

**Table S1** Embolization material

Embolization materials	Brands	Size (treated lesions)
DEB-TACE (n=72)		
DC beads	Boston Scientific®	100–300 µm (n=1); 300–500 µm (n=30); 500–700 µm (n=1); 300–500 µm/500–700 µm (n=36); not available (n=4)
TAE (n=50)		
DC beads	Boston Scientific®	100–300 µm (n=11); 300–500 µm (n=2); not available (n=2)
Embozene	Varian®	40 µm (n=1); 100 µm (n=6); 250–500 µm (n=11); 500–700 µm (n=2); not available (n=3)
Hydropearls	Terumo®	75 µm (n=4); 200 µm (n=4); 75 µm/200 µm (n=1); not available (n=2)
PVA foam embolization particles	Cook®	not available (n=1)

DEB-TACE, drug-eluting beads transarterial chemoembolization; TAE, transarterial bland embolization; PVA foam, polyvinyl alcohol foam.

**Table S2** Radiological outcome stratified by embolization material

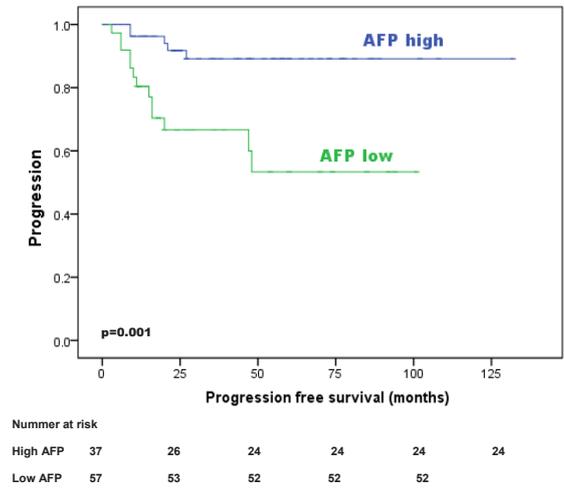
Radiological response <sup>†</sup>	DEB-TACE <sup>‡</sup>		TAE <sup>§</sup>	
	Doxorubicin <100 mg (n=29)	Doxorubicin ≥100 mg (n=30)	Doxorubicin <250 µm (n=46)	Doxorubicin ≥250 µm (n=12)
Complete response	17 (58.6%)	15 (50.0%)	24 (52.2%)	7 (58.3%)
Partial response	10 (34.5%)	13 (43.3%)	18 (39.1%)	5 (41.7%)
Stable disease	1 (3.4%)	1 (3.3%)	2 (4.3%)	0
Progressive disease	1 (3.4%)	1 (3.3%)	2 (4.3%)	0
P	0.98		1.0	

Mann-Whitney *U* test for continuous variables with not normal distribution. Chi-square test and Fisher's exact test for nominal variables. †, response after first embolization. ‡, DEB-TACE: lesions embolized by DC beads 300–700 µm stratified according to dose of doxorubicin. §, TAE: lesions embolized by Embozene, stratified according to size of the particles. DEB-TACE, drug-eluting beads transarterial chemoembolization; TAE, transarterial bland embolization.

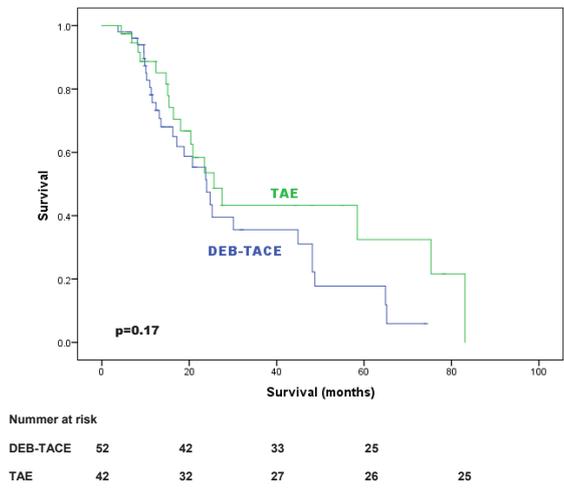
**Table S3** Association of clinical factors with OS and PFS

Variables	P value
AFP >20 ng/mL	
OS	0.005
PFS	0.001
Tc >100×10 <sup>9</sup> /L	
OS	0.96
PFS	0.50
Age >60 years	
OS	0.45
PFS	0.80
CHILD	
OS	0.65
PFS	0.80
BCLC	
OS	0.25
PFS	0.54
MELD ≥9	
OS	0.55
PFS	0.58
Embolization as first therapy	
OS	0.95
PFS	0.54
Tumor size (>2 cm)	
OS	0.76
PFS	0.20

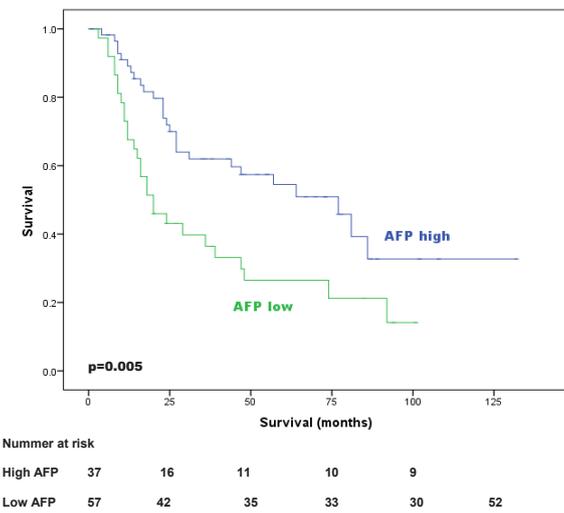
For P value log-rank (mantel cox) was used. OS, overall survival; PFS, progression free survival; AFP, alpha-fetoprotein; Tc, thrombocytes; CHILD, Child Pugh classification; BCLC, Barcelona Clinic of Liver Cancer; MELD, Model for End-stage Liver Disease.



**Figure S1** Overall disease free survival in patients with high AFP (>20 ng/mL =16 kU/L) in comparison with patients with low AFP (≤20 ng/mL). AFP, alpha-fetoprotein.



**Figure S2** Kaplan-Meier curve showing overall survival of patients receiving DEB-TACE versus TAE until death, end of study period or liver transplantation. DEB-TACE, drug-eluting beads transarterial chemoembolization; TAE, transarterial bland embolization.



**Figure S3** Overall survival in patients with high AFP (>20 ng/mL =16 kU/L) in comparison with patients with low AFP (≤20 ng/mL). AFP, alpha-fetoprotein.