

Killing two birds with one stone: A dual-action drug to combat tumors and cachexia

Principal Investigator: Dr. Peter Leiluo GENG

Technology

Using large-scale screening and genetic manipulation methods, we identified a new protein X that is specifically found in cancer cells and energy-wasting fat cells. Blocking X can reduce tumor growth and prevent energy loss by maintaining mitochondrial health. Based on these findings, we developed small molecule inhibitors that target X, which can help treat cancer and prevent cachexia at the same time.

Stage of Development

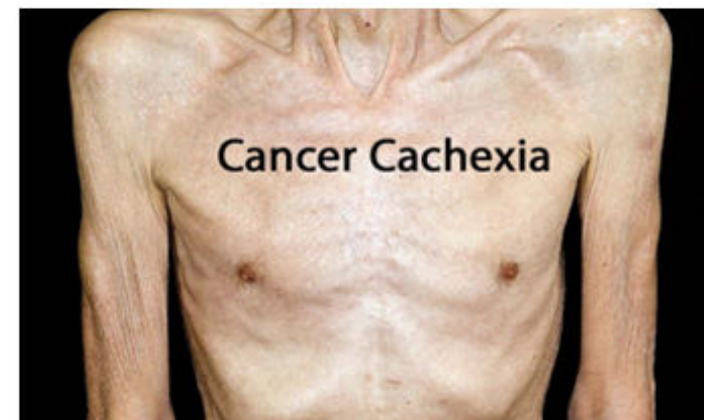
- ◆ Discovery and validation of protein target X have been completed by cell and animal studies.
- ◆ Several small molecule compounds targeting protein X have been developed and are being evaluated in mouse models.

Key Advantages

- ◆ Novel target and first-in-class drug
- ◆ Dual effects
- ◆ High specificity & Low side-effects
- ◆ Clear pharmacological mechanisms
- ◆ Wide range of applications

Opportunities

- ◆ First-in-class dual-purpose specific drug for tumor treatment and cachexia prevention in huge global market
- ◆ Potentially synergistic effects in combination with standard anti-cancer therapy to maximize treatment efficacy



Intellectual property

Related patents are being prepared and will be submitted soon.

Contact

✉ Email: llgeng@hku.hk



**HKU
Med**

LKS Faculty of Medicine
The University of Hong Kong
香港大學李嘉誠醫學院