Article ID: WMC005826 ISSN 2046-1690

A short review of results with palbociclib in a real world daily clinic

Peer review status:
No

Corresponding Author:
Dr. Esther Una Cidon,
Medical Oncologist, Oncology Department, University Hospital Dorset, Castle Lane East, BH7 7DW - United Kingdom

Submitting Author:
Dr. Esther Una Cidon,
Medical Oncologist, Oncology Department, University Hospital Dorset, Castle Lane East, BH7 7DW - United Kingdom

Article ID: WMC005826

Article Type: Original Articles

Submitted on:09-Jul-2023, 07:25:29 PM GMT **Published on:** 10-Jul-2023, 03:19:34 AM GMT

Article URL: http://www.webmedcentral.com/article_view/5826

Subject Categories:CANCER

Keywords:palbociclib, breast cancer, survival, response, metastatic breast cancer, palliative

How to cite the article: Una Cidon E. A short review of results with palbociclib in a real world daily clinic. WebmedCentral CANCER 2023;14(7):WMC005826

Source(s) of Funding:

N/A

Competing Interests:

N/A

A short review of results with palbociclib in a real world daily clinic

Author(s): Una Cidon E

Abstract

Background: Palbociclib (P) was the first cyclin-dependent kinase 4/6 (CDK4/6) inhibitor approved for ER+/HER-2 negative advanced breast cancer patients.Â Neutropenia is commonly observed.Â

Aim: We carried out a review of our data to provide a real-world experience of the results and toxicities associated with this therapy in our population of patients.

Patients and methods: Retrospective review of ER positive metastatic breast cancer patients treated with Palbociclib at the University Hospital Dorset.Â Â

Results:Â 64 women included. All had received P in combination either with L (46) or F (18). Median age 63 years old (36-84).Â 30 patients (46.8%) required dose adjustments, with 19 of them (63.6%) requiring this during the first 3 months of treatment (early dose adjustment). 9 patients (out of 64, 154.06%) required a second dose adjustment. No discontinuation due to toxicities. Adverse events as expected; only one case of repeated thromboembolic events was reported.Â

At the time of collecting these data, with a m follow up of 33 months, the mPFS was 26 months with P + L and 15m with P + F. And mOS was not reached in any of the combinations.Â Â

36 patients were alive with P+L (78.2%) and 10 had died (21.7%). With P+F, 12 were alive (66.7%) and 6 (33.3%) had died.

32 patients had progressed at the time of data cut-off. 13 with P+F and 19 with P+L.

Conclusion: Although we will continue to follow these patients to get final conclusions, our data are in line with other real life studies showing benefits with these combinations with expected toxicities.Â

Introduction

Palbociclib (P) was the first cyclin-dependent kinase 4/6 (CDK4/6) inhibitor approved for ER+/HER-2 negative advanced breast cancer patients, based on the randomised, phase 2 PALOMA-1 trial. Following this, PALOMA-2 a phase 3 trial in first line[1], confirmed a clinically and statistically significant improvement in progression free survival (PFS) with P + Letrozole (L) (median PFS 27.6m). Overall survival (OS) data have been presented at ASCO meeting in 2022, showing a numerically bigger median OS in comparison to placebo+L (mOS 53.9m versus 51.2m respectively).

The phase 3 PALOMA-3 trial[2], presented results after a median duration of follow-up of 73.3 months and showed a mOS of 34.8 months in P + Fulvestrant (F) versus 28.0 months in the placebo + F group. mPFS was significantly prolonged when compared to placebo + F (11.2 vs. 4.6 months).

Neutropenia is commonly observed and it needs to be monitored.

In this context, we decided to assess our patients receiving these combinations looking for results in a daily real world clinic experience.

Â

Â

Â

Â

Â

Patients and methods

We performed a retrospective review of our ER positive, Her-2 negative metastatic breast cancer patients treated with Palbociclib in UHD. Â

We included 64 patients, all women. 46 of them were receiving P + L and 18 P + F.Â

Â

Â

Results

The m age in this population of patients was 63 years old (36-84), with 29 aged 65 or older.

Â The metastatic locations can be seen in Table 1.Â Â

Â

Table 1: Metastatic locations:

Location of metastases	N
Primary in situ	20
Bones	47
Lung	17
Liver	15
Axillary nodes	19
Mediastinal nodes	10
Supraclavicular nodes	9
Pleura	9
Abdominal and retroperitoneal	13
Chest wall	4
Mesenteric	6
Cutaneous	2
Orbit	1
Cervical nodes	1
Brain	1

Â

30 patients (46.8%) required dose adjustments, with 19 of them (63.6%) requiring this during the first 3 months of treatment (early dose adjustment). 9 patients (out of 64, 154.06%) required a second dose adjustment. Seen in Table 2.Â

Â

Table 2: Doses of Palbociclib and reasons for a reduction.

REASONS FOR DOSE REDUCTION	EARLY REDUCTION	LATE REDUCTION
Neutropenia	13	3
Mucositis + fatigue	1	1
Neutropenia + mucositis	1	0
LFTs / Thrombocytopenia/DVT	1	0/0/1
Mucositis	1	2
Fatigue	2	3
Abdominal cramps	0	1

Â

No patients discontinued treatment due to toxicities.

Adverse events were as expected; only one case of repeated thromboembolic events was reported. This was managed initially with anticoagulants only. After two repetitive episodes of embolism, the dose of P was attenuated and the patient continued with the same type and dose of anticoagulants. No further episodes of embolism were diagnosed since. Â

After a median follow up of 33 months (3.50 â€“ 62.30m) we have observed the following results (see Table 3).Â

Â

Table 3: mPFS and mOS

RESULTS	P + L	P + F
mPFS	26 m	15 m
mOS	not reached	not reached

Â

36 patients were alive with P+L (78.2%) and 10 had died (21.7%). With P+F, 12 were alive (66.7%) and 6 (33.3%) had died.

32 patients had progressed at the time of data cut-off. 13 with P+F and 19 with P+L. See table 4 and 5.

Table 4: Patients alive at different cut-offs.Â Â

Alive	At 12 m	At 24	At 36	At 48	At 60	>60
P+L	42	27	16	5	2	2
P+F	14	7	2	1	0	0

Â Table 5: Patients without progression at different cut-offs.Â

Free of progression	At 12 m	At 24	At 36	At 48	At 60	>60
P+L	36	24	9	4	2	2
P+F	7	3	1	1	0	0

Comments and conclusions

Although our study is small and needs further follow up to get final data, current results with a m follow up of 33 months could be seen in Table 6 below.Â
Most patients had the first dose adjustment within the first three months of treatment and in most cases this was due to neutropenia, although some cases had other reasons for reductions such as mucositis or fatigue for example.Â
We cannot compare our results in terms of mOS with those obtained from the phase III trials as we have not reached this data in our study. However, mPFS shown is comparable to those achieved in the trials and better than other real world studies.Â
Â

Â Table 6: Current data obtained compared to other studies.Â

RESULTS	mPFS	mOS	mFU
PALOMA-2[1]	27.6m	53.9m	90m
PALOMA-3[2]	11.2m	34.8m	73.3m
REAL WORLD DATA P+L[3]	16.5m	not reached	22.6m
REAL WORLD DATA P+F[4]	7.43m	24.70m	23m
AUDIT REAL WORLD P+L (our results)	26	>29.8 (not reached)	Â 33m
AUDIT REAL WORLD P+F (our results)	15	>21 (not reached)	

We can conclude that this retrospective review has shown that these combinations have proven effective and safe in our real world population of patients and we hope to get final positive mOS data in a near future.Â

References

Â

1. Finn RS, Rugo HS, Dieras VC, et al: Overall survival with first-line palbociclib plus letrozole versus placebo plus letrozole in women with estrogen receptorâ€“positive/human epidermal growth factor receptor 2â€“negative advanced breast cancer: Analyses from PALOMA-2.Â 2022 ASCO Annual Meeting. Abstract LBA1003. Presented June 4, 2022.
2. Massimo Cristofanilli, Hope S. Rugo; Seock-Ah Im, et al. Overall Survival with Palbociclib and Fulvestrant in Women with HR^{+}/HER2$^{â¯}$Â ABC: Updated Exploratory Analyses of PALOMA-3, a Double-blind, Phase III Randomized Study. *Clin Cancer Res*Â (2022) 28 (16): 3433â€“3442. https://doi.org/10.1158/1078-0432.CCR-22-305

3. Adam Brufsky, Xianchen Liu, Benjamin Li et al. Real World effectiveness of Palbociclib plus Letrozole vs Letrozole alone for metastatic breast cancer with lung or liver metastases: Flatiron database analysis. Front Oncol 2022 (12): https://doi.org/10.3389/fonc.2022.86529
4. FÃ¡bio Cardoso Borges, Filipa Alves da Costa, Adriana Ramos, et al. Real-world effectiveness of palbociclib plus fulvestrant in advanced breast cancer: Results from a population-based cohort study. *The Breast* (2022) 62: 135-143. https://doi.org/10.1016/j.breast.2022.02.005.

Â

Â