

Difference in persistence between tablets and capsules

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Background

- Pharmaceutical companies have recently developed capsule and tablet forms of their drugs to allow a choice on dosage form
- As both capsules and tablets should be bioequivalent, adherence rates between members prescribed capsules and tablets should be the same

Objective

• This study compares persistency between capsule and tablet forms of enzalutamide and palbociclib

Methods

- This retrospective cohort study included adult Caremark members who received enzalutamide and palbociclib between 03/01/2021 and 03/01/2022 with continuous eligibility for six months prior and 12 months post-index into the study
- Members were excluded if they had a > 60-day gap in fill or switched from a capsule to a tablet or vice versa during the study period
- Adherence was measured using the prescription-based proportion of days covered (PDC) and defined as the sum of days with medication on hand divided by the number of days between index fill and exhaust of last fill
- Continuous variables were compared with the student's t-test and Mann-U tests; categorical variables were compared with a chi-square test
- Logistic regression was utilized to assess adherence differences in capsules vs. tablets
- P-values < 0.05 were significant

Results

- A total of 5.997 members were included in the enzalutamide cohort: there were no insurance type or regional differences (all p>0.05) between members receiving capsules and tablets
- There were no significant differences in mean PDC (mean (SD) 0.963 (0.080) vs. 0.964 (0.073); p =0.521) or adherence rates (94.2% vs. 95.2%); p =0.215) between members receiving capsules and tablets
- After adjusting for the variables in the model, there was no difference in adherence rates between tablets and capsules
- Members less than 65 years of age had significantly lower adherence rates (odds) ratio (OR)) 0.5 (95% confidence interval (CI), 0.35-0.71) compared to those aged 65-74
- A total of 5,361 members were included in the palbociclib cohort; there were significant differences in age, gender, type of insurance and region (all p<0.05) between members receiving capsules and tablets
- There were no significant differences in PDC (0.962 (0.072) vs. 0.960 (0.072); p =0.534) or adherence rates (94.9% vs. 94.9%); p =1.0) between members receiving capsules and tablets

Conclusions

 Capsule and tablet forms of enzalutamide and palbociclib had similar adherence rates when adjusting for confounders.

Enzalutamide cohort

Variable	Overall N=5997	Capsules N=4795 (80.0%)	Tablet N=1202 (20.0%)	p-value
Age, mean (SD)	74.7 (9.4)	74.7 (9.2)	74.8 (9.8)	0.902
Age, median [Q1,Q3]	75.0 [68.0,82.0]	75.0 [68.0,82.0]	74.0 [68.0,82.0]	0.985
Age category, n (%)				0.007
<65	829 (13.8)	648 (13.5)	181 (15.1)	
65-74	2158 (36.0)	1726 (36.0)	432 (35.9)	
75-84	2047 (34.1)	1679 (35.0)	368 (30.6)	
≥85	963 (16.1)	742 (15.5)	221 (18.4)	
Male gender, n (%)	5997 (100.0)	4795 (100.0)	1202 (100.0)	1
Insurance type, n (%)				0.32
Employer	1545 (25.8)	1235 (25.8)	310 (25.8)	
Exchange	62 (1.0)	45 (0.9)	17 (1.4)	
Healthplan	103 (1.7)	82 (1.7)	21 (1.7)	
Medicaid	197 (3.3)	149 (3.1)	48 (4.0)	
Medicare	4090 (68.2)	3284 (68.5)	806 (67.1)	
Subregion, n (%)				0.213
East North Central	763 (12.8)	612 (12.9)	151 (12.7)	
East South Central	378 (6.3)	289 (6.1)	89 (7.5)	
Middle Atlantic	1070 (18.0)	858 (18.0)	212 (17.8)	
Mountain	265 (4.5)	206 (4.3)	59 (4.9)	
New England	424 (7.1)	360 (7.6)	64 (5.4)	
Pacific	858 (14.4)	687 (14.4)	171 (14.3)	
South Atlantic	1242 (20.9)	985 (20.7)	257 (21.6)	
West North Central	335 (5.6)	266 (5.6)	69 (5.8)	
West South Central	618 (10.4)	498 (10.5)	120 (10.1)	

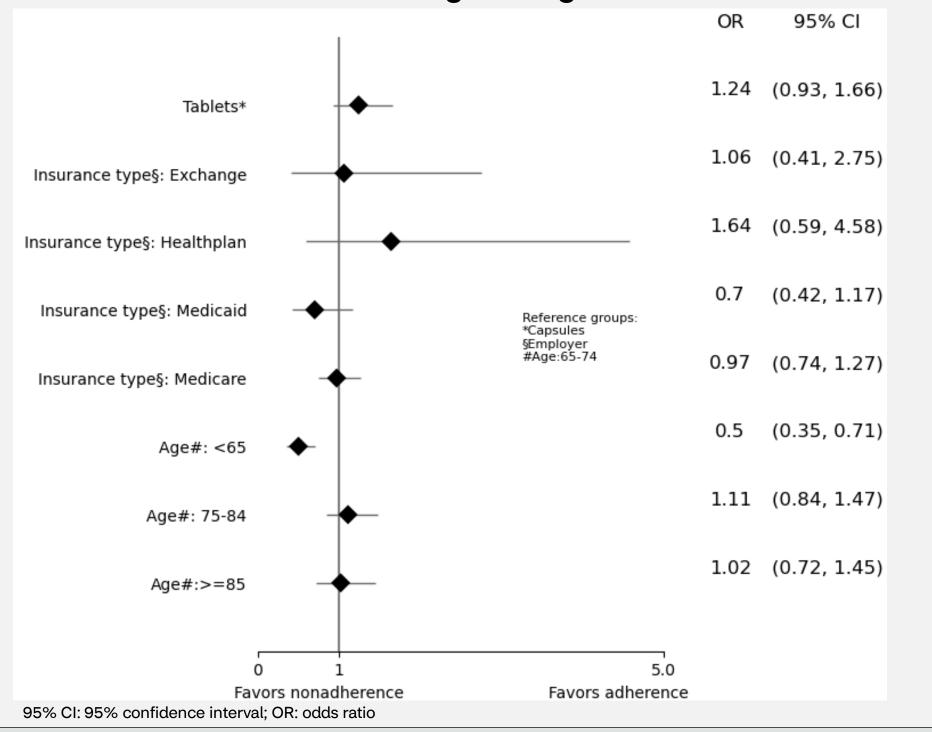
Table 2: Enzalutamide cohort adherence metrics

SD: Standard deviation; Q1: first quartile; Q3: third quartile

SD: Standard deviation; O1: first quartile; O3: third quartile

PDC	Overall N=5997	Capsules N=4795 (80.0%)	Tablet N=1202 (20.0%)	p-value
Mean (SD)	0.963 (0.079)	0.963 (0.080)	0.964 (0.073)	0.521
Median [Q1,Q3]	1.0 [0.964,1.0]	1.0 [0.964,1.0]	1.0 [0.964,1.0]	0.025
Adherent, n (%)	5661 (94.4)	4517 (94.2)	1144 (95.2)	0.215

Figure 1: Enzalutamide cohort adherence logistic regression results



Palbociclib cohort

Table 3: Palbociclib cohort demographics

Variable	Overall N=5361	Capsules N=882 (16.5%)	Tablets N=4479 (83.5%)	p-value
Age, mean (SD)	66.1 (12.6)	68.9 (12.0)	65.6 (12.6)	<0.001
Age, median [Q1,Q3]	67.0 [58.0,75.0]	70.0 [62.0,77.0]	66.0 [57.0,74.5]	< 0.001
Age category, n (%)				< 0.001
<65	1668 (31.1)	326 (37.0)	1342 (30.0)	
65-74	1052 (19.6)	216 (24.5)	836 (18.7)	
75-84	2282 (42.6)	265 (30.0)	2017 (45.0)	
≥85	359 (6.7)	75 (8.5)	284 (6.3)	
Female gender, n (%)	5361 (100.0)	882 (100.0)	4479 (100.0)	1
Insurance type, n (%)				< 0.001
Employer	1787 (33.3)	155 (17.6)	1632 (36.4)	
Exchange	125 (2.3)	22 (2.5)	103 (2.3)	
Healthplan	169 (3.2)	18 (2.0)	151 (3.4)	
Medicaid	463 (8.6)	59 (6.7)	404 (9.0)	
Medicare	2817 (52.5)	628 (71.2)	2189 (48.9)	
Subregion, n (%)				< 0.001
East North Central	613 (11.6)	65 (7.6)	548 (12.3)	
East South Central	268 (5.1)	61 (7.2)	207 (4.7)	
Middle Atlantic	1059 (20.0)	163 (19.2)	896 (20.1)	
Mountain	251 (4.7)	45 (5.3)	206 (4.6)	
New England	391 (7.4)	64 (7.5)	327 (7.3)	
Pacific	669 (12.6)	141 (16.6)	528 (11.9)	
South Atlantic	1222 (23.0)	150 (17.6)	1072 (24.1)	
West North Central	267 (5.0)	61 (7.2)	206 (4.6)	
West South Central	562 (10.6)	101 (11.9)	461 (10.4)	

Table 4: Palbociclib cohort adherence metrics

PDC	Overall N=5361	Capsules N=882 (16.5%)	Tablets N=4479 (83.5%)	p-value
Mean (SD)	0.960 (0.072)	0.962 (0.072)	0.960 (0.072)	0.534
Median [Q1,Q3]	1.0 [0.948,1.0]	1.0 [0.949,1.0]	1.0 [0.948,1.0]	0.173
Adherent, n (%)	5086 (94.9)	837 (94.9)	4249 (94.9)	1

SD: Standard deviation; Q1: first quartile; Q3: third quartile

Figure 2: Palbociclib cohort adherence logistic regression results

