**SUPPLEMENTARY DATA**

**Supplementary Table 1**. Differentially expressed miRNAs in AT-AMI vs control subjects.

|  |  |  |
| --- | --- | --- |
| miRNA ID |  FDR corrected p value | AT-AMI/CONTROLS |
| hsa\_mir\_107 | 0.000137202950502183 | DOWN |
| hsa\_mir\_103a\_3p | 0.00073247887227318 | DOWN |
| hsa\_let\_7d\_5p | 0.000840408616432995 | DOWN |
| hsa\_mir\_26b\_5p | 0.00104938363046324 | DOWN |
| hsa\_mir\_191\_5p | 0.00184416334604069 | DOWN |
| hsa\_mir\_22\_3p | 0.00238496353368204 | UP |
| hsa\_let\_7g\_5p | 0.0027074437545601 | DOWN |
| hsa\_mir\_106a\_5p | 0.00271873252253686 | DOWN |
| hsa\_mir\_30c\_5p | 0.00271873252253686 | DOWN |
| hsa\_mir\_454\_3p | 0.00271873252253686 | DOWN |
| hsa\_mir\_301a\_3p | 0.00271873252253686 | DOWN |
| hsa\_mir\_374a\_5p | 0.00271873252253686 | DOWN |
| hsa\_let\_7c\_5p | 0.00278843102807841 | DOWN |
| hsa\_mir\_29a\_3p | 0.00296258025182088 | UP |
| hsa\_mir\_125b\_5p | 0.00637994864624059 | UP |
| hsa\_mir\_18b\_5p | 0.0110396122058713 | DOWN |
| hsa\_mir\_17\_5p | 0.0128259591576138 | DOWN |
| hsa\_mir\_29c\_3p | 0.0157932881043971 | UP |
| hsa\_mir\_365a\_3p | 0.0163132842598492 | UP |
| hsa\_mir\_22\_5p | 0.0264972202122007 | UP |
| hsa\_mir\_483\_5p | 0.0287061986605215 | UP |
| hsa\_mir\_20a\_5p | 0.0341543132095997 | DOWN |
| hsa\_mir\_497\_5p | 0.0498509400549692 | UP |

**Supplementary Table 2.** Confidence intervals (CI, 95%) for DE of miRNAs between control subjects and AT-AMI patients.

|  |  |
| --- | --- |
| **miRNA ID** | **CI (95%)** |
| hsa\_let\_7d\_5p | 0.1974680 - 0.4418131 |
| hsa\_mir\_103a\_3p | 1.207383 - 2.758278 |
| hsa\_mir\_106a\_5p | 1.953191 - 5.197487 |
| hsa\_mir\_125b\_5p | -0.42689799 - -0.08514594 |
| hsa\_mir\_191\_5p | 0.7745062 - 1.9888464 |
| hsa\_mir\_22\_3p | -4.958886 - -1.859620 |
| hsa\_mir\_26b\_5p | 0.5663564 - 1.2859570 |
| hsa\_mir\_30c\_5p | 0.1271989 - 0.3797141 |

DE Differential expression

**Supplementary Table 3.** Confidence intervals (CI, 95%) for DE of miRNAs in Discovery and Validation cohorts.

|  |  |  |
| --- | --- | --- |
| **miRNA ID** | **Discovery cohort CI (95%)** | **Validation cohort CI (95%)** |
| hsa\_let\_7f\_5p | -0.22174937 -0.07390335 | -0.185443401 - -0.003768791 |
| hsa\_mir\_146a\_5p | -2.3294678 -0.4316445 | -1.11853112 - -0.01522239 |
| hsa\_mir\_151a\_3p | -0.44626052 -0.08303055 | -0.33644209 - 0.00902833 |
| hsa\_mir\_223\_5p | -0.05279846 -0.01585272 | -0.045315483 - 0.003940501 |

DE Differential expression

**Supplementary Table 4.** Confidence intervals (CI, 95%) for miRNAS confirmed by individual PCR primer sets.

|  |  |
| --- | --- |
| **miRNA ID** | **CI (95%)** |
| hsa\_let\_7f\_5p | -0.10743882 - -0.03068808 |
| hsa\_mir\_146a\_5p | -2.2816659 - -0.1157393 |
| hsa\_mir\_151a\_3p | -0.58758349 - -0.04650965 |
| hsa\_mir\_223\_5p | -0.056952817 -0.008196918 |

**Supplementary Table 5.** Confidence intervals (CI, 95%) for the expression of plasma molecules between AT-AMI and SCAD patients.

|  |  |
| --- | --- |
| **Cytokine** | **CI (95%)** |
| CXCL8 | -93.20006 - -32.69999 |
| TGFB1 | -70031.1 - -26100.1 |
| TGFBR1 | -7304.5 - -1039.7 |
| Endothelin-1 | -231.80008 - -37.80005 |
| MMP2 | -14195.6 - 0.0 |

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**Supplementary Figure 1**. **Circulating levels of miR-let-7f-5p, miR-146a-5p, mmiR-151a-3p and mir223-5p distinguish SCAD from AT-AMI patients.** Box and whiskers Min to Max plots showing plasma levels of miR-let-7f-5p, miR-146a-5p, miR-151a-3p and miR-223-5p from two independent cohorts of SCAD and AT-AMI patients. Expression of miRNAs was analysed by RT-PCR using a serum/plasma focused PCR panel. Data correspond to the expression of miRNAs in cohort 1 (SCAD n=15, AT-AMI n=15) and cohort 2 (SCAD n=10, AT-AMI n=26). Only those differentially expressed miRNAs in cohort 1 and validated in cohort 2 are shown. Data were normalized using the global mean and expression levels are shown as Normalized relative quantity (NRQ), as indicated under Methods. Differences among groups were analysed by a multiple linear regression model adjusted by haemolysis (plasma sample absorbance at 414 nm), sex and/or age when necessary.