Veeda™
Lifesciences

Peptides:
One Partner.
Complete Solutions.

Preclinical → Market

| Octreotide | Semaglutide | Teriparatide | Liraglutide | Leuprolide Acetate |

Preclinical Solutions for Peptides
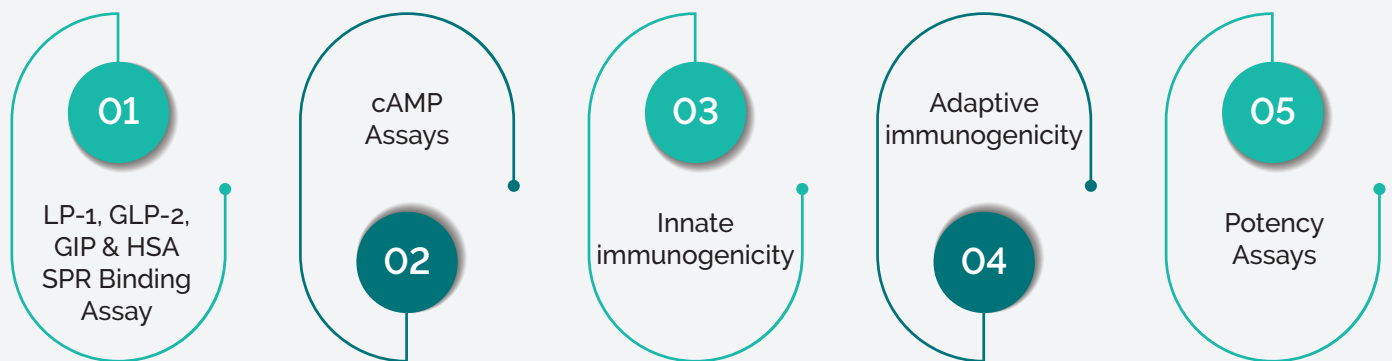
GLP Toxicity Studies
- IND or NDA enabling
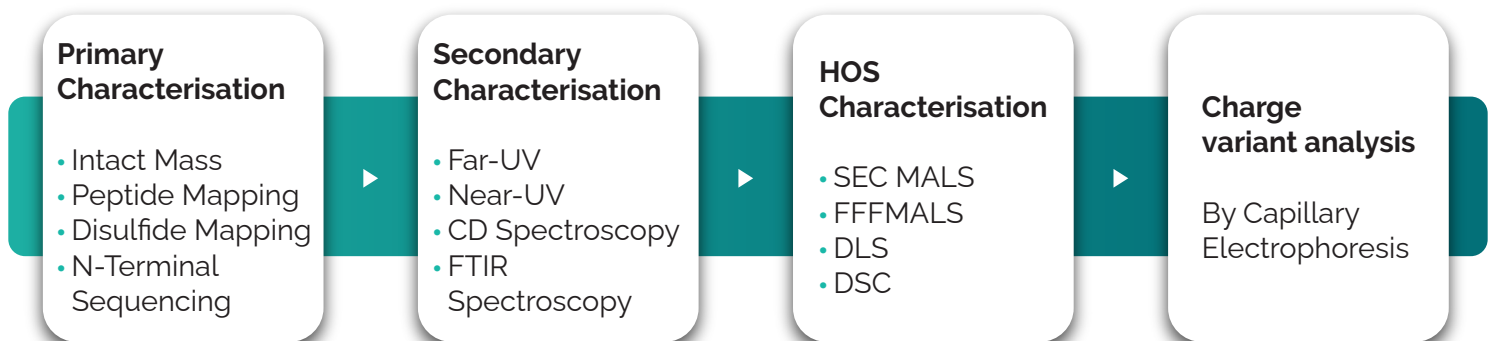- 27500+ GLP Studies Executed

Infrastructure
- 25000+ sq ft built up area
- 115+ animal rooms
- 450+ team strength

- Long-term toxicity studies like Chronic, Carcinogenicity, DART, Juvenile toxicity, Neurotoxicity etc.
- MTD/DRF/Repeat Dose Tox Studies
- PK (Rodents/Non-Rodents) with Bioequivalence
- Complex tissue distribution studies
- Associated bioanalytical activities like TK/Immunogenicity/biomarker assessment etc
- GLP batch release assays (DS/DP)

Biological Sciences Expertise for Peptides

01 — LP-1, GLP-2, GIP & HSA SPR Binding Assay

02 — cAMP Assays

03 — Innate immunogenicity

04 — Adaptive immunogenicity

05 — Potency Assays

Analytical Solutions for Peptides

Primary Characterisation
- Intact Mass
- Peptide Mapping
- Disulfide Mapping
- N-Terminal Sequencing

▶

Secondary Characterisation
- Far-UV
- Near-UV
- CD Spectroscopy
- FTIR Spectroscopy

▶

HOS Characterisation
- SEC MALS
- FFFMALS
- DLS
- DSC

▶

Charge variant analysis

By Capillary Electrophoresis

Advanced Analytical Instruments for Peptide Characterization

- High resolution mass spectrometry (Waters Xevo G3, thermo Q-exactive)
- CD Spectroscopy (Applied Photophysics)
- (High Performance Liquid Chromatography) HPLC, - (Shimadzu prominence I series)
- SEC/FFFMALS (postnova)
- FTIR (Bruker)
- Nano DSC (TA instruments)
- DLS (ANTON PAAR)
- SCIEX PA 800, Capillary electrophoresis
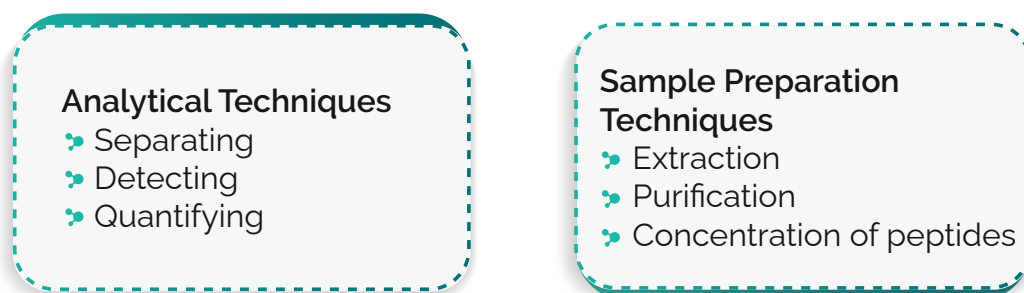
Supporting **10+** Biopharma Studies

Your Partner for Solving Complex Clinical Challenges

- Complex Dosing Requirements
- Stringent Storage Conditions
- Rigorous Screening & Recruitment
- IMP Handling & Accountability

15
Healthy Volunteer & Patient
PK Studies

300+
Healthy Volunteers
Enrolled

90+
Patients
Enrolled

Comprehensive infrastructure and expertise to execute peptide Studies

- 30 Bedded Phase I units
- Medical team with ACLS and BLS certification.
- Team experience >400 successful glucose clamp studies ranging from 8 hrs to 36 hrs
- 91,000+ Healthy Volunteer Database

Bioanalytical Techniques and Methods for the Accurate Quantification and Analysis of Peptides

Analytical Techniques
- Separating
- Detecting
- Quantifying

Sample Preparation Techniques
- Extraction
- Purification
- Concentration of peptides

Ensuring Optimal Chromatographic Conditions

GLP-1:
Comprehensive Bioanalytical support for Clinical Comparability Studies

- Serum/Plasma measurement for both reference and biosimilar GLP-1 RAs
- Pharmacokinetic (PK) estimations and statistical analysis
- Immunogenicity studies to assess the immune response
- Tailored bioanalytical methods specifically for different GLP-1 analogues

Molecules	Challenges	Solutions	Results
Desmopressin	• Detection limit 20x below Cmaxsensitivity/selectivity against endogenous matrix.	• SPE cleanup & sub-micron • Reversed-phase LC; • Sciex 6500+ LC-MS;	• Linear 1.056–264 pg/mL • ≥98% acceptance
Octerotide	• Low pg/mL quantitation • Matrix effects.	• Optimized mass transition • Ion exchange SPE • Specialized peptide column	• Linear 20 pg/mL–10 ng/mL • No carryover or matrix interference • Consistent recovery
Liraglutide	• Very high molecular weight (~3751 Da). • Adds hydrophobicity, altering chromatographic behaviour and ionization efficiency in LCMSMS. • Non-specific bindings and carryover issue	• Optimized Stable ion-pair for consistent signal • Peptide Specific columns and gradient program to resolve interfering peaks and eliminated matrix effect. • Optimized autosampler rinsing situation & rinsing cycle to minimized carry over and reduce overall run time	• Linearity 0.8ng/mL to 80.0ng/mL. • No matrix effect observed. • No carry over observed.
Teriparatide	• Low sensitivity and reproducibility for ADA assay	• Homogenous sample incubation • MRD optimization	• Sensitivity of 39 ng/mL with consistent results • High reproducibility in clinical samples

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Excellence _____
_____ **In Everything**