

Applications

- Anti-Cancer (prostate, breast, ovarian)
- Anti-HIV, anti-dementia

Advantages

- Natural product based drug
- Novel and specific mechanism of action
- Minimal cytotoxicity

Inventors

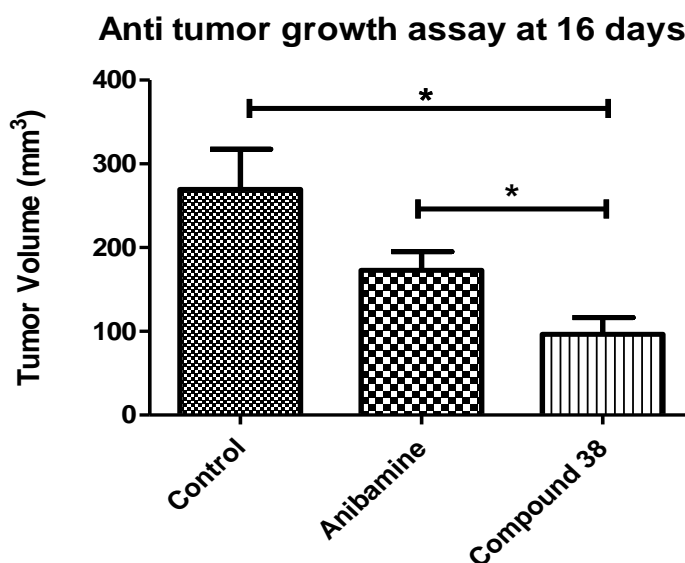
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Technology Summary

Prostate cancer is one of the leading causes of death among males in the world. Approximately six million men die annually from prostate cancer, and the global market value for the treatment and prevention of prostate cancer is estimated to be around 50 billion dollars. One aspect of prostate cancer is the contribution of inflammatory mediators and their associated receptors in the progression and metastasis of cancer cells. Prostate cancer cells upregulate receptors associated with inflammatory responses and may signal cancer cell progression and migration. Dr. Zhang synthesized and tested a series of Anibamine derivatives, a natural product known to inhibit prostate cancer cell proliferation. These compounds have novel skeletal structures that provide a novel and specific receptor mechanism of action. Experiments conducted by Dr. Zhang show the derivatives inhibit prostate cancer cell invasion, have anti-proliferative activity and have a very high affinity for the target receptor. Importantly, the derivatives were found to have minimal cytotoxic effects while maintaining their potency for inhibiting prostate cancer cell proliferation.



Technology Status

In vitro data available

Patent pending: U.S. rights available

This technology is available for licensing to industry for further development and commercialization.