Original Article

miR-378, miR-20a, and miR-520a-3p can be used in a novel serum prognostic panel for cervical cancer

Shuping Li[1], Huiying Li[1], Yan Li[1], Ying Cui[1*]

[1]Department of Obstetrics and Gynecology, Hongqi Hospital Affiliated to Mudanjiang Medical University, Mudanjiang, 157000, China.

Running title: miRNAs are prognostic biomarkers for cervical cancer.

[*] Correspondence should be addressed to Ying Cui Professor

Department of Obstetrics and Gynecology, Hongqi Hospital Affiliated to Mudanjiang Medical University, No. 5 Tongxiang Road, Aimin District, Mudanjiang, 157000, China.

E-mail: cuiyingmdj@163.com

ORCID: 0009-0004-6285-3663

Supplementary Figure 1 The effect of miR-378, miR-20a, and miR-520a-3p on the malignant phenotypes of HeLa cells

HeLa cells were treated with miR-378, miR-20a, or miR-520a-3p mimics, mimic controls, inhibitors, or inhibitor controls for 48 h. **(a)** The HeLa cell viability was analyzed using the CCK-8 assay. **(b)** The HeLa cell invasion was assessed using the Transwell assay. $n = 3$, ▲▲$P < 0.01$ vs. the mimic control treatment; **$P < 0.01$ vs. the inhibitor control treatment.

Supplementary Figure 2 The expression levels of candidate miRNAs in serum

Serum levels of miR-378, miR-20a, miR-520a-3p, and miR-155-5p were assessed by RT-qPCR in healthy control group ($n = 30$), patients with good prognosis group ($n = 62$) and poor prognosis group ($n = 65$). ***$P < 0.001$; *$P < 0.05$ *versus* the healthy control group; ▲▲▲$P < 0.001$; ▲$P < 0.05$ *versus* the good prognosis group.