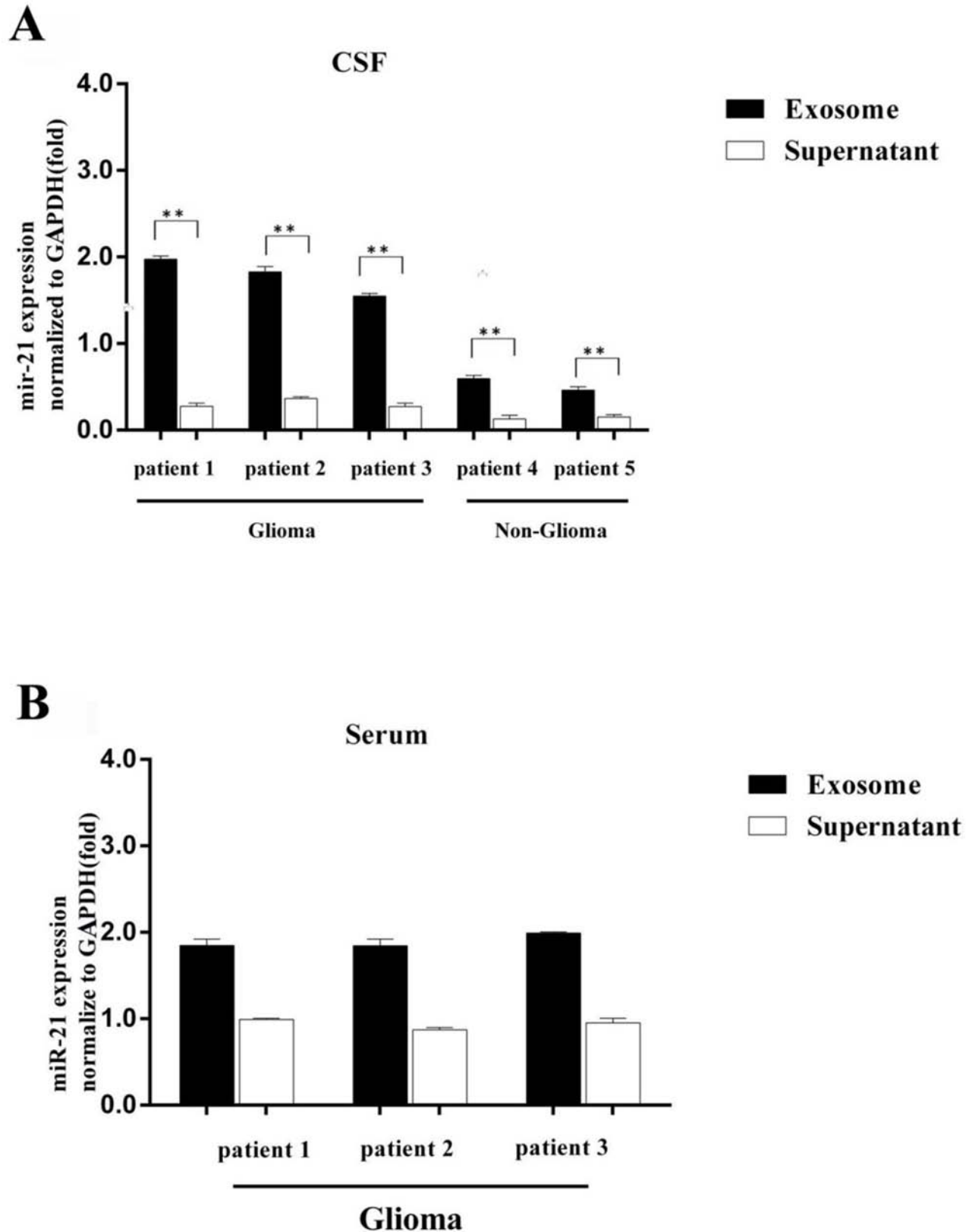
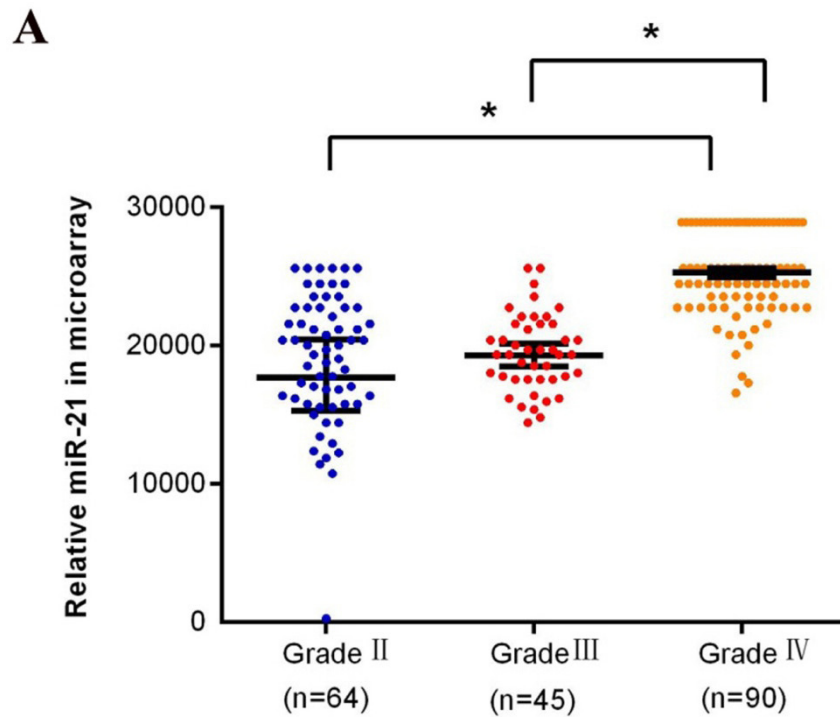


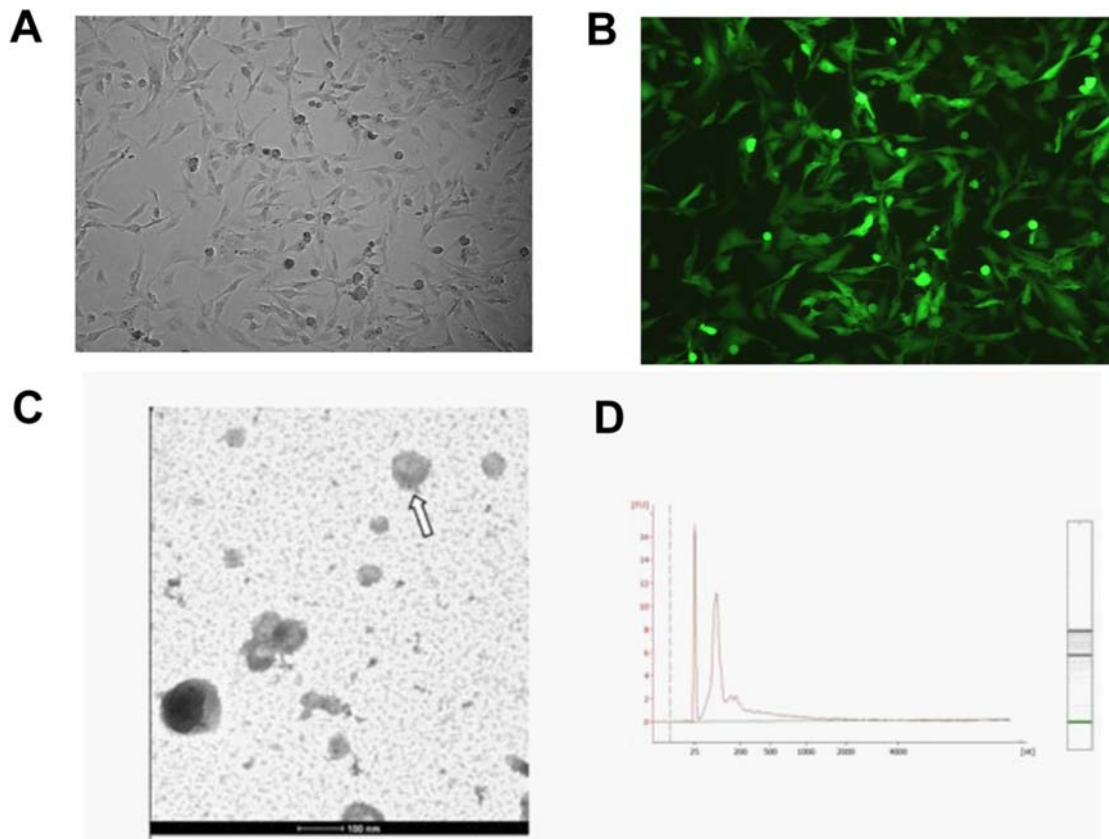
SUPPLEMENTARY FIGURES AND TABLES



Supplementary Figure S1: miR-21 expression levels. A. miR-21 levels in CSF of glioma or non-glioma control patients. B. miR-21 levels in serum of the glioma patients. ** $p < 0.01$.



Supplementary Figure S2: Microarray analysis of miR-21 in glioma patients of different glioma grades. Relative miR-21 expression in brain tissues of 198 glioma patients with pathological grades of II–IV.



Supplementary Figure S3: Lentiviral infection of GFP construct into U251 cells. A. U251 cells under bright field of the microscope. **B.** U251 cells infected by Lentiviral-GFP with Roche Fugene HD for 48 h. **C.** TEM images of exosomes derived from the supernatant of U251 medium for identification of exosomes. **D.** Quality analysis of exosomal RNA of the cell determined by an Agilent Bioanalyzer.

Supplementary Table S1. Clinical features of patients with glioma or non-glioma controls

	% of patients		<i>P</i>
	Control Group	Glioma Group	
Total number	25	70	
Men	18 (72)	42 (60)	
Women	7 (28)	28 (40)	<i>0.944</i>
Age: Median±SD	54.3 ± 16.9	49.8 ± 13.5	<i>0.452</i>
Reasons for admission			
Cerebral hemorrhage	3 (12)		
Hydrocephalus	1 (4)		
Severe head trauma	10 (40)		
Subarachnoid hemorrhage	7 (28)		
Pituitary adenomas	2 (8)		
Lymphocyte infiltration hypophysitis	2 (8)		

Abbreviations: SD, standard deviation; *P* < .05.

Supplementary Table S2. Correlation of miR-21 expression level with other clinical pathological features in 198 glioma patients

Clinicopathological features	No. of cases	miR-21 expression		<i>P</i>
		Low (<i>n</i> , %)	High (<i>n</i> , %)	
WHO grade				<0.001
II	64	47 (73%)	17 (17%)	
III	45	38 (84%)	7 (16%)	
IV	90	13 (14%)	77 (86%)	
Sex				0.23
Male	133	58 (43%)	75 (57%)	
Female	65	40 (61%)	25 (39%)	
Age				<0.001
<50	48	23 (47%)	27 (53%)	
>50	150	25 (16%)	125 (84%)	
KPS				0.373
>70	70	38 (54%)	32 (46%)	
<70	128	60 (46%)	68 (54%)	

Supplementary Table S3: Cox multivariate analysis

Parameter	Risk	95% confidence interval	<i>P</i>
Age	1.200	0.634–1.212	1.232
Sex	1.227	0.810–1.857	1.227
KPS	0.850	0.572–1.264	0.850
WHO grade	3.543	2.637–4.760	0.000
miR-21 xpression level	1.634	1.083–2.467	0.019