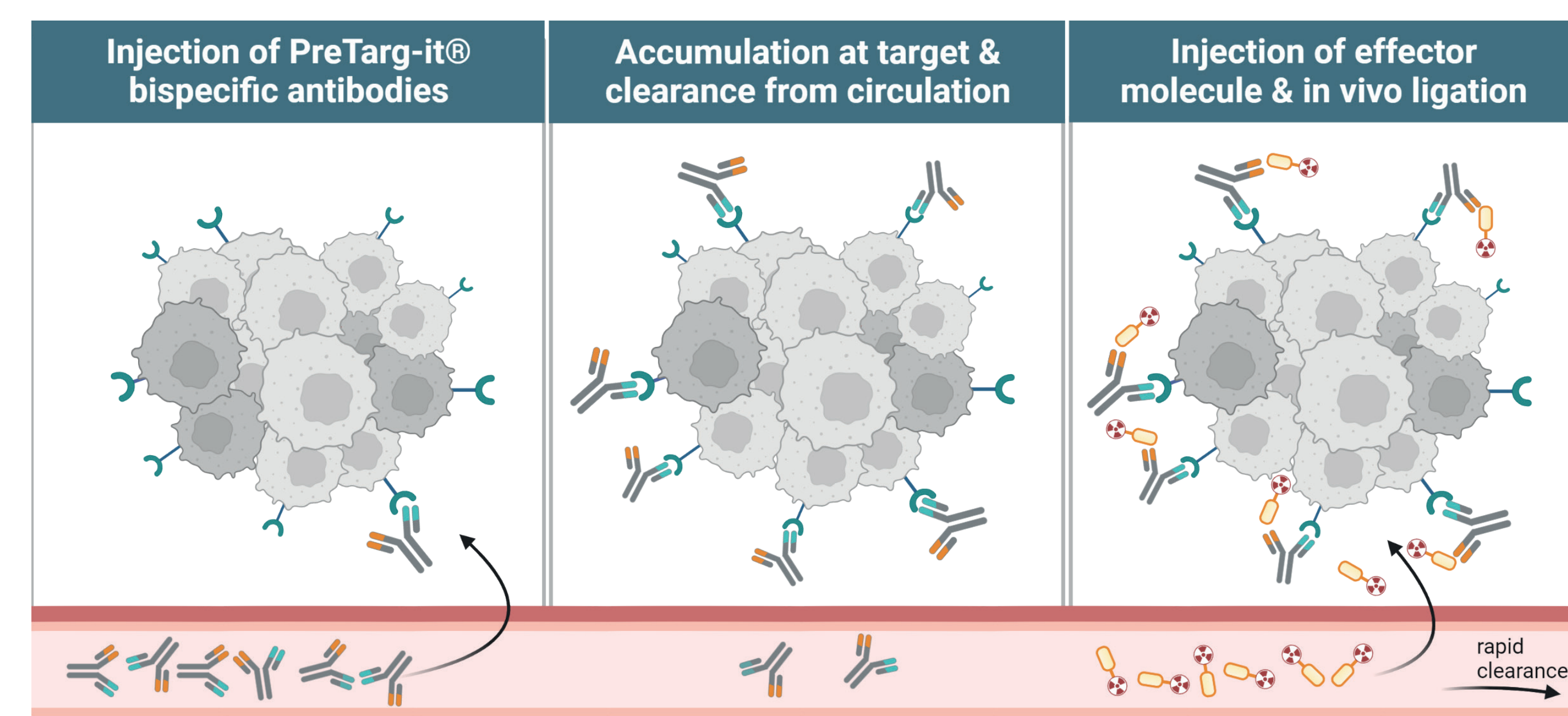


# Pre-targeted radioimmunotherapy with a novel anti-oxMIF/HSG bispecific antibody and a <sup>177</sup>Lu-loaded HSG radioligand results in significant tumor regression in murine models of cancer

## 1 Introduction

### Pre-Targeted Radioimmunotherapy (PRIT)

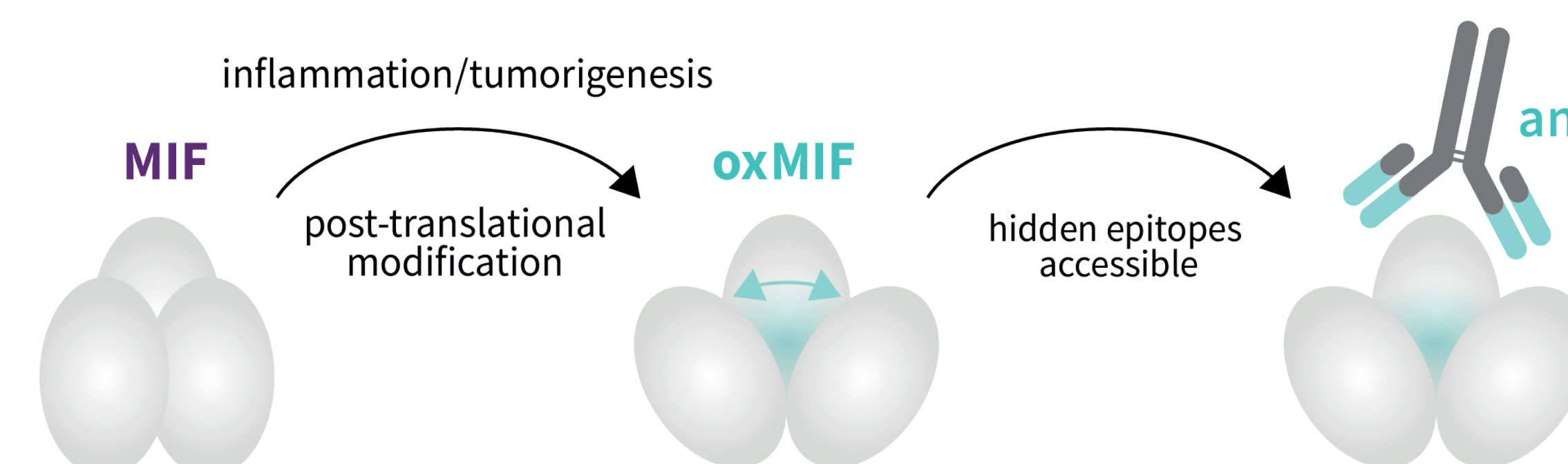
Radiolabeled antibodies have proven effective in patients with hematological malignancies, but adaptation of radioimmunotherapy (RIT) in solid tumors has been challenging. The slow clearance and delayed tumor uptake of directly radio-labeled antibodies can cause high non-target tissue irradiation, and related toxicity.



Pre-targeting techniques overcome limitations of RIT by decoupling the radioactive payload from the tumor-targeting vector

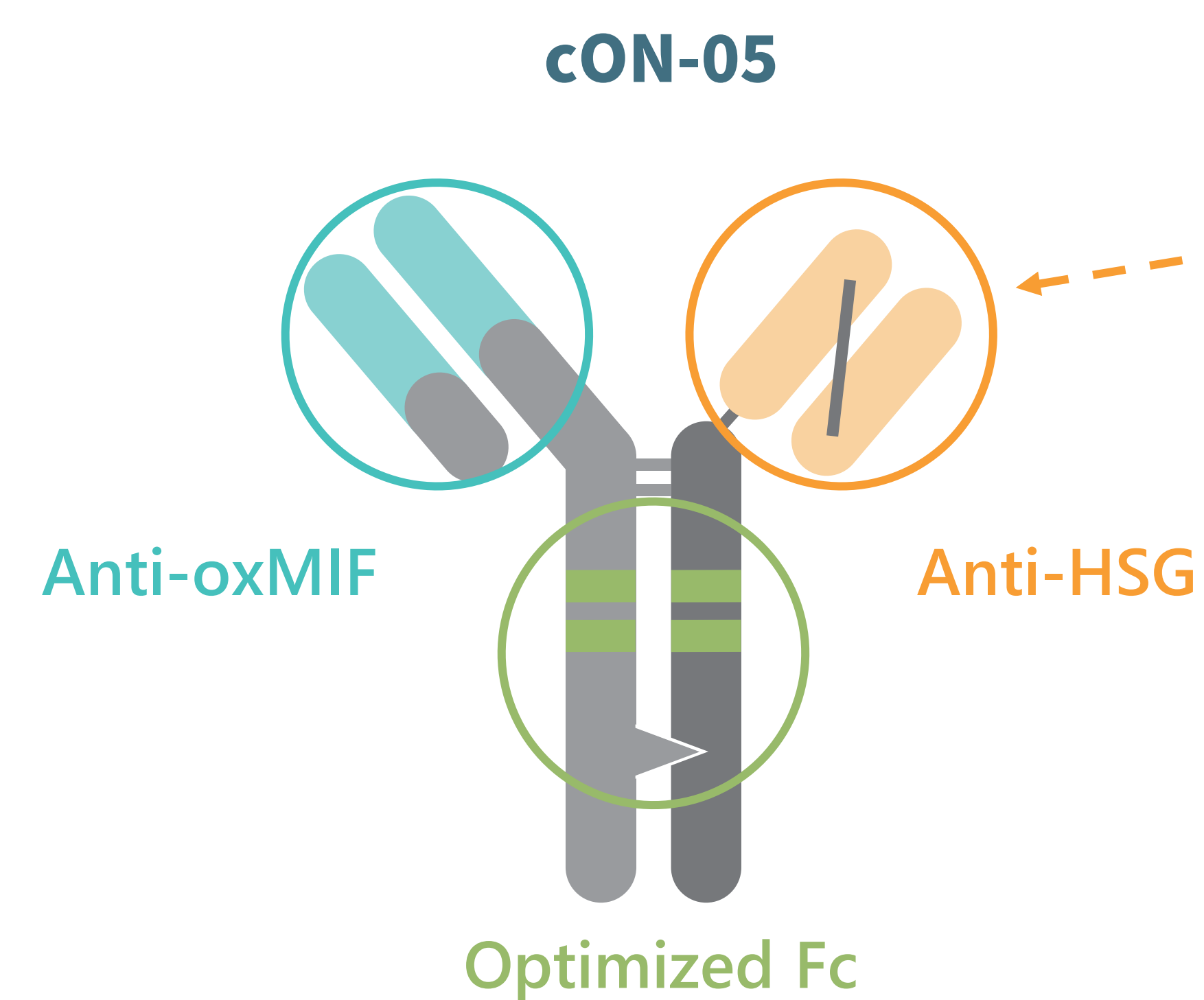
### The tumor target: oxMIF

The founders of OncoOne discovered the disease-related and druggable isoform <sup>1,2</sup> of one of the most important drivers of innate and adaptive immunity: the macrophage migration inhibitory factor (MIF) <sup>3</sup>. Because it is generated in the pro-oxidative tumor microenvironment it was named “oxMIF” (oxidized MIF) <sup>1,2,4</sup>. In contrast to MIF, which is abundantly expressed in healthy and diseased tissues <sup>3</sup>, oxMIF is formed by a post-translational modification which leads to a structural transformation that exposes epitopes in the MIF homotrimer that are otherwise inaccessible to antibodies in the center of the trimer <sup>5,6</sup>.

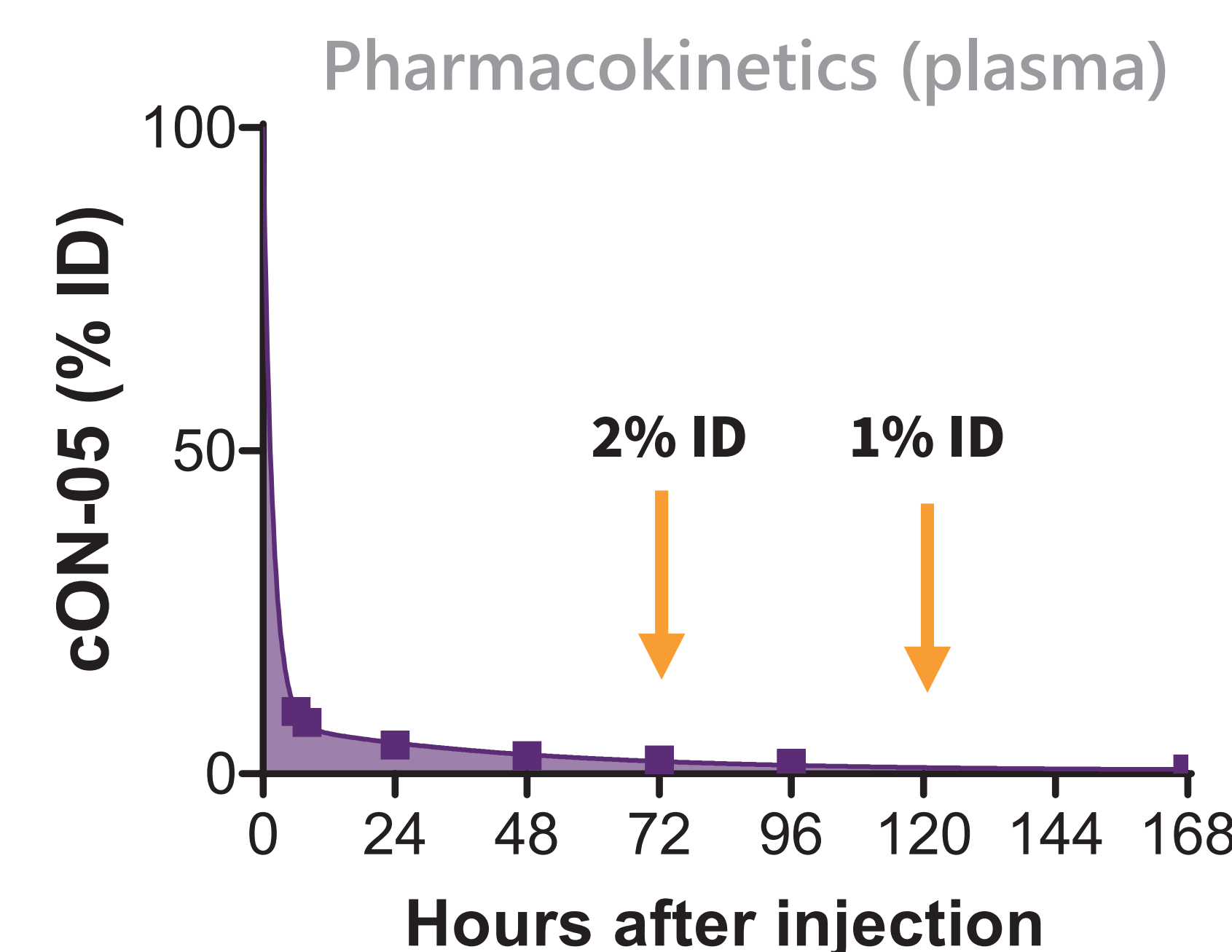
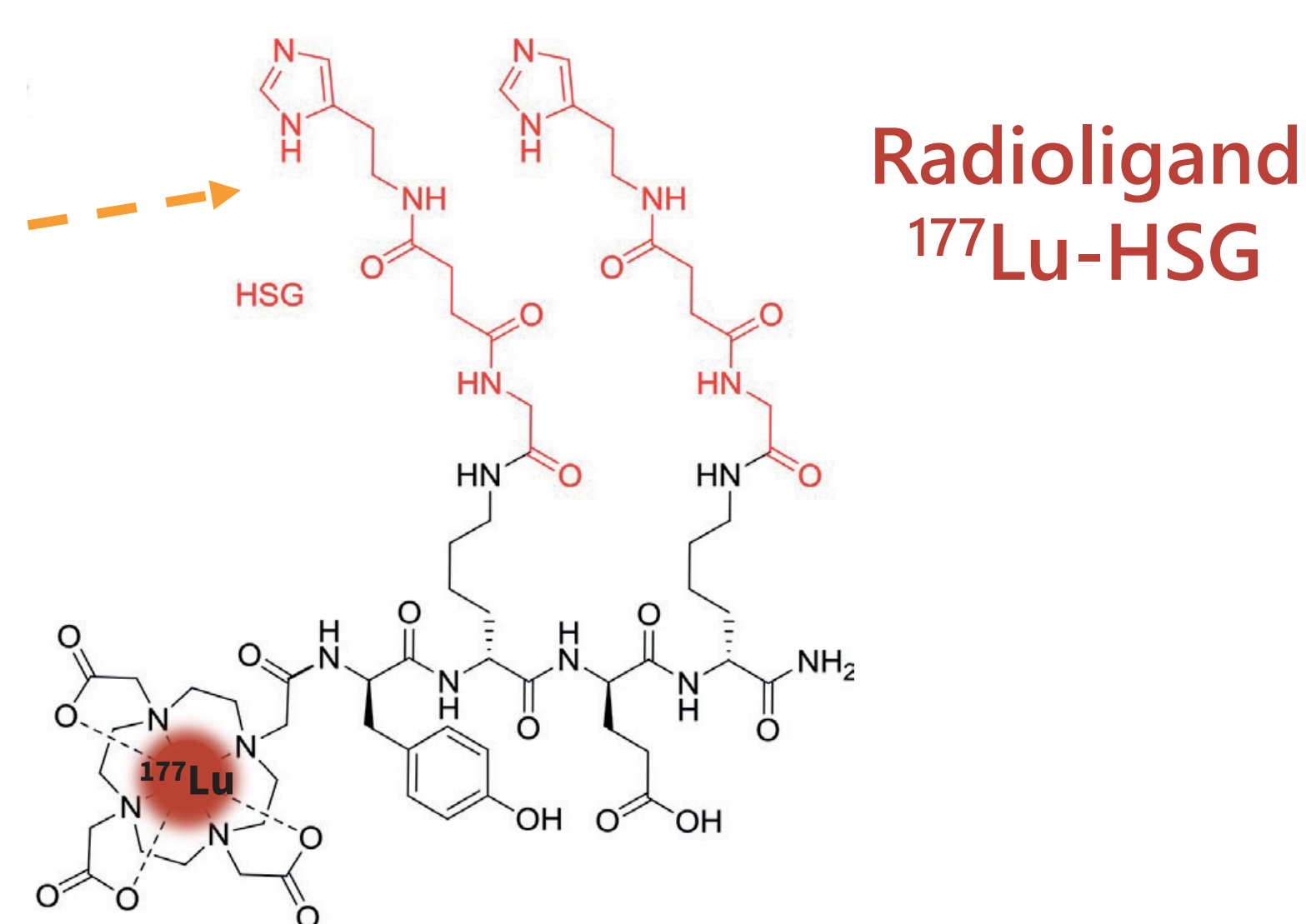


Targeting oxMIF as the disease related isoform of MIF overcomes the previous significant challenges associated with targeting MIF

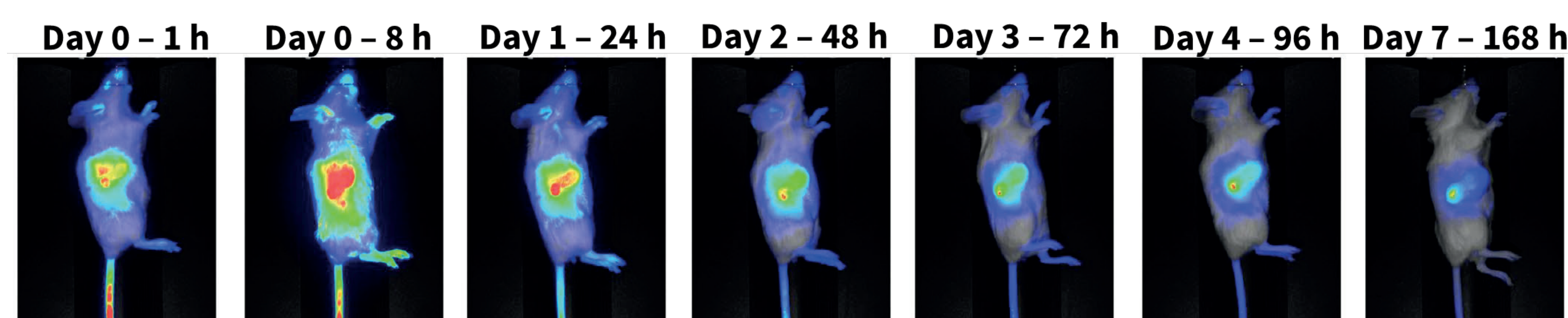
## 2 Biodistribution and PK of PreTarg-it® bsmAb cON-05 & radioligand <sup>177</sup>Lu-HSG



Optimal tumor-to-non-tumor ratio is reached at 3-5 days post injection, with 1-2% of cON-05 remaining in circulation

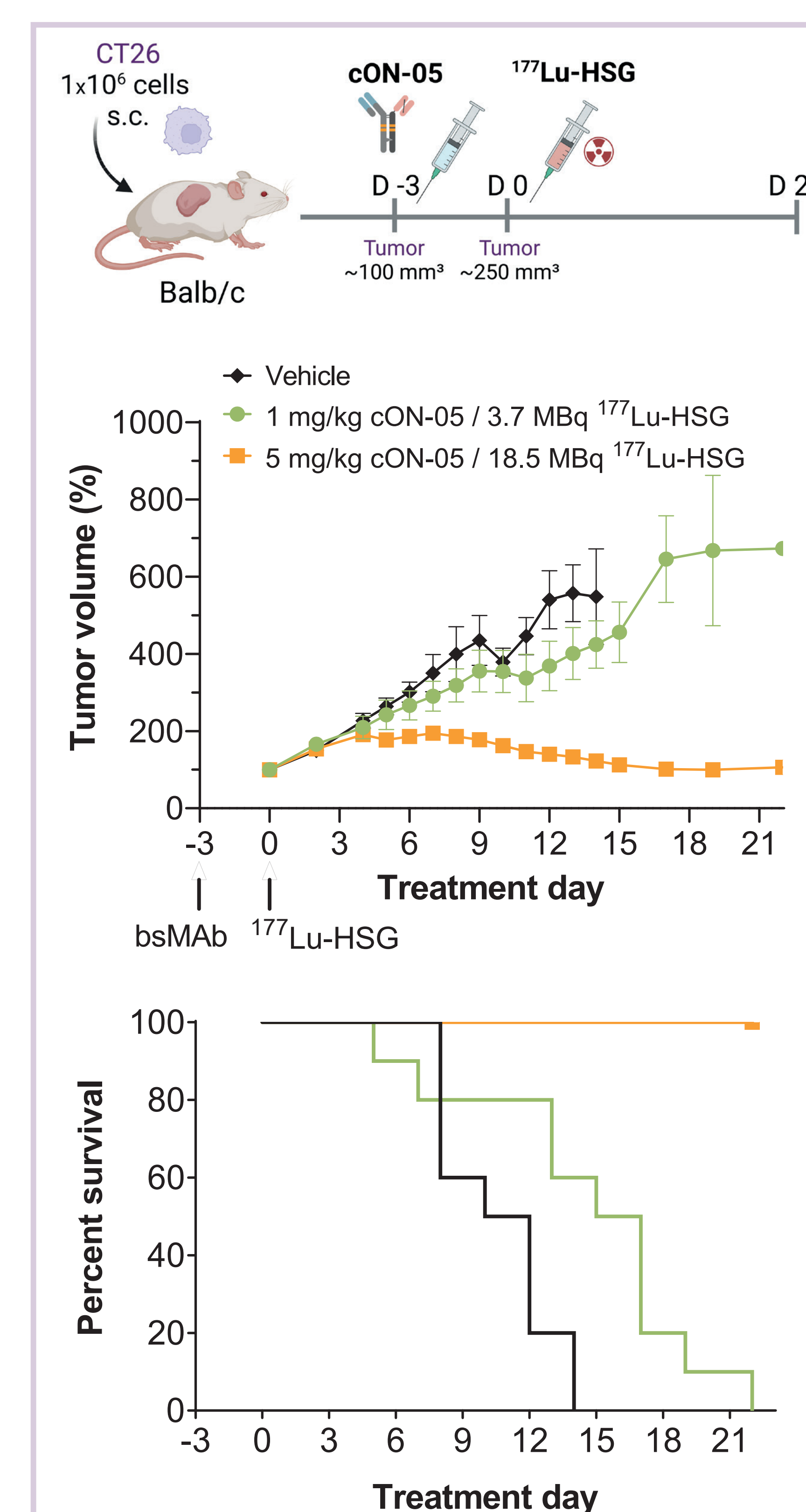


### Biodistribution



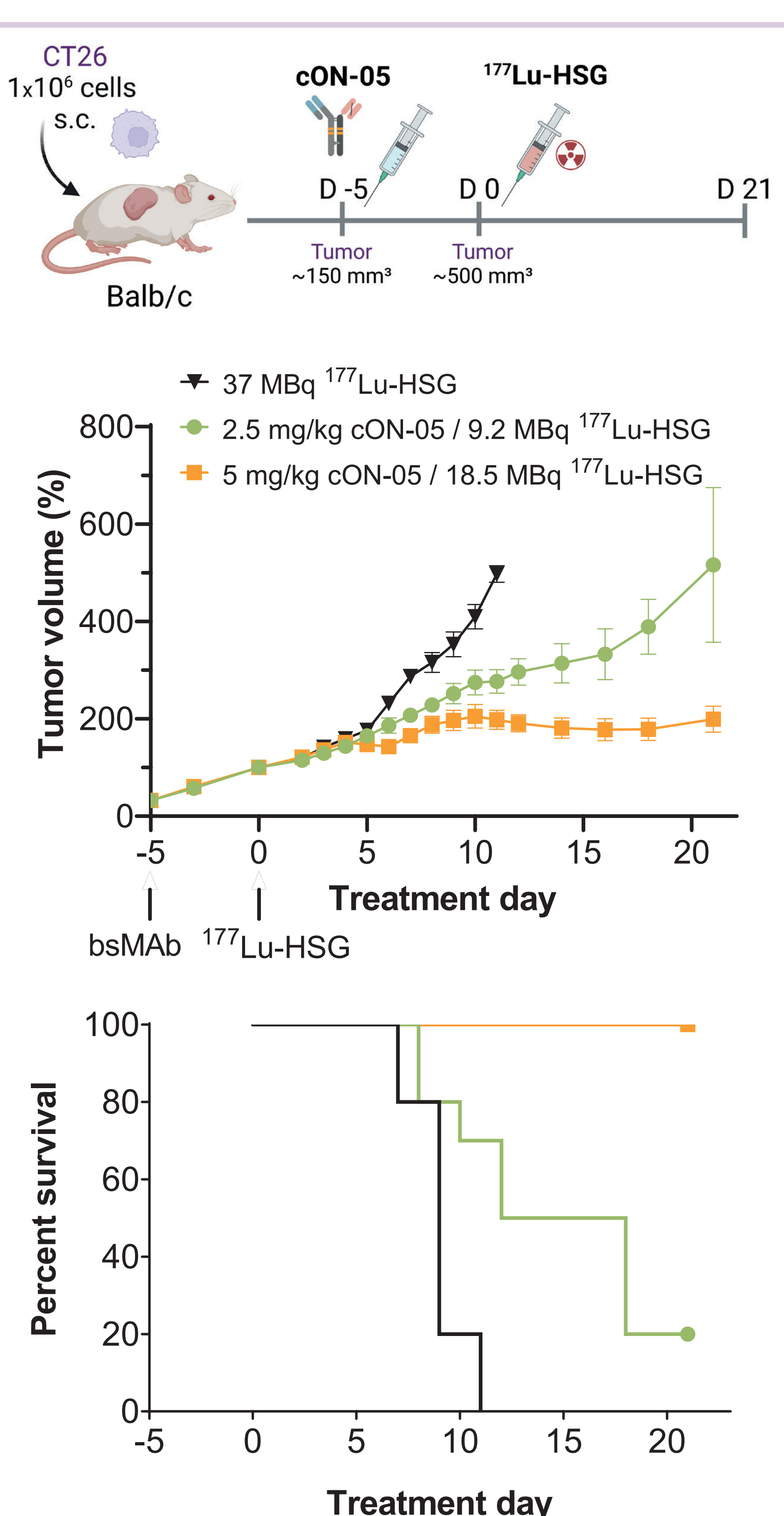
## 3 In vivo efficacy of PreTarg-it® bsmAb cON-05 & radioligand <sup>177</sup>Lu-HSG

### Colorectal cancer syngraft



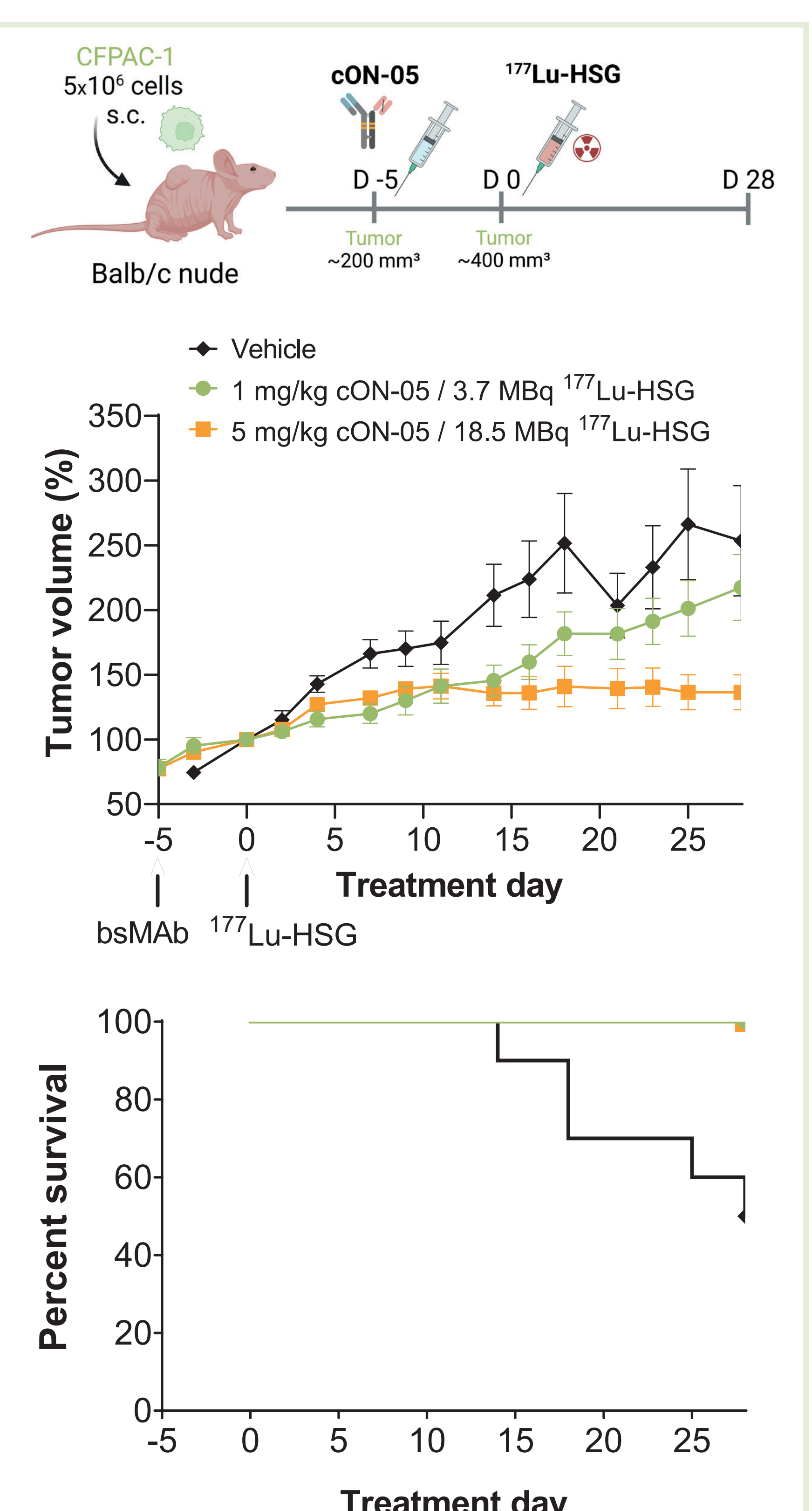
Highly significant tumor regression and survival benefit

### Pancreatic cancer xenograft



Significant tumor growth inhibition and survival benefit

### Pancreatic cancer xenograft



Significant tumor growth inhibition and survival benefit

## 4 Conclusions

- cON-05 is a novel anti-oxMIF/HSG designed for pre-targeted radioimmunotherapy
- Pre-targeted radioimmunotherapy with cON-05 and <sup>177</sup>Lu-HSG has shown efficacy in murine models of cancer:
  - ✓ Highly significant tumor regression and survival benefit in colorectal syngraft model
  - ✓ Significant tumor growth inhibition in human pancreatic cancer xenograft model