

Table S1. Relative expression of mir-205 and MVD in OC tissues.

	Relative expression of miR-205	MVD
Median	0.229	34
Range	0.096-0.367	12-85
Mean±SD	0.228±0.063	40.625±19.539

Table S2. Clinical information of patients in the OC tissues.

Patient	Age, years	Sample receipt date, YMD	Stage	Metastasis (No:0; Yes:1)	Histological pattern
1	37	2015/3/24	3	1	Ovarian cancer
2	49	2017/3/15	1	0	Ovarian cancer
3	55	2017/4/11	3	1	Ovarian cancer
4	46	2017/5/23	2	1	Ovarian cancer
5	50	2017/5/23	3	1	Ovarian cancer
6	60	2017/6/9	1	0	Ovarian cancer
7	57	2017/6/13	4	1	Ovarian cancer
8	48	2017/6/20	3	1	Ovarian cancer
9	49	2017/6/20	2	1	Ovarian cancer
10	44	2017/9/29	1	0	Ovarian cancer
11	54	2017/10/31	3	1	Ovarian cancer
12	49	2017/11/2	4	1	Ovarian cancer
13	59	2017/11/7	4	1	Ovarian cancer
14	56	2017/11/16	1	0	Ovarian cancer
15	62	2017/11/30	1	0	Ovarian cancer
16	61	2017/12/1	1	0	Ovarian cancer
17	53	2017/12/12	2	1	Ovarian cancer
18	37	2017/12/12	2	1	Ovarian cancer
19	53	2017/12/12	3	1	Ovarian cancer
20	41	2017/12/19	2	1	Ovarian cancer
21	44	2017/12/19	2	1	Ovarian cancer
22	45	2017/12/22	3	1	Ovarian cancer
23	60	2017/12/26	3	1	Ovarian cancer

24	49	2018/1/3	1	0	Ovarian cancer
25	64	2018/1/26	2	1	Ovarian cancer
26	48	2018/2/2	2	1	Ovarian cancer
27	68	2018/2/9	2	1	Ovarian cancer
28	65	2018/2/9	2	1	Ovarian cancer
29	45	2018/2/23	1	0	Ovarian cancer
30	48	2018/3/6	2	1	Ovarian cancer
31	43	2018/3/8	2	1	Ovarian cancer
32	48	2018/3/14	3	1	Ovarian cancer
33	37	2018/3/15	2	1	Ovarian cancer
34	47	2018/4/8	3	1	Ovarian cancer
35	35	2018/4/8	3	1	Ovarian cancer
36	60	2018/4/24	3	1	Ovarian cancer
37	37	2018/4/28	3	1	Ovarian cancer
38	37	2018/4/28	3	1	Ovarian cancer
39	65	2018/5/3	3	1	Ovarian cancer
40	38	2018/5/11	3	1	Ovarian cancer
41	59	2015/6/11	-	-	Normal ovarian tissues
42	54	2016/1/12	-	-	Normal ovarian tissues
43	37	2016/5/26	-	-	Normal ovarian tissues
44	53	2016/10/27	-	-	Normal ovarian tissues
45	49	2017/3/15	-	-	Normal ovarian tissues
46	50	2017/3/15	-	-	Normal ovarian tissues
47	55	2017/4/11	-	-	Normal ovarian tissues
48	33	2017/9/20	-	-	Normal ovarian tissues
49	33	2017/9/20	-	-	Normal ovarian tissues
50	44	2017/9/29	-	-	Normal ovarian tissues
51	50	2017/12/19	-	-	Normal ovarian tissues
52	44	2017/12/19	-	-	Normal ovarian tissues
53	60	2017/12/26	-	-	Normal ovarian tissues
54	41	2018/4/3	-	-	Normal ovarian tissues
55	56	2018/4/27	-	-	Normal ovarian tissues
56	52	2018/4/27	-	-	Normal ovarian tissues
57	55	2018/4/28	-	-	Normal ovarian tissues
58	42	2018/5/8	-	-	Normal ovarian tissues
59	48	2018/5/18	-	-	Normal ovarian tissues
60	56	2018/5/23	-	-	Normal ovarian tissues
61	48	2018/5/29	-	-	Distant metastatic carcinoma

62	50	2014/12/26	-	-	Distant metastatic carcinoma
63	50	2017/11/17	-	-	Distant metastatic carcinoma
64	60	2018/04/24	-	-	Abdominal metastatic carcinoma
65	44	2018/04/28	-	-	Abdominal metastatic carcinoma
66	65	2018/05/04	-	-	Abdominal metastatic carcinoma
67	48	2018-02-02	-	-	Lymph node metastatic carcinoma
68	47	2017-11-10	-	-	Lymph node metastatic carcinoma

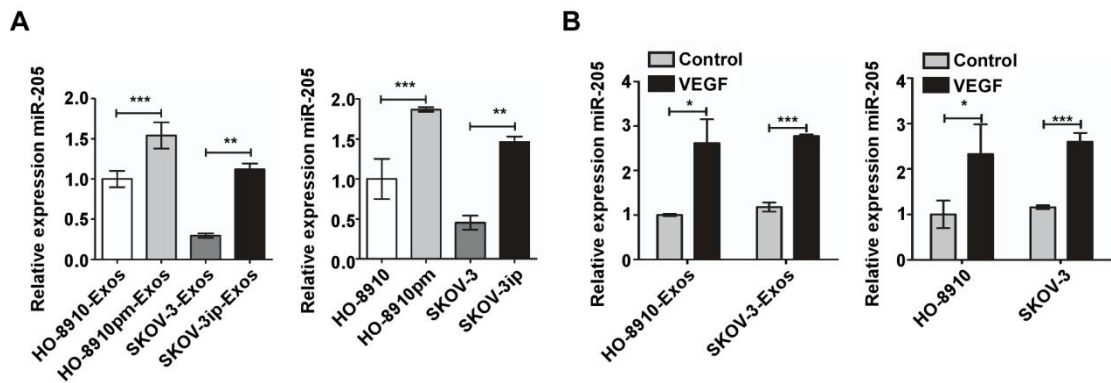
Table S3. Clinical information of OC patients and healthy volunteers in the circulating exosomes study.

Patient	Age, years	Sample receipt date, YMD	Metastasis (No:0; Yes:1)	Histological pattern
1	53	2017/12/19	0	Serum sample
2	58	2017/12/20	1	Serum sample
3	47	2017/12/26	0	Serum sample
4	38	2017/12/26	1	Serum sample
5	53	2017/12/27	1	Serum sample
6	47	2017/12/28	0	Serum sample
7	52	2018/1/18	0	Serum sample
8	49	2018/1/19	0	Serum sample
9	28	2018/02/02	healthy	Serum sample
10	29	2018/02/02	healthy	Serum sample
11	23	2018/02/02	healthy	Serum sample
12	25	2018/02/02	healthy	Serum sample
13	26	2018/02/02	healthy	Serum sample

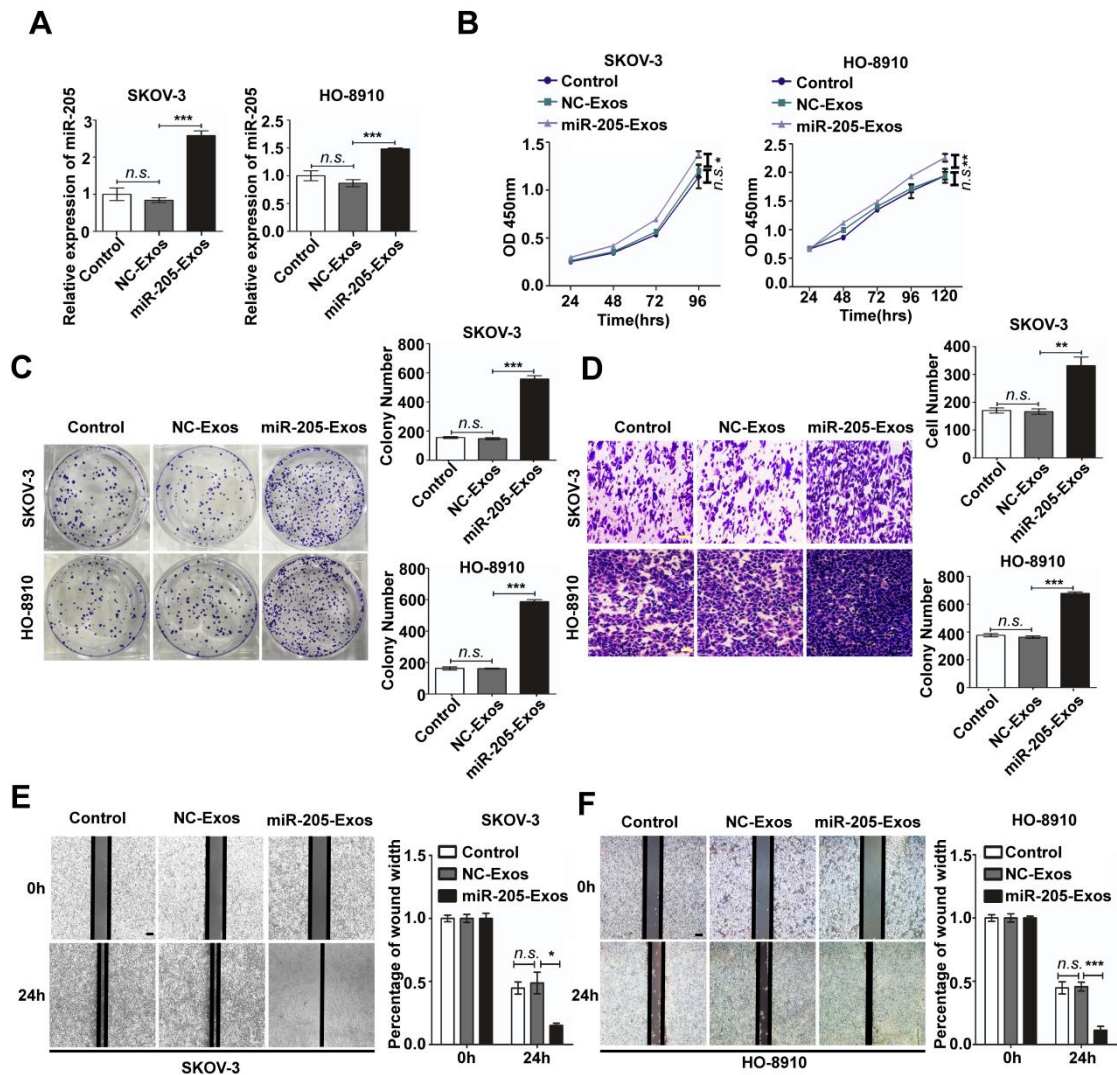
Table S4. The sequences used in this study

Primer	Sequence (5'→3')
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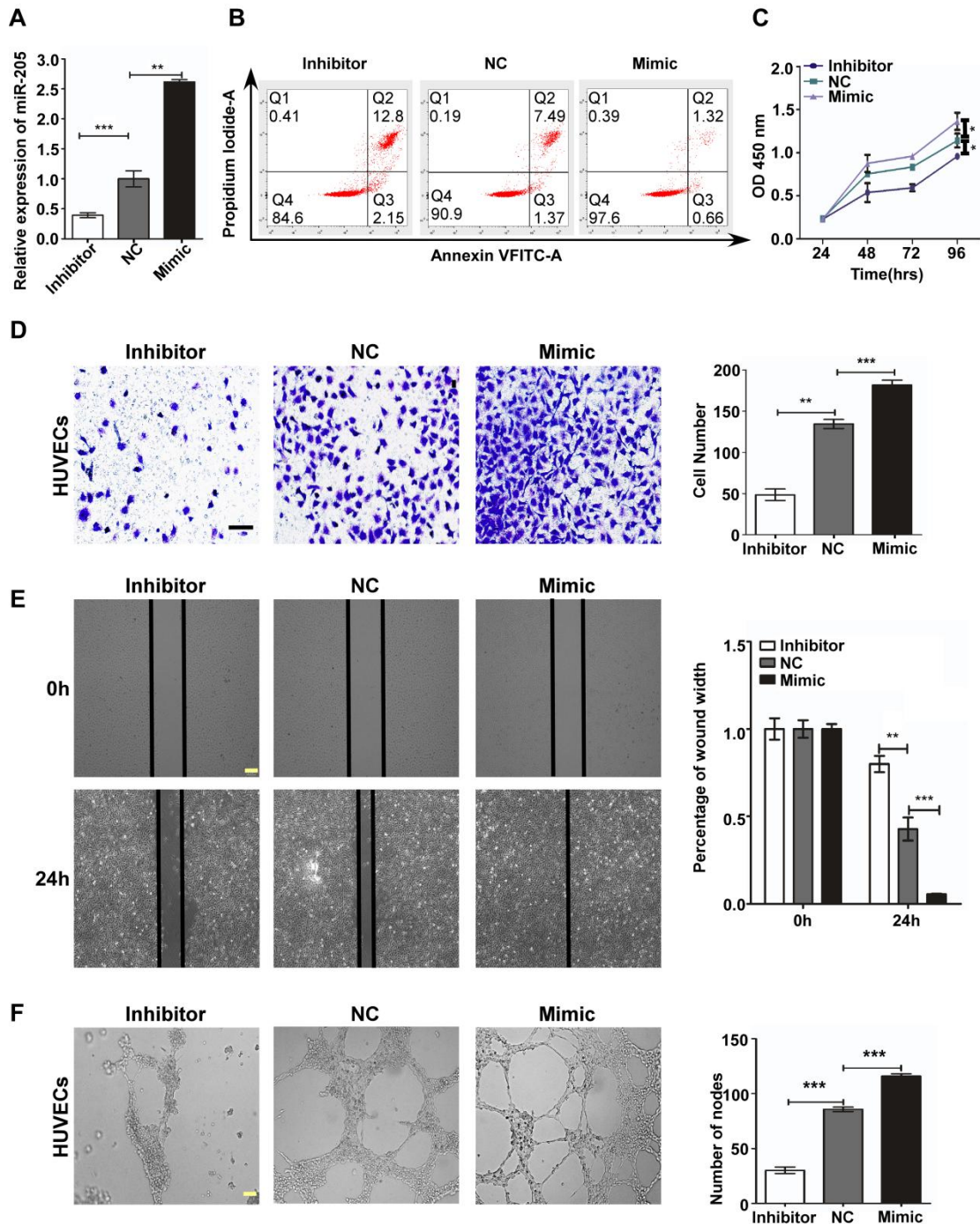
Cel-miR-239b-5p	UUUGUACUACACAAAAGUACUG
hsa-miR-205 mimic	UCCUUCAUCCACCGGAGUCUG
hsa-miR-205 nc	UUUGUACUACACAAAAGUACUG
hsa-miR-205-5p inhibitor	CAGACUCCGGUGGAAUGAAGGA
PTEN-si1	GGAATATCTAGTACTTACT
PTEN-si2	GGTGAATGATATGTGCAT
PTEN-si3	ACCGCCAAATTTAATTGCA
Flag-PTEN Forward	AGGCACTGGGCAGGTAAG
Flag-PTEN Reverse	CTGGAATAGCTCAGAGGC
PTEN Forward	CCTCAGCCGTTACCTGTGTG
PTEN Reverse	TCTGGATTTGACGGCTCCTCT



Supplementary Figure S1: Expression level of miR-205 in cells can affect the expression levels of miR-205 in exosomes (A) The expression levels of miR-205 in OCCs and exosomes were measured by RT-PCR. (B) RT-PCR was used to detect the levels of miR-205 in cells and exosomes after treatment with VEGF₁₆₅. All data are shown as the mean \pm SEM from at least three independent experiments. * $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$, Student's *t* test.

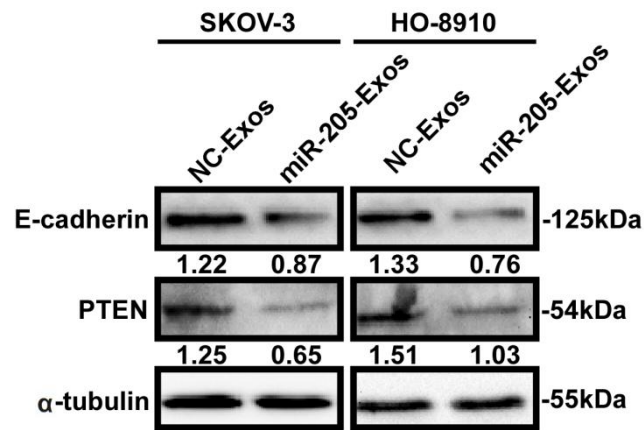


Supplementary Figure S2: Exosomal miR-205 promotes invasion and metastasis in OCCs. (A) After treatment with the miR-205-Exos, NC-Exos and Control (blank control), the miR-205 levels of HO-8910 and SKOV-3 cells were measured by RT-PCR. (B) The cell proliferation of HO-8910 and SKOV-3 cells was measured by the CCK-8 assay after treatment with exosomes. (C) After incubated with exosomes, cell proliferation of HO-8910 and SKOV-3 cells was assessed by colony formation. (D) The transwell invasion assay was performed to measure the cell invasion ability of HO-8910 and SKOV-3 cells treated with exosomes. The scale bar represents 50 μm . (E, F) The wound closure assay was performed to measure the effect of exosomal miR-205 on the migration of OCCs. The scale bar represents 100 μm . All the in vitro experiments were repeated three times. The results are presented as the mean \pm SEM. Statistical significance was determined by a two-tailed, unpaired Student's t-test. * $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$. *n.s.*, not significant.



Supplementary Figure S4. miR-205 regulates in vitro angiogenesis. (A) Transfection efficiency was measured by RT-PCR. (B) Analysis of apoptosis was performed at 24 h after transfection. (C) The CCK-8 assay was used to measure the effect of miR-205 on HUVEC cell growth. (D) Transwell assays were applied to measure cell migration. The scale bar represents 50 μ m. (E) The wound closure assay showed cell migration by transfected HUVECs. The scale bar represents 100 μ m. (F) The tube formation assay was performed with HUVECs after transfection. The scale bar represents 100 μ m. All in vitro experiments were performed in triplicate and repeated three times. The results are presented as the mean \pm SEM. Statistical significance was determined by a two-tailed,

unpaired Student's *t* test. **P* < 0.05, ***P* < 0.01 and ****P* < 0.001



Supplementary Figure S5: Exosomal miR-205 decreases the protein levels of PTEN and E-cadherin in OCCs.

(A) Western blotting analysis of E-cadherin, PTEN, α -tubulin in HO-8910 and SKOV-3 cells incubated with NC-Exos, miR-205-Exos.