

Figure S1. Patient survival according to the different patient groups. miR-1 low expression was correlated with poor overall survival in patients with luminal-type breast cancer (A), but not in those with human epidermal growth factor receptor 2-positive (B) or triple-negative breast cancers (C). miR, microRNA.

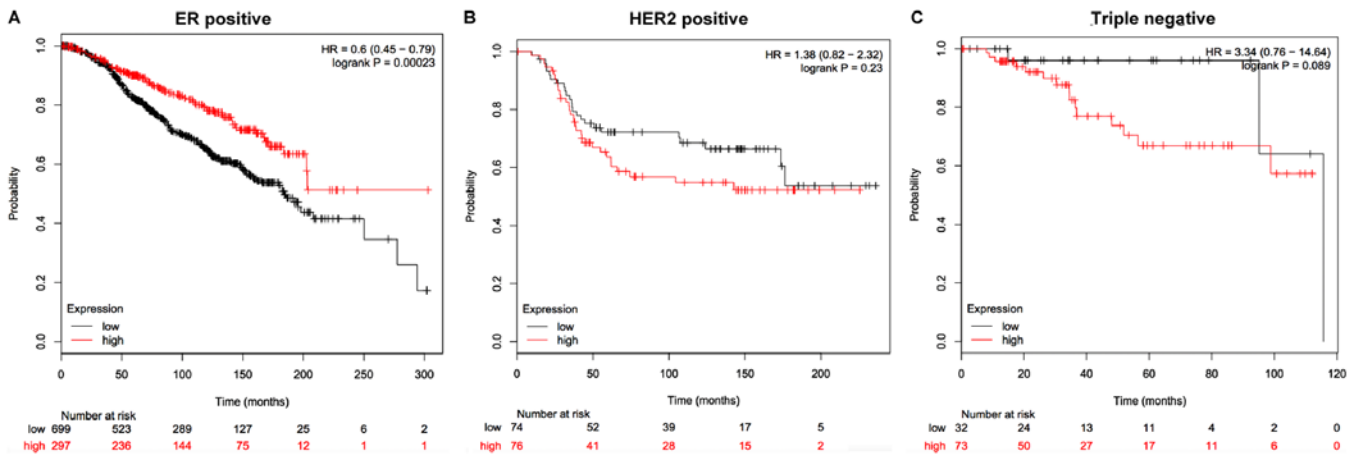


Figure S2. Bcl-2 expression level in ZR-7530 cell line and BC tissues. (A) Examination of important genes that function in the cell cycle and DNA damage. (B) Bcl-2 was expressed at high levels in BC tissues in contrast to normal breast tissues, n=30, P=0.03958. (C) Expression of Bcl-2 mRNA was downregulated following miR-1 overexpression in ZR-7530 cells (n=3, P<0.01). (D) Expression of Bcl-2 mRNA was downregulated following miR-1 overexpression in ZR-7530 cells. BC, breast cancer.

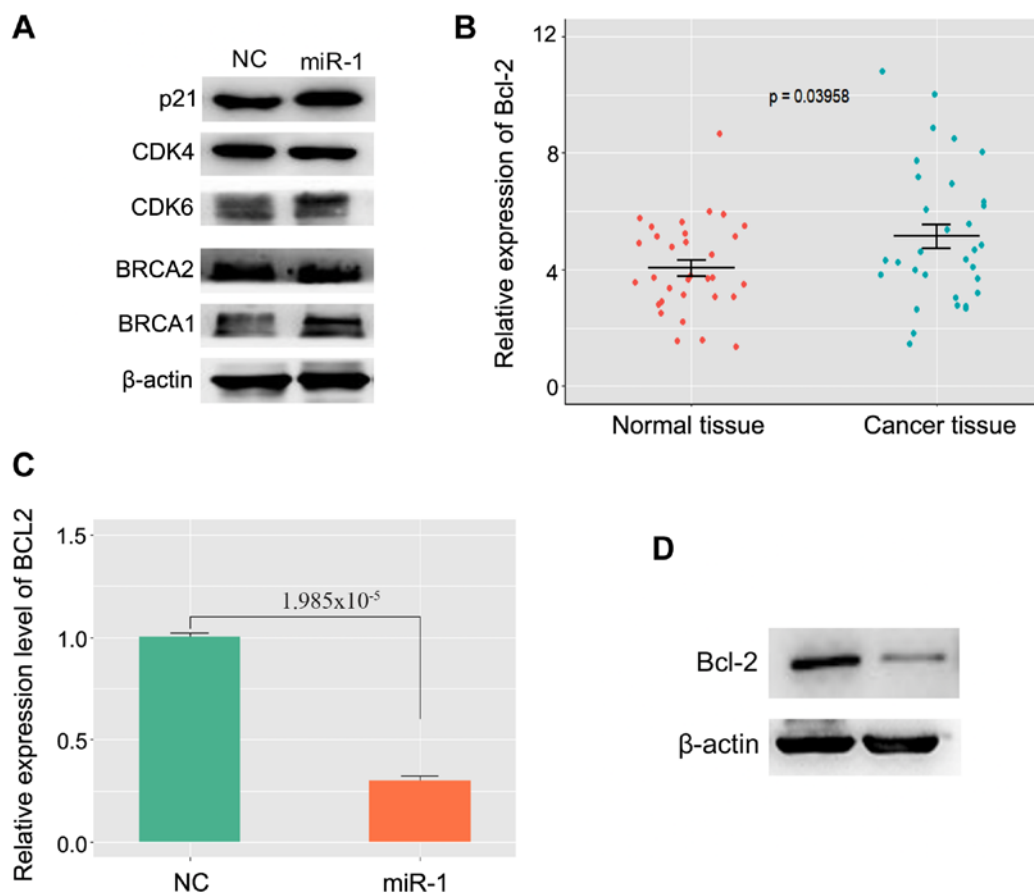


Figure S3. Overexpression of miR-1 inhibits cell migration and invasion by regulating Bcl-2. (A) Overexpression of miR-1 inhibited cell migration, which was reversed by Bcl-2 overexpression (n=3, P<0.01). (B) Overexpression of miR-1 inhibited cell invasion, which was reversed by Bcl-2 overexpression (n=3, P<0.01). miR, microRNA.

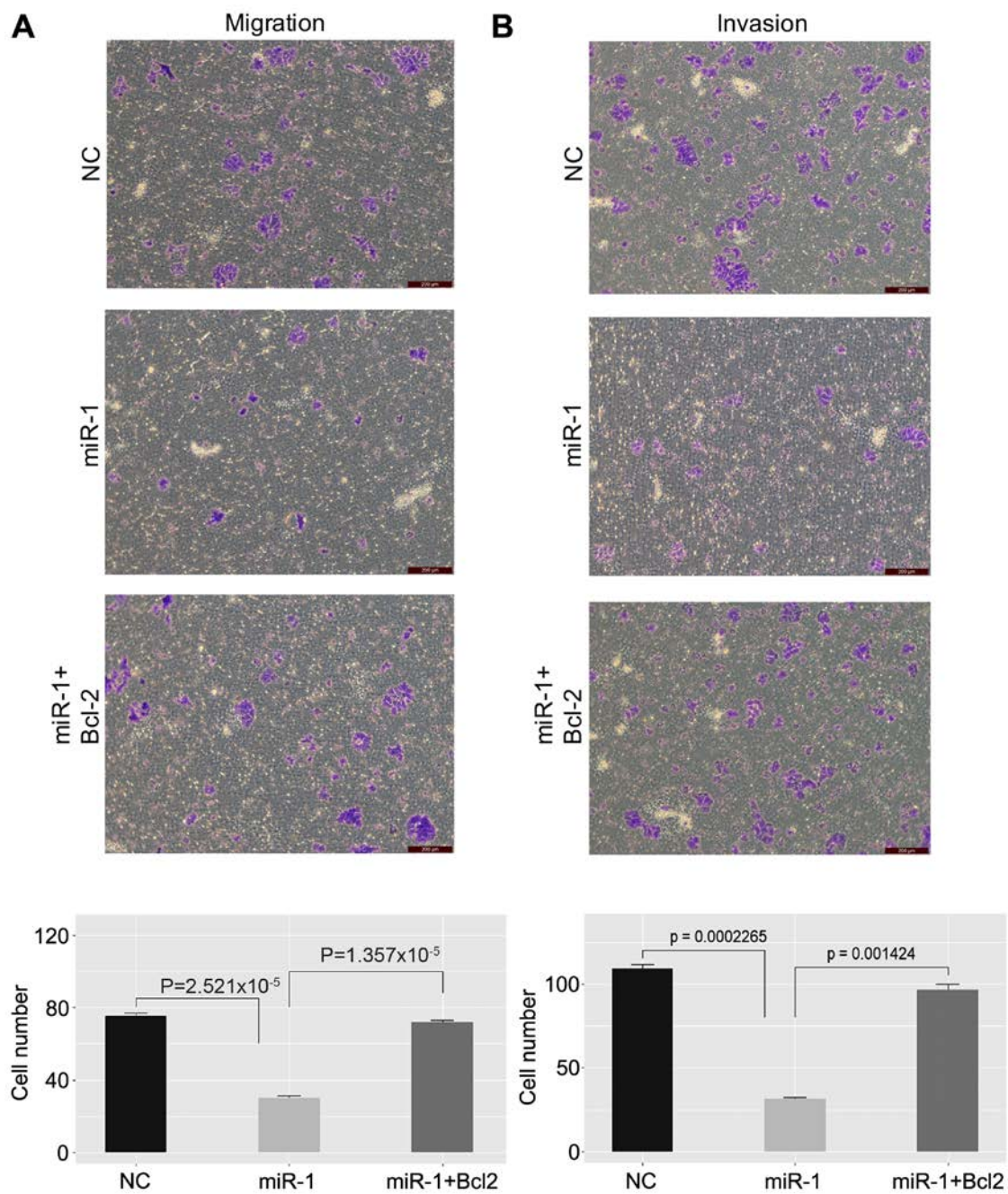


Table SI. Antibodies used in the present study.

Antibodies	Company	Catalog number
β -actin	Sigma-Aldrich; Merck KGaA	A3854
Akt	Cell Signaling Technology, Inc.	4691
Bad	Cell Signaling Technology, Inc.	9239
Bax	Cell Signaling Technology, Inc.	5023
Bcl-2	Cell Signaling Technology, Inc.	2870
Bip	Cell Signaling Technology, Inc.	3177
BRCA1	Abcam	ab16781
BRCA2	Abcam	ab27976
CDK4	Cell Signaling Technology, Inc.	12790
CDK6	Cell Signaling Technology, Inc.	3136
Claudin-1	Cell Signaling Technology, Inc.	13255
Cleaved-caspase-7	Cell Signaling Technology, Inc.	12827
Cleaved-caspase-9	Cell Signaling Technology, Inc.	7237
Cleaved-Parp	Cell Signaling Technology, Inc.	5625
E-cadherin	Cell Signaling Technology, Inc.	3195
Erk1/2	Cell Signaling Technology, Inc.	4695
Mcl-1	Cell Signaling Technology, Inc.	5453
p21	Cell Signaling Technology, Inc.	2947
Parp	Cell Signaling Technology, Inc.	4695
p-Akt	Cell Signaling Technology, Inc.	4060
p-Erk1/2	Cell Signaling Technology, Inc.	9101
Zeb-1	Cell Signaling Technology, Inc.	3396

Parp, poly ADP ribose polymerase; p, phosphorylated; CDK, cyclin dependent kinase; E, epithelial; Zeb-1, zinc finger E-box binding homeobox; Mcl-1, myeloid cell leukemia 1; Bip, binding immunoglobulin protein.