

Dysregulation Of MiR-519d Affects Oral Squamous Cell Carcinoma Invasion And Metastasis By Targeting MMP3

Yu Jin^{1,2}, Yuexiu Li³, Xin Wang^{1,2}, Ya Yang^{1,2,#}

Affiliation of the authors:

1 Department of General Dentistry, Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, 200011, PR China.

2 Shanghai Key Laboratory of Stomatology and Shanghai Research Institute of Stomatology, National Clinical Research Center of Stomatology, 200000, PR China.

3 Department of Stomatology, Tai'an Central Hospital, Tai'an, Shandong 271000, P.R. China.

Corresponding Authors:

Ya Yang, Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine, 639 Zhizaoju Road, Shanghai 200011, China.

Telephone: +8618019790350

E-mail: jinyu19931216@sjtu.edu.cn

Supplementary materials

Supplementary Figure legends

Figure S1. miR-519d suppressed the migration of OSCC cells.

(A, B) Transwell migration assay revealed that overexpression of miR-519d inhibited the migration of OSCC cells while knockdown of miR-519d promoted migration of cancer cells. **, $P < 0.01$. ***, $P < 0.001$.

Figure S2. The effect of miR-519d on OSCC migration was mediated through regulating MMP3 expression.

(A) Wound healing assay revealed that miR-519d inhibited the migration of HN4 or HN30 cells while ectopic expression of MMP3 reversed this effect. (B) As presented by wound healing assay, inhibiting the expression of MMP3 by siRNA could rescue the miR-519d inhibitor-induced promotion of cell migration. (C) As detected by transwell migration assay, ectopic expression of MMP3 reversed the miR-519d-induced inhibition of cell migration. (D) Transwell migration revealed that miR-519d inhibitor accelerated the migration of HN4 or HN30 cells while MMP3 siRNA reversed this effect. **, $P < 0.01$. ***, $P < 0.001$.

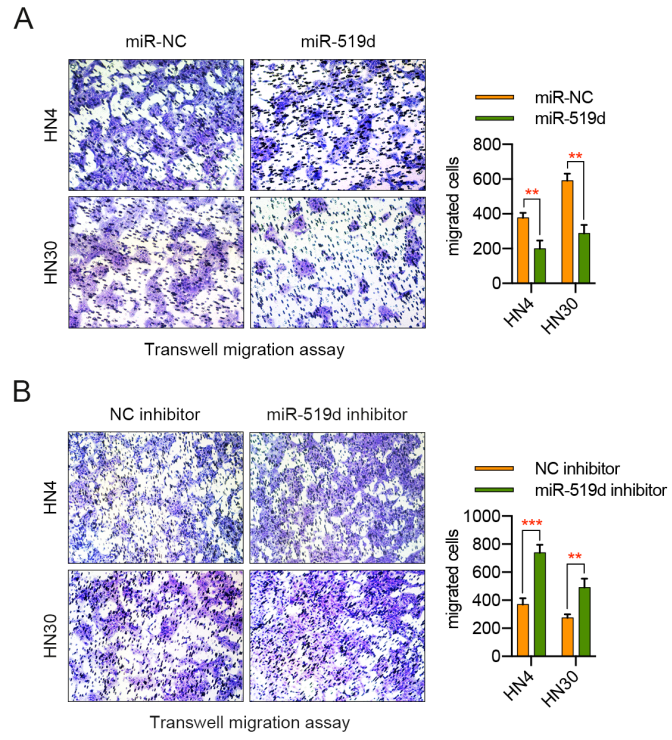


Figure S1

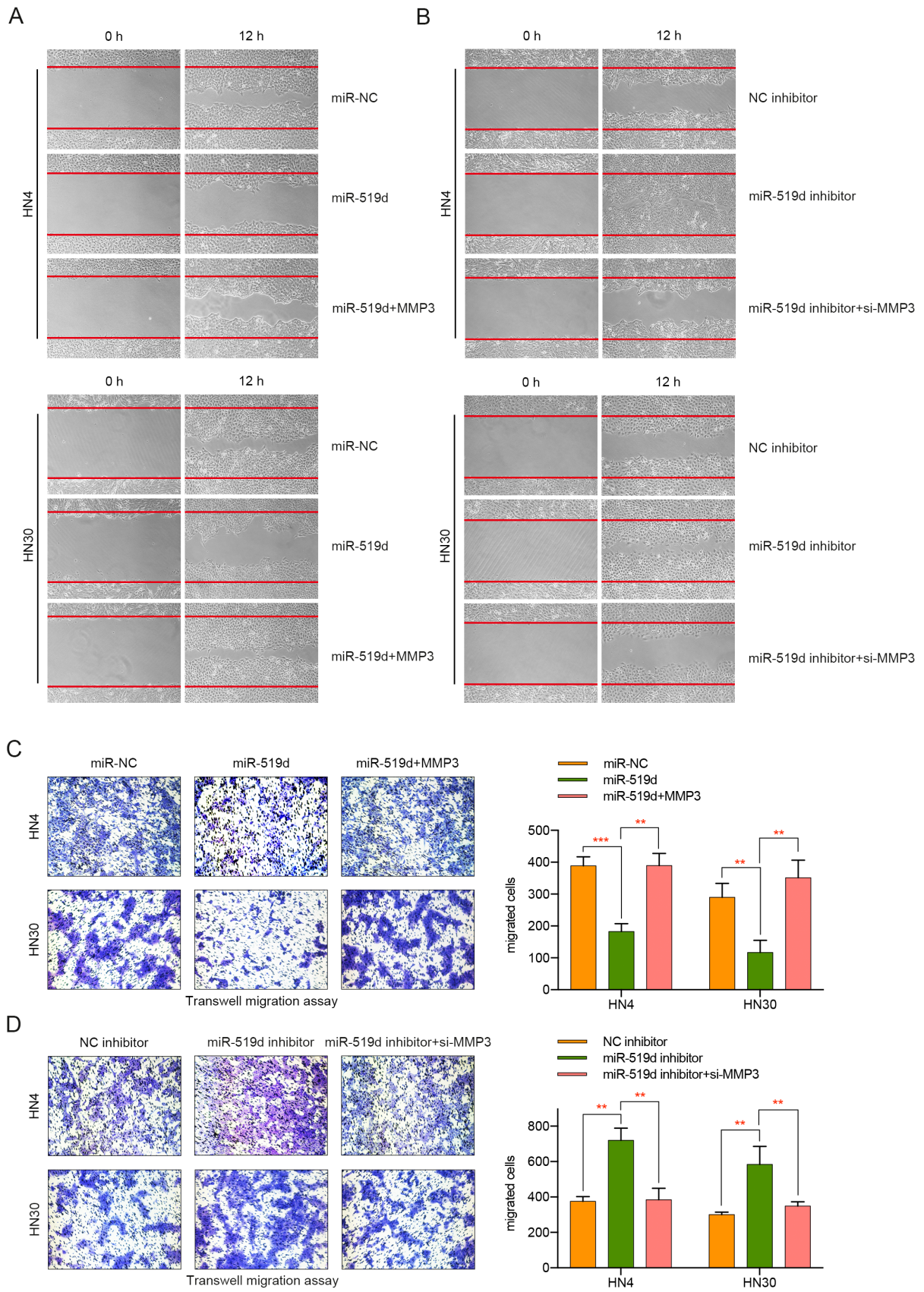


Figure S2