

Table S1. Adherence to abiraterone or enzalutamide in the first three months of observation

Parameter	Abiraterone Cohort (<i>n</i> = 86)	Enzalutamide Cohort (<i>n</i> = 148)	All patients (<i>n</i> = 234)	P value
	Value	Value	Value	
Assessed cycles,				
n (%)	253 (38)	418 (62)	671	
Median, n. [IQR]	3 [3-3]	3 [3-3]	3 [3-3]	0.014
Pill counting				
Non-adherence ^a , pills n. (%)	-805/14.084 (5.7)	-2.191/45.836 (4.7)	-3.008/59.920 (5.0)	<0.001
Non-adherence ^b , median % [IQR]	2.4 [7.7/0.0]	2.4 [5.8/0.0]	2.4 [6.0/0.0]	0.970
Compliance, dose reduction, pts, n. (%)	1 (1)	10 (7)	11 (5)	0.0513
Dose reduction, median % [IQR]	50 [NA]	30 [25-50]	25 [25-50]	
BAAS (patient's reporting)				
Patients missing, n. (%)	9 (10)	28 (19)	37 (16)	0.128
Missing events ^c , n. (%)	13 (5.0)	53 (12.8)	66 (9.8)	0.025
Missing reasons, n. (%)				
Forgot	3 (23)	21 (40)	24 (36)	<0.001
Do not need it	3 (23)	10 (19)	13 (20)	
Quantity	0 (0)	0 (0)	0 (0)	
Other	7 (54)	22 (42)	29 (44)	
Clinical diary				
Non-adherence ^d , patients n. (%)	7 (13)	17 (16)	24 (15)	0.5903
Non-compliance ^e , patients n. (%)	32 (37)	43 (29)	75 (32)	0.1975

^aBased on the proportion of missed/prescribed pills ratio

^bProportions based on missed/prescribed pills ratio, reported as the median (and IQR) of individual proportions over the treatment period

^cProportions based on reported missing events/total number of cycles ratio

^dProportions based on fulfilled/delivered diary ratio in patients completing at least one diary.

^ePatients not completing any of the diaries delivered.

Abbreviations: IQR, interquartile range; m, months; n, number; NA, not assessable.

Table 2S. Logistic regression analysis of baseline factors^a related to non-adherence^b to abiraterone or enzalutamide in the whole period of observation

Variable	OR (95% CI)	P value
Treatment (Abi vs Enza)	1.58 (0.88-2.84)	0.123
Geriatric G8 score (<13 cut-off)	0.33 (0.18-0.61)	<0.001
IADL (<6.5 cut-off)	1.29 (0.72-2.30)	0.395
Concomitant drugs (<3 cut off)	0.43 (0.24-0.76)	0.004
Caregiver presence (no vs yes)	0.36 (0.17-0.75)	0.006

Abbreviations: Abi, Abiraterone; Enza, enzalutamide; IADL, instrumental activity daily living; OR, odds ratio; ROC, receiver operating characteristic curves.

^aWith cut-offs assessed by the ROC curves reported in Figure 1 for the Geriatric G8, IADL and number of concomitant drugs.

^bDefined by the median of individual non-adherence proportions as the cut-off of $\geq 2.4\%$.

In bold statistically significant values-