Bavdegalutamide (ARV-110), a PROTAC® androgen receptor degrader, in men with metastatic castration-resistant prostate cancer and mutations in the androgen-binding region of the androgen receptor

This summary contains information from the scientific poster:

Phase 1/2 Study of Bavdegalutamide, a PROteolysis TArgeting Chimera (PROTAC) Androgen Receptor Degrader, in Metastatic Castration-Resistant Prostate Cancer: Radiographic Progression-Free Survival in Patients With Androgen Receptor Ligand-Binding Domain Mutations

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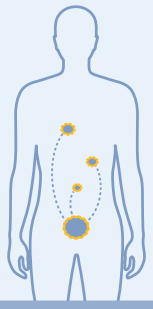
What is prostate cancer?

Prostate cancer is cancer of the prostate gland. **Male hormones** (**androgens**), including testosterone, **promote cancer growth by binding androgen receptors** on prostate cancer cells

- **Castration-sensitive** prostate cancer is cancer that is controlled by **keeping the testosterone level low** (called the **castrate level**)
- **Castration-resistant** prostate cancer is cancer that is still growing even when the testosterone levels are at or below the castrate level

Metastatic prostate cancer is cancer that **started in the prostate gland and has spread** to other parts of the body



Why are mutations important in prostate cancer?

Some mutations are inherited and make it more likely that a man will **develop prostate cancer** and/or **metastatic prostate cancer**

Other mutations can develop in prostate cancer cells during cancer treatment (called acquired mutations)

Some men with prostate cancer develop **acquired mutations in the part of the androgen receptor that binds androgen** (called the androgen-binding domain). Common mutations in this region include ***AR* T878X**, ***AR* H875Y**, and ***AR* L702H**

- In previous studies, these mutations have been shown to **be associated with worse outcomes** in men with prostate cancer

What is bavdegalutamide?

Bavdegalutamide, also called **ARV-110**, is a drug that is being evaluated as a treatment for metastatic prostate cancer. It is a **PROteolysis TArgeting Chimera (PROTAC) androgen receptor degrader**

- PROTAC protein degraders are designed to bind specific proteins of interest in cells, which causes those proteins to be **marked for elimination** by a natural protein disposal system in the body
- Bavdegalutamide works by **causing androgen receptors to be eliminated**, which blocks the activity of androgens and could potentially stop prostate tumors from growing or cause the tumors to shrink
  - In laboratory research studies, bavdegalutamide caused the elimination of androgen receptors with **certain mutations in the androgen-binding domain and androgen receptors without mutations**

This summary describes results from a clinical study of bavdegalutamide in men with metastatic castration-resistant prostate cancer. **The benefits of bavdegalutamide were evaluated in men** who had **mutations in the androgen-binding region of the androgen receptor.**

For men with mutations in the androgen-binding region of the androgen receptor, this summary will describe

- **How long those men taking bavdegalutamide live without their cancer getting worse based on medical imaging (such as a CT or MRI)**
- **How well bavdegalutamide can lower prostate-specific antigen[a] levels in those men**

For all men who took bavdegalutamide 420 mg once per day, this summary will describe

- **The side effects men experience while taking bavdegalutamide**

[a]Prostate-specific antigen, or PSA, is a protein produced by prostate cancer cells as well as by normal prostate cells. The blood level of PSA is often elevated in men with prostate cancer and testing is used to monitor the progression of prostate cancer. If a man's PSA level begins to rise after prostate cancer treatment, it may be the first sign that the cancer is getting worse/coming back

Analysis Population

WHO WAS INCLUDED IN THIS ANALYSIS?

153

153 MEN TOOK BAVDEGALUTAMIDE 420 MG ONCE PER DAY IN THIS STUDY

45

45 OF THOSE MEN HAD TUMORS WITH CERTAIN MUTATIONS IN THE ANDROGEN-BINDING REGION OF THE ANDROGEN RECEPTOR EXCEPT FOR *AR* L702H ALONE

26

26 OF THOSE MEN HAD TUMORS WITH *AR* T878X AND/OR *AR* H875Y MUTATIONS BUT DID NOT HAVE AN *AR* L702H MUTATION

Before the study

100% had received a novel hormonal agent[b]

33% had received chemotherapy (taxane)[c]

[b]Novel hormonal therapies work either by blocking testosterone production or by blocking the activity of testosterone on cancer cells. This may slow or stop cancer growth

[c]Chemotherapy is a treatment that damages cancer cells. Taxanes are a class of commonly used chemotherapy agents for prostate cancer

Results

WHAT WERE THE RESULTS OF THE ANALYSIS IN MEN WITH A MUTATION IN THE ANDROGEN-BINDING REGION OF THE ANDROGEN RECEPTOR?

8.2 months or longer

Half of the men taking bavdegalutamide lived without their cancer getting worse for **8.2 months or longer**

36%

Prostate-specific antigen levels were reduced by 50% or more in **36% of men taking bavdegalutamide**

24 weeks or longer

36% of men took **bavdegalutamide for 24 weeks or longer**

WHAT WERE THE RESULTS OF THE ANALYSIS IN MEN WITH *AR* T878X AND/OR *AR* H875Y MUTATIONS?

11.1 months or longer

Half of the men taking bavdegalutamide lived without their cancer getting worse for **11.1 months or longer**

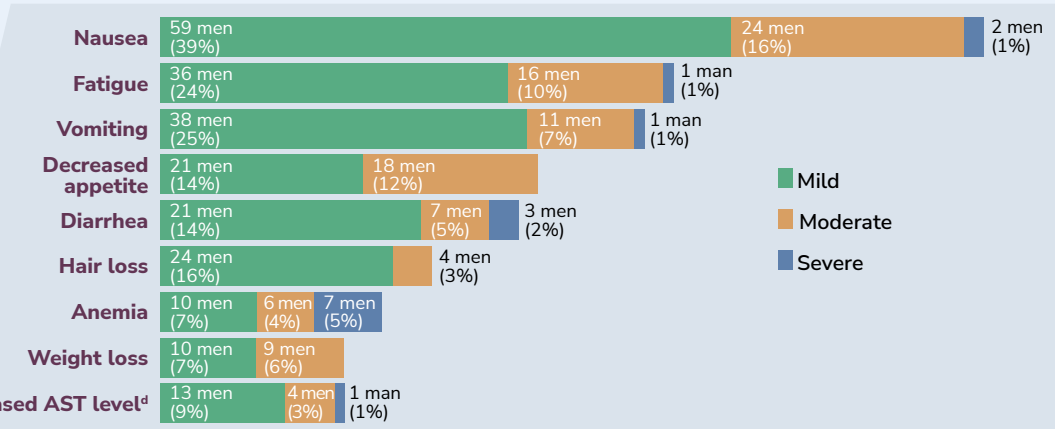
54%

Prostate-specific antigen levels were reduced by 50% or more in **54% of men taking bavdegalutamide**

24 weeks or longer

42% of men took **bavdegalutamide for 24 weeks or longer**

Most of the 153 men (with or without mutations in the androgen-binding region of the androgen receptor) taking bavdegalutamide had **mild or moderate side effects**. The most common side effects were:



[d]AST is aspartate aminotransferase, a substance produced by the liver

TAKE-HOME MESSAGES

- Treatment with bavdegalutamide showed **clinical benefits** for men with metastatic castration-resistant prostate cancer **whose tumors have certain mutations in the androgen-binding region of the androgen receptor** (including the ***AR* T878X and/or *AR* H875Y mutations**)
- Most of the **side effects** with bavdegalutamide **were mild or moderate**; the most common side effects were **nausea**, **fatigue**, and **vomiting**

Who sponsored the study?

This study is sponsored by **Arvinas Androgen Receptor, Inc.**

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Arvinas thanks the **men who volunteered to participate in this study** and **their caregivers**, as well as the **investigators**, **researchers**, and **coordinators** who contributed to this study

Writing and editorial support for this summary was provided by Justine Lempart, PhD, and Melissa Austin of Apollo Medical Communications, part of Helios Global Group, and funded by Arvinas Operations, Inc.

Where can I find more information?

For more information on **this study**

VIEW CLINICAL TRIAL RECORD

For more information on **clinical studies in general**

VIEW INFORMATION