Supplementary Table S1. Patient demographics, medical history, and disease characteristics

Demographics	Value (*N*)	(%)
Gender		
Male	22	73.3
Female	8	26.7
Age (years)		
< 18	12	40.0
≥ 18	18	60.0
Tumor site		
Femur	15	50.0
Tibia	7	23.3
Humerus	7	23.3
Iliac bone	1	3.3

Supplementary Table S2. Pre- and post-filtration ratios of two different CTC detection methods using two leucocyte depletion filters in OS

	CD45-FISH positive detection rate range (min-max) (%)	Vimentin positive detection rate range (min-max) (%)	FISH, vimentin both positive detection rate (%)	One of FISH, vimentin positive detection rate (%)
pre-filter	53.0 (16/30) (0–5)	66.7 (20/30) (0–81)	40.0 (13/30)	77.0 (23/30)
Post-filter				
SQ	50.0 (15/30) (0–4)	53.3 (16/30) (0–41)	30.0 (9/30)	73.3 (22/30)
RC	6.7 (2/30) (0–2)	13.3 (4/30) (1)	6.7 (2/30)	20.0 (6/30)

Supplementary Table S3. Patient ratios and comparisons who received and did not receive preoperative chemotherapy, *n* (%)

Detection mode	No chemotherapy (*n* = 11)	Preoperative chemotherapy (*n* = 19)	*P* value
FISH[a]	6 (54%)	4 (21%)	0.108
Vimentin[a]	7 (63%)	12 (63%)	1.000

Note. [a] ≥ 2 CTCs per 7.5 mL of blood[5].