Supplementary Data

Let-7g targets *collagen type I* α 2 and inhibits cell migration in hepatocellular carcinoma

Junfang Ji^{1*}, Lei Zhao^{1, 3*}, Anuradha Budhu¹, Marshonna Forgues¹, Hu-Liang Jia², Lun-Xiu Qin², Qing-Hai Ye², Jinming Yu³, Xuetao Shi³, Zhao-You Tang², Xin Wei Wang¹

¹Liver Carcinogenesis Section, Laboratory of Human Carcinogenesis, Center for Cancer Research, National Cancer Institute, Bethesda, MD, USA; ²Liver Cancer Institute and Zhongshan Hospital, Fudan University, Shanghai and ³Shandong Provincial Tumor Hospital and Institute of Oncology, Jinan, China

* *These authors contributed equally to this work.*

Running title: Let-7g and hepatocellular carcinoma metastasis

Correspondence to: Dr. Xin Wei Wang, 37 Convent Dr., MSC 4258, Building 37, Room 3044A, Bethesda, MD 20892, USA. Phone: 301-496-2099; Fax: 301-496-0497; E-mail: xw3u@nih.gov

Target genes	Gene name	Number of BS^{\dagger}	Total context score [‡]	Context score percentile [§]
COL1A2	collagen, type I, alpha 2	1	-0.44	99
COL3A1	collagen, type III, alpha 1	1	-0.40	98
COL14A1	collagen, type XIV, alpha 1	1	-0.28	91
COL24A1	collagen, type XXIV, alpha 1	1	-0.20	76
COL1A1	collagen, type I, alpha 1	1	-0.19	73
COL15A1	collagen, type XV, alpha 1	1	-0.19	73
COL5A2	collagen, type V, alpha 2	1	-0.18	70
COL4A2	collagen, type IV, alpha 2	1	-0.15	60
COL19A1	collagen, type XIX, alpha 1	1	-0.15	60
COL4A1	collagen, type IV, alpha 1	1	-0.12	46
COL4A5	collagen, type IV, alpha 5	1	-0.11	45

Supplementary Table 1. The predicted target genes of let-7g^{*}.

Note:

* All information was collected from <u>http://www.targetscan.org/cgi-</u> bin/vert_42/targetscan.cgi?mirg=hsa-let-7g.

[†]BS, binding site. All binding sites are conserved sites.

[‡] The context score for a specific site is the sum of the contribution of these four features: site-type contribution, 3' pairing contribution, local AU contribution and position contribution. The sum of the context scores for each miRNA was calculated, and the lowest score is displayed. A more negative score is associated with a more favorable site. [§] The context score percentile rank is the percentage of sites for this miRNA with a less favorable context score.

Legends

Supplementary Figure 1. Metastasis associated let-7g is down-regulated in HpSC-HCC and isolated EpCAM+ HpSC-HCC cells. (A) Let-7g expression by microarray in HpSC-HCC (n=50) and MH-HCC (n=95) samples. (B) Let-7g expression was detected in isolated EpCAM⁺-HpSC cells and EpCAM⁻ cells from HuH1 cell line.

Supplementary Figure 1

