



Tae-Hyoung Kim<sup>†1</sup>, Il-Hun Jung<sup>1</sup>, Su Jin Lee<sup>1</sup>, Mi-Kyung Kim<sup>1</sup>, Hyung Heon Kim<sup>2</sup>, Yuna Chae<sup>1\*</sup>

<sup>†</sup>Presenter, <sup>\*</sup>Corresponding author; <sup>1</sup>Dong-A ST Co., Ltd., Seoul, Republic of Korea; <sup>2</sup>NeuroBo Pharmaceutical, Inc., Boston, MA, USA

## FINANCIAL DISCLOSURES

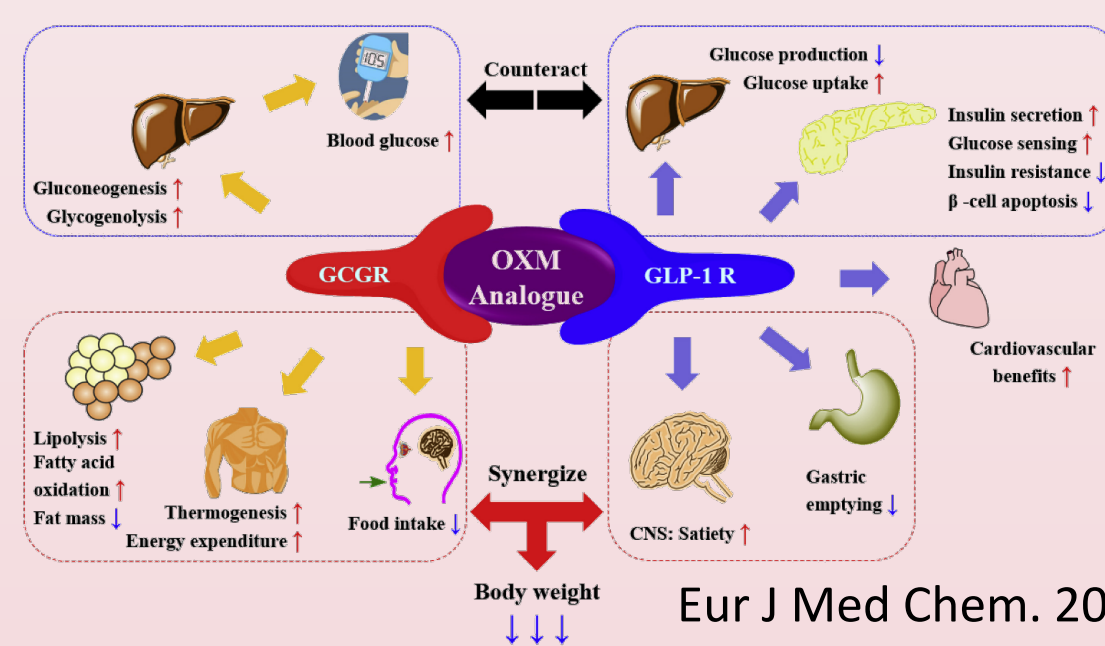
None.

## BACKGROUND

- Obesity often leads to abnormalities in lipid metabolism and weight loss is accompanied by a decrease in lean body mass.
- A mechanism that supports weight loss while minimizing lean body mass loss and controlling lipids simultaneously can be an efficient treatment option.

## OBJECTIVE

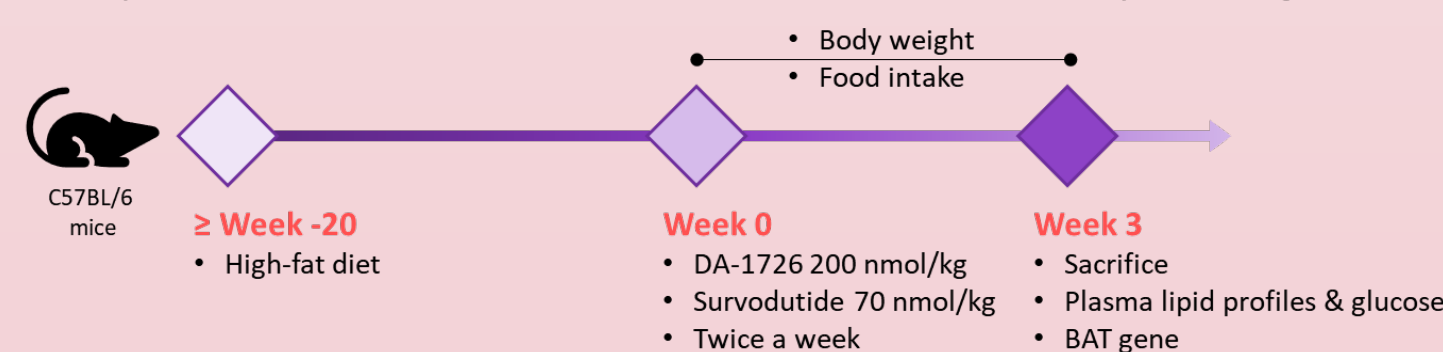
DA-1726 is a novel oxyntomodulin analogue undergoing a Phase 1 clinical trial for obesity. This study focuses on the pharmacological effects of improving body composition and lipid profiles in rodent models.



Eur J Med Chem. 2020;203:112496

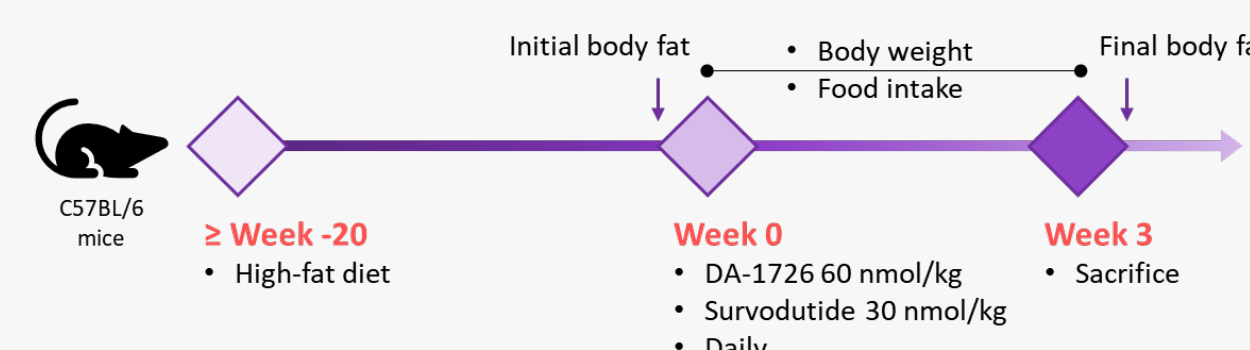
## METHODS AND MATERIAL

- Comparison with Survodutide on body weight loss

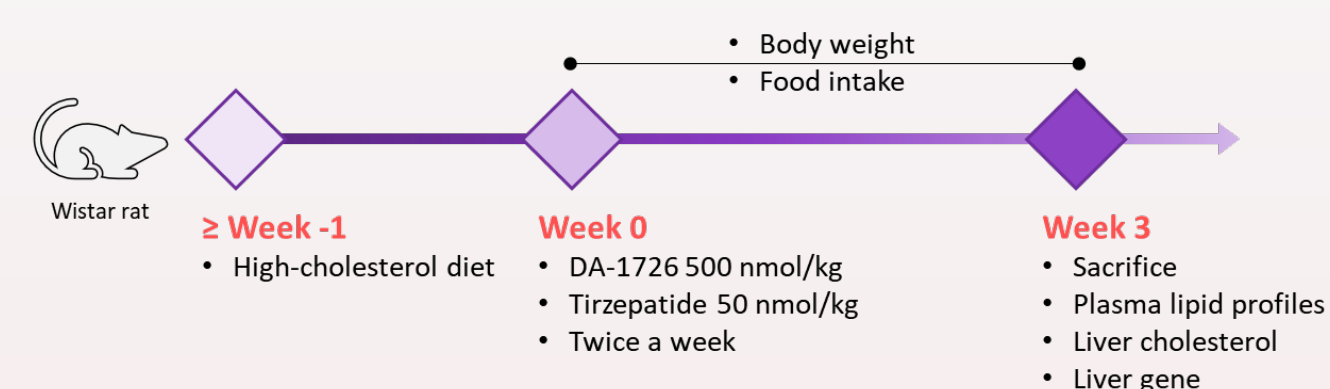


84<sup>TH</sup> SCIENTIFIC SESSIONS  
ORLANDO, FL | HYBRID | JUNE 21-24, 2024

- Comparison with Survodutide on fat mass loss

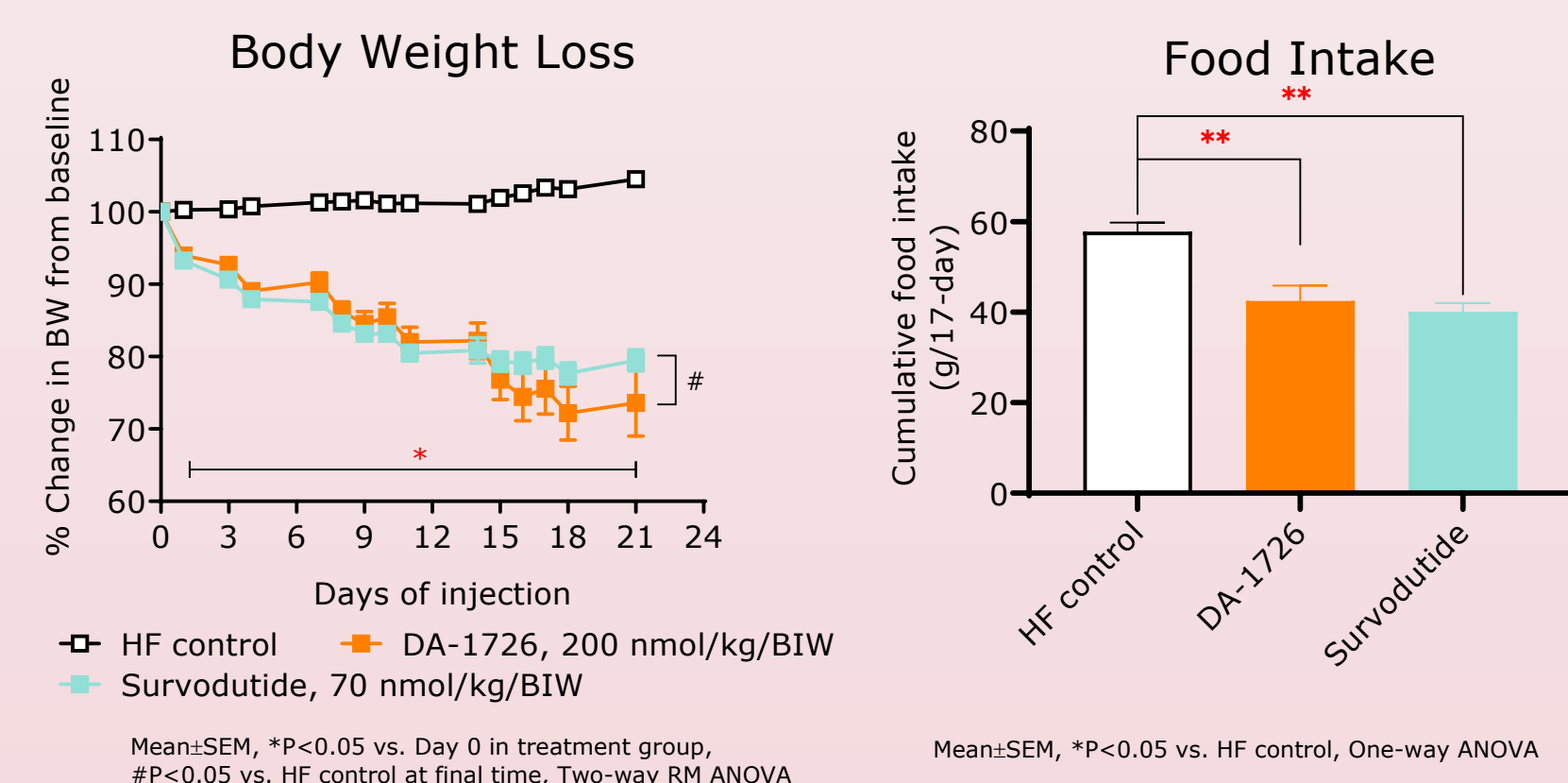


- Comparison with Tirzepatide on lipid-lowering

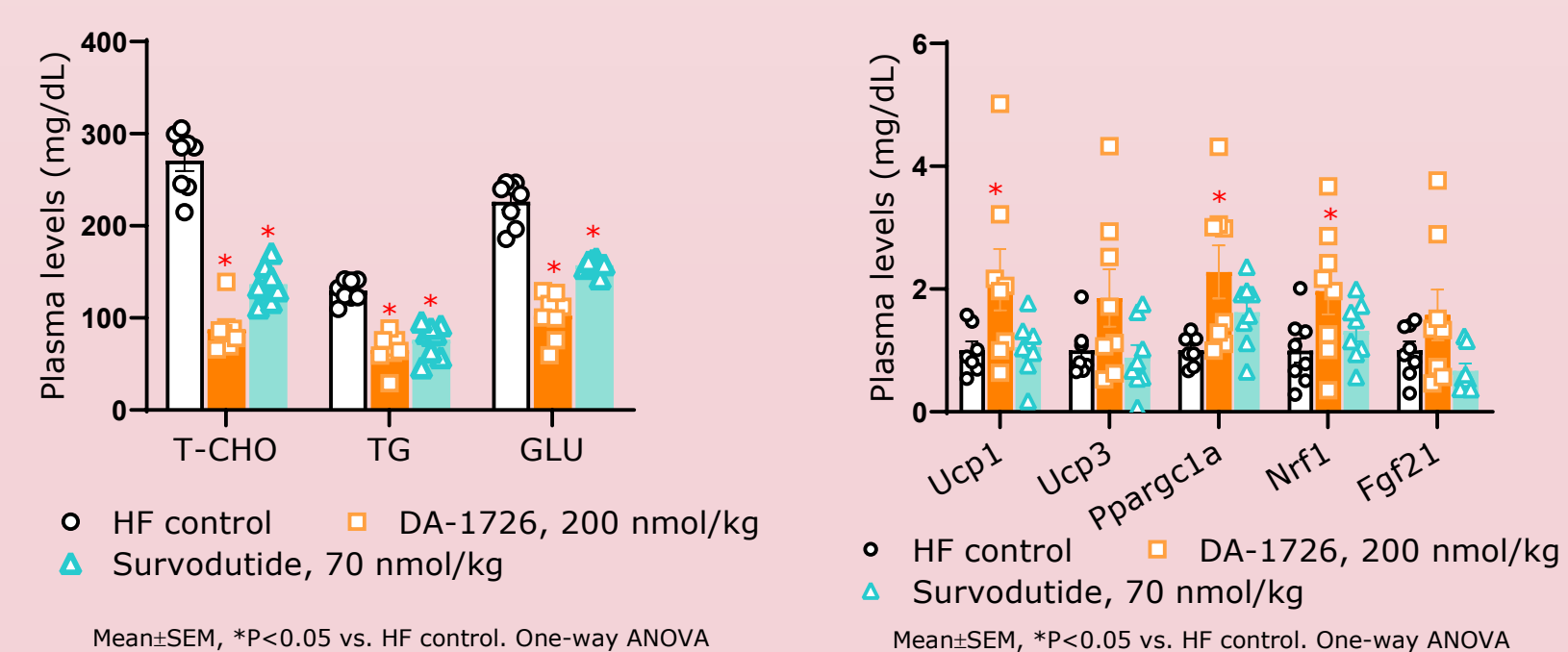


## RESULTS

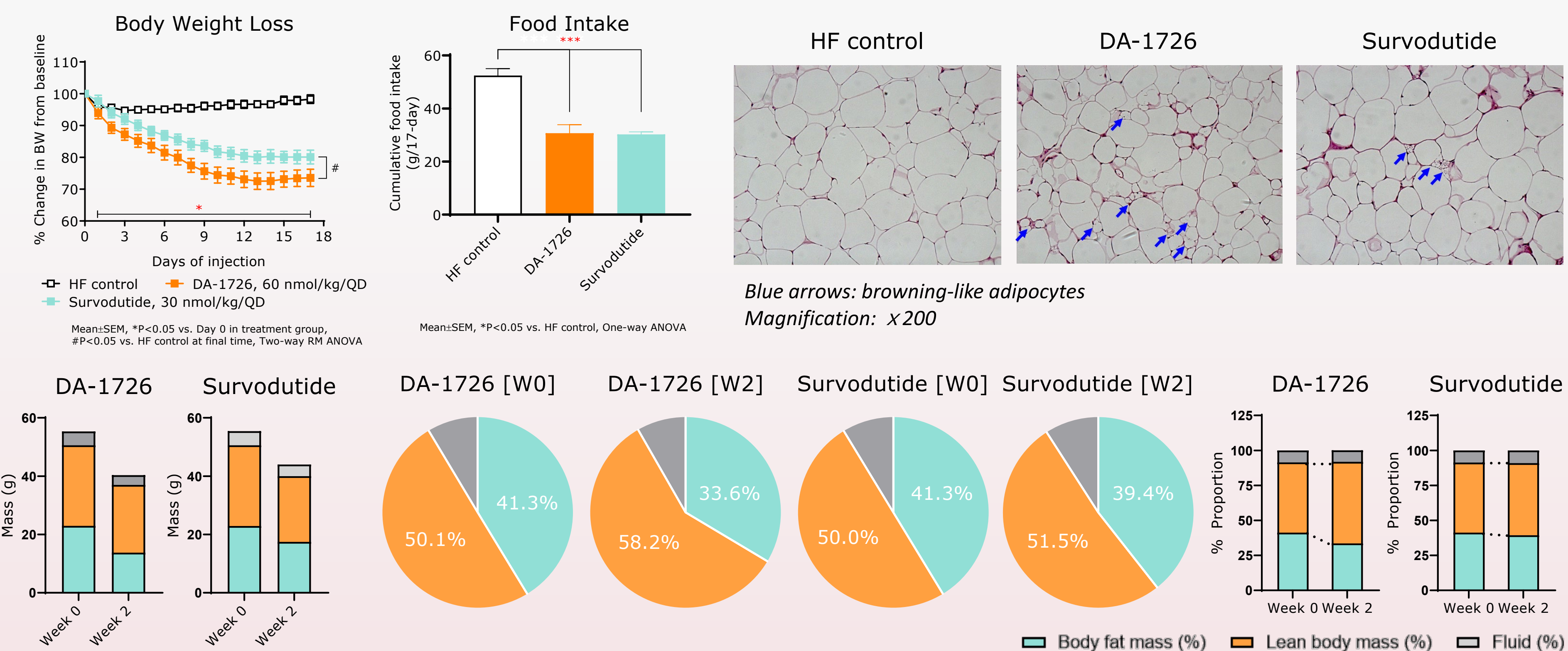
- DA-1726 is more effective in weight loss than Survodutide in HF mice



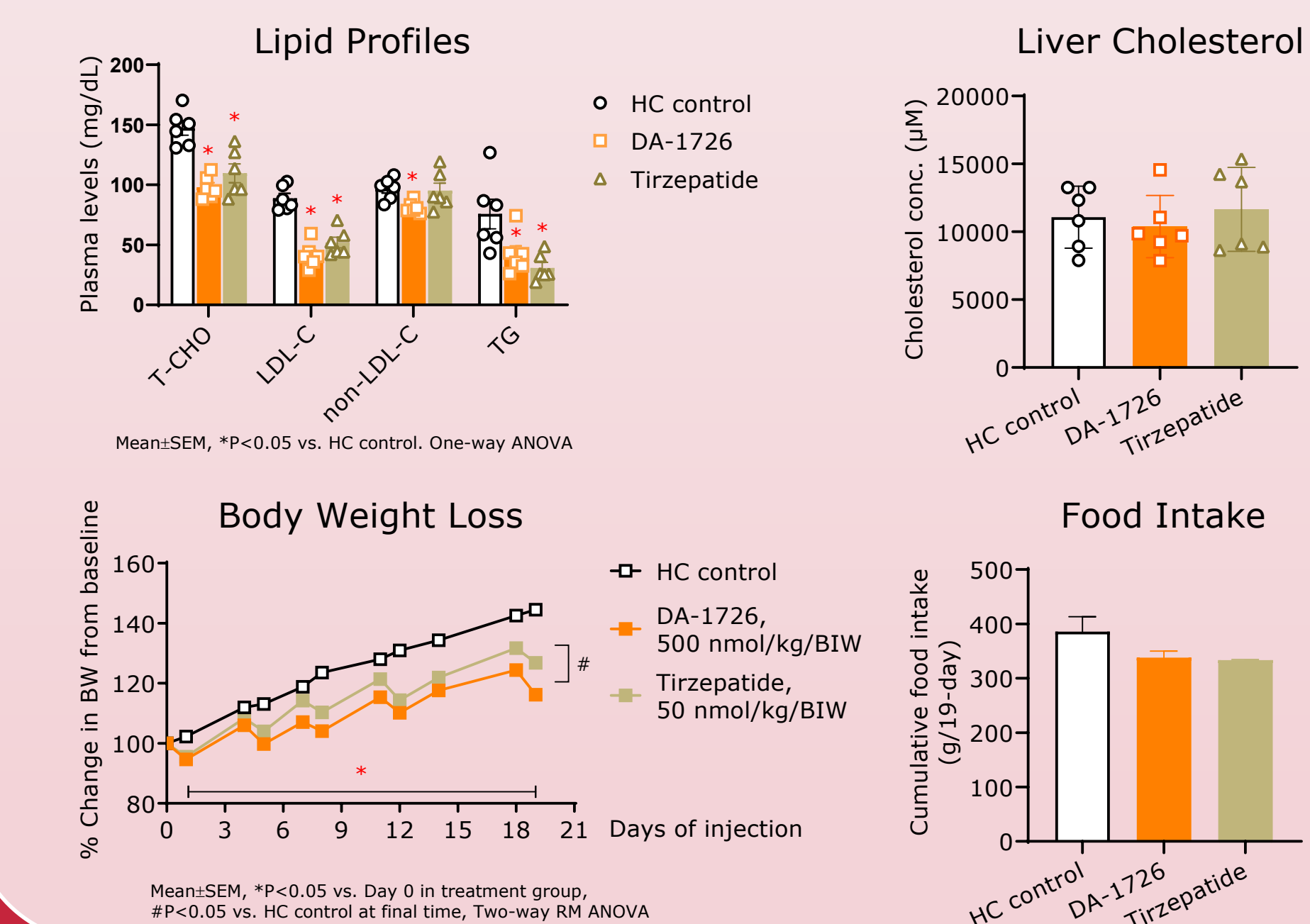
Plasma Biochemistry Analysis Thermogenesis-related Gene in BAT



- DA-1726 effectively reduces body fat mass and relatively preserves lean body mass in HF mice



- DA-1726 is more effective in regulating lipid metabolism than Tirzepatide in hypercholesterolemic rats



## Contact information

Yuna Chae, ynchae@donga.co.kr; Mi-Kyung Kim, kmk@donga.co.kr; Hyung Heon Kim, HHKim@neurobopharma.com

## CONCLUSION

- Compared to Survodutide, DA-1726 led to greater weight loss, superior reduction in body fat mass, and better preservation of lean body mass in DIO mice.
- In a hypercholesterolemic rat model, DA-1726 was more effective in regulating lipid metabolism despite having a similar food intake to those taking Tirzepatide.
- These findings suggest that DA-1726 is a highly effective obesity treatment, offering more benefits in weight loss, overall body composition improvement, and lipid reduction compared to competitors.