Here, we present data on BT8009 and BT5528, where we compare the anti-tumor activity of these BTCs to Nectin-4 and EphA2-targeted antibody-drug conjugates (ADCs), respectively, in pre-clinical models.

1) Introduction to Bicycle discovery process

The discovery of Bicycle® molecules is centered on our phage display platform which can generate high affinity, highly specific molecules against a range of protein targets. Phage hits are then optimized and can be incorporated into functional modalities, including Bicycle Toxin Conjugates®.

2) Comparison of Bicycle molecules to antibodies and small molecules

Bicycle peptides have antibody-like binding affinities with small molecule-like pharmacokinetics.

In contrast to both antibodies and small molecules, Bicycle peptides are renally excreted.

3) BT8009 – A Nectin-4 targeted Bicycle Toxin Conjugate®

BT8009 demonstrates robust anti-tumor activity in CDX and PDX pre-clinical models.

When compared to a DAR 4 Val-Cit-MMAE antibody-drug conjugate (ADC), BT8009 demonstrates favorable anti-tumor activity.

The PK profile of BT8009 in tumor-bearing animals demonstrated sustained MMAE levels in the tumor after a single dose, and rapid elimination from circulation.

4) BT5528 – An EphA2 targeted Bicycle Toxin Conjugate®

BT5528 is an EphA2 targeted BTC® which also demonstrated differentiated anti-tumor activity in pre-clinical tumor models. No signs of coagulopathy, bleeding or abnormal liver function in preclinical species. Sustained delivery of MMAE to tumor while rapid elimination of BT5528 and MMAE from plasma. BT5528 is currently undergoing a Phase 1/2 clinical study in solid tumors. See www.bicycletherapeutics.com for more information.