# P-selectin antagonist Bicycles: a Novel Chemical Modality to Explore the Role of P-selectin in Disease

BicycleTx Ltd. (Bicycle®) has developed an extensive library of small molecule peptidic compounds called '*Bicycles*', which are constrained bicyclic peptides that bind with high affinity and selectivity to targets. *Bicycles* combine the pharmacological properties characteristic of biologics with the manufacturing and pharmacokinetic advantages of small molecules. Bicycle® is seeking to establish research collaborations to fully characterise these tools, and explore their potential application across different therapeutics areas with a disease area agnostic mind-set.
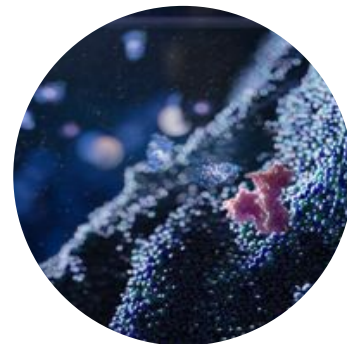
Some of the potential advantages of *Bicycles* vs. other targeting modalities include:

- Low molecular weight (1.5-2.5 KDa), delivering rapid tissue penetration and tuneable PK
- Large molecular footprint allowing protein-protein interactions to be targeted
- Renal elimination, potentially minimising toxicological burden on liver and gut
- Ability to multimerise together or conjugate to a range of therapeutic payloads

For its first Discover campaign, Bicycle® is offering a set of tool monomeric and multimeric *Bicycles* that selectively antagonise binding of P-selectin glycoprotein ligand-1 (PSGL-1) to its cognate receptor. These P-Selectin *Bicycles*, a unique modality which is not commercially available, have the following properties to explore:

- High affinity against P-Selectin (nM potency determined by SPR)
- High avidity to P-Selectin (low dissociation constant - off rate)
- High specificity (no activity against L- and E-selectin)
- Defined binding site with associated crystal structure
- Demonstrated potent cellular activity in a range of *in vitro* and *ex vivo* assays

The Bicycle® team are interested in research proposals that utilise the P-Selectin *Bicycles* to explore the biology of P-selectin, and their potential application in treating diseases including but not restricted to haematological, cardiovascular or inflammatory diseases or cancers. Initially the team are looking for proposals focused on *in vitro* biology studies, with the potential to expand into *in vivo* (pre-clinical mechanistic, efficacy and/or PK-PD studies). The team are also interested in research that reveals new pharmacological insights to understand their mechanism of action and potential application to treat human diseases.

Successful applicants will receive milligram quantities of *Bicycles* free of charge, supported by a dedicated scientific point of contact at Bicycle®. Bicycle® endorses an open innovation model and wherever possible researchers will be actively encouraged to publish results from their work. Researchers may also be offered further, ongoing collaboration opportunities by Bicycle® both on P-selectin, or with other target-specific *Bicycles* in its library. Project funding may be considered for high quality proposals, on a case by case basis.

Applicants should complete the application form which should contain a brief, non-confidential overview of your proposal, demonstrating how the RFP requirements are satisfied by your approach. To submit your proposal, please visit our website at discover.in-part.com , register, and submit your application form under the appropriate Discover campaign.

Opportunities sought

- Research projects

Submissions

Please submit relevant, non-confidential opportunities online via: discover.in-part.com

Deadline: **8th November 2022 - 11:59 pm GMT**

Have any questions?
Contact our team at discover@in-part.co.uk

Bicycle®

BicycleTx Ltd (NASDAQ: BCYC) is a clinical-stage biopharmaceutical company developing a novel class of medicines, referred to as Bicycles, for diseases that are underserved by existing therapeutics.