID** | **DMD-Y-preTx  *vs.* CTRL-Y** | | |
| **p-value** | **Ratio** | **Fold-Change** |
| hsa-miR-409-3p\_st | 0.00264901 | 0.789634 | -1.26641 |
| hsa-miR-127-3p\_st | 0.016708 | 0.804095 | -1.24363 |
| hsa-miR-1303\_st | 0.00387929 | 1.29579 | 1.29579 |
| hsa-miR-572\_st | 0.0263668 | 1.28787 | 1.28787 |
| hsa-miR-4745-5p\_st | 0.0242684 | 1.21234 | 1.21234 |
| hsa-miR-4685-3p\_st | 0.00466638 | 0.828 | -1.20773 |
| hsa-miR-4286\_st | 0.0127062 | 0.769058 | -1.30029 |
| hsa-miR-4538\_st | 9.83E-06 | 0.540349 | -1.85066 |
| hsa-miR-378d\_st | 0.0385069 | 1.23951 | 1.23951 |
| hsa-miR-574-5p\_st | 0.019781 | 0.769003 | -1.30038 |
| hsa-miR-454\_st | 0.0075196 | 1.23705 | 1.23705 |
| hsa-miR-4539\_st | 8.98E-05 | 0.691958 | -1.44517 |
| hsa-miR-181a-2-star\_st | 0.000383747 | 0.759145 | -1.31727 |
| hsa-miR-1279\_st | 0.000786327 | 0.788399 | -1.26839 |
| hsa-miR-4478\_st | 0.00582311 | 0.828683 | -1.20673 |
| hsa-miR-606\_st | 0.0185517 | 0.778664 | -1.28425 |
| hsa-miR-206\_st | 0.00185252 | 0.695955 | -1.43687 |

**Supplemental Table 2A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **mRNA ID** | **Gene Symbol** | **DMD-Y-postTx  *vs.* DMD-Y-preTx** | | |
| **p-value** | **Ratio** | **Fold-Change** |
| 7981183 | TCL1A | 7.77E-10 | 0.679906 | -1.47079 |
| 7976554 | LOC100133207 | 4.29E-10 | 0.69147 | -1.44619 |
| 7921319 | FCRL1 | 1.12E-08 | 0.733799 | -1.36277 |
| 8082012 | SLC15A2 | 3.71E-08 | 0.752972 | -1.32807 |
| 7976523 | TCL6 | 2.40E-10 | 0.759558 | -1.31656 |
| 7921298 | FCRL2 | 1.64E-06 | 0.763406 | -1.30992 |
| 8011680 | ALOX15 | 9.91E-05 | 0.763455 | -1.30984 |
| 8112428 | CD180 | 3.73E-05 | 0.766429 | -1.30475 |
| 8026350 | CLEC17A | 4.98E-08 | 0.779355 | -1.28311 |
| 7971922 | PCDH9 | 5.14E-11 | 0.781707 | -1.27925 |
| 7910950 | KMO | 0.000251655 | 0.781972 | -1.27882 |
| 8054254 | AFF3 | 1.17E-05 | 0.787525 | -1.2698 |
| 7981742 | IGHV5-78 | 8.76E-07 | 0.788843 | -1.26768 |
| 7921237 | FCRL5 | 8.65E-06 | 0.793414 | -1.26038 |
| 8161004 | CD72 | 1.63E-07 | 0.79457 | -1.25854 |
| 8050115 | C2orf46 | 7.95E-05 | 0.796925 | -1.25482 |
| 8033420 | FCER2 | 3.18E-07 | 0.797251 | -1.25431 |
| 8138489 | CDCA7L | 1.54E-05 | 0.797417 | -1.25405 |
| 8161211 | PAX5 | 4.32E-06 | 0.805049 | -1.24216 |
| 8027837 | CD22 | 0.000114245 | 0.805334 | -1.24172 |
| 8140752 | ABCB4 | 1.93E-06 | 0.806251 | -1.24031 |
| 8150276 | PPAPDC1B | 2.38E-08 | 0.80763 | -1.23819 |
| 8128247 | BACH2 | 2.34E-05 | 0.80842 | -1.23698 |
| 7921275 | FCRL3 | 8.85E-06 | 0.809386 | -1.2355 |
| 7971486 | C13orf18 | 7.23E-06 | 0.809798 | -1.23488 |
| 7894819 |  | 0.000152915 | 0.811786 | -1.23185 |
| 7935270 | BLNK | 2.48E-05 | 0.812378 | -1.23095 |
| 8122756 | PLEKHG1 | 0.000113129 | 0.812555 | -1.23069 |
| 7993825 | RUNDC2C | 5.70E-07 | 0.812622 | -1.23058 |
| 8082003 | EAF2 | 2.51E-07 | 0.813766 | -1.22886 |
| 8047788 | ADAM23 | 3.09E-06 | 0.815063 | -1.2269 |
| 8178833 | HLA-DOB | 3.82E-05 | 0.815396 | -1.2264 |
| 8113039 | MEF2C | 1.03E-07 | 0.816351 | -1.22496 |
| 8152764 | MTSS1 | 1.40E-06 | 0.816741 | -1.22438 |
| 8065084 | LOC613266 | 3.58E-08 | 0.81985 | -1.21973 |
| 8113790 | 3-Mar | 1.26E-08 | 0.820569 | -1.21867 |
| 8026787 | FAM129C | 4.19E-06 | 0.821618 | -1.21711 |
| 8131600 | TSPAN13 | 2.79E-08 | 0.8218 | -1.21684 |
| 8023415 | TCF4 | 1.56E-06 | 0.823311 | -1.21461 |
| 7944335 | CXCR5 | 5.64E-06 | 0.823573 | -1.21422 |
| 8164008 | NCRNA00287 | 5.28E-06 | 0.823579 | -1.21421 |
| 8101304 | RASGEF1B | 4.22E-05 | 0.82393 | -1.2137 |
| 8099393 |  | 5.12E-06 | 0.824895 | -1.21227 |
| 7994487 | CD19 | 5.04E-07 | 0.827255 | -1.20882 |
| 8178199 | HLA-DQA1 | 1.24E-06 | 0.827733 | -1.20812 |
| 8179489 | HLA-DQA1 | 1.24E-06 | 0.827733 | -1.20812 |
| 8115543 | EBF1 | 1.44E-05 | 0.828139 | -1.20753 |
| 7994576 | RUNDC2C | 1.88E-06 | 0.828786 | -1.20658 |
| 8069178 | ADARB1 | 3.44E-06 | 0.830141 | -1.20462 |
| 8057056 | TTN | 4.91E-05 | 0.832998 | -1.20048 |
| 8120501 | COL19A1 | 2.29E-08 | 0.833294 | -1.20006 |
| 8128865 |  | 0.000199231 | 1.20481 | 1.20481 |
| 8100971 | PPBP | 2.87E-05 | 1.23406 | 1.23406 |
| 7961142 | OLR1 | 0.000229892 | 1.25623 | 1.25623 |
| 8141094 | PDK4 | 0.000144396 | 1.30658 | 1.30658 |
| 7918323 | SORT1 | 0.000208423 | 1.32489 | 1.32489 |
| 7978351 | CTSG | 7.68E-06 | 1.35497 | 1.35497 |
| 8132743 | ABCA13 | 2.42E-05 | 1.35797 | 1.35797 |
| 8024056 | ELANE | 4.48E-07 | 1.36552 | 1.36552 |
| 8139656 | GRB10 | 0.000277162 | 1.37057 | 1.37057 |
| 8150988 | ASPH | 3.00E-05 | 1.37217 | 1.37217 |
| 8016932 | MPO | 9.29E-06 | 1.37673 | 1.37673 |
| 8125919 | FKBP5 | 0.000113877 | 1.39508 | 1.39508 |
| 7973105 | RNASE3 | 3.62E-05 | 1.4079 | 1.4079 |
| 8126905 | CRISP3 | 0.000304994 | 1.45097 | 1.45097 |
| 8158167 | LCN2 | 7.68E-06 | 1.45521 | 1.45521 |
| 8029098 | CEACAM6 | 3.70E-06 | 1.46376 | 1.46376 |
| 8021645 | SERPINB10 | 0.000240525 | 1.46955 | 1.46955 |
| 8086607 | LTF | 5.40E-05 | 1.47195 | 1.47195 |
| 8066493 | SLPI | 4.06E-08 | 1.60418 | 1.60418 |
| 8119357 | DAAM2 | 0.000196953 | 1.63612 | 1.63612 |
| 8037222 | CEACAM8 | 6.68E-07 | 1.65991 | 1.65991 |
| 8062444 | BPI | 3.77E-07 | 1.75321 | 1.75321 |
| 7940216 | MS4A3 | 1.15E-07 | 1.77779 | 1.77779 |
| 8149109 | DEFA4 | 8.97E-08 | 1.80945 | 1.80945 |
| 7969288 | OLFM4 | 6.33E-08 | 1.81452 | 1.81452 |
| 7951246 | MMP8 | 6.13E-07 | 2.16345 | 2.16345 |
| 8149137 | DEFA3 | 3.56E-10 | 2.51552 | 2.51552 |
| 8149116 | DEFA3 | 1.40E-10 | 2.72479 | 2.72479 |
| 8149126 | DEFA3 | 1.40E-10 | 2.72479 | 2.72479 |

**Supplemental Table 2B**

|  |  |  |  |
| --- | --- | --- | --- |
| **miRNA ID** | **DMD-Y-postTx  *vs.* DMD-Y-preTx** | | |
| **p-value** | **Ratio** | **Fold-Change** |
| hsa-miR-409-3p\_st | 0.00264901 | 0.789634 | -1.26641 |
| hsa-miR-127-3p\_st | 0.016708 | 0.804095 | -1.24363 |
| hsa-miR-1303\_st | 0.00387929 | 1.29579 | 1.29579 |
| hsa-miR-572\_st | 0.0263668 | 1.28787 | 1.28787 |
| hsa-miR-4745-5p\_st | 0.0242684 | 1.21234 | 1.21234 |
| hsa-miR-4685-3p\_st | 0.00466638 | 0.828 | -1.20773 |
| hsa-miR-4286\_st | 0.0127062 | 0.769058 | -1.30029 |
| hsa-miR-4538\_st | 9.83E-06 | 0.540349 | -1.85066 |
| hsa-miR-378d\_st | 0.0385069 | 1.23951 | 1.23951 |
| hsa-miR-574-5p\_st | 0.019781 | 0.769003 | -1.30038 |
| hsa-miR-454\_st | 0.0075196 | 1.23705 | 1.23705 |
| hsa-miR-4539\_st | 8.98E-05 | 0.691958 | -1.44517 |
| hsa-miR-181a-2-star\_st | 0.000383747 | 0.759145 | -1.31727 |
| hsa-miR-1279\_st | 0.000786327 | 0.788399 | -1.26839 |
| hsa-miR-4478\_st | 0.00582311 | 0.828683 | -1.20673 |
| hsa-miR-606\_st | 0.0185517 | 0.778664 | -1.28425 |
| hsa-miR-206\_st | 0.00185252 | 0.695955 | -1.43687 |

**Supplemental Table 3**

|  |  |  |  |
| --- | --- | --- | --- |
| **miRNA ID** | **DMD-O *vs.* CTRL-O** | | |
| **p-value** | **Ratio** | **Fold-Change** |
| hsa-miR-320e\_st | 3.49E-05 | 0.55881 | -1.78952 |
| hsa-miR-320d\_st | 8.97E-05 | 0.564147 | -1.77259 |
| hsa-miR-4298\_st | 0.000140136 | 0.601529 | -1.66243 |
| hsa-let-7c\_st | 0.000476166 | 0.586165 | -1.706 |
| hsa-miR-4429\_st | 0.000478467 | 0.570869 | -1.75171 |
| hsa-miR-4754\_st | 0.000481331 | 0.772621 | -1.2943 |
| hsa-miR-197\_st | 0.000516091 | 0.594416 | -1.68232 |
| hsa-miR-4732-5p\_st | 0.000561609 | 0.529968 | -1.88691 |
| hsa-miR-4419a\_st | 0.000563178 | 0.777632 | -1.28596 |
| hsa-miR-4800-5p\_st | 0.000568157 | 0.646072 | -1.54781 |
| hsa-miR-26b\_st | 0.001252 | 1.94456 | 1.94456 |
| hsa-miR-320c\_st | 0.00158723 | 0.730836 | -1.3683 |
| hsa-miR-939\_st | 0.00227088 | 0.644772 | -1.55093 |
| hsa-miR-146b-5p\_st | 0.00229678 | 1.72426 | 1.72426 |
| hsa-miR-363-star\_st | 0.00237656 | 1.47419 | 1.47419 |
| hsa-miR-767-5p\_st | 0.00276092 | 1.29767 | 1.29767 |
| hsa-miR-10b-star\_st | 0.00352342 | 0.80979 | -1.23489 |
| hsa-miR-1915-star\_st | 0.00358941 | 0.8228 | -1.21536 |
| hsa-miR-25-star\_st | 0.0042067 | 0.709374 | -1.40969 |
| hsa-let-7f\_st | 0.00512474 | 2.0269 | 2.0269 |
| hsa-miR-1260b\_st | 0.00528618 | 0.754527 | -1.32533 |
| hsa-miR-3928\_st | 0.00543359 | 0.711671 | -1.40514 |
| hsa-miR-3135b\_st | 0.00587863 | 0.612034 | -1.6339 |
| hsa-miR-4669\_st | 0.00625272 | 0.685819 | -1.45811 |
| hsa-miR-4738-3p\_st | 0.00640903 | 0.776481 | -1.28786 |
| hsa-miR-320b\_st | 0.00649854 | 0.790058 | -1.26573 |
| hsa-miR-4632\_st | 0.00720631 | 0.7451 | -1.3421 |
| hsa-miR-4449\_st | 0.00726667 | 0.698422 | -1.4318 |
| hsa-miR-4645-5p\_st | 0.00745744 | 1.20406 | 1.20406 |
| hsa-miR-320a\_st | 0.00750537 | 0.787634 | -1.26963 |
| hsa-miR-3679-5p\_st | 0.00786499 | 0.656677 | -1.52282 |
| hsa-miR-423-5p\_st | 0.00793873 | 0.704183 | -1.42008 |
| hsa-let-7g\_st | 0.00814646 | 1.96275 | 1.96275 |
| hsa-miR-183\_st | 0.00831737 | 1.68213 | 1.68213 |
| hsa-let-7b\_st | 0.00866369 | 0.734236 | -1.36196 |
| hsa-miR-377\_st | 0.00902807 | 1.26499 | 1.26499 |
| hsa-miR-24\_st | 0.0100479 | 1.23207 | 1.23207 |
| hsa-miR-181a\_st | 0.0106535 | 0.689214 | -1.45093 |
| hsa-miR-182\_st | 0.0109992 | 1.43227 | 1.43227 |
| hsa-miR-374b\_st | 0.0111156 | 1.40239 | 1.40239 |
| hsa-miR-720\_st | 0.0111327 | 0.464853 | -2.15122 |
| hsa-miR-5095\_st | 0.0112014 | 1.28419 | 1.28419 |
| hsa-miR-4433\_st | 0.0123305 | 0.704135 | -1.42018 |
| hsa-miR-3653\_st | 0.0129449 | 0.826516 | -1.2099 |
| hsa-miR-26a\_st | 0.0130228 | 1.43454 | 1.43454 |
| hsa-miR-3162-5p\_st | 0.0134261 | 0.649089 | -1.54062 |
| hsa-miR-27b\_st | 0.0135503 | 1.521 | 1.521 |
| hsa-miR-4538\_st | 0.0143927 | 0.608537 | -1.64328 |
| hsa-miR-4640-5p\_st | 0.015978 | 0.583235 | -1.71457 |
| hsa-miR-4463\_st | 0.0173647 | 0.657639 | -1.52059 |
| hsa-miR-494\_st | 0.0184479 | 1.47714 | 1.47714 |
| hsa-miR-574-3p\_st | 0.0185616 | 0.670787 | -1.49079 |
| hsa-miR-130a\_st | 0.0187511 | 1.31982 | 1.31982 |
| hsa-miR-4728-5p\_st | 0.0192757 | 0.681221 | -1.46795 |
| hsa-miR-3911\_st | 0.0206058 | 0.782617 | -1.27776 |
| hsa-miR-4539\_st | 0.0206768 | 0.75702 | -1.32097 |
| hsa-miR-1280\_st | 0.0207986 | 0.739531 | -1.35221 |
| hsa-miR-2861\_st | 0.0208187 | 0.661401 | -1.51194 |
| hsa-miR-638\_st | 0.0209102 | 0.681224 | -1.46795 |
| hsa-miR-4516\_st | 0.022887 | 0.668263 | -1.49642 |
| hsa-miR-378i\_st | 0.0229932 | 0.700057 | -1.42846 |
| hsa-miR-3656\_st | 0.023778 | 0.707071 | -1.41429 |
| hsa-miR-155\_st | 0.023913 | 1.32448 | 1.32448 |
| hsa-miR-4695-3p\_st | 0.0260791 | 0.651863 | -1.53406 |
| hsa-miR-3185\_st | 0.0266352 | 0.656135 | -1.52408 |
| hsa-miR-4758-5p\_st | 0.0275452 | 0.652107 | -1.53349 |
| hsa-miR-4689\_st | 0.0283654 | 0.676847 | -1.47744 |
| hsa-miR-1303\_st | 0.0290808 | 0.623374 | -1.60417 |
| hsa-miR-4653-5p\_st | 0.0292341 | 1.22271 | 1.22271 |
| hsa-miR-4443\_st | 0.0305436 | 0.63733 | -1.56904 |
| hsa-miR-363\_st | 0.0313704 | 1.6748 | 1.6748 |
| hsa-miR-4534\_st | 0.0321425 | 0.706622 | -1.41518 |
| hsa-miR-4728-3p\_st | 0.0323153 | 0.831586 | -1.20252 |
| hsa-miR-4687-3p\_st | 0.0331871 | 0.68003 | -1.47052 |
| hsa-miR-1268\_st | 0.0335962 | 0.684726 | -1.46044 |
| hsa-let-7a\_st | 0.0351675 | 1.33551 | 1.33551 |
| hsa-miR-3605-3p\_st | 0.0365029 | 0.745129 | -1.34205 |
| hsa-miR-4701-3p\_st | 0.0376886 | 0.666296 | -1.50083 |
| hsa-miR-3138\_st | 0.039091 | 0.808742 | -1.23649 |
| hsa-miR-1231\_st | 0.0394516 | 0.637634 | -1.5683 |
| hsa-miR-4707-5p\_st | 0.0398931 | 0.677456 | -1.47611 |
| hsa-miR-4466\_st | 0.039902 | 0.703602 | -1.42126 |
| hsa-miR-4459\_st | 0.0415848 | 0.746114 | -1.34028 |
| hsa-miR-4270\_st | 0.042523 | 0.648764 | -1.54139 |
| hsa-miR-1180\_st | 0.0430926 | 0.780234 | -1.28167 |
| hsa-miR-3940-5p\_st | 0.0435024 | 0.695775 | -1.43725 |
| hsa-miR-92b-star\_st | 0.0454911 | 0.640313 | -1.56174 |
| hsa-miR-422a\_st | 0.0456413 | 0.721158 | -1.38666 |
| hsa-miR-4741\_st | 0.0462653 | 0.674651 | -1.48225 |
| hsa-miR-4739\_st | 0.0479643 | 0.740809 | -1.34988 |
| hsa-miR-409-3p\_st | 0.0487012 | 1.75159 | 1.75159 |
| hsa-miR-20b\_st | 0.0494395 | 1.67769 | 1.67769 |
| hsa-miR-488\_st | 0.049509 | 1.28876 | 1.28876 |
| hsa-miR-4743\_st | 0.0498425 | 0.806429 | -1.24003 |
| hsa-miR-30c-1-star\_st | 0.0499235 | 0.764037 | -1.30884 |

**Supplemental Table 4**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **miRNA ID** | **DMD-Y-preTx *vs.* CTRL-Y** | | | **DMD-Y-postTx *vs.* DMD-Y-preTx** | | |
| **p-value** | **Ratio** | **Fold-Change** | **p-value** | **Ratio** | **Fold-Change** |
| hsa-miR-206\_st | 2.15E-05 | 1.72052 | 1.72052 | 0.00185252 | 0.695955 | -1.43687 |
| hsa-miR-181a-2-star\_st | 0.000383747 | 0.759145 | -1.31727 | 0.000383747 | 0.759145 | -1.31727 |
| hsa-miR-454\_st | 0.0033469 | 0.791317 | -1.26372 | 0.0075196 | 1.23705 | 1.23705 |
| hsa-miR-606\_st | 0.041517 | 1.27422 | 1.27422 | 0.0185517 | 0.778664 | -1.28425 |
| hsa-miR-4538\_st | 0.000196467 | 1.94863 | 1.94863 | 9.83E-06 | 0.540349 | -1.85066 |
| hsa-miR-4539\_st | 0.000316669 | 1.51342 | 1.51342 | 8.98E-05 | 0.691958 | -1.44517 |