

| miRNA | Total Number of papers | Up-regulated | Down-regulated | Sample | Refs |
|---|------------------------|--------------|----------------|--|--|
| miR-10a | 2 | 2 | / | Serum | Li LM, Cancer Research, 2010 Tan Y, PLoS One 2014 (miR-10a-5p) |
| miR-10b | 2 | 2 | / | Tissue Tissue | Gao P, Hepatology 2011 Zhu HT, Plos One, 2012 |
| miR-15b | 3 | 2 | 1* | Tissue Tissue Tissue | Li W, Int J Cancer 2008 Zhang ZZ, WJG 2011 *Zhu HT, Plos One, 2012 |
| miR-17–92 (miR-17, miR-19a, miR-20, and miR-92) | 2 | 2 | / | Tissue Tissue | Connolly E, The American Journal of Pathology 2008 Li W, Int J Cancer 2008 (miR-17-5p) |
| miR-18a | 3 | 3 | / | Serum Tissue Tissue | Li L, Digestive Diseases and Sciences 2012 Li W, Int J Cancer 2008 Zhang ZZ, WJG 2011 |
| miR-18b | 1 | 1 | / | Tissue | Zhang ZZ, WJG 2011 |
| miR-19b | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-20 (only miR20) | 3 | 2 | 1* | Tissue Tissue Tissue | Fan MQ, Journal of Experimental & Clinical Cancer Research 2013 Li W, Int J Cancer 2008 *Li W, Int J Cancer 2008 |
| miR-21 | 6 | 5 | 1* | Tissue | Bandopadhyay M, BMC Cancer 2014 |

| | | | | | |
|------------|---|---|---|--------|---|
| | | | | Tissue | Connolly E, The American Journal of Pathology 2008 |
| | | | | Tissue | Gao p, Hepatology 2011 |
| | | | | Tissue | Li T, Oncology Reports 2014 |
| | | | | Serum | Xu J, Molecular Carcinogenesis, 2011 |
| | | | | Serum | *Zhou J, J Clin Oncol 2011 |
| miR-22 | 2 | 1 | 1 | Tissue | Jiang R, Clin Cancer Res 2011 |
| | | | | Tissue | Zhu HT, Plos One, 2012 |
| miR-23b/a, | 1 | 1 | / | Serum | Li LM, Cancer Research, 2010 |
| miR-24-3p | 1 | 1 | / | Tissue | Meng FL, Med Oncol 2014 |
| miR-25 | 2 | 2 | / | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| miR-26a-5p | 2 | / | 2 | Serum | Tan Y, PLoS One 2014 |
| | | | | Serum | Zhou J, J Clin Oncol 2011 |
| miR-26b | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-27a | 1 | / | 1 | Serum | Zhou J, J Clin Oncol 2011 |
| miR-27b | 2 | 1 | 1 | Tissue | Li T, Oncology Reports 2014 |
| | | | | Tissue | Zhu HT, Plos One, 2012 |
| miR-28-5p | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| miR-29a | 2 | 1 | 1 | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhu HT, Plos One, 2012 (miR-29a-5p) |

| | | | | | |
|------------|---|----|---|--------------|---|
| miR-29b | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-29c | 3 | 1* | 2 | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| | | | | Tissue | *Zhu HT, Plos One, 2012 |
| miR-30a | 2 | / | 2 | Tissue | Li T, Oncology Reports 2014 |
| | | | | Serum | Tan Y, PLoS One 2014 (miR-30a-3p) |
| miR-30b-5p | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| miR-30c | 2 | / | 2 | Tissue | Li W, Int J Cancer 2008 |
| | | | | Serum | Tan Y, PLoS One, 2014 |
| miR-30d | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-30e-3p | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| miR-31 | 1 | 1 | / | Serum/Tissue | Wen Y, Int. J Cancer 2015 |
| miR-34a | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-34c-5p | 1 | / | 1 | Tissue | Zhu HT, Plos One, 2012 |
| miR-92 | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-92a, | 1 | 1 | / | Serum | Li LM, Cancer Research, 2010 |
| miR-93 | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-98 | 3 | 1 | 2 | Tissue | Li W, Int J Cancer 2008 |
| | | | | Serum | Tan Y, PLoS One 2014 (miR-98-5p) |
| | | | | Tissue | Zhu HT, Plos One, 2012 |
| miR-99a | 2 | 1 | 1 | Serum | Li LM, Cancer Research, 2010 |

| | | | | | |
|------------|---|----|----|--------------|--|
| | | | | Tissue | Li T, Oncology Reports 2014 |
| miR-99b-3p | 1 | 1 | / | Serum | Tan Y, PLoS One 2014 |
| miR-100 | 2 | / | 2 | Tissue | Li W, Int J Cancer 2008 |
| | | | | Serum | Tan Y, PLoS One 2014 |
| miR-101 | 5 | 1* | 4 | Tissue | Fu Y, Oncol Letters 2013 |
| | | | | Tissue | Li W, Int J Cancer 2008 |
| | | | | Serum/Tissue | Xie Y, Cancer Biology and Therapy 2014 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| | | | | Serum | *Fu Y, Oncol Letters 2013 |
| miR103 | 2 | 2 | / | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| miR-106a | 2 | 2 | / | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| miR-106b | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-107 | 3 | 2 | 1 | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| | | | | Tissue | Zhu HT, Plos One, 2012 |
| miR-122a | 6 | 4 | 2* | Serum | Li LM, Cancer Research, 2010 |
| | | | | Serum | Qi P, PLoS One 2011 |
| | | | | Serum | Xing TJ, Genetics and |

| | | | | | |
|-------------|---|---|---|--------------|---|
| | | | | Serum | Molecular Research 2014 |
| | | | | Serum | Xu J, Molecular Carcinogenesis, 2011 |
| | | | | Serum | *Tan Y, PLoS One 2014 |
| | | | | | *Zhou J, J Clin Oncol 2011 |
| miR-125a | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-125b-5p | 2 | 2 | / | Serum | Giray BG, Mol Biol Rep 2014 |
| | | | | Serum | Li LM, Cancer Research, 2010 |
| miR-132 | 1 | / | 1 | Tissue/Serum | Wei X, Cellular Signalling 2013 |
| miR-134 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-135a | 1 | / | 1 | Tissue | Zhu HT, Plos One, 2012 |
| miR-139 | 1 | / | 1 | Tissue/Serum | Li T, Oncology Reports 2014 |
| miR-141-3p | 1 | 1 | / | Serum | Tan Y, PLoS One 2014 |
| miR-142-5p | 1 | / | 1 | Tissue | Zhu HT, Plos One, 2012 |
| miR-145 | 2 | / | 2 | Tissue | Bandopadhyay M, BMC Cancer 2014 |
| | | | | Tissue | Gao P, Hepatology 2011 |
| miR-146a | 1 | 1 | / | Serum | Gui J, Clinical Science 2011 |
| miR-146b | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-148a | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-148b | 1 | 1 | / | Tissue | Li T, Oncology Reports 2014 |
| miR-150 | 2 | 2 | / | Serum | Li LM, Cancer Research, 2010 |
| | | | | Tissue | Li W, Int J Cancer 2008 |

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|-------------------|---|---|----|--------|--|
| miR-152 | 2 | / | 2 | Tissue | Dang YW, Asian Pac J Cancer Prev, 2014 |
| | | | | Tissue | Hou J, Cancer Cell 2011 |
| miR-155 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-165 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-166 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-181a | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-181c | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-182 | 1 | 1 | / | Tissue | Zhang ZZ, WJG 2011 |
| miR-185 | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-186 | 1 | 1 | / | Tissue | Li T, Oncology Reports 2014 |
| miR-188 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-189 | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-191 | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-192- 5p | 3 | 2 | 1* | Serum | Tan Y, PLoS One 2014 |
| | | | | Tissue | Li W, Int J Cancer 2008 |
| | | | | Serum | *Zhou J, J Clin Oncol 2011 |
| miR-193b | 1 | / | 1 | Tissue | Zhu HT, Plos One, 2012 |
| miR-196b | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR- 199a/b-3p | 1 | / | 1 | Tissue | Hou J, Cancer Cell 2011 |
| miR- 199a-5p | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| miR-199b | 1 | / | 1 | Tissue | Gao P, Hepatology 2011 |
| miR-200b | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-202 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-204 | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-205 | 1 | / | 1 | Tissue | Zhang T, Neoplasia 2013 |

| | | | | | |
|----------|---|---|----|---------------|---|
| miR-206 | 1 | 1 | / | Serum | Tan Y, PLoS One 2014 |
| miR-210 | 2 | 2 | / | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Zhu HT, Plos One, 2012 |
| miR-214 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-215 | 3 | 2 | 1* | Serum | Gui J, Clinical Science 2011 |
| | | | | Tissue | Zhu HT, Plos One, 2012 |
| | | | | Tissue | *Li W, Int J Cancer 2008 |
| miR-216a | 1 | 1 | | Tissue | Zhu HT, Plos One, 2012 |
| miR-217 | 1 | 1 | | Tissue | Zhu HT, Plos One, 2012 |
| miR-221 | 6 | 6 | / | Tissue | Gao P, Hepatology 2011 |
| | | | | Serum | Li J, Biochemical and Biophysical Research Communications, 2011 |
| | | | | Tissue | Li T, Oncology Reports 2014 |
| | | | | Tissue | Li W, Int J Cancer 2008 |
| | | | | Serum/ Tissue | Wen Y, Int. J Cancer 2015 |
| | | | | Tissue | Zhang ZZ, WJG 2011 |
| miR-222 | 5 | 4 | 1* | Tissue | Li W, Int J Cancer 2008 |
| | | | | Tissue | Qi P, PLoS One 2011 |
| | | | | Serum | Zhang ZZ, WJG 2011 |
| | | | | Serum/ Tissue | Wen Y, Int. J Cancer 2015 |

| | | | | | |
|-------------|---|---|----|---|--|
| | | | | Tissue | *Bandopadhyay M, BMC Cancer 2014 |
| miR-223 | 5 | 3 | 2* | Serum Serum Serum Serum Serum | Li LM, Cancer Research, 2010 Qi P, PLoS One 2011 Xu J, Molecular Carcinogenesis, 2011 *Giray BG, Mol Biol Rep 2014 (miR-223-3p) *Zhou J, J Clin Oncol 2011 |
| miR-224 | 4 | 4 | / | Tissue Serum Tissue Tissue | Gao P, Hepatology 2011 Gui J, Clinical Science 2011 Li W, Int J Cancer 2008 Zhang ZZ, WJG 2011 |
| miR-331 | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |
| miR-342-3p, | 2 | 2 | / | Serum Tissue | Li LM, Cancer Research, 2010 Li W, Int J Cancer 2008 (miR-342) |
| miR-371 | 1 | 1 | / | Tissue | Kwak MS, Plos One 2012 |
| miR-372 | 1 | 1 | / | Tissue | Kwak MS, Plos One 2012 |
| miR-373 | 1 | 1 | / | Tissue | Kwak MS, Plos One 2012 |
| miR-374a | 1 | 1 | / | Serum/Tissue | Zhao Q, Plos One 2014 |
| miR-375 | 1 | 1 | / | Serum | Li LM, Cancer Research, 2010 |
| miR-378a | 1 | / | 1 | Tissue | Li T, Oncology Reports 2014 |

| | | | | | |
|----------------|---|---|----|--------------|------------------------------------|
| miR-378e | 1 | / | 1 | Tissue | Li T, Oncology Reports 2014 |
| miR-422a | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-422b | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-423 | 1 | 1 | / | Serum | Li LM, Cancer Research, 2010 |
| miR-424 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-433- 3p | 1 | 1 | / | serum | Tan Y, PLoS One 2014 |
| miR-451 | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-483- 5p | 1 | / | 1 | Serum | Tan Y, PLoS One, 2014 |
| miR-486- 5p | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-505 | 1 | / | 1 | Tissue | Zhu HT, Plos One, 2012 |
| miR-511- 5p | 1 | 1 | / | Serum | Tan Y, PLoS One, 2014 |
| miR-517a | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-518b | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-518e | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-518f | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-519a | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-519d | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-520b | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-520d | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-520f | 1 | / | 1 | Tissue | Li W, Int J Cancer 2008 |
| miR-522 | 1 | 1 | / | Tissue | Zhu HT, Plos One, 2012 |
| miR-545 | 1 | 1 | / | Serum/Tissue | Zhao Q, Plos One 2014 |
| miR-572 | 1 | 1 | / | Serum | Zhang H, WJG 2012 |
| miR-574- 3p | 2 | 1 | 1* | Serum | Gui J, Clinical Science 2011 |
| | | | | Serum | *Tan Y, PLoS One 2014 |

| | | | | | |
|---------------|---|---|----|--------------------|--|
| miR-575 | 1 | 1 | / | Serum | Zhang H, WJG 2012 |
| miR-584-5p | 1 | / | 1 | Serum | Tan Y, PLoS One, 2014 |
| miR-638 | 1 | 1 | / | Serum | Zhang H, WJG 2012 |
| miR-643 | 1 | / | 1 | Tissue | Zhu HT, Plos One, 2012 |
| miR-801 | 1 | 1 | / | Serum | Zhou J, J Clin Oncol 2011 |
| miR-885-5p | 1 | 1 | / | Serum | Gui J, Clinical Science, 2011 |
| miR-1228-5p | 1 | 1 | / | Serum | Tan Y, PLoS One, 2014 |
| miR-1285-1-p5 | 1 | 1 | / | Serum | Tan Y, PLoS One, 2014 |
| miR-4433b-5p | 1 | / | 1 | Serum | Tan Y, PLoS One, 2014 |
| miR-4454 | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| miR-4532 | 1 | 1 | / | Serum | Tan Y, PLoS One, 2014 |
| mir-6127 | 1 | 1 | / | Serum | Tan Y, PLoS One, 2014 |
| miR-6852-5p | 1 | / | 1 | Serum | Tan Y, PLoS One, 2014 |
| let-7b | 1 | 1 | / | Tissue | Li W, Int J Cancer, 2008 |
| let-7c. | 2 | 1 | 1* | Serum Serum | Li LM, Cancer Research, 2010 *Tan Y, PLoS One 2014 (let-7c-5p) |
| let-7e-5p | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| let-7f-5p | 1 | / | 1 | Serum | Tan Y, PLoS One 2014 |
| let-7i | 1 | 1 | / | Tissue | Li W, Int J Cancer 2008 |

Supplementary Table 1. miRNAs patterns in studies enrolling HCC patients with HBV-related infection. Up-, Down-regulated: number of study that described miRNA as up- or down-regulated

| miRNA | Number of papers | Up-regulated | Down-regulated | Sample | Refs |
|---------------|-------------------------|---------------------|-----------------------|------------------------------------|---|
| miR-10b | 1 | 1 | / | Tissue | Ladeiro Y, Hepatology 2008 |
| miR-15b | 2 | 2 | / | Tissue Tissue | Chung GE, Oncol Rep 2010 Oksuz Z, Mol Biol Rep 2015 (miR-15b-5p) |
| miR-16 | 1 | / | 1 | Tissue | Qu KZ, J Clin Gastroenterol 2011 |
| pri-miRNA-18a | 1 | 1 | / | Tissue | Murakami Y, Oncogene 2006 |
| miR-18a | 2 | 2 | / | Tissue Tissue | Liu WH, Gastroenterology 2009 Murakami Y, Oncogene 2006 |
| miR-21 | 3 | 3 | / | Tissue Tissue Serum | Ladeiro Y, Hepatology 2008 Salvi A, Intern J Oncol 2012 Tomimaru Y, J Hepatol 2011 |
| miR-22 | 1 | / | 1 | Tissue | Chung GE, Oncol Rep 2010 |
| miR-24 | 3 | 2 | 1* | Tissue Tissue Tissue | Liu YX, BioMed Research International 2014 Oksuz Z, Mol Biol Rep 2015 (miR-24-3p) *Salvi A, Intern J Oncol 2012 |
| miR-25 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-26a | 2 | / | 2 | Tissue Tissue | Toffanin S, Hoshida Cabellos, Gastroenterology 2011 Ura S Hepatology 2009 |
| miR-26b | 1 | / | 1 | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-27a | 1 | / | 1 | Tissue | Salvi A, Intern J Oncol 2012 |
| miR-29a-3p | 1 | / | 1 | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-29c | 1 | / | 1 | Tissue | Ura S Hepatology 2009 |
| miR-30a-5p | 1 | / | 1 | Tissue | Oksuz Z, Mol Biol Rep 2015 |

| | | | | | |
|---------------------|---|----|---|--------------|---|
| miR-30b-5p | 1 | 1 | | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-30c-5p | 1 | / | 1 | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-30d | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-92a | 1 | 1 | / | Tissue/Serum | Shigoka M, Pathology International 2010 |
| miR-93 | 2 | 2 | / | Tissue | Chung GE, Oncol Rep 2010 |
| | | | | Tissue | Oksuz Z, Mol Biol Rep 2015 (miR-93-5p) |
| miR-96 | 1 | 1 | / | Tissue | Ladeiro Y, Hepatology 2008 |
| miR-103 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-105 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-106a-5p | 1 | 1 | / | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-107 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-122 | 3 | 1* | 2 | Tissue | Coulouarn C, Oncogene 2009 |
| | | | | Tissue | Spaniel C, PLOS One 2013 |
| | | | | Tissue | *Oksuz Z, Mol Biol Rep 2015 (miR-122-5p) |
| miR-122a | 2 | / | 2 | Tissue | Gramantieri L, Cancer Research 2007 |
| | | | | Tissue | Ladeiro Y, Hepatology 2008 |
| miR-124a | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-125a-5p | 1 | / | 1 | Tissue | Diaz G, Int J Cancer. 2013 |
| miR-126 | | / | 1 | Tissue | Ura S Hepatology 2009 |
| mi129-2 methylation | 1 | / | | Tissue | Lu CY, Genes Chromosomes and Cancer, 2013 |
| miR-130a | 4 | / | 4 | Tissue | Gramantieri L, Cancer Research 2007 |
| | | | | Tissue | Diaz G, Int J Cancer. 2013 |
| | | | | Tissue | Chung GE, Oncol Rep 2010 |
| | | | | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-132 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |

| | | | | | |
|-----------------------|---|---|---|------------------------------------|--|
| miR-136 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-139-3p | 1 | / | 1 | Tissue | Diaz G, Int J Cancer. 2013 |
| miR-139-5p | 1 | / | 1 | Tissue | Diaz G, Int J Cancer. 2013 |
| miR-141 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-142 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-143 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-145 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-146 | 2 | 1 | 1 | Tissue Tissue | Gramantieri L, Cancer Research 2007 Oksuz Z, Mol Biol Rep 2015 (miR-146a-5p) |
| miR-150 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-154 | 2 | 1 | 1 | Tissue Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 Ura S Hepatology 2009 |
| miR-155 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-181a-5p | 1 | / | 1 | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-181a-1 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-181a-2 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-181c | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-191 | 1 | 1 | | Tissue | Spaniel C, PLOS One 2013 |
| miR-195 | 3 | / | 3 | Tissue Tissue Tissue | Gramantieri L, Cancer Research 2007 Diaz G, Int J Cancer. 2013 Chung GE, Oncol Rep 2010 |
| miR-199a and miR-199* | 2 | / | 2 | Tissue Tissue | Chung GE, Oncol Rep 2010 Qu KZ, J Clin Gastroenterol 2011 |
| miR-199a-3p | 1 | / | 1 | Tissue | Diaz G, Int J Cancer. 2013 |
| miR199a1-5p | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-199a2-5p | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-199a-5 | 1 | / | 1 | Tissue | Diaz G, Int J Cancer. 2013 |

| | | | | | |
|-------------|---|---|----|--------|--|
| miR-199b | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-200b | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-210 | 1 | 1 | | Tissue | Chung GE, Oncol Rep 2010 |
| miR-214 | 2 | / | 2 | Tissue | Gramantieri L, Cancer Research 2007 |
| | | | | Tissue | Diaz G, Int J Cancer. 2013 |
| miR-219 | 1 | / | 1 | Tissue | Ura S, Hepatology 2009 |
| miR-221 | 3 | 2 | 1* | Tissue | Gramantieri L, Cancer Research 2007 |
| | | | | Tissue | Diaz G, Int J Cancer. 2013 |
| | | | | Tissue | *Oksuz Z, Mol Biol Rep 2015 (miR-221-3p) |
| miR-222 | 1 | 1 | | Tissue | Ladeiro Y, Hepatology 2008 |
| miR-223 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| miR-224 | 3 | 3 | / | Tissue | Diaz G, Int J Cancer. 2013 |
| | | | | Tissue | Ladeiro Y, Hepatology 2008 |
| | | | | Tissue | Murakami Y, Oncogene 2006 |
| miR-299-5p | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-302c-3p | 1 | / | 1 | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-320 | 2 | 1 | 1 | Tissue | Chung GE, Oncol Rep 2010 |
| | | | | Tissue | Ura S Hepatology 2009 |
| miR-325 | 1 | / | 1 | Tissue | Ura S Hepatology 2009 |
| miR-338 | 1 | / | 1 | Tissue | Ura S Hepatology 2009 |
| miR-339 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-345 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-368 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-369-3p | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-375 | 1 | / | 1 | Tissue | Ladeiro Y, Hepatology 2008 |
| miR-376a | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-376b | 1 | 1 | / | Tissue | Toffanin S, |

| | | | | | |
|------------|---|---|---|--------|--|
| | | | | | Hoshida Cabellos Gastroenterology 2011 |
| miR-377 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-379 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-381 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-382 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-409-3p | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-410 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-422b | 2 | / | 2 | Tissue | Chung GE, Oncol Rep 2010 |
| | | | | Tissue | Ladeiro Y, Hepatology 2008 |
| miR-423 | 1 | 1 | / | Tissue | Chung GE, Oncol Rep 2010 |
| miR-424-3p | 2 | 1 | 1 | Tissue | Chung GE, Oncol Rep 2010 |
| | | | | Tissue | Diaz G, Int J Cancer. 2013 |
| miR-431 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-432 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-462 | 1 | 1 | / | Tissue | Diaz G, Int J Cancer. 2013 |
| miR-494 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-495 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-497 | 2 | 1 | 2 | Tissue | Diaz G, Int J Cancer. 2013 |
| | | | | Tissue | Chung GE, Oncol Rep 2010 |
| miR-512-3p | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-516-1 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-516-5p | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-517a | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |

| | | | | | |
|----------|---|---|---|--------|--|
| miR-517b | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-517c | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-518b | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-518f | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-519a | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-519b | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-519d | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-519e | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-520b | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-520c | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-520f | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-520g | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-520h | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-522 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-524 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-525 | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-526a | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-526b | 1 | 1 | / | Tissue | Toffanin S, Hoshida Cabellos Gastroenterology 2011 |
| miR-1269 | 1 | 1 | / | Tissue | Diaz G, Int J Cancer. 2013 |
| let-7a | 1 | 1 | | Tissue | Chung GE, Oncol Rep 2010 |
| let-7a-1 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| let-7a2 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| let-7a3 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |

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|---------|---|---|---|--------|--|
| let-7b | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| let-7c | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| let-7d | 2 | 1 | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| | | | | Tissue | Chung GE, Oncol Rep 2010 |
| let-7e | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| let-7f2 | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |
| let-7g | 1 | / | 1 | Tissue | Gramantieri L, Cancer Research 2007 |

Supplementary Table 2. miRNAs patterns in studies enrolling HCC patients with HBV and HCV-related infection. Up-, Down-regulated: number of study that described miRNA as up- or down-regulated.

| miRNA | Number of papers | Up-regulated | Down-regulated | Sample | Refs |
|-----------|------------------|--------------|----------------|---|------------------------------------|
| miR-7 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-9 | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-9* | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-10a | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-15a | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-16 | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-17-5p | 1 | 1 | / | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-29c | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-92b | 1 | / | 1 | Urine | Abdalla MA, J Cancer 2012 |
| miR-95 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-100 | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-104 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-106a | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-122 | 1 | 1 | / | Serum | El-Garem H, WJG 2014 |
| miR-125b | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-134 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-137 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-145 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-147 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-155 | 1 | 1 | / | Tissue | Zhang Y Hepatology 2012 |
| miR-159a | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-181a | 1 | 1 | / | Serum/Tissue/Peripheral mononuclear cells | Elhelw DS, Biomedical Reports 2014 |
| miR-185 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-198 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-199b | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-200a | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-204 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-206 | 1 | 1 | / | Tissue | Oksuz Z, Mol Biol Rep 2015 |

| | | | | | |
|------------|---|---|---|--------|-------------------------------|
| miR-218 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-221 | 1 | 1 | / | Serum | El-Garem H, WJG 2014 |
| miR-223-3p | 1 | / | 1 | Tissue | Oksuz Z, Mol Biol Rep 2015 |
| miR-299 | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-302b | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-323 | 1 | / | 1 | Urine | Abdalla MA, J Cancer 2012 |
| miR-326 | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-330 | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-335 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-368b | 1 | / | 1 | Tissue | Varnholt H Hepatology 2008 |
| miR-370 | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |
| miR-449 | 1 | / | 1 | Urine | Abdalla MA, J Cancer 2012 |
| miR-502d | 1 | / | 1 | Urine | Abdalla MA, J Cancer 2012 |
| miR-516-5p | 1 | / | 1 | Urine | Abdalla MA, J Cancer 2012 |
| miR-532 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-610 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-618 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-625 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-650 | 1 | / | 1 | Urine | Abdalla MA, J Cancer 2012 |
| miR-765 | 1 | 1 | / | Urine | Abdalla MA, J Cancer 2012 |
| miR-let-7g | 1 | 1 | / | Tissue | Varnholt H Hepatology 2008 |

Supplementary Table 3. miRNAs patterns in studies enrolling HCC patients with HCV-related infection. Up-, Down-regulated: number of study that described miRNA as up- or down-regulated.