Treatment with CDK4/6 inhibitors in elderly patients with HR+/HER2- metastatic breast cancer a Spanish center

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Background

Cyclin-dependent kinase 4/6 inhibitors (CDK4/6i) in combination with endocrine therapy (ET) is the first line recommended for patients with hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) metastatic breast cancer (mBC). However, there is lack of real-world data in particularly population as elderly patients. The aim of this study was to evaluate the efficacy and tolerability of CDK4/6i in elderly population (≥ 70 years) compared to younger patients (< 70 years) in a cohort of HR+/HER2- mBC patients

Methods

Retrospective cohort study of HR+/HER2- mBC patients treated with CDK4/6i in our center between 2014 and 2023. Clinicopathological data was collected from electronic medical record. Survival outcomes and safety were assed. Cohort was stratified by age (≥ 70 years compared to patients < 70 years)

Conclusions

In this cohort, palbociclib was the most frequent cyclin inhibitor prescribed in elderly patients. There was no difference in toxicity and progression free survival between the two groups. Elderly patients had a shorter global survival compared with younger patients, which may be related with the associated comorbidities in this group.

Results

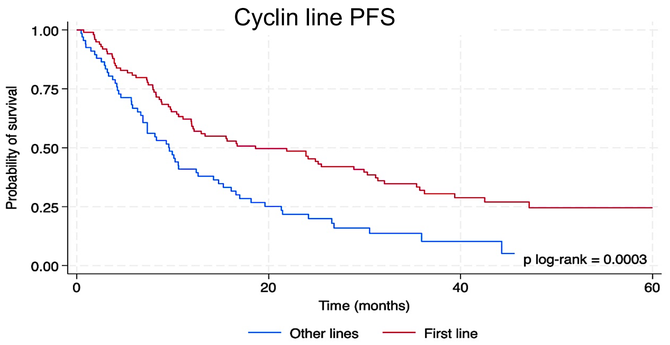
Variable	N=169	<70 (n=116)	>70 (n=53)	p
Mean Age	61.5 (50.7-72.3)	55.6 (49.0-61.9)	76.2 (72.8-79.8)	<0.001
ECOG				
- 0-1	136 (80.4%)	101 (87%)	35 (66%)	<0.001
- 2	33 (1.6%)	15 (13%)	18 (44%)	
Histological grade				
- I	42 (30.7)	29 (30.5)	13 (30.9)	0.839
- II	58 (42.3)	39 (41.1)	19 (45.2)	
- III	37 (27.0)	27 (28.4)	10 (23.8)	
M1 de novo	49 (29.0)	33 (28.5)	16 (30.2)	0.817
Ki67	30 (10-40)	30 (10-40)	20 (10-40)	0.707
Cyclin inhibitor				
- Ribociclib	48 (28.6)	42 (36.2)	6 (11.5)	<0.001
- Abemaciclib	49 (29.2)	36 (31.0)	13 (25.0)	
- Palbociclib	71 (42.3)	38 (32.8)	33 (63.5)	
HT				
- IA	78 (46.2)	47 (40.5)	31 (58.5)	0.030
- Fulvestrant	91 (53.9)	69 (59.5)	22 (41.5)	
First line	102 (60.4)	70 (60.3)	32 (60.4)	0.997
Nº of cycles	12 (4-28)	12 (4-30)	9 (5-26)	0.512
G3 toxicity	36 (21.3)	24 (20.9)	12 (22.6)	0.795

Table 1. Baseline characteristics and treatment

Regarding to survival, there were no differences in progression free survival (13.1 vs 11.1 months, p=0.536). In the multivariant analysis de novo metastatic disease was associated with shorter PFS [HR 1.60 (1.05-2.45); p=0.03]. The used of cyclin as fist line treatment was associated with longer PFS [HR 0.58 (0.39-0.88); p=0.003]. Furthermore, ≥ 70 years patients exhibit a statistically shorter global survival (51.1 vs 35.9 months, p=0.0003) compared to < 70 years patients. In the multivariant analysis age ≥ 70 years was the only factor associated with worst global survival [HR 1.76 (1.03-2.98); p=0.035].

169 patients were included in the analysis. 116 (68.6%) were < 70 years, with a mean age of 55.6 (49-61.9) years], and 53 (31.4%) were ≥ 70 years, with a mean age of 76.2 (72.8-79.8) years. Mean follow up 44.9 months. Approximately one third of the patients were metastatic de novo in both groups. Aromatases inhibitors were more frequently used in ≥ 70 years patients and fulvestrant was more frequently used in < 70 years group (p=0.03). 60% of patients received CDK4/6i as first line treatment in both groups.

When compared pattern of cyclin inhibitor prescription between the groups significant difference was observed (<0.001), with Palbociclib been the most frequently prescribed in ≥ 70 years patients (63.5%), and < 70 years patients received the three cyclin inhibitors in the same proportion. Mean number of cycles and grade 3-4 toxicity were similar in both groups, with neutropenia been the most common grade 3-4 toxicity (69%). Table 1.



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The first author declares no conflict of interest.