

Why a Long-Acting Anti-Myostatin and Anti-GDF11 Antibody?

There is a need for muscle preservation

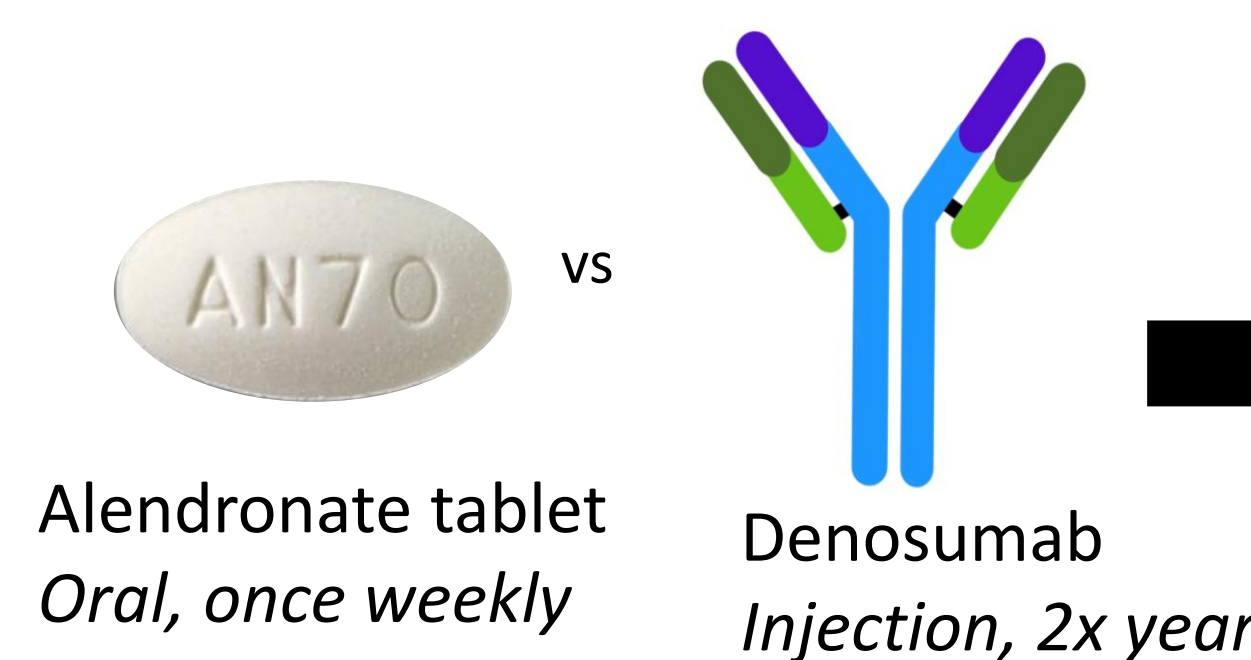
Quotes from studies looking at weight loss => regain

*"For every 1 kg weight lost... 0.32 kg lean tissue was lost and for every 1 kg weight regained..., only 0.08 kg lean tissue was regained"*¹

*"Compared to (control) group, the [weight loss/regain] group had a statistically significant 39% increased risk of a frailty fracture"*²

Patients prefer infrequent dosing

Osteoporosis: 2-year randomized crossover study³



Patient preference?
92% preferred injection
8% preferred oral tablet

Long acting injection is favored

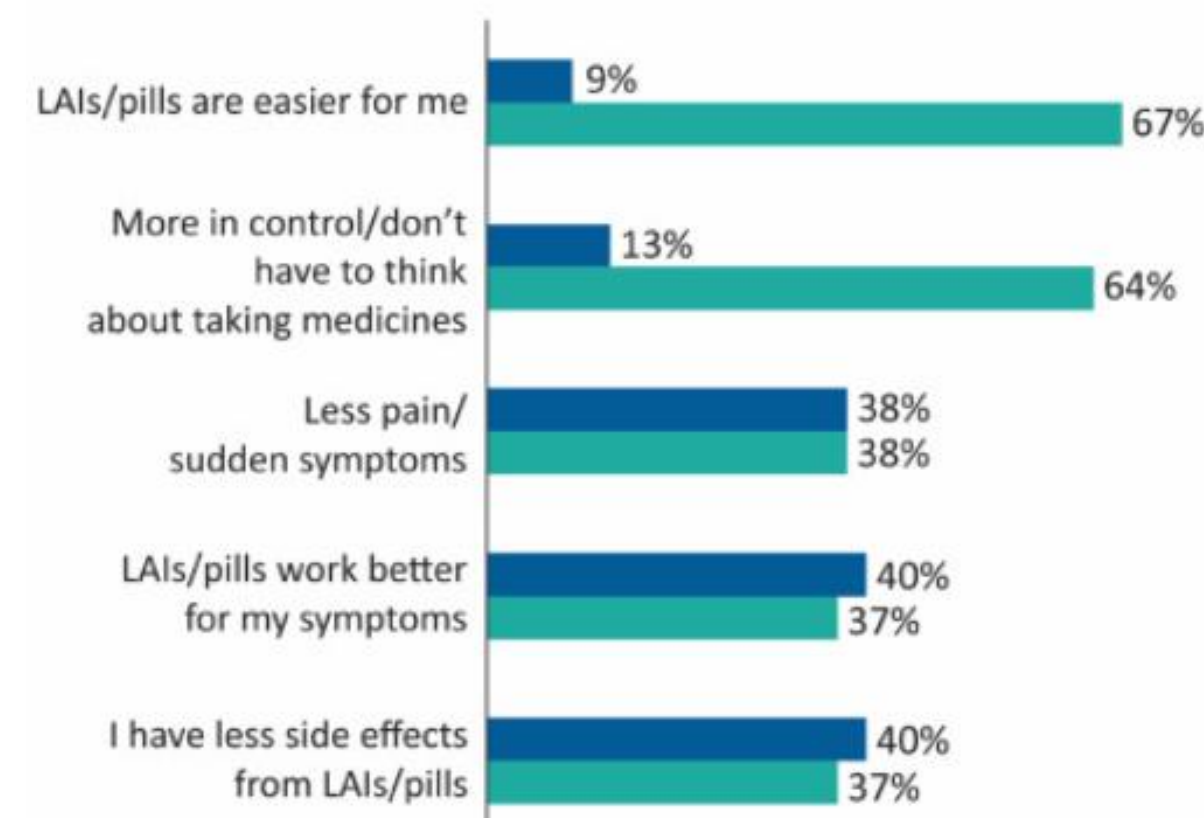
Schizophrenia: Medication Preference Questionnaire from NCT01515423⁴

2. Preference based on personal experience (Page 2)

Based on your experience with both pills and injections, which ONE you prefer?

☐ Pills Why do you prefer PILLS?

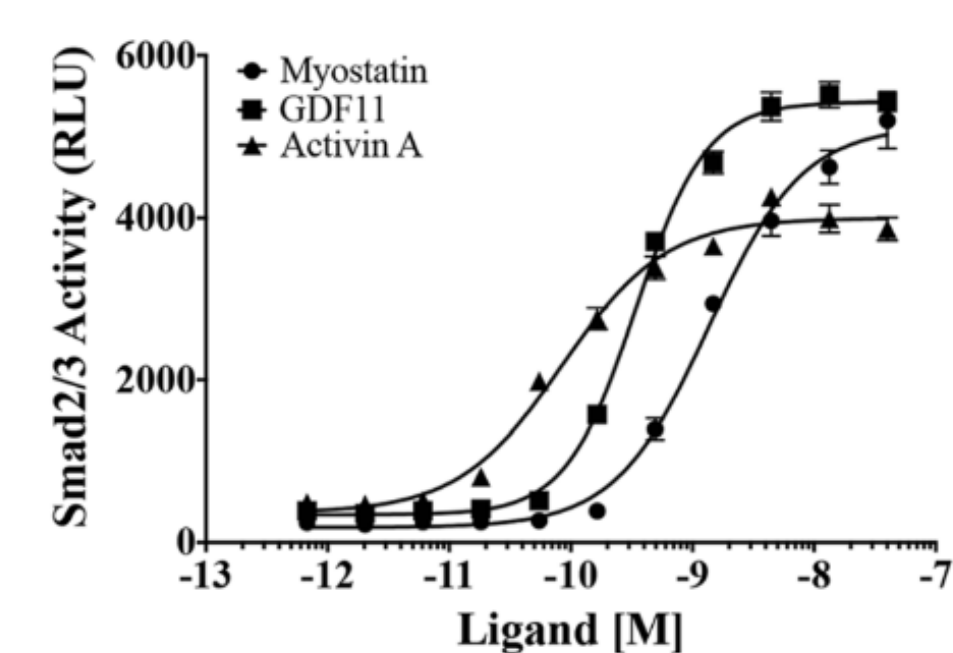
☐ Injection Why do you prefer INJECTIONS?



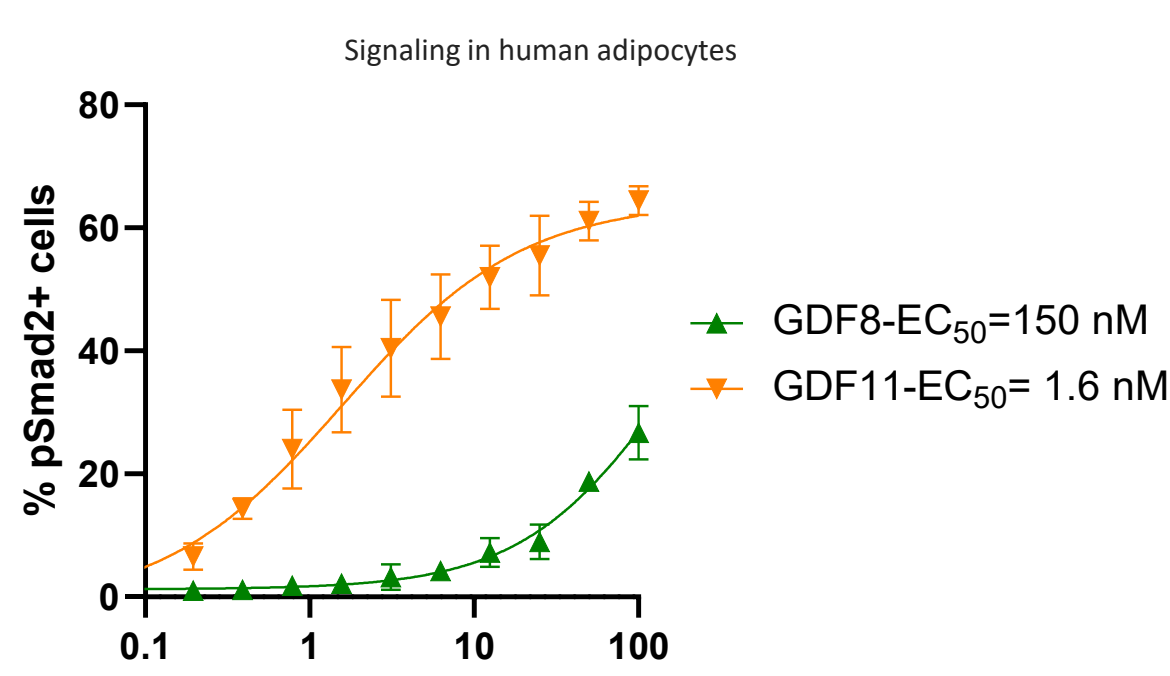
Preference driven by convenience

Myostatin and GDF11 impact muscle and fat

GDF11 is more potent than myostatin signaling in muscle⁵

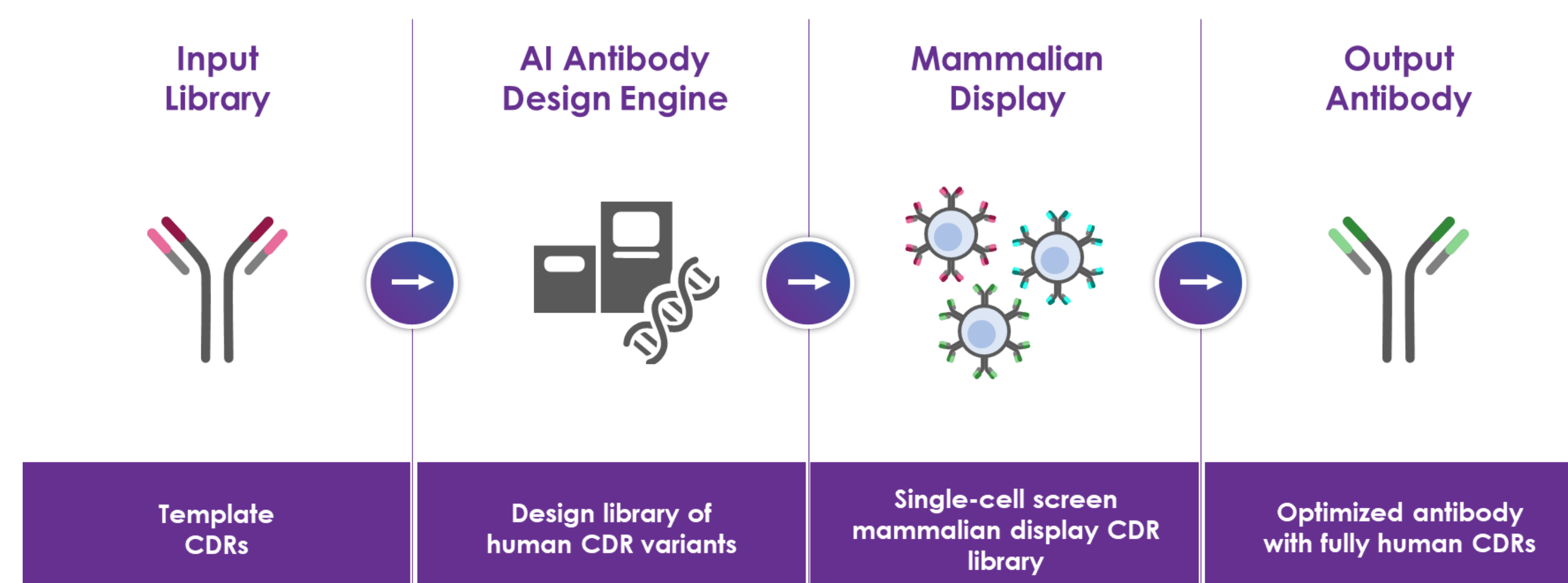


GDF11 is more potent than GDF8 signaling in human fat cells



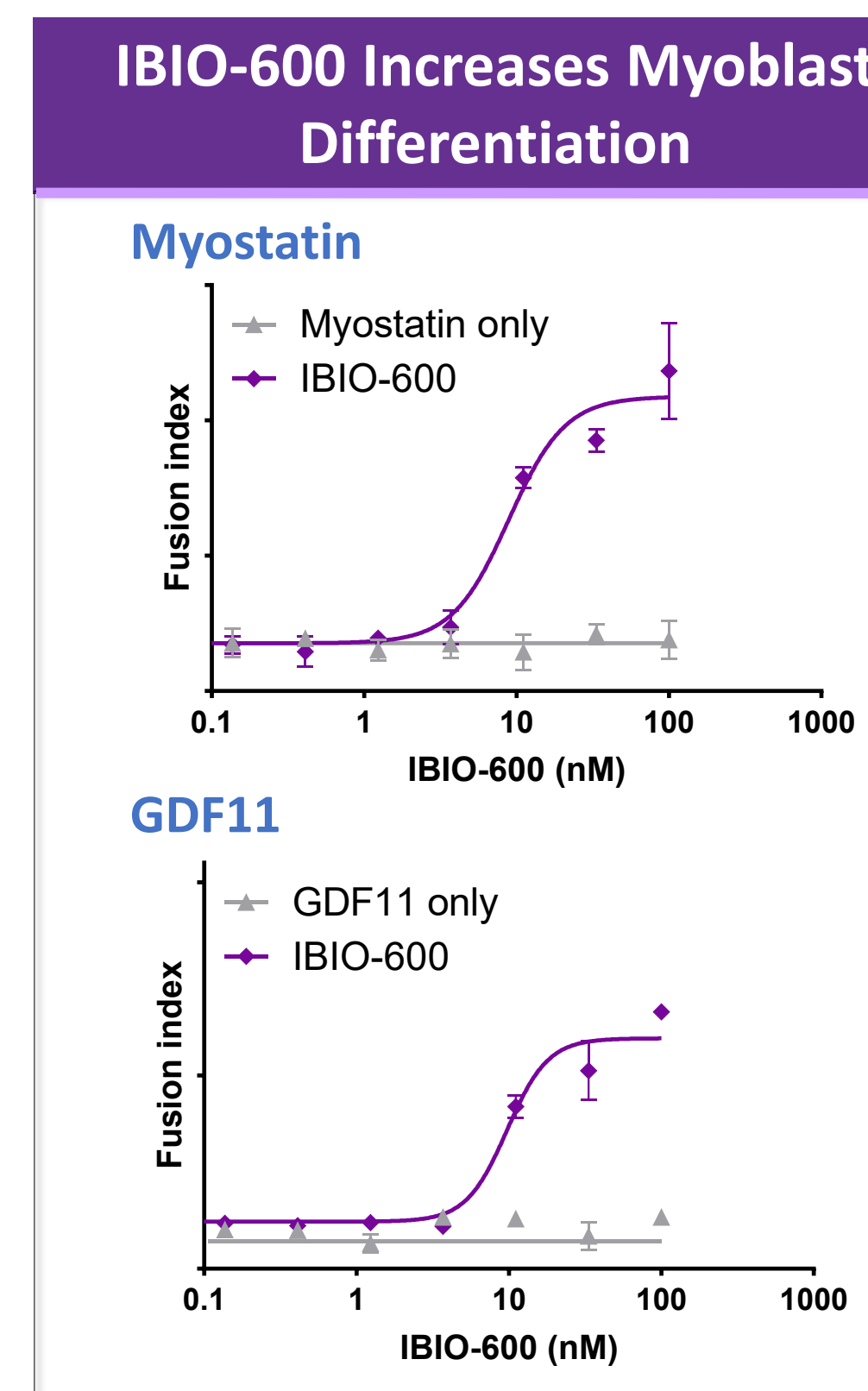
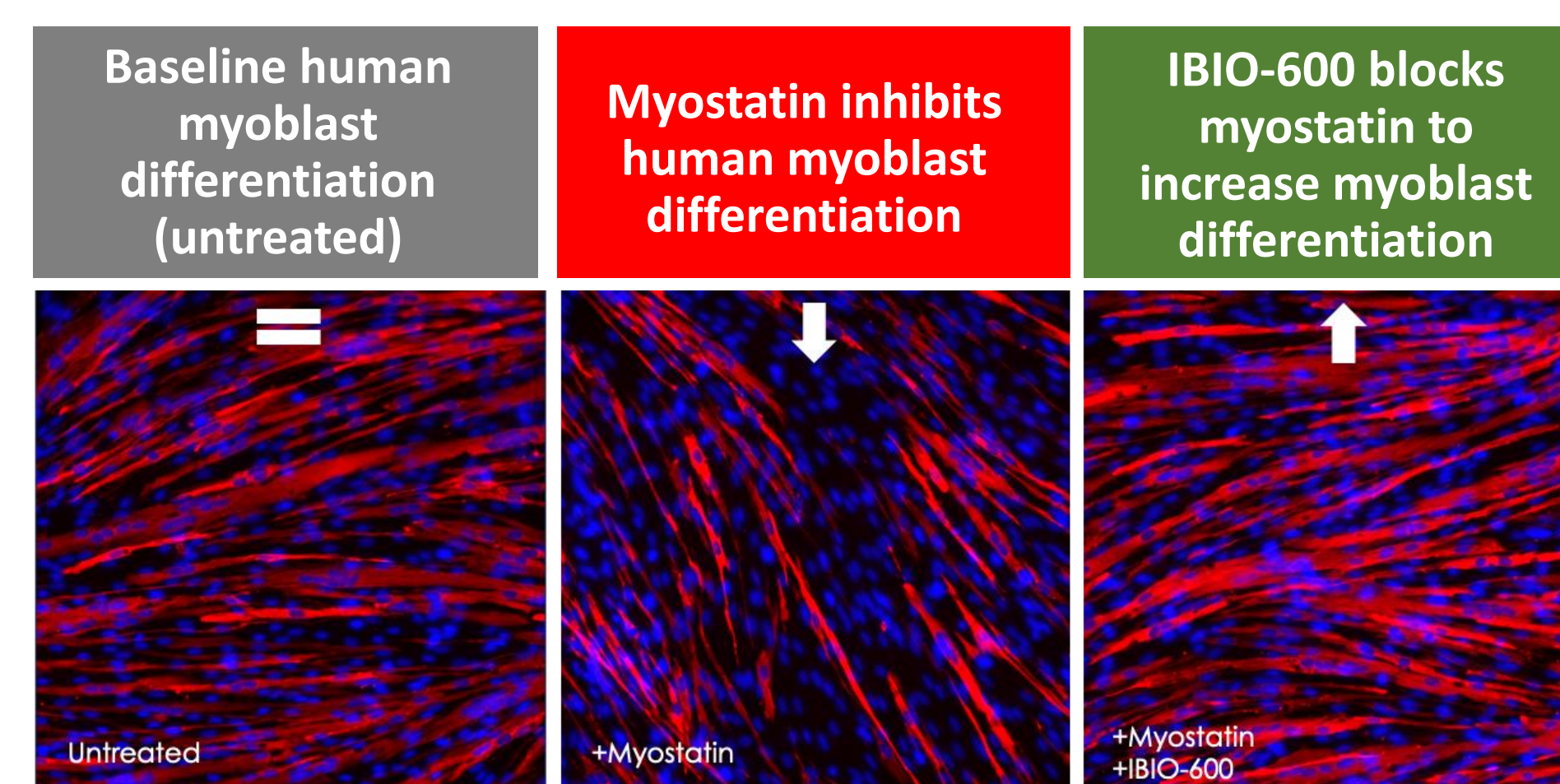
Discovery and Development of IBIO-600

Leverage AI-enabled platform and myostatin literature

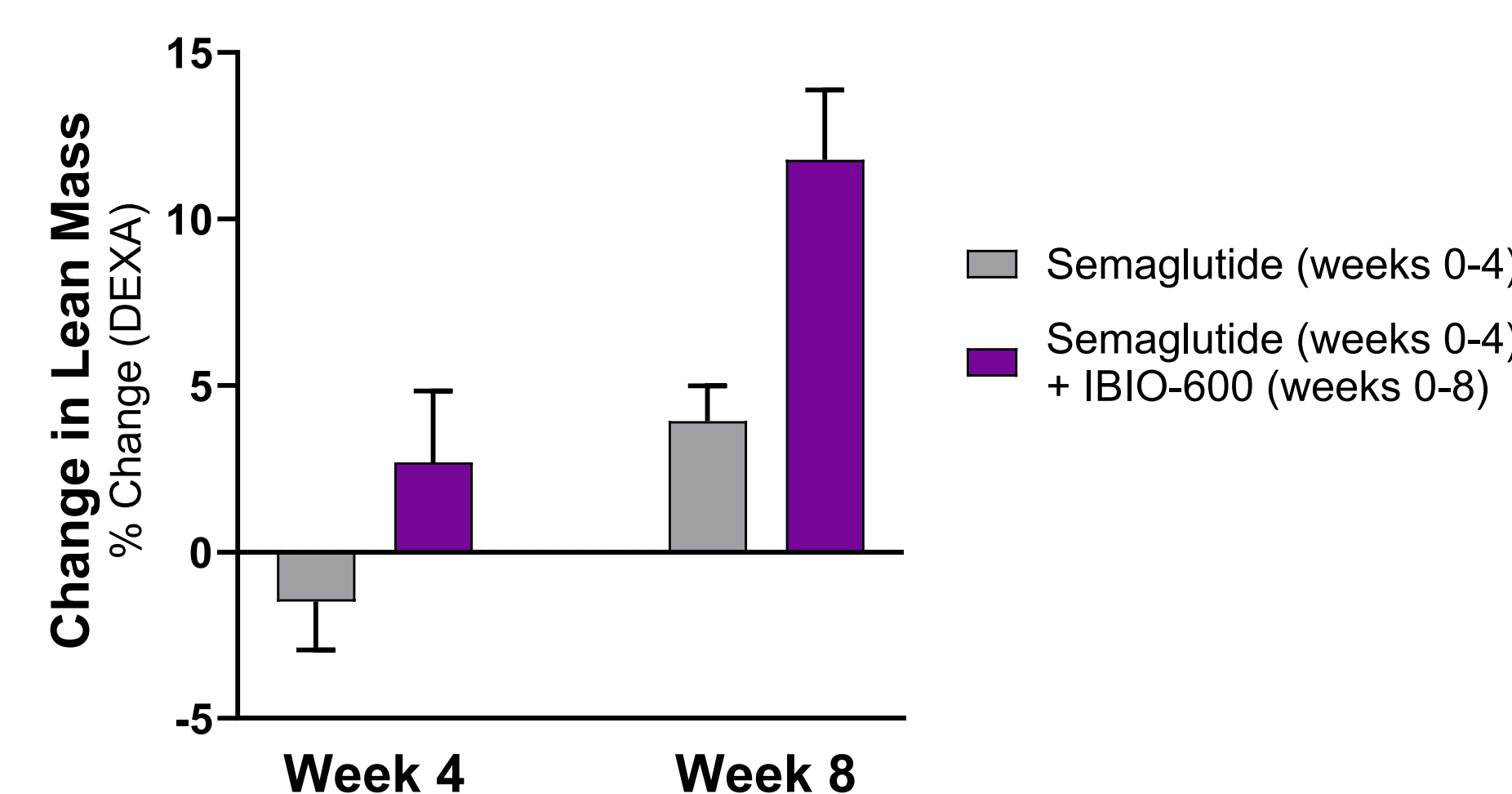
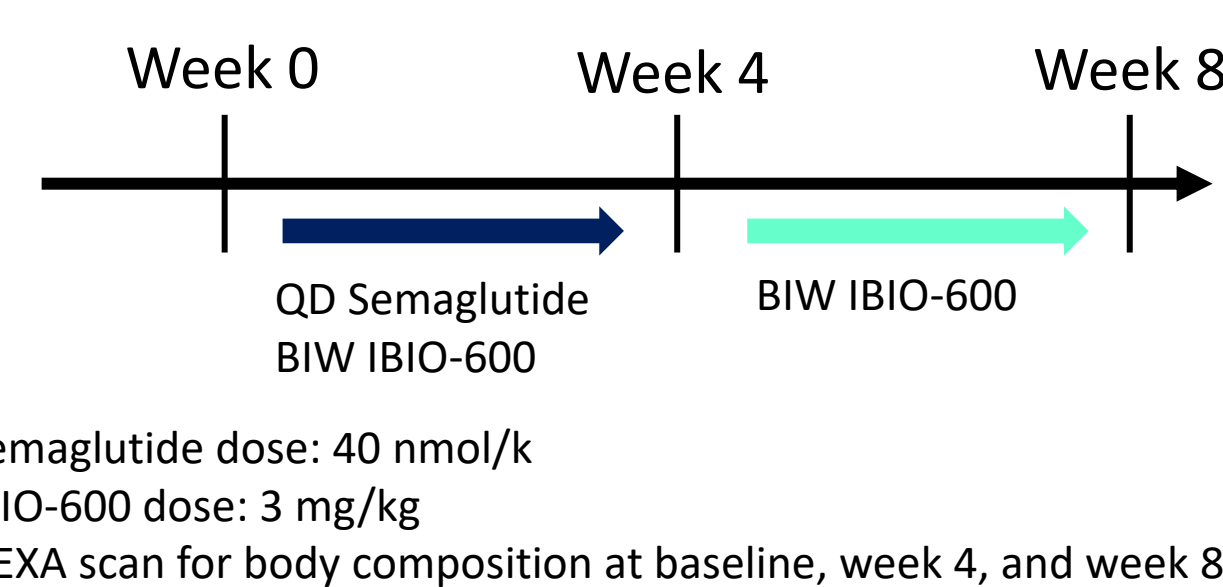


Potent function in human muscle cell assay

Human Myoblast differentiation as translational in vitro model for muscle in humans



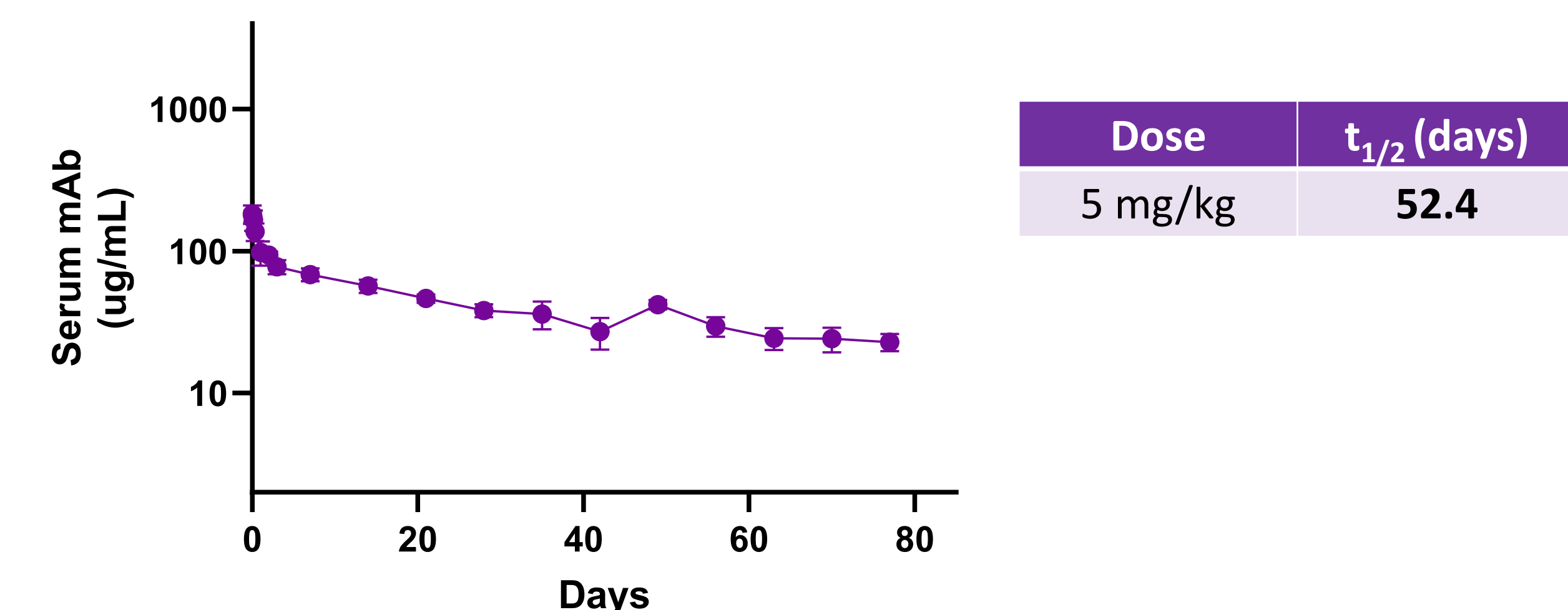
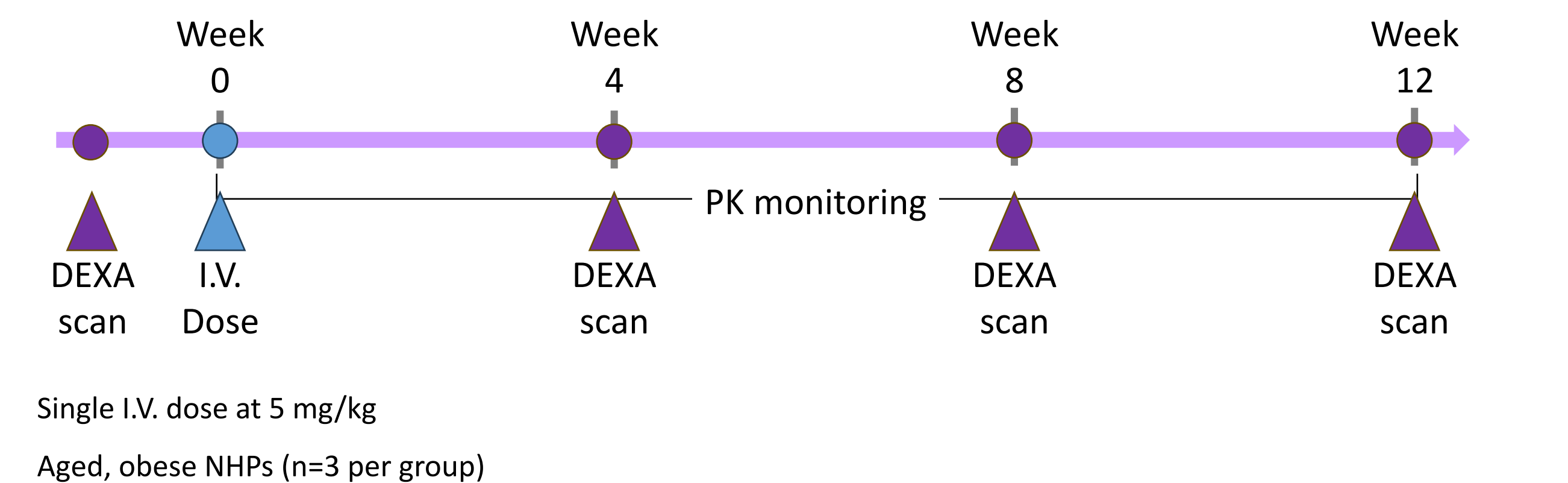
Diet-Induced obesity mouse study – IBIO-600 + GLP-1



IBIO-600 increases lean mass during and after GLP-1-induced weight loss in diet-induced obesity mouse model

Non-Human Primate (NHP) Testing

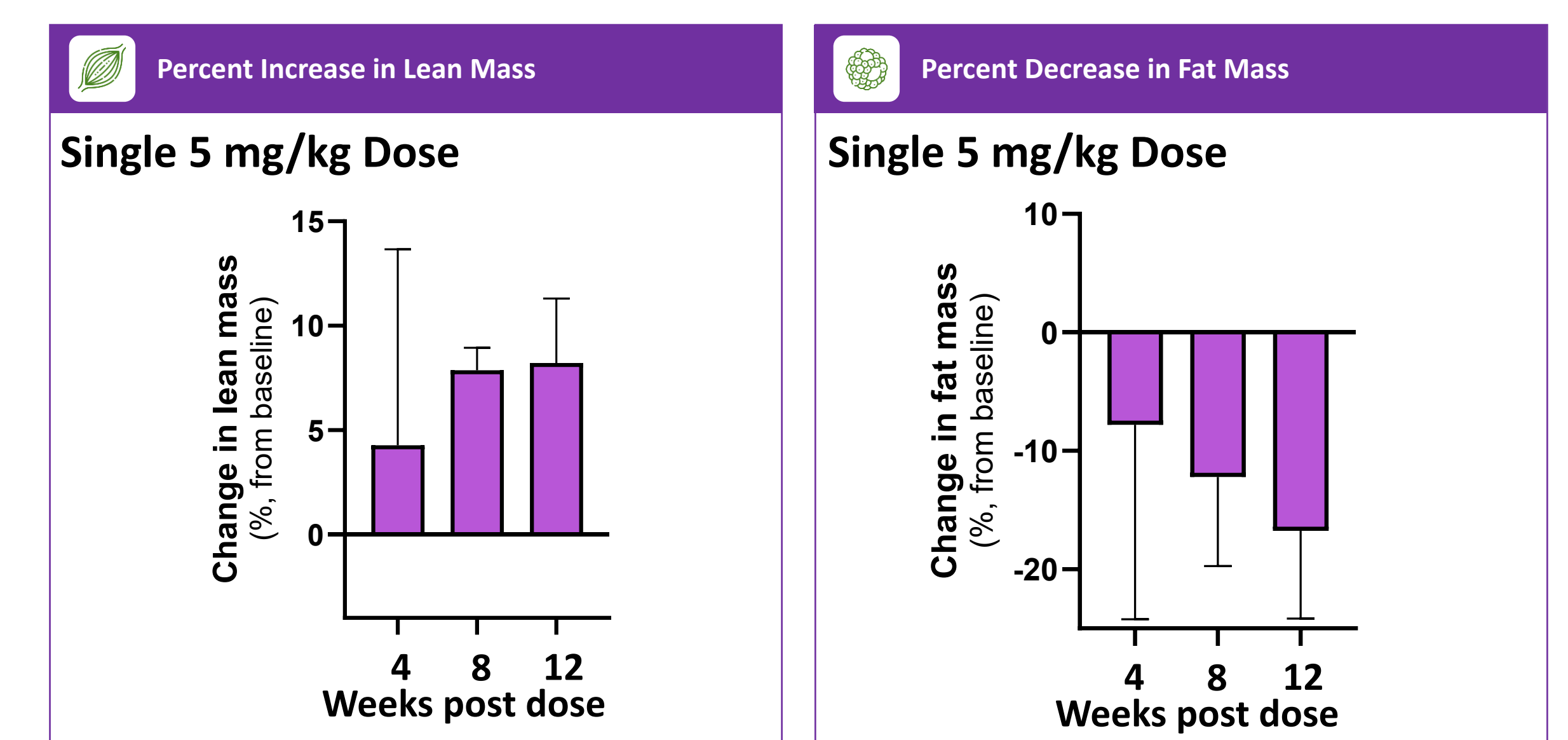
Pharmacokinetics – Extended half-life



Allometric scaling to predict human half-life^{6,7}

Dose	NHP t _{1/2} (actual)	Human t _{1/2} (predicted) ⁶
5 mg/kg	52.4	74-147 days

Increased lean mass and decreased fat mass



Data supports that IBIO-600 has an extended half-life and provides benefits on both fat and lean mass in aged, obese NHPs

1. Beavers et al (2011), Am J Clin Nutr. 94:767-74
2. Johnson et al (2017), J Bone Miner Res. 32(11):2278-2287
3. Freemantle et al. (2011) Osteoporosis Int.
4. Blackwood et al. (2020). Patient Prefer Adherence
5. Latres et al (2015). Skeletal Muscle
6. Haraya and Tachibana (2022). BioDrugs
7. Nakamura et al. (2020). Biological and Pharmaceutical Bulletin