Supplementary information

miRandola 2017: a curated knowledge base of non-invasive biomarkers

Francesco Russo[1, *], Sebastiano Di Bella[2], Federica Vannini[3, #], Gabriele Berti[3, #], Flavia Scoyni[4, #], Helen Victoria Cook[1], Alberto Santos[1,5], Giovanni Nigita[6], Vincenzo Bonnici[7], Alessandro Laganà[8], Filippo Geraci[9], Alfredo Pulvirenti[10], Rosalba Giugno[7], Federico De Masi[11], Kirstine Belling[1], Lars Juhl Jensen[1], Søren Brunak[1], Marco Pellegrini[9] and Alfredo Ferro[10]

[1] Disease Systems Biology, Novo Nordisk Foundation Center for Protein Research, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark;

[2] Business Unit Oncology, Nerviano Medical Sciences, Milan, Italy;

[3] Institute of Clinical Physiology (IFC), National Research Council (CNR), Pisa, Italy;

[4] University of Eastern Finland, Kuopio, Finland;

[5] Clinical Proteomics, Novo Nordisk Foundation Center for Protein Research, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark;

[6] Department of Cancer Biology and Genetics, The Ohio State University, Ohio, USA;

[7] Department of Computer Science, University of Verona, Verona, Italy;

[8] Department of Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai, NYC, USA;

[9] Institute of Informatics and Telematics (IIT), National Research Council (CNR), Pisa, Italy;

[10] Department of Clinical and Experimental Medicine, University of Catania, Catania, Italy;

[11] Department of Bio and Health Informatics, DTU Bioinformatics, Technical University of Denmark, Lyngby, Denmark.

* To whom correspondence should be addressed. Tel: +45 35325000; Email: francesco.russo@cpr.ku.dk

[#]These authors contributed equally to this work.

Supplementary table. List of papers (n=314) included in miRandola 2017.

First author	Title	Journal	Year of publication	PubMed ID
Hou S et al.	MicroRNA-939 governs vascular integrity and angiogenesis through targeting γ-catenin in endothelial cells.	Biochem Biophys Res Commun. 26;484(1):27-33	2017	28115160
Ishikawa H et al.	Stability of serum high-density lipoprotein-microRNAs for preanalytical conditions.	Ann Clin Biochem. 54(1):134-142	2017	27166305
Kim SS et al.	Plasma micoRNA-122 as a predictive marker for treatment response following transarterial chemoembolization in patients with hepatocellular carcinoma.	J Gastroenterol Hepatol. 32(1):199-207	2017	27194671
Al-Kafaji G et al.	Circulating endothelium-enriched microRNA-126 as a potential biomarker for coronary artery disease in type 2 diabetes mellitus patients.	Biomarkers. 11:1-11	2016	27321479
Binderup HG et al.	Aspirin resistance may be identified by miR-92a in plasma combined with platelet distribution width.	Clin Biochem. 49(15):1167-1172	2016	27208561
Chien HY et al.	Differential microRNA Profiles Predict Diabetic Nephropathy Progression in Taiwan.	Int J Med Sci. 13(6):457-65	2016	27279796
de Gonzalo-Calvo D et al.	microRNA expression profile in human coronary smooth muscle cell-derived microparticles is a source of biomarkers.	Clin Investig Arterioscler. 28(4):167-77	2016	27363781
Ding E et al.	Plasma microRNAs expression profile in female workers occupationally exposed to mercury.	J Thorac Dis. 8(5):833-41	2016	27162656
He QF et al.	Circulating MicroRNA-21 is Downregulated in Patients with Metabolic Syndrome.	Biomed Environ Sci. 2016 May;29(5):385-9	2016	27353714
Hoffmann S et al.	Coding and non-coding variants in the SHOX2 gene in patients with early-onset atrial fibrillation.	Basic Res Cardiol. 111(3):36	2016	27138930
Hruskova V et al.	MicroRNA-125b: association with disease activity and the treatment response of patients with early rheumatoid arthritis.	Arthritis Res Ther. 18(1):124	2016	27255643
Ioannidis J et al.	Circulating microRNA Profiles during the Bovine Oestrous Cycle.	PLoS One. 11(6):e0158160	2016	27340826
Kaneko M et al.	AT1 receptor blocker azilsartan medoxomil normalizes plasma miR-146a and miR-342-3p in a murine heart failure model.	Biomarkers. 11:1-8	2016	27321284
Karakas M et al.	Circulating microRNAs strongly predict cardiovascular death in patients with coronary artery disease-results from the large AtheroGene study.	Eur Heart J. pii: ehw250	2016	27357355

Ke-Gang J et al.	Evaluating Diagnostic and Prognostic Value of Plasma miRNA133a in Acute Chest Pain Patients Undergoing Coronary Angiography.	Medicine (Baltimore). 95(17):e3412	2016	27124025
Kessler T et al.	Serum microRNA-1233 is a specific biomarker for diagnosing acute pulmonary embolism.	J Transl Med. 14(1):120	2016	27150028
Khalyfa A et al.	Extracellular microvesicle microRNAs in children with sickle cell anaemia with divergent clinical phenotypes.	Br J Haematol. 174(5):786-98	2016	27161653
Kho AT et al.	Circulating MicroRNAs: Association with Lung Function in Asthma.	PLoS One. 11(6):e0157998	2016	27362794
Knyazev EN et al.	Plasma Levels of hsa-miR-619-5p and hsa-miR-1184 Differ in Prostatic Benign Hyperplasia and Cancer.	Bull Exp Biol Med. 161(1):108-11	2016	27265125
Miura K et al.	Circulating Levels of Pregnancy-Associated, Placenta-Specific microRNAs in Pregnant Women With Placental Abruption.	Reprod Sci. pii: 1933719116653837	2016	27297699
Montagnana M et al.	Plasma Expression Levels of Circulating miR-21 are not Useful for Diagnosing and Monitoring Colorectal Cancer.	Clin Lab. 62(5):967-70	2016	27349026
Nagamitsu Y et al.	Profiling analysis of circulating microRNA expression in cervical cancer.	Mol Clin Oncol. 5(1):189-194	2016	27330796
Saito K et al.	MicroRNA-93 may control vascular endothelial growth factor A in circulating peripheral blood mononuclear cells in acute Kawasaki disease.	Pediatr Res. 80(3):425-32	2016	27089500
Salamin O et al.	Circulating microRNA-122 as Potential Biomarker for Detection of Testosterone Abuse.	PLoS One. 11(5):e0155248	2016	27171140
Vistbakka J et al.	Circulating microRNAs as biomarkers in progressive multiple sclerosis.	Mult Scler. pii: 1352458516651141	2016	27246141
Wang X et al.	Diagnostic potential of plasma microRNA signatures in patients with deep-vein thrombosis.	Thromb Haemost. 116(2):328-36	2016	27197074
Weilner S et al.	Secreted microvesicular miR-31 inhibits osteogenic differentiation of mesenchymal stem cells.	Aging Cell. 15(4):744-54	2016	27146333
Zhang L et al.	Circulating MicroRNA-21 Is Involved in Lymph Node Metastasis in Cervical Cancer by Targeting RASA1.	Int J Gynecol Cancer. 26(5):810-6	2016	27101583
Beyer C et al.	Signature of circulating microRNAs in osteoarthritis.	Ann Rheum Dis. 74(3):e18.	2015	24515954
Chen Z et al.	Oxidative stress activates endothelial innate immunity via sterol regulatory element binding protein 2	Circulation. 131(9):805-14.	2015	25550450

	(SREBP2) transactivation of microRNA-92a.			
Csak T et al.	microRNA-122 regulates hypoxia-inducible factor-1 and vimentin in hepatocytes and correlates with fibrosis in diet-induced steatohepatitis.	Liver Int. 35(2):532-41.	2015	25040043
de Guia RM et al.	microRNA-379 couples glucocorticoid hormones to dysfunctional lipid homeostasis.	EMBO J. 34(3):344-60.	2015	25510864
Duan LJ et al.	MiR-133 modulates TGF-beta-1-induced bladder smooth muscle cell hypertrophic and fibrotic response: implication for a role of microRNA in bladder wall remodeling caused by bladder outlet obstruction.	Cell Signal. 27(2):215-27.	2015	25451078
Fong MY et al.	Breast-cancer-secreted miR-122 reprograms glucose metabolism in premetastatic niche to promote metastasis.	Nat Cell Biol. 17(2):183-94.	2015	25621950
Hansen TF et al.	Changes in circulating microRNA-126 during treatment with chemotherapy and bevacizumab predicts treatment response in patients with metastatic colorectal cancer.	Br J Cancer. 112(4):624-9.	2015	25584492
Hu Y et al.	Circulating microRNA profiles and the identification of miR-593 and miR-511 which directly target the PROP1 gene in children with combined pituitary hormone deficiency.	Int J Mol Med. 35(2):358-66.	2015	25434367
Kacperska MJ et al.	Selected Extracellular microRNA as Potential Biomarkers of Multiple Sclerosis Activity-Preliminary Study.	J Mol Neurosci. 56(1):154-63.	2015	25487315
Kleivi Sahlberg K et al.	A serum microRNA signature predicts tumor relapse and survival in triple-negative breast cancer patients.	Clin Cancer Res. 21(5):1207-14.	2015	25547678
Kubiczkova Besse L et al.	Combination of serum microRNA-320a and microRNA-320b as a marker for Waldenström macroglobulinemia.	Am J Hematol. 90(3):E51-2.	2015	25428891
Løvendorf MB et al.	Laser capture microdissection followed by next-generation sequencing identifies disease-related microRNAs in psoriatic skin that reflect systemic microRNA changes in psoriasis.	Exp Dermatol. 24(3):187-93.	2015	25431026
Li Q et al.	Plasma long noncoding RNA protected by exosomes as a potential stable biomarker for gastric cancer.	Tumour Biol. 36(3):2007-12.	2015	25391424
Liu P et al.	MicroRNA-424 protects against focal cerebral ischemia and reperfusion injury in mice by suppressing oxidative stress.	Stroke. 46(2):513-9.	2015	25523055

Lorenzen JM et al.	Circulating long noncoding RNATapSaki is a predictor of mortality in critically ill patients with acute kidney injury.	Clin Chem. 61(1):191-201.	2015	25294924
Lu YC et al.	Combined determination of circulating miR-196a and miR-196b levels produces high sensitivity and specificity for early detection of oral cancer.	Clin Biochem. 48(3):115-21.	2015	25485932
Memczak S et al.	Identification and Characterization of Circular RNAs As a New Class of Putative Biomarkers in Human Blood.	PLoS One. 10(10):e0141214.	2015	26485708
Odenthal M et al.	Serum microRNA profiles as prognostic/predictive markers in the multimodality therapy of locally advanced adenocarcinomas of the gastroesophageal junction.	Int J Cancer. 137(1):230-7.	2015	25429911
Pirola CJ et al.	Circulating microRNA signature in non-alcoholic fatty liver disease: from serum non-coding RNAs to liver histology and disease pathogenesis.	Gut. 64(5):800-12.	2015	24973316
Pontoppidan PL et al.	Associations between gastrointestinal toxicity, micro RNA and cytokine production in patients undergoing myeloablative allogeneic stem cell transplantation.	Int Immunopharmacol. 25(1):180-8.	2015	25614225
Shen L et al.	Circulating microRNA predicts insensitivity to glucocorticoid therapy in Graves' ophthalmopathy.	Endocrine.	2015	25588771
Soeki T et al.	Plasma microRNA-100 is associated with coronary plaque vulnerability.	Circ J. 79(2):413-8.	2015	25519160
Stamatopoulos B et al.	Opposite prognostic significance of cellular and serum circulating microRNA-150 in Chronic Lymphocytic Leukemia patients.	Mol Med. [Epub ahead of print]	2015	25584781
Sun L et al.	Expression of circulating microRNA-1 and microRNA-133 in pediatric patients with tachycardia.	Mol Med Rep. 11(6):4039-46.	2015	25625292
Tong YS et al.	Identification of the long non-coding RNA POU3F3 in plasma as a novel biomarker for diagnosis of esophageal squamous cell carcinoma.	Mol Cancer. 14(1):3.	2015	25608466
Tsujiura M et al.	Circulating miR-18a in plasma contributes to cancer detection and monitoring in patients with gastric cancer.	Gastric Cancer. 18(2):271-9.	2015	24626859
Wang R et al.	Elevated circulating microRNA-122 is associated with obesity and insulin resistance in young adults.	Eur J Endocrinol. 172(3):291-300.	2015	25515554
Wang Y et al.	Profiles of differential expression of circulating microRNAs in hepatitis B virus-positive small hepatocellular carcinoma.	Cancer Biomark. 15(2):177-86.	2015	25519019

Wong LL et al.	Circulating microRNAs in heart failure with reduced and preserved left ventricular ejection fraction.	Eur J Heart Fail. 17(4):393-404.	2015	25619197
Zhang H et al.	Investigation of microRNA expression in human serum during the aging process.	J Gerontol A Biol Sci Med Sci. 70(1):102-9.	2015	25165030
Zuo K et al.	A dysregulated microRNA-26a/EphA2 axis impairs endothelial progenitor cell function via the p38 MAPK/VEGF pathway.	Cell Physiol Biochem. 35(2):477-88.	2015	25613580
Achberger S et al.	Circulating immune cell and microRNA in patients with uveal melanoma developing metastatic disease.	Mol Immunol. 58(2):182-6.	2014	24370793
Akao Y et al.	Extracellular disposal of tumor-suppressor miRs-145 and -34a via microvesicles and 5-FU resistance of human colon cancer cells.	Int J Mol Sci. 15(1):1392-401.	2014	24447928
Badrnya S et al.	Smoking alters circulating plasma microvesicle pattern and microRNA signatures.	Thromb Haemost. 112(1):128-36.	2014	24573468
Balakathiresan NS et al.	Serum and amygdala microRNA signatures of posttraumatic stress: fear correlation and biomarker potential.	J Psychiatr Res. 57:65-73.	2014	24998397
Balaraman S et al.	Maternal and neonatal plasma microRNA biomarkers for fetal alcohol exposure in an ovine model.	Alcohol Clin Exp Res. 38(5):1390-400.	2014	24588274
Basati G et al.	Elevated level of microRNA-21 in the serum of patients with colorectal cancer.	Med Oncol. 31(10):205.	2014	25178939
Bhatnagar S et al.	Increased microRNA-34c abundance in Alzheimer's disease circulating blood plasma.	Front Mol Neurosci. 7:2.	2014	24550773
Bijkerk R et al.	Silencing of miRNA-126 in kidney ischemia reperfusion is associated with elevated SDF-1 levels and mobilization of Sca-1+/Lin- progenitor cells.	Microrna. 3(3):144-9.	2014	25541911
Biros E et al.	microRNA profiling in patients with abdominal aortic aneurysms: the significance of miR-155.	Clin Sci (Lond). 126(11):795-803.	2014	24283299
Borgonio Cuadra VM et al.	Altered expression of circulating microRNA in plasma of patients with primary osteoarthritis and in silico analysis of their pathways.	PLoS One. 9(6):e97690	2014	24901787
Bronisz A et al.	Extracellular vesicles modulate the glioblastoma microenvironment via a tumor suppression signaling network directed by miR-1.	Cancer Res. 74(3):738-50.	2014	24310399
Cantara S et al.	Circulating miRNA95 and miRNA190 are sensitive markers for the differential diagnosis of thyroid nodules in a Caucasian population.	J Clin Endocrinol Metab. 99(11):4190-8.	2014	25057879
Cao R et al.	Xuezhikang therapy increases miR-33 expression in patients with low HDL-C levels.	Dis Markers. 2014:781780	2014	24591767

Chen D et al.	Cancer affects microRNA expression, release, and function in cardiac and skeletal muscle.	Cancer Res. 74(16):4270-81.	2014	24980554
Chen W et al.	Clinical significance and detection of microRNA-21 in serum of patients with diffuse large B-cell lymphoma in Chinese population.	Eur J Haematol. 92(5):407-12.	2014	24400911
Cheng L et al.	Characterization and deep sequencing analysis of exosomal and non-exosomal miRNA in human urine.	Kidney Int. 86(2):433-44	2014	24352158
Clarke JD et al.	Circulating microRNA 122 in the methionine and choline-deficient mouse model of non-alcoholic steatohepatitis.	J Appl Toxicol. 34(6):726-32.	2014	24217942
Duong Van Huyen JP et al.	MicroRNAs as non-invasive biomarkers of heart transplant rejection.	Eur Heart J. 35(45):3194-202.	2014	25176944
El-Garem H et al.	Circulating microRNA, miR-122 and miR-221 signature in Egyptian patients with chronic hepatitis C related hepatocellular carcinoma.	World J Hepatol. 6(11):818-24.	2014	25429320
Feng Y et al.	microRNA-99a acts as a tumor suppressor and is down-regulated in bladder cancer.	BMC Urol. 14:50	2014	24957100
Fu Z et al.	Circulating miR-222 in plasma and its potential diagnostic and prognostic value in gastric cancer.	Med Oncol. 31(9):164.	2014	25129310
Ganepola GA et al.	Novel blood-based microRNA biomarker panel for early diagnosis of pancreatic cancer.	World J Gastrointest Oncol. 6(1):22-33.	2014	24578785
Grassmann F et al.	A Circulating MicroRNA Profile Is Associated with Late-Stage Neovascular Age-Related Macular Degeneration.	PLoS One. 9(9):e107461	2014	25203061
Guo L et al.	Differentially expressed plasma microRNAs and the potential regulatory function of Let-7b in chronic thromboembolic pulmonary hypertension.	PLoS One. 9(6):e101055	2014	24978044
Hale A et al.	An Argonaute 2 switch regulates circulating miR-210 to coordinate hypoxic adaptation across cells.	Biochim Biophys Acta. 1843(11):2528-42.	2014	24983771
Hromadnikova I et al.	First trimester screening of circulating C19MC microRNAs can predict subsequent onset of gestational hypertension.	PLoS One. 9(12):e113735.	2014	25502889
Jiang R et al.	Short-term diesel exhaust inhalation in a controlled human crossover study is associated with changes in DNA methylation of circulating mononuclear cells in asthmatics.	Part Fibre Toxicol. 11(1):71.	2014	25487561
Joerger et al.	Circulating microRNA profiling in patients with advanced non-squamous NSCLC receiving bevacizumab/erlotinib followed by	Lung Cancer. 85(2):306-13.	2014	24928469

	platinum-based chemotherapy at progression (SAKK 19/05).			
Kim Y et al.	Serum microRNA-21 as a potential biomarker for response to hypomethylating agents in myelodysplastic syndromes.	PLoS One. 9(2):e86933.	2014	24503739
Kumarswamy R et al.	Circulating long noncoding RNA, LIPCAR, predicts survival in patients with heart failure.	Circ Res. 114(10):1569-75.	2014	24663402
Li D et al.	Characterization of Circulating MicroRNA Expression in Patients with a Ventricular Septal Defect.	PLoS One. 9(8):e106318	2014	25165856
Li Q et al.	Circulating miR-19a and miR-205 in Serum May Predict the Sensitivity of Luminal A Subtype of Breast Cancer Patients to Neoadjuvant Chemotherapy with Epirubicin Plus Paclitaxel.	PLoS One. 9(8):e104870	2014	25137071
Li S et al.	MicroRNA-19b functions as potential anti-thrombotic protector in patients with unstable angina by targeting tissue factor.	J Mol Cell Cardiol. 75:49-57.	2014	24998411
Li Z et al.	High Association between Human Circulating MicroRNA-497 and Acute Myocardial Infarction.	ScientificWorldJournal. 2014:931845.	2014	25110754
Liu Y et al.	The role of circulating microRNA-126 (miR-126): a novel biomarker for screening prediabetes and newly diagnosed type 2 diabetes mellitus.	Int J Mol Sci. 15(6):10567-77	2014	24927146
McManus DD et al.	Relations between circulating microRNAs and atrial fibrillation: data from the Framingham Offspring Study.	Heart Rhythm. 11(4):663-9.	2014	24444445
Muller V et al.	Changes in serum levels of miR-21, miR-210, and miR-373 in HER2-positive breast cancer patients undergoing neoadjuvant therapy: a translational research project within the Geparquinto trial.	Breast Cancer Res Treat. 147(1):61-8.	2014	25086636
Mundalil Vasu M et al.	Serum microRNA profiles in children with autism.	Mol Autism. 5:40	2014	25126405
Park IH et al.	Identification and clinical implications of circulating microRNAs for estrogen receptor-positive breast cancer.	Tumour Biol. 35(12):12173-80.	2014	25179838
Pilbrow AP et al.	Circulating miR-323-3p and miR-652: candidate markers for the presence and progression of acute coronary syndromes.	Int J Cardiol. 176(2):375-85.	2014	25124998
Ren W et al.	Circulating microRNA-21 (MIR-21) and phosphatase and tensin homolog (PTEN) are promising novel biomarkers for detection of oral squamous cell carcinoma.	Biomarkers. 19(7):590-6.	2014	25174622
Rosjo H et al.	Prognostic value of circulating microRNA-210 levels in patients	PLoS One. 9(3):e91812.	2014	24626394

	with moderate to severe aortic stenosis.			
Santovito T et al.	Plasma Exosome MicroRNA Profiling Unravels a New Potential Modulator of Adiponectin Pathway in Diabetes: Effect of Glycemic Control	J Clin Endocrinol Metab. 99(9):E1681-5.	2014	24937531
Seeliger C et al.	Five freely circulating miRNAs and bone tissue miRNAs are associated with osteoporotic fractures.	J Bone Miner Res. 29(8):1718-28.	2014	24431276
Selvamani A et al.	Circulating miRNA profiles provide a biomarker for severity of stroke outcomes associated with age and sex in a rat model.	Clin Sci (Lond). 127(2):77-89.	2014	24428837
Sepramaniam S et al.	Circulating microRNAs as biomarkers of acute stroke.	Int J Mol Sci. 15(1):1418-32.	2014	24447930
Shen J et al.	Circulating miR-148b and miR-133a as biomarkers for breast cancer detection.	Oncotarget. 5(14):5284-94.	2014	25051376
Silakit R et al.	Circulating miR-192 in liver fluke-associated cholangiocarcinoma patients: a prospective prognostic indicator.	J Hepatobiliary Pancreat Sci. 21(12):864-72.	2014	25131257
Slater EP et al.	MicroRNA-196a and -196b as Potential Biomarkers for the Early Detection of Familial Pancreatic Cancer.	Transl Oncol. 7(4):464-71.	2014	24956938
Tabet F et al.	HDL-transferred microRNA-223 regulates ICAM-1 expression in endothelial cells.	Nat Commun. 5:3292.	2014	24576947
Takahashi K et al.	Extracellular vesicle-mediated transfer of long non-coding RNA ROR modulates chemosensitivity in human hepatocellular cancer.	FEBS Open Bio. 4:458-67.	2014	24918061
Tan J et al.	MicroRNA-29 mediates TGFβ1-induced extracellular matrix synthesis by targeting wnt/β-catenin pathway in human orbital fibroblasts.	Int J Clin Exp Pathol. 7(11):7571-7.	2014	25550793
Toivonen JM et al.	MicroRNA-206: a potential circulating biomarker candidate for amyotrophic lateral sclerosis.	PLoS One. 9(2):e89065.	2014	24586506
Ura B et al.	Potential role of circulating microRNAs as early markers of preeclampsia.	Taiwan J Obstet Gynecol. 53(2):232-4.	2014	25017274
Vliegenthart AD et al.	Retro-orbital blood acquisition facilitates circulating microRNA measurement in zebrafish with paracetamol hepatotoxicity.	Zebrafish. 11(3):219-26.	2014	24625211
Wang HW et al.	Deficiency of the microRNA-31-microRNA-720 pathway in the plasma and endothelial progenitor cells from patients with coronary artery disease.	Arterioscler Thromb Vasc Biol. 34(4):857-69.	2014	24558106
Wang JM et al.	Dialysis method alters the expression of microRNA-33a and its	Ther Apher Dial. 18(1):44-50.	2014	24499083

	target genes ABCA1, ABCG1 in THP-1 macrophages.			
Wang L et al.	Polymorphism in miRNA-1 target site and circulating miRNA-1 phenotype are associated with the decreased risk and prognosis of coronary artery disease.	Int J Clin Exp Pathol. 7(8):5093-102	2014	25197382
Wang WT et al.	Differentially expressed microRNAs in the serum of cervical squamous cell carcinoma patients before and after surgery.	J Hematol Oncol. 7:6.	2014	24405714
Wang X et al.	Determination of 14 circulating microRNAs in Swedes and Iraqis with and without diabetes mellitus type 2.	PLoS One. 9(1):e86792.	2014	24497980
Ward J et al.	Circulating microRNA profiles in human patients with acetaminophen hepatotoxicity or ischemic hepatitis.	Proc Natl Acad Sci U S A. 111(33):12169-74.	2014	25092309
Waters PS et al.	Impact of tumour epithelial subtype on circulating microRNAs in breast cancer patients.	PLoS One. 9(3):e90605.	2014	24626163
Westermann AM et al.	Serum microRNAs as biomarkers in patients undergoing prostate biopsy: results from a prospective multi-center study.	Anticancer Res. 34(2):665-9.	2014	24510997
Winther TN et al.	Circulating MicroRNAs in Plasma of Hepatitis B e Antigen Positive Children Reveal Liver-Specific Target Genes.	Int J Hepatol. 2014:791045.	2014	25580300
Wu JJ et al.	4-(Methylnitrosamino)-1-(3-pyridyl) -1-butanone induces circulating microRNA deregulation in early lung carcinogenesis.	Biomed Environ Sci. 27(1):10-6.	2014	24553369
Xiang M et al.	U6 is not a suitable endogenous control for the quantification of circulating microRNAs.	Biochem Biophys Res Commun. 454(1):210-4.	2014	25450382
Xiao J et al.	Serum microRNA-499 and microRNA-208a as biomarkers of acute myocardial infarction.	Int J Clin Exp Med. 7(1):136-41.	2014	24482699
Xie Y et al.	Expression profiling of serum microRNA-101 in HBV-associated chronic hepatitis, liver cirrhosis, and hepatocellular carcinoma.	Cancer Biol Ther. 15(9):1248-55.	2014	24971953
Xin SY et al.	Reduced expression of circulating microRNA-218 in gastric cancer and correlation with tumor invasion and prognosis.	World J Gastroenterol. 20(22):6906-11	2014	24944481
Yang Q et al.	MicroRNA-505 identified from patients with essential hypertension impairs endothelial cell migration and tube formation.	Int J Cardiol. 177(3):925-34.	2014	25449503
Yao Y et al.	Plasma Levels of MicroRNA-499 Provide an Early Indication of Perioperative Myocardial Infarction in Coronary Artery Bypass Graft Patients.	PLoS One. 9(8):e104618	2014	25111390

Yu G et al.	MicroRNA-34a functions as an anti-metastatic microRNA and suppresses angiogenesis in bladder cancer by directly targeting CD44.	J Exp Clin Cancer Res. 33(1):779.	2014	25551284
Zhang J et al.	Inflammation induced-endothelial cells release angiogenesis associated-microRNAs into circulation by microparticles.	Chin Med J (Engl). 127(12):2212-7.	2014	24931230
Zhang X et al.	Expression profiles of six circulating microRNAs critical to atherosclerosis in patients with subclinical hypothyroidism: a clinical study.	J Clin Endocrinol Metab. 99(5):E766-74.	2014	24517143
Zhang ZQ et al.	Serum microRNA 143 and microRNA 215 as potential biomarkers for the diagnosis of chronic hepatitis and hepatocellular carcinoma.	Diagn Pathol. 9:135.	2014	24993656
Zhao Z et al.	Dysregulated miR1254 and miR579 for cardiotoxicity in patients treated with bevacizumab in colorectal cancer.	Tumour Biol. 35(6):5227-35.	2014	24515657
Zhu C et al.	A five-microRNA panel in plasma was identified as potential biomarker for early detection of gastric cancer.	Br J Cancer. 110(9):2291-9.	2014	24595006
Arita T et al.	Circulating long non-coding RNAs in plasma of patients with gastric cancer.	Anticancer Res. 33(8):3185-93.	2013	23898077
Aushev VN et al.	Comparisons of microRNA Patterns in Plasma before and after Tumor Removal Reveal New Biomarkers of Lung Squamous Cell Carcinoma.	PLoS One. 8(10):e78649.	2013	24130905
Belleannee C et al.	Epididymosomes convey different repertoires of microRNAs throughout the bovine epididymis.	Biol Reprod. 89(2):30	2013	23803555
Belleannee C et al.	microRNA signature is altered in both human epididymis and seminal microvesicles following vasectomy.	Hum Reprod. 28(6):1455-67	2013	23539611
Chen L et al.	Epigenetic regulation of connective tissue growth factor by microRNA-214 delivery in exosomes from mouse or human hepatic stellate cells.	Hepatology.	2013	24122827
Cuk K et al.	Circulating microRNAs in plasma as early detection markers for breast cancer.	Int J Cancer. 132(7):1602-12.	2013	22927033
Cuk K et al.	Plasma MicroRNA Panel for Minimally Invasive Detection of Breast Cancer.	PLoS One. 8(10):e76729.	2013	24194846
D'Alessandra Y et al.	Diagnostic potential of plasmatic MicroRNA signatures in stable and unstable angina.	PLoS One. 8(11):e80345.	2013	24260372
de Boer HC et al.	Aspirin treatment hampers the use of plasma microRNA-126 as a biomarker for the progression of vascular disease.	Eur Heart J.	2013	23386708

Fan F et al.	MicroRNA-34a Promotes Cardiomyocyte Apoptosis Post Myocardial Infarction Through Down-regulating Aldehyde Dehydrogenase 2.	Curr Pharm Des.	2013	23323620
Fu Y et al.	Circulating microRNA-101 as a potential biomarker for hepatitis B virus-related hepatocellular carcinoma.	Oncol Lett. 6(6):1811-1815.	2013	24260081
Gao J et al.	Clinical significance of serum miR-21 in breast cancer compared with CA153 and CEA.	Chin J Cancer Res. 25(6):743-8.	2013	24385703
Ge Y et al.	Serum microRNA expression profile as a biomarker for the diagnosis of pertussis.	Mol Biol Rep. 40(2):1325-32	2013	23073777
He X et al.	Host serum miR-223 is a potential new biomarker for Schistosoma japonicum infection and the response to chemotherapy.	Parasit Vectors. 6:272.	2013	24330517
Hooten NN et al.	Age-related changes in microRNA levels in serum.	Aging (Albany NY).	2013	24088671
Hromadnikova I et al.	Circulating C19MC microRNAs in preeclampsia, gestational hypertension, and fetal growth restriction.	Mediators Inflamm. 2013:186041.	2013	24347821
Ikonomidis JS et al.	Plasma biomarkers for distinguishing etiologic subtypes of thoracic aortic aneurysm disease.	J Thorac Cardiovasc Surg. pii: S0022-5223(12)01571	2013	23312977
Jones KL et al.	Plasma microRNA are disease response biomarkers in classical Hodgkin lymphoma.	Clin Cancer Res.	2013	24222179
Kogure T et al.	Extracellular Vesicle-Mediated Transfer of a Novel Long Noncoding RNA TUC339: A Mechanism of Intercellular Signaling in Human Hepatocellular Cancer.	Genes Cancer. 4(7-8):261-72.	2013	24167654
Kotlabova K et al.	Extracellular chromosome 21-derived microRNAs in euploid & aneuploid pregnancies.	Indian J Med Res. 138(6):935-43.	2013	24521639
Lee JC et al.	MicroRNA-222 and microRNA-146b are tissue and circulating biomarkers of recurrent papillary thyroid cancer.	Cancer. 119(24):4358-65.	2013	24301304
Ma GJ et al.	Plasma post-operative miR-21 expression in the prognosis of gastric cancers.	Asian Pac J Cancer Prev. 14(12):7551-4.	2013	24460332
Muraoka T et al.	The degree of microRNA-34b/c methylation in serum-circulating DNA is associated with malignant pleural mesothelioma.	Lung Cancer. 82(3):485-90.	2013	24168922
Nabiałek E et al.	Circulating microRNAs (miR-423-5p, miR-208a and miR-1) in acute myocardial infarction and stable coronary heart disease.	Minerva Cardioangiol. 61(6):627-37.	2013	24253456
Pescador N et al.	Serum Circulating microRNA Profiling for Identification of	PLoS One. 8(10):e77251.	2013	24204780

	Potential Type 2 Diabetes and Obesity Biomarkers.			
Ren S et al.	Long non-coding RNA metastasis associated in lung adenocarcinoma transcript 1 derived miniRNA as a novel plasma-based biomarker for diagnosing prostate cancer.	Eur J Cancer. 49(13):2949-59.	2013	23726266
Roderburg C et al.	Circulating MicroRNA-150 Serum Levels Predict Survival in Patients with Critical Illness and Sepsis.	PLoS One. 8(1):e54612.	2013	23372743
Sheinerman KS et al.	Plasma microRNA biomarkers for detection of mild cognitive impairment: biomarker validation study.	Aging (Albany NY). 5(12):925-38.	2013	24368295
Shen J et al.	Exploration of Genome-wide Circulating MicroRNA in Hepatocellular Carcinoma (HCC): MiR-483-5p as a Potential Biomarker.	Cancer Epidemiol Biomarkers Prev.	2013	24127413
Shrivastava S et al.	Upregulation of circulating miR-20a is correlated with hepatitis C virus mediated liver disease progression.	Hepatology	2013	23390075
Song J et al.	Serum microRNA-21 levels are related to tumor size in gastric cancer patients but cannot predict prognosis.	Oncol Lett. 6(6):1733-1737.	2013	24260069
Song WF et al.	MiR-21 upregulation induced by promoter zone histone acetylation is associated with chemoresistance to gemcitabine and enhanced malignancy of pancreatic cancer cells.	Asian Pac J Cancer Prev. 14(12):7529-36.	2013	24460329
Sun L et al.	MicroRNA expression profiles of circulating microvesicles in hepatocellular carcinoma.	Acta Gastroenterol Belg. 76(4):386-92.	2013	24592541
Tambyah PA et al.	microRNAs in circulation are altered in response to influenza A virus infection in humans.	PLoS One. 8(10):e76811.	2013	24116168
van der Meer AJ et al.	Sensitive detection of hepatocellular injury in chronic hepatitis C patients with circulating hepatocyte-derived microRNA-122.	J Viral Hepat. 20(3):158-66.	2013	23383654
Wang WT et al.	Circulating MicroRNAs Identified in a Genome-Wide Serum MicroRNA Expression Analysis as Noninvasive Biomarkers for Endometriosis.	J Clin Endocrinol Metab. 98(1):281-9	2013	23118427
Wang YT et al.	Circulating microRNAs have a sex-specific association with metabolic syndrome.	J Biomed Sci. 20(1):72.	2013	24093444
Ward JA et al.	Circulating Cell and Plasma microRNA Profiles Differ between Non-ST-Segment and ST-Segment-Elevation Myocardial Infarction.	Fam Med Med Sci Res. 2(2):108.	2013	24432306
Watahiki A et al.	Plasma miRNAs as Biomarkers to Identify Patients with Castration-Resistant Metastatic Prostate Cancer.	Int J Mol Sci. 14(4):7757-70.	2013	23574937

Yan S et al.	Circulating MicroRNA Profiles Altered in Mice after 28 Days Exposure to Perfluorooctanoic Acid.	Toxicol Lett. pii: S0378-4274(13)01360-X.	2013	24513432
Zhang H et al.	Circulating microRNAs in relation to EGFR status and survival of lung adenocarcinoma in female non-smokers.	PLoS One. 8(11):e81408.	2013	24282590
Zhang T et al.	Plasma miR-126 is a potential biomarker for early prediction of type 2 diabetes mellitus in susceptible individuals.	Biomed Res Int. 2013:761617.	2013	24455723
Zhang YY et al.	Decreased circulating microRNA-223 level predicts high on-treatment platelet reactivity in patients with troponin-negative non-ST elevation acute coronary syndrome.	J Thromb Thrombolysis.	2013	24202700
Alexandrov PN et al.	microRNA (miRNA) speciation in Alzheimer's disease (AD) cerebrospinal fluid (CSF) and extracellular fluid (ECF).	Int J Biochem Mol Biol. 3(4):365-73.	2012	23301201
Bellingham SA et al.	Small RNA deep sequencing reveals a distinct miRNA signature released in exosomes from prion-infected neuronal cells.	Nucleic Acids Res. 40(21):10937-49	2012	22965126
bryant rj et al.	changes in circulating microrna levels associated with prostate cancer.	br j cancer. 106(4):768-74.	2012	22240788
chen zh et al.	a panel of five circulating micrornas as potential biomarkers for prostate cancer.	prostate. doi: 10.1002/pros.22495.	2012	22298030
Cookson VJ et al.	Circulating microRNA profiles reflect the presence of breast tumours but not the profiles of microRNAs within the tumours.	Cell Oncol (Dordr).	2012	22821209
da Silveira JC et al.	Cell-secreted vesicles in equine ovarian follicular fluid contain miRNAs and proteins: a possible new form of cell communication within the ovarian follicle.	Biol Reprod. 86(3):71	2012	22116803
ding x et al.	circulating microrna-122 as a potential biomarker for liver injury.	mol med report. 5(6):1428-32.	2012	22427142
Freedman JE et al.	The distribution of circulating microRNA and their relation to coronary disease.	F1000Res. 1:50.	2012	24358814
Gallo A et al.	The Majority of MicroRNAs Detectable in Serum and Saliva Is Concentrated in Exosomes.	PLoS One. 7(3):e30679.	2012	22427800
Giráldez MD et al.	Circulating MicroRNAs as Biomarkers of Colorectal Cancer: Results From a Genome-Wide Profiling and Validation Study.	Clin Gastroenterol Hepatol. pii: S1542-3565(12)015	2012	23267864
goren y et al.	serum levels of micrornas in patients with heart failure.	eur j heart fail. 14(2):147-54	2012	22120965
Gorur A et al.	Determination of plasma microRNA for early detection of gastric cancer.	Mol Biol Rep.	2012	23212612

hennessey pt et al.	serum microrna biomarkers for detection of non-small cell lung cancer	plos one 7(2): e32307.	2012	22389695
huang jj et al.	circulating microrna expression is associated with genetic subtype and survival of multiple myeloma.	med oncol.	2012	22447484
Ilhan-Mutlu A et al.	Plasma MicroRNA-21 Concentration May Be a Useful Biomarker in Glioblastoma Patients.	Cancer Invest. 30(8):615-21	2012	22891879
Jia SZ et al.	Plasma miR-17-5p, miR-20a and miR-22 are down-regulated in women with endometriosis.	Hum Reprod.	2012	23203215
Jones CI et al.	Identification of circulating microRNAs as diagnostic biomarkers for use in multiple myeloma.	Br J Cancer.	2012	23169280
Kan CW et al.	Elevated levels of circulating microRNA-200 family members correlate with serous epithelial ovarian cancer.	BMC Cancer. 12(1):627	2012	23272653
liu h et al.	genome-wide microrna profiles identify mir-378 as a serum biomarker for early detection of gastric cancer.	cancer lett. 316(2):196-203.	2012	22169097
Long G et al.	Human Circulating MicroRNA-1 and MicroRNA-126 as Potential Novel Indicators for Acute Myocardial Infarction.	Int J Biol Sci. 8(6):811-8.	2012	22719221
Madhavan D et al.	Circulating microRNAs as Surrogate Markers for Circulating Tumour Cells and Prognostic Markers in Metastatic Breast Cancer.	Clin Cancer Res. 18(21):5972-82	2012	22952344
Martino F et al.	Circulating MicroRNAs Are Not Eliminated by Hemodialysis.	PLoS One. 7(6): e38269.	2012	22715378
Nguyen HC et al.	Expression differences of circulating microRNAs in metastatic castration resistant prostate cancer and low-risk, localized prostate cancer.	Prostate.	2012	22887127
Nielsen LB et al.	Circulating levels of microRNA from children with newly diagnosed type 1 diabetes and healthy controls: evidence that miR-25 associates to residual beta-cell function and glycaemic control during disease progression.	Exp Diabetes Res. 2012:896362	2012	22829805
Roth C et al.	Low Levels of Cell-Free Circulating miR-361-3p and miR-625* as Blood-Based Markers for Discriminating Malignant from Benign Lung Tumors.	PLoS One. 7(6):e38248.	2012	22675530
Sanders I et al.	Evaluation of reference genes for the analysis of serum miRNA in patients with prostate cancer, bladder cancer and renal cell carcinoma.	Int J Urol. 19(11):1017-25.	2012	22788411
Scheffer AR et al.	Circulating microRNAs in serum: novel biomarkers for patients with bladder cancer?	World J Urol.	2012	23266581

schwarzenbach h et al.	diagnostic potential of pten-targeting mir-214 in the blood of breast cancer patients.	breast cancer res treat.	2012	22350790
Selth LA et al.	Discovery of circulating microRNAs associated with human prostate cancer using a mouse model of disease.	Int J Cancer. 131(3):652-61.	2012	22052531
Shen J et al.	Dysregulation of circulating microRNAs and prediction of aggressive prostate cancer.	Prostate. 72(13):1469-77.	2012	22298119
Si H et al.	Circulating microRNA-92a and microRNA-21 as novel minimally invasive biomarkers for primary breast cancer.	J Cancer Res Clin Oncol.	2012	23052693
Siegel SR et al.	Circulating microRNAs involved in multiple sclerosis.	Mol Biol Rep. 39(5):6219-25.	2012	22231906
song j et al.	identification of suitable reference genes for qpcr analysis of serum microrna in gastric cancer patients.	dig dis sci. 57(4):897-904.	2012	22198701
Sun X et al.	Circulating microRNA-126 in patients with coronary artery disease: correlation with LDL cholesterol.	Thromb J. 10(1):16	2012	22925274
Sun Y et al.	Serum MicroRNA-155 as a Potential Biomarker to Track Disease in Breast Cancer.	PLoS One. 7(10):e47003.	2012	23071695
tomimaru y et al.	circulating microrna-21 as a novel biomarker for hepatocellular carcinoma.	j hepatol. 56(1):167-75.	2012	21749846
tsai kw et al.	aberrant expression of mir-196a in gastric cancers and correlation with recurrence.	genes chromosomes cancer. 51(4):394-401.	2012	22420029
Uhlemann M et al.	Circulating microRNA-126 increases after different forms of endurance exercise in healthy adults.	Eur J Prev Cardiol.	2012	23150891
van schooneveld e et al.	expression profiling of cancerous and normal breast tissues identifies micrornas that are differentially expressed in serum from patients with (metastatic) breast cancer and healthy volunteers.	breast cancer res. 14(1):r34.	2012	22353773
Villar AV et al.	Myocardial and circulating levels of microRNA-21 reflect left ventricular fibrosis in aortic stenosis patients.	Int J Cardiol.	2012	22882958
Wang B et al.	The expression and clinical significance of circulating microRNA-21 in serum of five solid tumors.	J Cancer Res Clin Oncol.	2012	22638884
wang lg et al.	serum microrna-29a is a promising novel marker for early detection of colorectal liver metastasis.	cancer epidemiol. 36(1):e61-7.	2012	22018950
Wang Q et al.	Plasma miR-601 and miR-760 Are Novel Biomarkers for the Early Detection of Colorectal Cancer.	PLoS One. 7(9):e44398.	2012	22970209
Wang T et al.	Cell-Free MicroRNA Expression Profiles in Malignant Effusion	PLoS One. 7(8):e43268	2012	22937028

	Associated with Patient Survival in Non-Small Cell Lung Cancer.			
Yang C et al.	Identification of seven serum microRNAs from a genome-wide serum microRNA expression profile as potential noninvasive biomarkers for malignant astrocytomas.	Int J Cancer. doi:10.1002/ijc.27657.	2012	22674182
yu j et al.	circulating microrna-218 was reduced in cervical cancer and correlated with tumor invasion.	j cancer res clin oncol. 138(4):671-4.	2012	22237456
yu s et al.	circulating microrna profiles as potential biomarkers for diagnosis of papillary thyroid carcinoma.	j clin endocrinol metab.	2012	22472564
Zahm AM et al.	Circulating MicroRNA is a Biomarker of Biliary Atresia.	J Pediatr Gastroenterol Nutr.	2012	22732895
Zhao A et al.	Serum miR-210 as a novel biomarker for molecular diagnosis of clear cell renal cell carcinoma.	Exp Mol Pathol. pii: S0014-4800(12)00152-9	2012	23064048
zhao z et al.	circulating microrna mir-323-3p as a biomarker of ectopic pregnancy.	clin chem.	2012	22395025
Zheng C et al.	MiR-221 expression affects invasion potential of human prostate carcinoma cell lines by targeting DVL2.	Med Oncol. 29(2):815-22.	2012	21487968
zhu ht et al.	identification of suitable reference genes for qrt-pcr analysis of circulating micrornas in hepatitis b virus-infected patients.	mol biotechnol. 50(1):49-56.	2012	21567136
arroyo jd et al.	argonaute2 complexes carry a population of circulating micrornas independent of vesicles in human plasma.	pnas 108(12):5003-8	2011	21383194
asaga s et al.	direct serum assay for microrna-21 concentrations in early and advanced breast cancer	clin chem. 57(1):84-91	2011	21036945
baggish al et al.	dynamic regulation of circulating microrna during acute exhaustive exercise and sustained aerobic exercise training.	j physiol. 589(pt 16):3983-94.	2011	21690193
bihrer v et al.	serum microrna-21 as marker for necroinflammation in hepatitis c patients with and without hepatocellular carcinoma.	plos one 6(10): e26971.	2011	22066022
Brase JC et al.	Circulating miRNAs are correlated with tumor progression in prostate cancer.	Int J Cancer. 128(3):608-16.	2011	20473869
cermelli s et al.	circulating micrornas in patients with chronic hepatitis c and non-alcoholic fatty liver disease.	plos one.6(8):e23937	2011	21886843
cheng h et al.	circulating plasma mir-141 is a novel biomarker for metastatic colon cancer and predicts poor prognosis.	plos one.6(3):e17745.	2011	21445232
cui l et al.	serum microrna expression profile distinguishes enterovirus 71 and coxsackievirus 16 infections in patients with hand-foot-and-mouth disease.	plos one. 6(11):e27071.	2011	22087245

de rosa s et al.	transcoronary concentration gradients of circulating micrornas.	circulation. 124(18):1936-44.	2011	21969012
duttagupta r et al.	impact of cellular mirnas on circulating mirna biomarker signatures	plos one 6(6): e20769.	2011	21698099
ge q et al.	sequencing circulating mirna in maternal plasma with modified library preparation.	clin chim acta. 412(21-22):1989-94.	2011	21806976
gidlof o et al.	cardiospecific microrna plasma levels correlate with troponin and cardiac function in patients with st elevation myocardial infarction, are selectively dependent on renal elimination, and can be detected in urine samples.	cardiology. 118(4):217-26.	2011	21701171
gonzales jc et al.	comparison of circulating microrna 141 to circulating tumor cells, lactate dehydrogenase, and prostate-specific antigen for determining treatment response in patients with metastatic prostate cancer.	clin genitourin cancer. 9(1):39-45.	2011	21723797
gui j et al.	serum microrna characterization identifies mir-885-5p as a potential marker for detecting liver pathologies.	clin sci (lond). 120(5):183-93.	2011	20815808
gunel t et al.	serum microrna expression in pregnancies with preeclampsia.	genet mol res. 10(4).	2011	22095477
jung ej et al.	plasma microrna 210 levels correlate with sensitivity to trastuzumab and tumor presence in breast cancer patients.	cancer.	2011	22370716
kanemaru h et al	the circulating microrna-221 level in patients with malignant melanoma as a new tumor marker.	j dermatol sci. 61(3):187-93.	2011	21273047
li s et al.	signature microrna expression profile of essential hypertension and its novel link to human cytomegalovirus infection.	circulation. 124(2):175-84.	2011	21690488
Mahn R et al.	Circulating microRNAs (miRNA) in serum of patients with prostate cancer.	Urology. 77(5):1265.e9-16.	2011	21539977
mcdonald js et al.	analysis of circulating microrna: preanalytical and analytical challenges.	clin chem. 57(6):833-40	2011	21487102
mittelbrunn m et al.	unidirectional transfer of microrna-loaded exosomes from t cells to antigen-presenting cells.	nat commun.2:282.	2011	21505438
Moltzahn F et al.	Microfluidic-based multiplex qRT-PCR identifies diagnostic and prognostic microRNA signatures in the sera of prostate cancer patients.	Cancer Res. 71(2):550-60.	2011	21098088
moussay e et al.	microrna as biomarkers and regulators in b-cell chronic lymphocytic leukemia.	pnas 108(16):6573-8	2011	21460253
oyama r et al.	circulating microrna associated with tnf-a signaling pathway in patients with plaque psoriasis.	j dermatol sci. 61(3):209-11.	2011	21277746

rong h et al.	microrna-134 plasma levels before and after treatment for bipolar mania.	j psychiatr res. 45(1):92-5.	2011	20546789
roth c et al.	screening for circulating nucleic acids and caspase activity in the peripheral blood as potential diagnostic tools in lung cancer.	mol oncol. 5(3):281-91.	2011	21398193
rupp ak et al.	loss of epcam expression in breast cancer derived serum exosomes: role of proteolytic cleavage.	gynecol oncol. 122(2):437-46.	2011	21601258
shen j et al.	diagnosis of lung cancer in individuals with solitary pulmonary nodules by plasma microrna biomarkers	bmc cancer. 11:374.	2011	21864403
silva j et al.	vesicle-related micrornas in plasma of nonsmall cell lung cancer patients and correlation with survival.	eur respir j. 37(3):617-23.	2011	20595154
Starkey Lewis PJ et al.	Circulating microRNAs as potential markers of human drug-induced liver injury.	Hepatology. 54(5):1767-76.	2011	22045675
turchinovich a et al.	characterization of extracellular circulating microrna.	nucleic acids res. 39 (16): 7223-7233.	2011	21609964
tutarel o et al.	circulating mir-423_5p fails as a biomarker for systemic ventricular function in adults after atrial repair for transposition of the great arteries.	int j cardiol.	2011	22188991
vickers kc et al.	micrornas are transported in plasma and delivered to recipient cells by high-density lipoproteins	nat cell biol. 13(4):423-33.	2011	21423178
wang g et al.	serum and urinary free microrna level in patients with systemic lupus erythematosus.	lupus. 20(5):493-500.	2011	21372198
wang y et al.	nanopore-based detection of circulating micrornas in lung cancer patients.	nat nanotechnol. 6(10):668-74.	2011	21892163
wei j et al.	identification of plasma microrna-21 as a biomarker for early detection and chemosensitivity of non-small cell lung cancer.	chin j cancer. 30(6):407-14.	2011	21627863
wulfken lm et al.	micrornas in renal cell carcinoma: diagnostic implications of serum mir-1233 levels.	plos one. 6(9):e25787.	2011	21984948
xiao j et al.	microrna-134 as a potential plasma biomarker for the diagnosis of acute pulmonary embolism.	j transl med. 9:159.	2011	21943159
xu j et al.	circulating micrornas, mir-21, mir-122, and mir-223, in patients with hepatocellular carcinoma or chronic hepatitis.	mol carcinog. 50(2):136-42.	2011	21229610
Yaman Agaoglu F et al.	Investigation of miR-21, miR-141, and miR-221 in blood circulation of patients with prostate cancer.	Tumour Biol. 32(3):583-8.	2011	21274675
Yang M et al.	Microvesicles secreted by macrophages shuttle invasion-potentiating microRNAs into breast cancer cells.	Mol Cancer. 10:117	2011	21939504

yang q et al.	application of next-generation sequencing technology to profile the circulating micrornas in the serum of preeclampsia versus normal pregnant women.	clin chim acta. 412(23-24):2167-73.	2011	21840305
zahm am et al.	circulating microrna is a biomarker of pediatric crohn disease.	j pediatr gastroenterol nutr. 53(1):26-33.	2011	21546856
Zhang HL et al.	Serum miRNA-21: elevated levels in patients with metastatic hormone-refractory prostate cancer and potential predictive factor for the efficacy of docetaxel-based chemotherapy.	Prostate. 71(3):326-31.	2011	20842666
ai j et al.	circulating microrna-1 as a potential novel biomarker for acute myocardial infarction.	biochem biophys res commun.391(1):73-7.	2010	19896465
cheng y et al.	a translational study of circulating cell-free microrna-1 in acute myocardial infarction.	clin sci (lond). 119(2):87-95.	2010	20218970
Collino F et al.	Microvesicles derived from adult human bone marrow and tissue specific mesenchymal stem cells shuttle selected pattern of miRNAs.	PLoS One. 5(7):e11803	2010	20668554
corsten mf et al.	circulating microrna-208b and microrna-499 reflect myocardial damage in cardiovascular disease.	circ cardiovasc genet. 3(6):499-506.	2010	20921333
fichtlscherer s et al	circulating micrornas in patients with coronary artery disease.	circ res. 107(5):677-84.	2010	20595655
guo hq et al.	diagnostic and prognostic value of circulating mir-221 for extranodal natural killer/t-cell lymphoma.	dis markers. 29(5):251-8.	2010	21206010
hanke m et al.	a robust methodology to study urine microrna as tumor marker: microrna-126 and microrna-182 are related to urinary bladder cancer.	urol oncol. 28(6):655-61.	2010	19375957
ho as et al.	circulating mir-210 as a novel hypoxia marker in pancreatic cancer.	transl oncol. 3(2):109-13.	2010	20360935
huang z et al.	plasma micrornas are promising novel biomarkers for early detection of colorectal cancer.	int j cancer. 127(1):118-26.	2010	19876917
li a et al.	pancreatic cancers epigenetically silence sip1 and hypomethylate and overexpress mir-200a/200b in association with elevated circulating mir-200a and mir-200b levels.	cancer res. 70(13):5226-37	2010	20551052
Michael A et al.	Exosomes from human saliva as a source of microRNA biomarkers.	Oral Dis. 16(1):34-8	2010	19627513
miyachi m et al.	circulating muscle-specific microrna, mir-206, as a potential diagnostic marker for rhabdomyosarcoma.	biochem biophys res commun. 400(1):89-93	2010	20696132
Ogawa R et al.	Adipocyte-derived microvesicles contain RNA that is transported into macrophages and might be secreted into blood circulation.	Biochem Biophys Res Commun. 398(4):723-	2010	20621060
ohshima k et al.	let-7 microrna family is selectively secreted into the extracellular	plos one.5(10):e13247.	2010	20949044

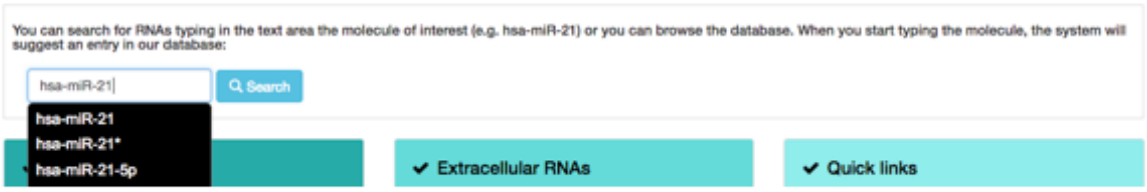
	environment via exosomes in a metastatic gastric cancer cell line.			
Pegtel DM et al.	Functional delivery of viral miRNAs via exosomes.	Proc Natl Acad Sci U S A. 107(14):6328-33	2010	20304794
pigati l et al.	selective release of microrna species from normal and malignant mammary epithelial cells.	plos one. 5(10):e13515.	2010	20976003
redell jb et al.	human traumatic brain injury alters plasma microrna levels.	j neurotrauma. 27(12):2147-56.	2010	20883153
roth c et al.	circulating micrornas as blood-based markers for patients with primary and metastatic breast cancer.	breast cancer res. 12(6):r90.	2010	21047409
tsujiura m et al.	circulating micrornas in plasma of patients with gastric cancers.	br j cancer. 102(7):1174-9	2010	20234369
wang gk et al.	circulating microrna: a novel potential biomarker for early diagnosis of acute myocardial infarction in humans.	eur heart j. 31(6):659-66.	2010	20159880
Wang K et al.	Export of microRNAs and microRNA-protective protein by mammalian cells.	Nucleic Acids Res. 38(20):7248-59	2010	20615901
weber ja et al.	the microrna spectrum in 12 body fluids.	clin chem. 56(11):1733-41.	2010	20847327
Xie L et al.	Cell-free miRNAs may indicate diagnosis and docetaxel sensitivity of tumor cells in malignant effusions.	BMC Cancer. 10:591.	2010	21029414
zampetaki a et al.	plasma microrna profiling reveals loss of endothelial mir-126 and other micrornas in type 2 diabetes.	circ res. 107(6):810-7.	2010	20651284
zhang y et al.	plasma microrna-122 as a biomarker for viral-, alcohol-, and chemical-related hepatic diseases.	clin chem. 56(12):1830-8.	2010	20930130
Zhou Q et al.	MicroRNA-29a regulates intestinal membrane permeability in patients with irritable bowel syndrome.	Gut. 59(6):775-84	2010	19951903
Lodes MJ et al.	Detection of cancer with serum miRNAs on an oligonucleotide microarray.	PLoS One. 4(7):e6229.	2009	19597549
rabinowits g et al.	exosomal microrna: a diagnostic marker for lung cancer.	clin lung cancer. 10(1):42-6.	2009	19289371
Yuan A et al.	Transfer of microRNAs by embryonic stem cell microvesicles.	PLoS One. 4(3):e4722	2009	19266099
zhu w et al.	circulating micrornas in breast cancer and healthy subjects.	bmc res notes. 2:89	2009	19454029
chim ss et al.	detection and characterization of placental micrornas in maternal plasma.	clin chem. 54(3):482-90	2008	18218722
gilad s et al.	serum micrornas are promising novel biomarkers.	plos one. 3(9):e3148	2008	18773077
hunter mp et al.	detection of microrna expression in human peripheral blood microvesicles.	plos one. 3(11):e3694.	2008	19002258
mitchell ps et al.	circulating micrornas as stable blood-based markers for cancer detection.	pnas 105(30):10513-8	2008	18663219

Skog J et al.	Glioblastoma microvesicles transport RNA and proteins that promote tumour growth and provide diagnostic biomarkers.	Nat Cell Biol. 10(12):1470-6	2008	19011622
taylor dd et al.	microrna signatures of tumor-derived exosomes as diagnostic biomarkers of ovarian cancer.	gynecol oncol.110(1):13-21.	2008	18589210
Panzitt K et al.	Characterization of HULC, a novel gene with striking up-regulation in hepatocellular carcinoma, as noncoding RNA.	Gastroenterology. 132(1):330-42.	2007	17241883
Tinzl M et al.	DD3PCA3 RNA analysis in urine--a new perspective for detecting prostate cancer.	Eur Urol. 46(2):182-6	2004	15245811
Hessels D et al.	DD3(PCA3)-based molecular urine analysis for the diagnosis of prostate cancer.	Eur Urol. 44(1):8-15	2003	12814669

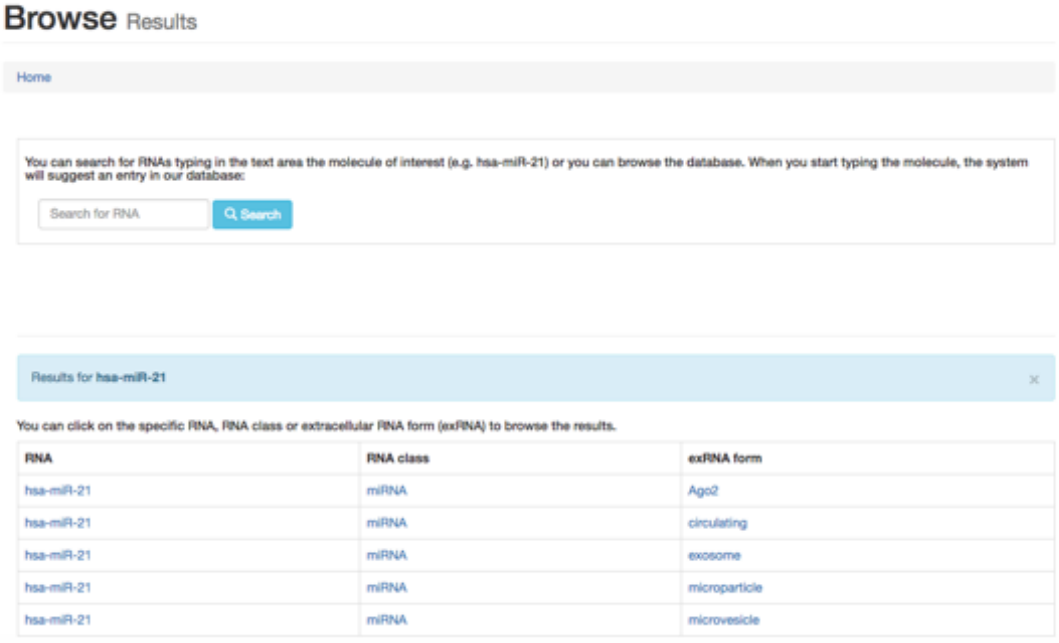
Supplementary Figure S1. Webpage of the database and search bar. A) Home page; B) Search bar with autocomplete function; C) Overview of the result of the search.

A

B



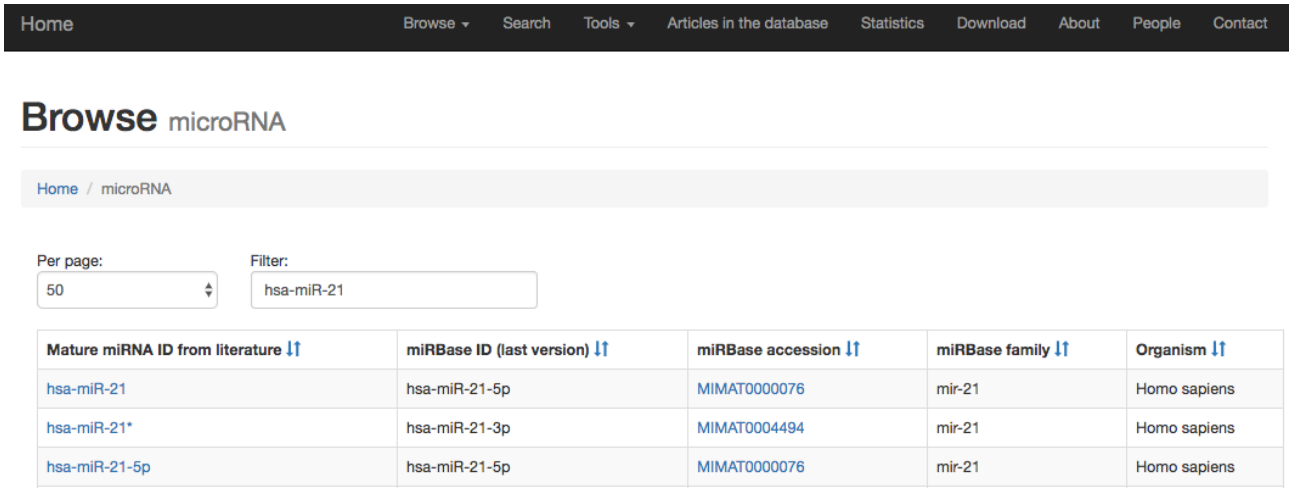
C



Supplementary Figure S2. Users can browse the database by choosing different terms. A) Detail of menu and the Browse section; B) Selection of "microRNAs" and use of the filtering function.

A

B



Supplementary Figure S3. Search section of the database. In this example, we show the search for *hsa-miR-21* and non-small cell lung cancer.