

## **Liposome-exosome hybrids for in situ detection of exosomal miR-1246 in breast cancer**

Xuting Zhou<sup>a, d</sup>, Wenting Tang<sup>a</sup>, Yan Zhang<sup>c</sup>, Yuehua Guo<sup>b, \*</sup>, Li Qian<sup>a, \*</sup>

<sup>a</sup> *Department of Oncology, Affiliated Hospital of Nantong University, Medical School of Nantong University, Nantong, 226000, China. E-mail: ntqianli@163.com*

<sup>b</sup> *Research Center of Clinical Medicine, Affiliated Hospital of Nantong University, Nantong, 226000, China. E-mail: guoyuehuanju@163.com*

<sup>c</sup> *Department of Laboratory Medicine, Affiliated Hospital of Nantong University, Nantong, 226001, China*

<sup>d</sup> *Department of Oncology, Nantong Third People's Hospital, Affiliated Nantong Hospital 3 of Nantong University, Nantong, 226006, China*

\*Corresponding author

*E-mail address: guoyuehuanju@163.com (Y. Guo); ntqianli@163.com (L. Qian)*

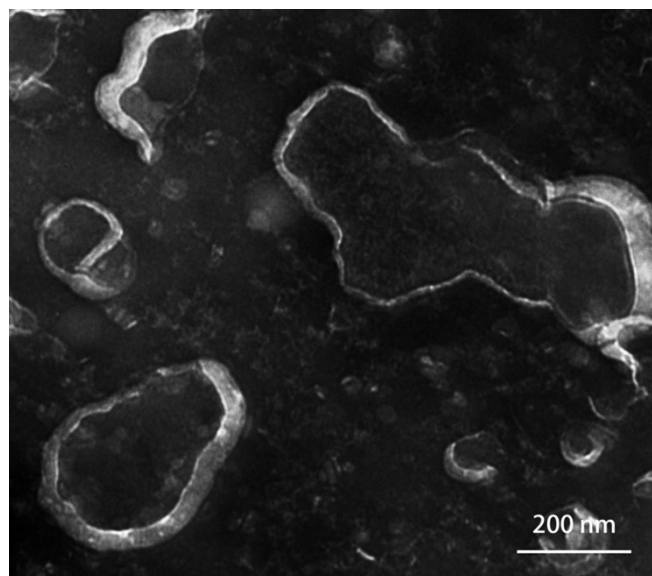
### Table of contents

1. Table S1. Sequences of oligonucleotides used in this work
2. TEM images of liposome-exosome hybrids.
3. Expression of miR-1246 in MCF-7 exosomes and MCF-10A exosomes
4. Table S2. The TNM stage of patients.

1. Table S1. Sequences of oligonucleotides used in this work.

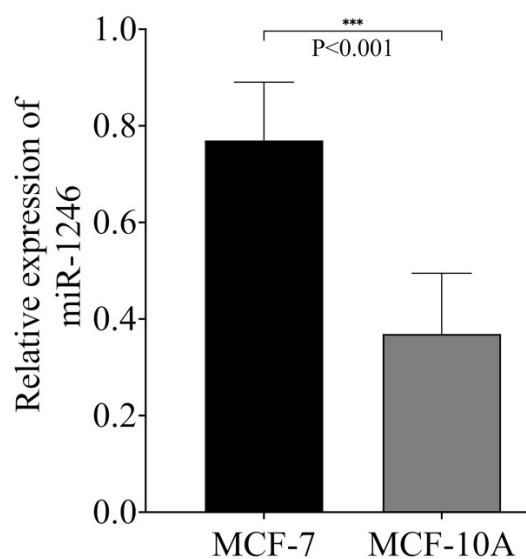
Name	Sequence (from 5' to 3')
crRNA	GGA CCA CCC CAA AAA UGA AGG GGA CCA AAA CCC UCU CCA AAA UCC AUU
Reporter RNA	FAM-UUUUU-BHQ1
Random RNA	UUG UAC UAC ACA AAA GUA CUG
miR-1246	AAU GGA UUU UUG GAG CAG G
miR-21	UAG CUU AUC AGA CUG AUG UUG A
miR-122	UGG AGU GUG ACA AUG GUG UUU G

2. TEM images with more liposome-exosome hybrids.



**Fig. S1** TEM images with more liposome-exosome hybrids.

### 3. Expression of miR-1246 in MCF-7 exosomes and MCF-10A exosomes



**Fig. S2.** Detection of the expression of miR-1246 in MCF-7 exosomes and MCF-10A exosomes by real-time q-PCR (\*\*\*p < 0.001).

### 4. Table S2. The TNM stage of patients.

Patient	TNM stage	Clinical stage	Patient	TNM stage	Clinical stage
1	T <sub>3</sub> N <sub>2</sub> M <sub>1</sub>	IV	21	T <sub>1</sub> N <sub>1</sub> M <sub>0</sub>	II
2	T <sub>2</sub> N <sub>0</sub> M <sub>1</sub>	IV	22	T <sub>2</sub> N <sub>0</sub> M <sub>0</sub>	II
3	T <sub>1</sub> N <sub>2</sub> M <sub>1</sub>	IV	23	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV
4	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV	24	T <sub>3</sub> N <sub>2</sub> M <sub>1</sub>	IV
5	T <sub>2</sub> N <sub>1</sub> M <sub>1</sub>	IV	25	T <sub>2</sub> N <sub>1</sub> M <sub>1</sub>	IV
6	T <sub>2</sub> N <sub>0</sub> M <sub>1</sub>	IV	26	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV
7	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	I	27	T <sub>3</sub> N <sub>1</sub> M <sub>1</sub>	IV
8	T <sub>1</sub> N <sub>2</sub> M <sub>1</sub>	IV	28	T <sub>3</sub> N <sub>3</sub> M <sub>0</sub>	III
9	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV	29	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV
10	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV	30	T <sub>2</sub> N <sub>0</sub> M <sub>0</sub>	II
11	T <sub>3</sub> N <sub>1</sub> M <sub>1</sub>	IV	31	T <sub>3</sub> N <sub>1</sub> M <sub>0</sub>	III
12	T <sub>3</sub> N <sub>1</sub> M <sub>1</sub>	IV	32	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	I
13	T <sub>2</sub> N <sub>2</sub> M <sub>0</sub>	III	33	T <sub>2</sub> N <sub>0</sub> M <sub>0</sub>	II
14	T <sub>2</sub> N <sub>0</sub> M <sub>0</sub>	II	34	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	I
15	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	I	35	T <sub>2</sub> N <sub>3</sub> M <sub>1</sub>	IV
16	T <sub>1</sub> N <sub>1</sub> M <sub>0</sub>	II	36	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	I
17	T <sub>3</sub> N <sub>2</sub> M <sub>1</sub>	IV	37	T <sub>2</sub> N <sub>1</sub> M <sub>1</sub>	IV
18	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV	38	T <sub>3</sub> N <sub>2</sub> M <sub>1</sub>	IV
19	T <sub>4</sub> N <sub>1</sub> M <sub>0</sub>	III	39	T <sub>2</sub> N <sub>2</sub> M <sub>1</sub>	IV
20	T <sub>2</sub> N <sub>1</sub> M <sub>1</sub>	IV	40	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	I