

**Table S1** Univariate analysis of progression-free survival

Characteristics	N (%)	mPFS (months)	95%CI (months)	HR (95% CI)	P value
Overall	50	10.47	5.80–16.27		
Age of starting palbociclib (years)					
≥65	11 (22)	17.03	7.20–NE	0.46 (0.21–1.01)	0.055
<65	39 (78)	8.90	5.23–13.53		
Menopausal status					
Post-menopausal	37 (74)	10.47	6.17–16.27	1.09 (0.53–2.23)	0.82
Pre-/peri-menopausal	13 (26)	9.20	4.17–21.97		
ER status					
Positive	46 (92)	10.47	5.80–16.87	0.51 (0.18–1.46)	0.21
Negative (PR positive)	4 (8)	5.60	2.53–NE		
Lung or liver involvement					
Yes	36 (72)	6.17	5.23–9.57	2.52 (1.19–5.30)	0.02
No	14 (28)	17.10	12.10–NE		
<i>De novo</i> stage IV					
Yes	11 (22)	9.57	5.23–NE	0.78 (0.35–1.76)	0.55
No	39 (78)	10.47	5.67–16.87		
Number of metastatic sites					
≥3	6 (12)	5.43	1.90–NE	1.40 (0.55–3.61)	0.48
<3	44 (88)	11.37	5.80–16.87		
Line of palbociclib treatment					
>1 <sup>st</sup>	28 (56)	7.20	5.23–14.30	1.63 (0.87–3.05)	0.13
1 <sup>st</sup>	22 (44)	13.53	5.67–17.77		
Previous chemotherapy for advanced disease					
Yes	22 (44)	9.03	4.93–16.87	1.46 (0.78–2.72)	0.24
No	28 (56)	12.10	5.67–17.77		
Endocrine combination partner					
Fulvestrant	11 (22)	6.60	2.80–19.80	1.33 (0.65–2.73)	0.43
AI	39 (78)	10.47	5.80–16.87		
Palbociclib dose reduction					
Yes	15 (30)	16.27	5.43–20.13	0.48 (0.20–1.14)	0.10
No	11 (22)	5.60	2.53–14.30		

mPFS, median progression-free survival; NE, not evaluable; HR, hazard ratio; CI: confidence interval; ER, estrogen receptor; PR, progesterone receptor; AI, aromatase inhibitor.

**Table S2** Univariate analysis of overall survival

Characteristics	N (%)	mOS (months)	HR (95% CI)	P value
Overall	50	33.60		
Age of starting palbociclib (years)				
≥65	11 (22)	32.13	0.83 (0.27–2.53)	0.74
<65	39 (78)	33.60		
Menopausal status				
Post-menopausal	37 (74)	35.80	1.01 (0.36–2.85)	0.98
Pre-/peri-menopausal	13 (26)	33.60		
ER status				
Positive	46 (92)	35.80	0.22 (0.07–0.69)	0.009
Negative (PR positive)	4 (8)	16.00		
Lung or liver involvement				
Yes	36 (72)	32.13	3.77 (0.86–16.49)	0.08
No	14 (28)	33.60		
<i>De novo</i> stage IV				
Yes	11 (22)	25.83	1.72 (0.60–4.88)	0.31
No	39 (78)	33.60		
Number of metastatic sites				
≥3	6 (12)	11.10	3.59 (1.15–11.20)	0.03
<3	44 (88)	33.60		
Line of palbociclib treatment				
>1 <sup>st</sup>	28 (56)	32.13	1.94 (0.68–5.50)	0.21
1 <sup>st</sup>	22 (44)	NE		
Previous chemotherapy for advanced disease				
Yes	22 (44)	33.60	1.73 (0.68–4.41)	0.25
No	28 (56)	35.80		
Endocrine combination partner				
Fulvestrant	11 (22)	33.60	0.82 (0.27–2.54)	0.74
AI	39 (78)	32.13		
Progression-free survival during palbociclib treatment				
≥12 months	23 (46)	NE	0.14 (0.04–0.50)	0.002
<12 months	27 (54)	24.30		
Palbociclib dose reduction				
Yes	15 (30)	35.80	0.52 (0.13–2.03)	0.35
No	11 (22)	24.30		

mOS, median overall survival; HR, hazard ratio; CI, confidence interval; ER, estrogen receptor; PR, progesterone receptor; AI, aromatase inhibitor; NE, not evaluable.

**Table S3** Immediate subsequent antineoplastic therapies among 34 patients who progressed on palbociclib with available records

Regimen	N (%)
Patients who received chemo-free regimens	20 (58.82)
Palbociclib plus another endocrine agent	10 (29.41)
Abemaciclib plus another endocrine agent	4 (11.76)
Ribociclib plus another endocrine agent	1 (2.94)
Chidamide plus another endocrine agent	1 (2.94)
Other endocrine therapy	3 (8.82)
Original regimen plus radiotherapy	1 (2.94)
Patients who received chemotherapy-based regimens	14 (41.18)
Chemotherapy alone	12 (35.29)
Chemotherapy plus another endocrine therapy	1 (2.94)
Chemotherapy plus apatinib	1 (2.94)

**Table S4** Adverse events of hematology in 36 patients and biochemistry in 35 patients

Adverse event	All grades	Grade 3	Grade 4
Leukopenia	32 (88.89)	16 (44.44)	1 (2.78)
Neutropenia	32 (88.89)	16 (44.44)	1 (2.78)
Anemia	25 (69.44)	3 (8.33)	-
Thrombocytopenia	12 (33.33)	2 (5.56)	1 (2.78)
AST increased	7 (20.00)	-	-
Blood creatinine level increased	5 (14.29)	-	-
ALT increased	3 (8.57)	-	-

AST, aspartate aminotransferase; ALT, alanine aminotransferase.