

## Circulating miRNA-based biomarkers of ischemic stroke recovery

Table S4

Let-7i	Xiang et al. 2017 (1)	Wang et al. 2020 (2)	Jickling et al. 2016 (3)
Prospective	Yes	Yes	Yes
Biomarker evaluator blinded to outcome	No	No	No
Defined time period	Yes	No	Yes
Pre-defined clinical endpoints	Yes	Yes	Yes
Sample size calculation	No	No	No
Candidate variables	No	No	Yes
Measurement method described	Yes	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes	Yes
<b>Score (of 8)</b>	5	4	6

miR-124	Wang et al. 2019 (4)	Yuan et al. 2022 (5)	Xie et al. 2019 (6)	Zhou and Qi 2021 (7)	Ji et al. 2016 (8)
Prospective	Yes	Yes	NA (abstract only)	Yes	Yes
Biomarker evaluator blinded to outcome	No	No		No	No
Defined time period	No	Yes		Yes	Yes
Pre-defined clinical endpoints	Yes	Yes		Yes	Yes
Sample size calculation	No	No		No	No
Candidate variables	No	No		Yes	No
Measurement method described	Yes	Yes		Yes	Yes
Inclusion/exclusion criteria	Yes	Yes		Yes	No
<b>Score (of 8)</b>	4	5		6	4

miR-124-3p	He et al. 2019 (9)	Qi et al. 2021 (10)
Prospective	Yes	No
Biomarker evaluator blinded to outcome	No	No
Defined time period	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes
Sample size calculation	No	No
Candidate variables	No	No
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	No
<b>Score (of 8)</b>	5	3

miR-126	Jin and Xing 2017 (11)	Jin and Xing 2018 (12)
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# Circulating miRNA-based biomarkers of ischemic stroke recovery

Prospective	Yes	Yes
Biomarker evaluator blinded to outcome	No	No
Defined time period	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes
Sample size calculation	No	No
Candidate variables	Yes	Yes
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes
<b>Score (of 8)</b>	6	6

miR-195	Chen et al. 2020 (13)	Yang et al. 2018 (14)	Zhai et al. 2020 (15)
Prospective	Yes	Yes	Yes
Biomarker evaluator blinded to outcome	No	No	No
Defined time period	Yes	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes	Yes
Sample size calculation	No	No	No
Candidate variables	No	No	Yes
Measurement method described	Yes	Yes	Yes
Inclusion/exclusion criteria	Yes	No	Yes
<b>Score (of 8)</b>	5	4	6

miR-21	Liu et al. 2021 (16)	Zhou and Zhang 2014 (17)	Yuan et al. 2022 (5)
Prospective	Yes	Yes	Yes
Biomarker evaluator blinded to outcome	No	No	No
Defined time period	Yes	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes	Yes
Sample size calculation	No	No	No
Candidate variables	No	No	No
Measurement method described	Yes	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes	Yes
<b>Score (of 8)</b>	5	5	5

miR-29b	Wang et al. 2015 (18)	Guo et al. 2020 (19)	Ma et al. 2022 (20)	Li et al. 2022 (21)
Prospective	Yes	NA (Abstract only)	No	Yes
Biomarker evaluator blinded to outcome	No		Yes	No
Defined time period	Yes		Yes	No
Pre-defined clinical endpoints	Yes		Yes	Yes
Sample size calculation	No		No	No
Candidate variables	Yes		No	No

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Measurement method described	Yes		Yes	Yes
Inclusion/exclusion criteria	Yes		No	No
<b>Score (of 8)</b>	6		4	37.5

miR-9	Chen et al. 2020 (13)	Abdelaleem et al. 2012 (22)	Xue al. 2018 (23)	Ji et al. 2016 (8)
Prospective	Yes	Yes	Yes	Yes
Biomarker evaluator blinded to outcome	No	No	Yes	No
Defined time period	Yes	No	No	Yes
Pre-defined clinical endpoints	Yes	Yes	Yes	Yes
Sample size calculation	No	No	No	No
Candidate variables	No	Yes	No	No
Measurement method described	Yes	Yes	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes	No	No
<b>Score (of 8)</b>	5	5	4	4

miR-125b-5p	Kautzky et al. 2022 (24)	He et al. 2019 (25)
Prospective	Yes	Yes
Biomarker evaluator blinded to outcome	No	No
Defined time period	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes
Sample size calculation	No	No
Candidate variables	Yes	No
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes
<b>Score (of 8)</b>	6	62.5

miR-335	Yuan et al. 2016 (26)	Zhao et al. 2016 (27)
Prospective	Yes	Yes
Biomarker evaluator blinded to outcome	No	No
Defined time period	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes
Sample size calculation	No	No
Candidate variables	No	Yes
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes
<b>Score (of 8)</b>	5	6

# Circulating miRNA-based biomarkers of ischemic stroke recovery

miR-185	Guo et al. 2022 (28)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	75

miR-125a-5p	Kijpaisalratana et al. 2020 (29)	Ma et al. 2022 (30)
Prospective	Yes	Yes
Biomarker evaluator blinded to outcome	No	No
Defined time period	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes
Sample size calculation	No	Yes
Candidate variables	Yes	Yes
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	Ye
<b>Score (of 8)</b>	75	87.5

Let-7e	Peng et al. 2015 (31)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	75

Multiple exosomal-derived miRNAs	Wu et al. 2017 (32)	Zeng et al. 2013 (33)	Otero-Ortega et al. 2021 (34)	Yang et al. 2016 (35)
Prospective	Yes	Yes	Yes	Yes
Biomarker evaluator blinded to outcome	No	No	No	No
Defined time period	Yes	Yes	Yes	Yes
Pre-defined clinical endpoints	Yes	Yes	Yes	Yes
Sample size calculation	No	No	No	No
Candidate variables	No	Yes	No	No
Measurement method described	Yes	Yes	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes	Yes	Yes
<b>Score (of 8)</b>	62.5	75	62.5	62.5

Mir-143	Zhu et al. 2019 (36)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	75

Circulating Exosomal miRNA	Niu et al. 2021 (37)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-132	Huang et al. 2016 (38)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-411-5p	Lin et al. 2022 (39)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-26b	Yuan et al. 2016 (40)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	50

Mir-497	Zhong et al. 2021 (41)	Zhai et al. 2020 (15)
Prospective	Yes	Yes
Biomarker evaluator blinded to outcome	No	No
Defined time period	No	Yes
Pre-defined clinical endpoints	Yes	Yes
Sample size calculation	No	No
Candidate variables	No	Yes
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes
<b>Score (of 8)</b>	50	6

Mir-409-3p	Song et al. 2021 (42)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-155	Zhang et al. 2020 (43)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	Yes

## Circulating miRNA-based biomarkers of ischemic stroke recovery

Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	87.5

Mir-135b	Yang et al. 2020 (44)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	75

Mir-128	Liu et al. 2019 (45)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	75

Mir-494	Zhao et al. 2020 (46)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No



# Circulating miRNA-based biomarkers of ischemic stroke recovery

Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	50

Mir-503	Sheikhbahaei et al. 2019 (47)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-451	Fu et al. 2019 (48)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-27-3p	Ye et al. 2021 (49)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	No
<b>Score (of 8)</b>	37.5

Mir-134	Zhou et al. 2018 (50)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-146b	Chen et al. 2018 (51)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-223	Chen et al. 2017 (52)	Wang et al. 2014 (53)
Prospective	Yes	Yes
Biomarker evaluator blinded to outcome	No	No
Defined time period	No	Yes
Pre-defined clinical endpoints	Yes	Yes

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Sample size calculation	No	No
Candidate variables	Yes	Yes
Measurement method described	Yes	Yes
Inclusion/exclusion criteria	Yes	Yes
<b>Score (of 8)</b>	62.5	75

Mir-34a-5p	Liang et al. 2016 (54)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	No
<b>Score (of 8)</b>	37.5

Mir-9-5p	Wang et al. 2021 (55)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	50

Mir-145	Jia et al. 2015 (56)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes

## Circulating miRNA-based biomarkers of ischemic stroke recovery

Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-140-5p	Liang et al. 2019 (57)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	Yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	75

Mir-22	Hu et al. 2020 (58)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	Yes
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-221-3p	Cui et al. 2021 (59)
Prospective	No
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes

# Circulating miRNA-based biomarkers of ischemic stroke recovery

Sample size calculation	No
Candidate variables	Yes
Measurement method described	No
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	37.5

Mir-210	Zeng et al. 2011 (60)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	50

Mir-146a	Kotb et al., 2019 (61)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	yes
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-99b	Wu et al., 2020 (62)
Prospective	Yes
Biomarker evaluator blinded to outcome	No
Defined time period	yes
Pre-defined clinical endpoints	Yes

## Circulating miRNA-based biomarkers of ischemic stroke recovery

Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

Mir-93	Ma et al., 2019 (63)
Prospective	Yes
Biomarker evaluator blinded to outcome	yes
Defined time period	No
Pre-defined clinical endpoints	Yes
Sample size calculation	No
Candidate variables	No
Measurement method described	Yes
Inclusion/exclusion criteria	Yes
<b>Score (of 8)</b>	62.5

## Supplemental References

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