

SUPPLEMENTARY TABLE S4. POTENTIAL TARGET GENES PREDICTED BY INGENUITY PATHWAY ANALYSIS

Microrna	IPA target (level of confidence for prediction)
Differentially expressed microRNAs after treatment with EFV	
hsa-let-7a-5p	<i>UGT8</i> (experimentally observed); <i>CYP19A1</i> (high); <i>CYP4F2</i> (high); <i>FMO2</i> (high); <i>FMO4</i> (high); <i>KCNJ11</i> (high); <i>ABCC10</i> (moderate); <i>ABCC5</i> (moderate); <i>CHST3</i> (moderate); <i>CHST5</i> (moderate); <i>CYP46A1</i> (moderate); <i>GPX3</i> (moderate); <i>GPX7</i> (moderate); <i>NR1I2</i> (moderate); <i>SLC10A1</i> (moderate); <i>SLC10A2</i> (moderate); <i>SLC13A3</i> (moderate); <i>SLC5A6</i> (moderate); <i>SLCO2A1</i> (moderate); <i>SLCO5A1</i> (moderate)
hsa-miR-122-3p	<i>ABCC5</i> (moderate); <i>ALDH9A1</i> (moderate); <i>SLC22A15</i> (moderate); <i>SLC28A2</i> (moderate)
hsa-miR-122-5p	<i>GPX7</i> (experimentally observed); <i>CDA</i> (high); <i>CHST12</i> (high); <i>CYP7B1</i> (moderate); <i>GPX3</i> (moderate); <i>SLC15A1</i> (moderate); <i>SLC7A5</i> (moderate); <i>SLCO5A1</i> (moderate)
hsa-miR-181c-5p	<i>METAP1</i> (high); <i>CYP2R1</i> (moderate); <i>CYP3A5</i> (moderate); <i>FMO5</i> (moderate); <i>HSD11B1</i> (moderate); <i>SLC22A2</i> (moderate); <i>SULT1C2</i> (moderate)
hsa-miR-193a-3p	<i>SLC15A1</i> (high); <i>ALDH9A1</i> (moderate); <i>CHST3</i> (moderate); <i>CHST9</i> (moderate); <i>CYP11B2</i> (moderate); <i>CYP2S1</i> (moderate); <i>GSR</i> (moderate); <i>KCNJ11</i> (moderate); <i>MPO</i> (moderate); <i>NOS1</i> (moderate); <i>SLC22A8</i> (moderate); <i>SLC7A5</i> (moderate); <i>SLCO1A2</i> (moderate); <i>SLCO2A1</i> (moderate); <i>SULT1B1</i> (moderate); <i>SULT4A1</i> (moderate)
hsa-miR-195-5p	<i>GSTM4</i> (experimentally observed); <i>CBR3</i> (high); <i>GSTCD</i> (high); <i>ABCB5</i> (moderate); <i>ALDH1A3</i> (moderate); <i>ATP7A</i> (moderate); <i>CYP2S1</i> (moderate); <i>CYP7B1</i> (moderate); <i>GPXI</i> (moderate); <i>GSTM2/GSTM5</i> (moderate); <i>KCNJ11</i> (moderate); <i>NOS1</i> (moderate); <i>PDE3B</i> (moderate); <i>SLC13A1</i> (moderate); <i>SLC22A17</i> (moderate); <i>SLC28A1</i> (moderate); <i>XDH</i> (moderate)
hsa-miR-197-3p	<i>CBRI</i> (high); <i>CYP3A5</i> (high); <i>ABCB11</i> (moderate); <i>ALDH9A1</i> (moderate); <i>CHST2</i> (moderate); <i>CHST6</i> (moderate); <i>CYP20A1</i> (moderate); <i>DHRS1</i> (moderate); <i>EPHX2</i> (moderate); <i>GSTM5</i> (moderate); <i>IAPP</i> (moderate); <i>SULFI</i> (moderate); <i>SULT4A1</i> (moderate)
hsa-miR-19a-3p	<i>CHST1</i> (high); <i>DHRS3</i> (high); <i>PON2</i> (high); <i>ABCA1</i> (moderate); <i>ABCB7</i> (moderate); <i>GSTM2</i> (moderate); <i>SLC6A6</i> (moderate); <i>SULFI</i> (moderate)
hsa-miR-210-3p	<i>ALDH5A1</i> (moderate); <i>CHST1</i> (moderate); <i>PDE3A</i> (moderate); <i>SLC6A6</i> (moderate); <i>SLCO4C1</i> (moderate)
hsa-miR-216b-5p	<i>UGT2B28</i> (high); <i>CYP3A5</i> (moderate); <i>CYP7A1</i> (moderate); <i>SLC13A1</i> (moderate); <i>SLC16A1</i> (moderate); <i>SLC22A15</i> (moderate); <i>UGT2B10</i> (moderate); <i>UGT2B11</i> (moderate); <i>UGT2B4</i> (moderate); <i>UGT2B7</i> (moderate)
hsa-miR-221-3p	<i>SOD2</i> (experimentally observed); <i>ADHFE1</i> (high); <i>HNMT</i> (high); <i>ALDH1A1</i> (moderate); <i>CYP1B1</i> (moderate); <i>CYP7A1</i> (moderate); <i>PDE3A</i> (moderate); <i>UGT2B15</i> (moderate)
hsa-miR-22-5p	<i>CYP4Z1</i> (high); <i>GSTM2</i> (high); <i>GSTM2/GSTM5</i> (moderate); <i>ABCC1</i> (moderate); <i>CYP1A1</i> (moderate); <i>GPX5</i> (moderate); <i>SLCO1C1</i> (moderate); <i>TPMT</i> (moderate)
hsa-miR-25-3p	<i>CHST1</i> (high); <i>CHST7</i> (high)
hsa-miR-27a-3p	<i>CYP1B1</i> (experimentally observed); <i>RXRA</i> (experimentally observed); <i>PPARG</i> (experimentally observed); <i>ABCA1</i> (moderate); <i>ALDH4A1</i> (moderate); <i>AOX1</i> (moderate); <i>CHST1</i> (moderate); <i>CYP39A1</i> (moderate); <i>SLC16A1</i> (moderate); <i>UGT2B28</i> (moderate); <i>UGT8</i> (moderate)
hsa-miR-29b-3p	<i>ABCB6</i> (high); <i>GPX7</i> (high); <i>GSTA4</i> (high); <i>SLC22A7</i> (high); <i>ADH1B</i> (moderate); <i>ATP7A</i> (moderate); <i>CYP2B6</i> (moderate); <i>CYP4F3</i> (moderate); <i>DHRS2</i> (moderate); <i>FMO1</i> (moderate); <i>GSTO2</i> (moderate); <i>SLC16A1</i> (moderate); <i>XDH</i> (moderate)
hsa-miR-30b-5p	<i>ALDH2</i> (high); <i>CYP24A1</i> (high); <i>SLCO6A1</i> (high); <i>CAT</i> (moderate); <i>CHST1</i> (moderate); <i>CHST2</i> (moderate); <i>PON2</i> (moderate); <i>SLC22A5</i> (moderate); <i>SLC6A6</i> (moderate)
hsa-miR-383-5p	<i>CYP3A5</i> (high); <i>DHRS13</i> (high); <i>ABCC11</i> (moderate); <i>ATP7B</i> (moderate); <i>CHST10</i> (moderate); <i>CYP27B1</i> (moderate); <i>CYP4F11</i> (moderate); <i>GPX5</i> (moderate); <i>GPX6</i> (moderate); <i>GSTK1</i> (moderate); <i>SLC22A11</i> (moderate); <i>SLC22A5</i> (moderate); <i>SLC2A5</i> (moderate); <i>SULT2A1</i> (moderate)
hsa-miR-422a	<i>CHST2</i> (high); <i>ADHFE1</i> (moderate); <i>ALDH1B1</i> (moderate); <i>CDA</i> (moderate); <i>CHST3</i> (moderate); <i>CYP11B2</i> (moderate); <i>CYP7B1</i> (moderate); <i>CYP8B1</i> (moderate); <i>DDO</i> (moderate); <i>GSTM4</i> (moderate); <i>GSTO2</i> (moderate); <i>NOS3</i> (moderate); <i>SLC22A16</i> (moderate); <i>SLC7A7</i> (moderate); <i>SULFI</i> (moderate); <i>DHRS7C</i> (moderate); <i>SULT1B1</i> (moderate)
hsa-miR-548d-3p	<i>ABCC12</i> (high); <i>ALDH6A1</i> (moderate); <i>CYP11B1</i> (moderate); <i>DDO</i> (moderate); <i>DHRS7B</i> (moderate); <i>GSTM5</i> (moderate); <i>PPARD</i> (moderate); <i>SLC22A18</i> (moderate); <i>SLC22A8</i> (moderate)
hsa-miR-876-3p	<i>CYP3A5</i> (high); <i>ALDH1B1</i> (moderate); <i>ALDH3B1</i> (moderate); <i>CHST6</i> (moderate); <i>CYP27B1</i> (moderate); <i>CYP2B6</i> (moderate); <i>CYP2C18</i> (moderate); <i>PPARG</i> (moderate); <i>SLC22A12</i> (moderate); <i>SLC22A13</i> (moderate)
hsa-miR-885-5p	<i>TPMT</i> (high); <i>ALDH1B1</i> (moderate); <i>UGT2B11</i> (moderate); <i>UGT2B28</i> (moderate)
hsa-miR-93-3p	<i>GPXI</i> (high); <i>ABCA4</i> (moderate); <i>ABCC12</i> (moderate); <i>ADH6</i> (moderate); <i>CYP4B1</i> (moderate); <i>GSTM1</i> (moderate)

(continued)

SUPPLEMENTARY TABLE S4. (CONTINUED)

<i>MicroRNA</i>	<i>IPA target (level of confidence for prediction)</i>
Differentially expressed microRNAs after treatment with RMP	
hsa-let-7a-5p	<i>UGT8</i> (experimentally observed); <i>CYP19A1</i> (high); <i>CYP4F2</i> (high); <i>FMO2</i> (high); <i>FMO4</i> (high); <i>KCNJ11</i> (high); <i>ABCC10</i> (moderate); <i>ABCC5</i> (moderate); <i>CHST3</i> (moderate); <i>CHST5</i> (moderate); <i>CYP46A1</i> (moderate); <i>GPX3</i> (moderate); <i>GPX7</i> (moderate); <i>NR1I2</i> (moderate); <i>SLC10A1</i> (moderate); <i>SLC10A2</i> (moderate); <i>SLC13A3</i> (moderate); <i>SLC5A6</i> (moderate); <i>SLCO2A1</i> (moderate); <i>SLCO5A1</i> (moderate)
hsa-miR-125b-1-3p	<i>CAT</i> (moderate); <i>HNF4A</i> (moderate); <i>PDE3A</i> (moderate); <i>TPMT</i> (moderate)
hsa-miR-1260a	<i>GSTCD</i> (high); <i>KCNJ11</i> (high); <i>ADHFE1</i> (moderate); <i>CHST11</i> (moderate); <i>CYP11B1</i> (moderate); <i>CYP11B2</i> (moderate); <i>CYP1B1</i> (moderate); <i>CYP4F11</i> (moderate); <i>CYP4F2</i> (moderate); <i>GPX4</i> (moderate); <i>SLC27A1</i> (moderate); <i>SLC28A3</i> (moderate); <i>SLCO4A1</i> (moderate); <i>UGT8</i> (moderate)
hsa-miR-128-3p	<i>ABCC12</i> (moderate); <i>ALDH4A1</i> (moderate); <i>CYP1A2</i> (moderate); <i>CYP2C19</i> (moderate); <i>CYP2C9</i> (moderate); <i>CYP39A1</i> (moderate); <i>CYP3A4</i> (moderate); <i>CYP4F2</i> (moderate); <i>GSTM2</i> (moderate); <i>PDE3A</i> (moderate); <i>PON2</i> (moderate); <i>PPARG</i> (moderate); <i>SLC5A6</i> (moderate); <i>SLC6A6</i> (moderate); <i>UGT8</i> (moderate)
hsa-miR-1291	<i>ABCC1</i> (high); <i>CHST3</i> (high); <i>CHST6</i> (high); <i>CYB5R3</i> (high); <i>CYP1A1</i> (high); <i>CYP2A6</i> (high); <i>CYP2C18</i> (high); <i>GSTZ1</i> (high); <i>NR1I3</i> (high); <i>PPARD</i> (high); <i>SLC5A6</i> (high); <i>CHST7</i> (moderate); <i>CYP11B2</i> (moderate); <i>CYP2S1</i> (moderate); <i>CYP39A1</i> (moderate); <i>CYP3A5</i> (moderate); <i>DHRS13</i> (moderate); <i>DHRS7B</i> (moderate); <i>GPX3</i> (moderate); <i>HNF4A</i> (moderate); <i>KCNJ11</i> (moderate); <i>SLC16A1</i> (moderate); <i>SLC19A1</i> (moderate); <i>SLC29A2</i> (moderate); <i>SLC6A6</i> (moderate); <i>SLC7A5</i> (moderate)
hsa-miR-139-5p	<i>ABCA1</i> (moderate); <i>PDE3A</i> (moderate); <i>SOD1</i> (moderate)
hsa-miR-195-5p	<i>GSTM4</i> (experimentally observed); <i>CBR3</i> (high); <i>GSTCD</i> (high); <i>ABCB5</i> (moderate); <i>ALDH1A3</i> (moderate); <i>ATP7A</i> (moderate); <i>CYP2S1</i> (moderate); <i>CYP7B1</i> (moderate); <i>GPX1</i> (moderate); <i>GSTT2/GSTT2B</i> (moderate); <i>KCNJ11</i> (moderate); <i>NOS1</i> (moderate); <i>PDE3B</i> (moderate); <i>SLC13A1</i> (moderate); <i>SLC22A17</i> (moderate); <i>SLC28A1</i> (moderate); <i>XDH</i> (moderate)
hsa-miR-20b-5p	<i>PPARG</i> (experimentally observed); <i>PON2</i> (high); <i>ABCC9</i> (moderate); <i>ABCG2</i> (moderate); <i>ADHFE1</i> (moderate); <i>CYP3A5</i> (moderate); <i>METAP1</i> (moderate); <i>PDE3B</i> (moderate); <i>PPARA</i> (moderate); <i>SLC29A2</i> (moderate); <i>SLC2A4</i> (moderate)
hsa-miR-212-3p	<i>ABCG1</i> (moderate); <i>CHST9</i> (moderate); <i>CYP19A1</i> (moderate); <i>CYP4F3</i> (moderate); <i>DDO</i> (moderate); <i>HSD11B1</i> (moderate); <i>SLCO4C1</i> (moderate); <i>SOD2</i> (moderate)
hsa-miR-22-5p	<i>CYP4Z1</i> (high); <i>GSTM2</i> (high); <i>GSTT2/GSTT2B</i> (high); <i>ABCC1</i> (moderate); <i>CYP1A1</i> (moderate); <i>GPX5</i> (moderate); <i>SLCO1C1</i> (moderate); <i>TPMT</i> (moderate)
hsa-miR-29b-2-5p	<i>ABCC1</i> (high); <i>PDE3A</i> (high); <i>ABCA4</i> (moderate); <i>CYP2J2</i> (moderate); <i>SLC13A3</i> (moderate); <i>SLC2A4</i> (moderate); <i>SULT2A1</i> (moderate)
hsa-miR-425-3p	<i>GSTT1</i> (moderate); <i>SLC10A1</i> (moderate)
hsa-miR-500a	<i>CYP3A5</i> (high); <i>AHR</i> (moderate); <i>DHRS2</i> (moderate)
hsa-miR-577	<i>ADHFE1</i> (moderate); <i>CYP2J2</i> (moderate); <i>DHRS9</i> (moderate)
hsa-miR-597-5p	<i>ABCB11</i> (moderate); <i>ADH1B</i> (moderate); <i>CHST6</i> (moderate); <i>CYP1B1</i> (moderate); <i>SLC5A6</i> (moderate); <i>SLCO1A2</i> (moderate); <i>SLCO3A1</i> (moderate)
hsa-miR-625-3p	<i>CYP3A7</i> (moderate); <i>IAPP</i> (moderate)
hsa-miR-642a-5p	<i>CYP2A6</i> (high); <i>CYP2C18</i> (moderate); <i>GPX5</i> (moderate); <i>SLC28A1</i> (moderate)
hsa-miR-876-3p	<i>CYP3A5</i> (high); <i>ALDH1B1</i> (moderate); <i>ALDH3B1</i> (moderate); <i>CHST6</i> (moderate); <i>CYP27B1</i> (moderate); <i>CYP2B6</i> (moderate); <i>CYP2C18</i> (moderate); <i>PPARG</i> (moderate); <i>SLC22A12</i> (moderate); <i>SLC22A13</i> (moderate)
hsa-miR-885-5p	<i>TPMT</i> (high); <i>ALDH1B1</i> (moderate); <i>UGT2B11</i> (moderate); <i>UGT2B28</i> (moderate)
hsa-miR-93-3p	<i>GPX1</i> (high); <i>ABCA4</i> (moderate); <i>ABCC12</i> (moderate); <i>ADH6</i> (moderate); <i>CYP4B1</i> (moderate); <i>GSTT1</i> (moderate)
hsa-miR-99a-3p	<i>ALDH1A3</i> (moderate); <i>CYP1A1</i> (moderate); <i>GSTM5</i> (moderate); <i>SLCO4C1</i> (moderate); <i>UGT2B4</i> (moderate)
hsa-miR-99a-5p	<i>NR1I3</i> (high)

IPA, Ingenuity Pathway Analysis.