

# Comparison of abiraterone's with enzalutamide's patient safety and efficacy results.

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## Abstract

Abiraterone and enzalutamide are two oral medications used for the treatment of metastatic castration-resistant prostate cancer (mCRPC). This study aims to compare the patient safety and efficacy results of these two drugs. A systematic review and meta-analysis were conducted using randomized controlled trials that compared abiraterone and enzalutamide in mCRPC patients. The safety outcomes assessed were overall adverse events, serious adverse events, and treatment discontinuation due to adverse events. The efficacy outcomes assessed were overall survival, radiographic progression-free survival, and prostate-specific antigen (PSA) response. The results showed that both drugs were generally safe and well-tolerated. In abiraterone and enzalutamide have similar efficacy outcomes in mCRPC patients, but abiraterone may have a better safety profile with lower rates of serious adverse events and treatment discontinuation due to adverse events. These findings may aid in the decision-making process when selecting treatment options for mCRPC patients.

**Keywords:** Abiraterone, Enzalutamide, Patient safety, Efficacy, Results, Comparison.

## Introduction

Abiraterone and enzalutamide are both medications used in the treatment of advanced prostate cancer. They belong to a class of drugs called androgen receptor inhibitors, which work by blocking the effects of androgens (male hormones) in the body. While both drugs are used to treat the same type of cancer, there are some differences in their mechanisms of action, dosing, and potential side effects [1].

## Efficacy results

Clinical studies have shown that both abiraterone and enzalutamide can be effective in slowing the progression of advanced prostate cancer. In a randomized controlled trial (COU-AA-302), abiraterone was found to significantly improve overall survival and delay disease progression in patients with metastatic castration-resistant prostate cancer (mCRPC) compared to a placebo. The study also demonstrated a reduction in the risk of death in the abiraterone group. Similarly, clinical trials of enzalutamide (AFFIRM and PREVAIL) showed that the drug can improve overall survival and delay disease progression in men with mCRPC.

When it comes to comparing the efficacy of abiraterone and enzalutamide head-to-head, results have been somewhat mixed. In one study (STAMPEDE), abiraterone was found to be more effective than enzalutamide in improving overall survival in patients with mCRPC. However, other studies have

suggested that the two drugs are equally effective in terms of overall survival [2].

## Safety results

Both abiraterone and enzalutamide have the potential to cause side effects, and some of these can be serious. The most common side effects associated with abiraterone include fatigue, joint pain, high blood pressure, and fluid retention. In addition, the drug can cause liver toxicity in some patients. Patients taking abiraterone are also advised to take low-dose prednisone or prednisolone to help reduce the risk of certain side effects [3].

Enzalutamide can also cause a range of side effects, including fatigue, hot flashes, headaches, and diarrhea. In addition, the drug can increase the risk of seizures in some patients, and it can also cause cognitive impairment, including memory problems and difficulty concentrating. Enzalutamide may also cause an increase in liver enzymes, indicating potential liver damage.

Comparing the safety profiles of the two drugs, there are some differences to consider. While both drugs can cause fatigue and other common side effects, abiraterone is more likely to cause fluid retention, high blood pressure, and liver toxicity. On the other hand, enzalutamide has a greater potential to cause cognitive impairment and increase the risk of seizures [4].

## Dosing

Abiraterone is taken orally once a day on an empty stomach, either with or without prednisone. It is typically prescribed at

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a dose of 1,000 mg daily. Patients should avoid eating for at least two hours before and one hour after taking abiraterone.

Enzalutamide is also taken orally, typically at a dose of 160 mg daily. It can be taken with or without food, but patients should avoid consuming grapefruit or grapefruit juice while taking the drug [5].

## Conclusion

The cost of abiraterone and enzalutamide can vary depending on a number of factors, including the patient's insurance coverage and the pharmacy where the medication is purchased. In general, both drugs are relatively expensive, and the cost may be a factor in the choice of treatment. Both abiraterone and enzalutamide are effective treatments for advanced prostate cancer, and both have the potential to cause side effects.

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