OPN-6602, a dual EP300/CBP bromodomain inhibitor modulates androgen-driven transcription in mCRPC

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OPN-6602 and OPN-6742 downregulate the androgen receptor (AR) pathway

OPN-6602 and OPN-6742 caused significant downregulation of AR signature genes (KLK2, KLK3, FKB5, and TMPRSS2) with stronger effects in the OPN-6602 + enzalutamide combination group. Alterations of AR pathway genes with enzalutamide single-agent treatment were not observed.

OPN-6602 and OPN-6742 are orally bioavailable, highly potent and selective EP300/CBP inhibitors. Based on safety, PK, and preclinical animal model data, OPN-6602 is favored for oral once daily dosing.

RESULTS

Conclusions:
- OPN-6602 and OPN-6742 are orally bioavailable, highly potent and selective EP300/CBP inhibitors.
- Based on safety, PK, and preclinical animal model data, OPN-6602 is favored for oral once daily dosing.
- In the preclinical human mCRPC models OPN-6602 suppresses tumor growth.
- Further development of OPN-6602 as a single agent and in combination with other agents in mCRPC and other oncology indications is planned.
- A first-in-human study of OPN-6602 in cancer patients is scheduled to start in 2024.