

# COST ESTIMATE ANALYSIS OF ABIRATERONE PLUS PREDNISONE (AAP) AND ENZALUTAMIDE (ENZ) IN INSURED METASTATIC CASTRATION RESISTANT PROSTATE CANCER PATIENTS IN ARGENTINA: EVIREPRO DATABASE

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## Abstract

**OBJECTIVES:** To estimate costs for metastatic castration-resistant prostate cancer (mRCC) in order to assess the relative value of abiraterone plus prednisone (AAP) and enzalutamide (ENZ) for mCRPC patients.

**METHODS:** A retrospective/prospective cohort study using data from **EVIREPRO** data bases (Real life study of insured cancer pts sponsored by Investigar Foundation)) and treatment costs were obtained from INSSJP formulary (veterans HMO). Males  $\geq 18$  years with  $\geq 1$  year follow up for prostate cancer diagnosis and no end stage renal disease and/or other primary cancer diagnosis were selected according the first observed mCRPC-specific treatment date between 8/25/2015-8/25/2018. Patient characteristics during  $\geq 6$  months prior were described; 12-month all-cause costs in 2018 US dollars were estimated. Generalized linear model was used to compare adjusted cost between AAP and ENZ cohorts. **RESULTS:** Of a total of 651 patients (pts.), 222 were mCRPC pts. from the EVIREPRO databases and were followed up for a mean of 478 days. Among insured mCRPC pts, 133/222 received treatment for at least 1 year., mean age was 69.7 (SD=4.2) years). All-cause 12-month costs were \$7.680.707 USD (mCRPC treatment): medical care: USD 18.260, other pharmacy: USD 12,449. Among 85 AAP and 68 ENZ insured patients, adjusted 12-month costs were \$3.133.752 vs \$4.514.688 ( $p < .0001$ ).

**CONCLUSIONS:** Costs among mCRPC patients show significant variation, with patients initiating on AAP incurring in significantly lower costs compared to ENZ over the first 12-months of treatment. Lower total costs for AAP patients resulted mainly from lower out-patient pharmacy costs and 11 commercialized competitor generics with lower prices.

## Introduction

AAP and ENZ achieve similar cancer control in MPRCC, but they have not been compared head-to-head in a prospective, randomized, controlled trial. This leaves the choice of therapy to a consideration of side-effect profiles, the physician's experience and comfort level with either or both drugs, and patient factors and preferences. In the registration studies that led to approval, both drugs appeared to provide similar cancer control. The choice comes down to patient factors and differences in side effects.

Three studies (1-2-3) have found better tolerance to ABI+P vs ENZ due to less adverse events and potentially lower cost associated with direct cost related with interventions needed to treat them. Cost comparison of both drugs have been reported as quite similar in other countries.

## Material and methods

**Population:** Cohort study of patients with CRMPCC since august 2015 to august 2018 included in **EVIREPRO** database EVIREPRO is a registry of real life patients with diverse metastatic cancer and malignant hematologic conditions conducted by Investigar Foundation at institutions related with public and private Health insurance.

Treatment costs were obtained from INSSJP vademécum.

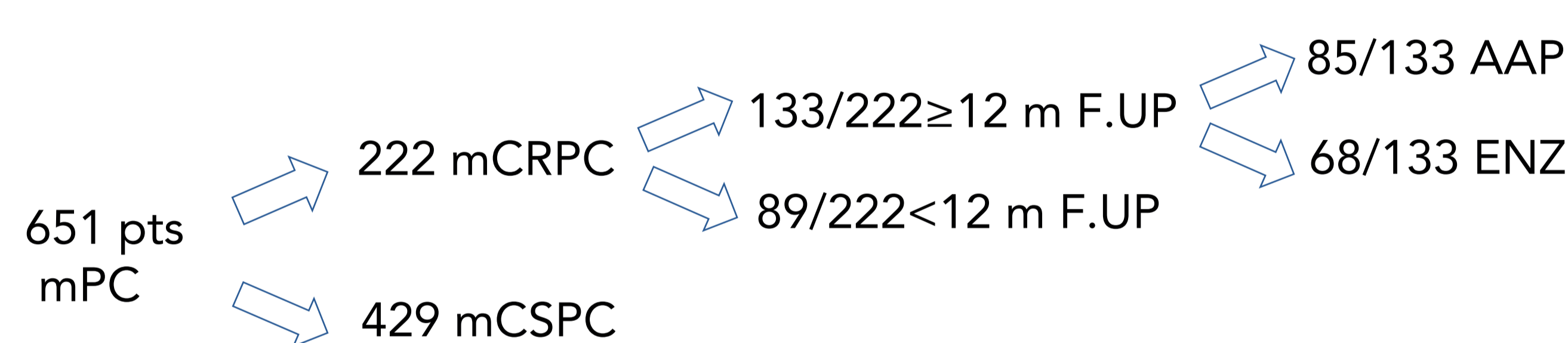
Males  $\geq 18$  years with  $\geq 1$  year follow up for prostate cancer diagnosis and no end stage renal disease and/or other primary cancer diagnosis were selected according the first observed mCRPC-specific treatment date between 8/25/2015-8/25/2018.

Patient characteristics during  $\geq 6$  months prior were described; 12-month all-cause costs in 2018 US dollars were estimated.

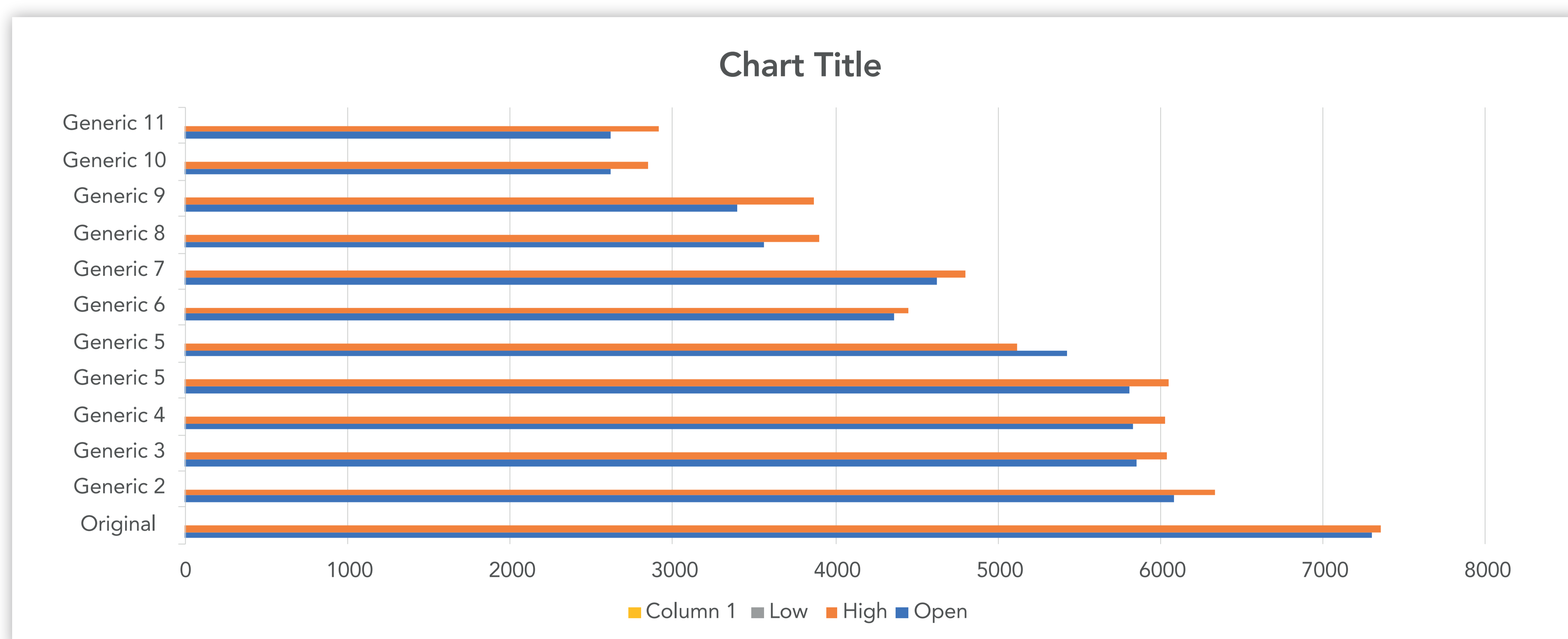
Generalized linear model was used to compare adjusted cost between AAP and ENZ cohorts.

## Population characteristics

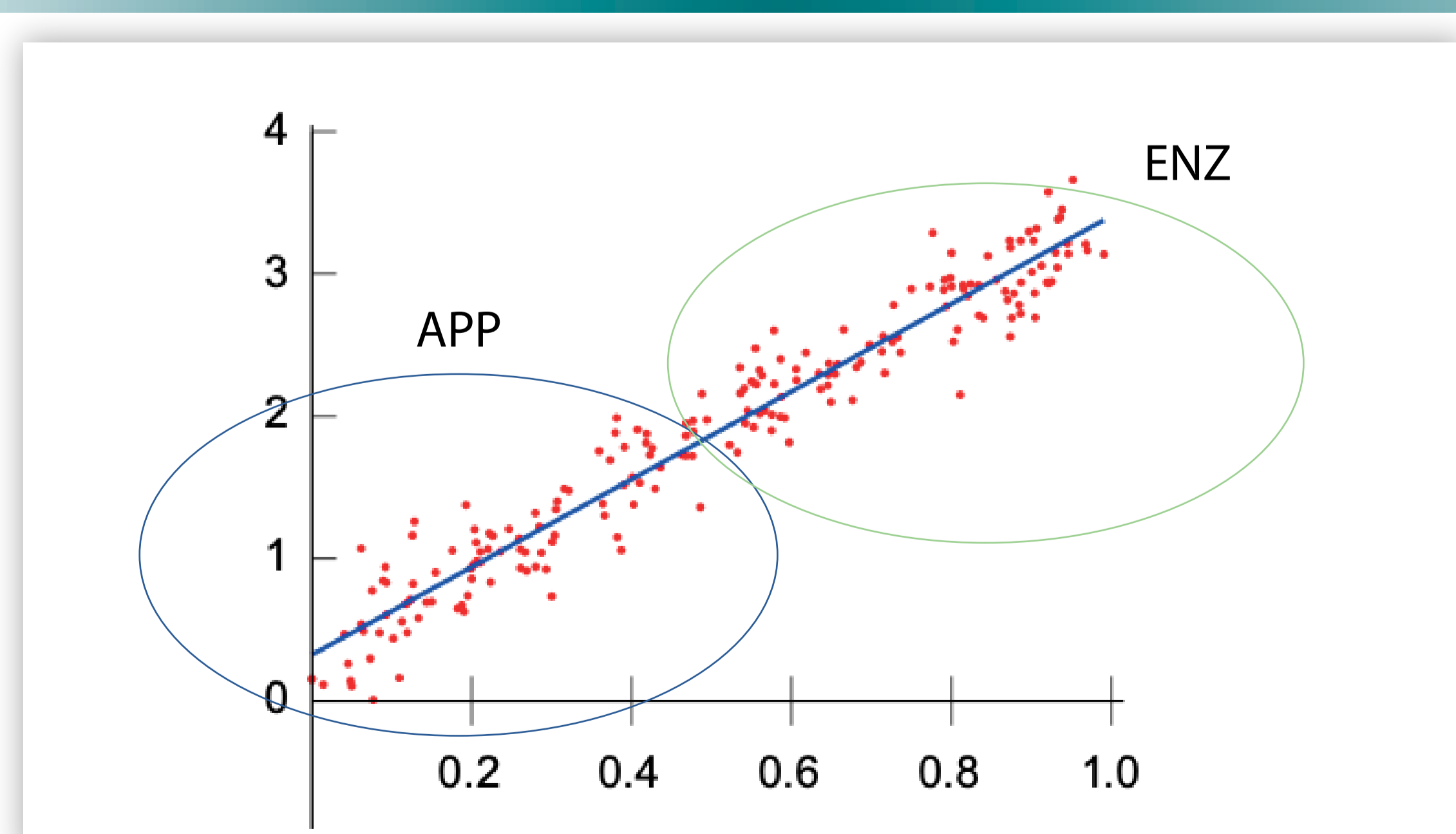
mPC	651
mPC treated with ADT	412/651 (63%)
mCRPC treated with AAP+P or ENZ	222/651 (34.5%)
Non specified	17/651 (2.5%)



## 12 months Abiraterone costs by patient (original and generics)



## Linear regresión costs AAP vs ENZ



## Conclusions

1-Costs among mCRPC patients show significant variation at 12 months

2-Patients initiating on AP incurring significantly lower costs compared to ENZ over the first 12-months of treatment.

3-Lower costs of AAP are related with 11 generics in the Argentina market while ENZ is still without comercializad generics

## References

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