

Analytical Support for GLP-1 Peptide Development

Enabling Confident Development Through Robust Characterization and Regulatory-Ready Data

Overview

GLP-1 peptides are among the fastest-growing therapeutic classes in diabetes and obesity management. However, their development presents significant analytical challenges due to structural complexity, instability and stringent regulatory expectations.

A comprehensive analytical approach is essential to ensure product quality, safety, and consistency across development stages.

At Veeda Lifesciences, analytical programs for GLP-1 peptides are designed with a focus on scientific rigor, advanced instrumentation, and regulatory alignment - supporting seamless progression from early development to clinical phases.

Our Capabilities

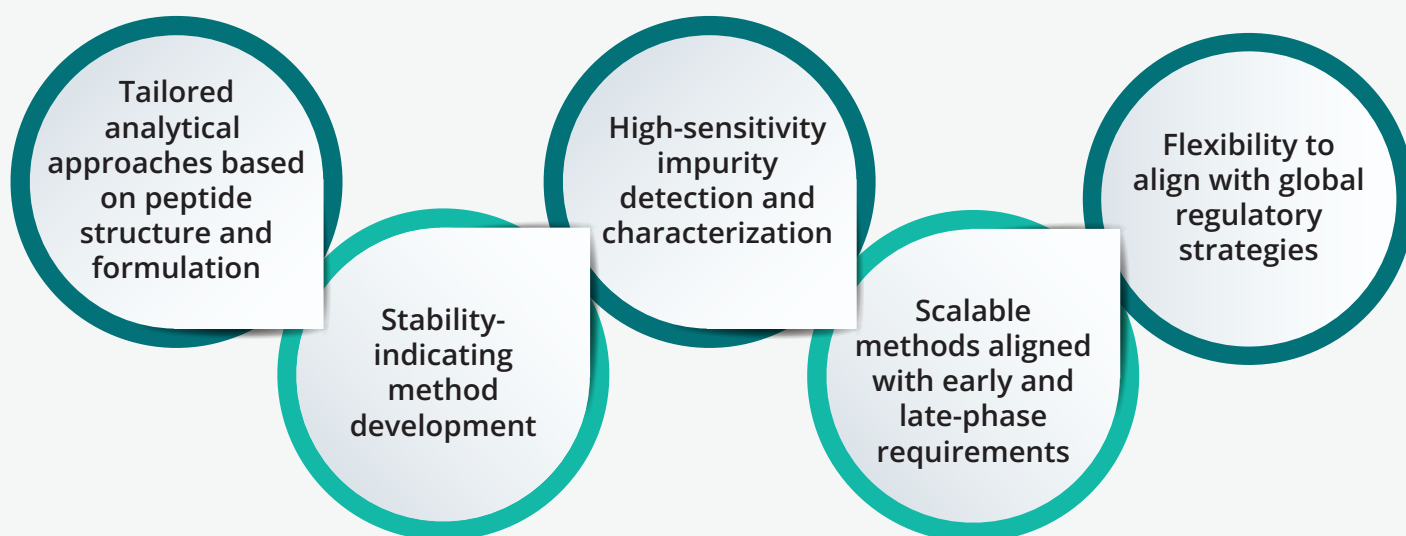
End-to-end analytical support for GLP-1 peptides and analogs

- Method development and validation for complex peptide molecules
- Advanced LC-MS/MS and high-resolution mass spectrometry platforms
- Integrated analytical and bioanalytical services

Evaluation of GLP 1 peptides and analogs using binding kinetics and functional bioassays

- Support across development stages, from characterization to clinical bioanalysis

Analytical Excellence



Comprehensive Evaluations

Structural Characterization

- Molecular weight confirmation using HRMS
- Peptide mapping for sequence verification
- Identification of structural modifications and variants

Purity & Impurity Profiling

- RP-HPLC / UPLC-based separation methods
- LC-MS for impurity identification and characterization
- Monitoring of process-related impurities and degradation products

Quantification & Assay Development

- HPLC/UPLC-based quantitative methods
- LC-MS/MS for high-sensitivity analysis
- Batch consistency and dosage accuracy assessment

Stability Studies

- Forced degradation under thermal, oxidative, photolytic, and pH conditions
- Identification of degradation pathways
- Shelf-life and storage condition establishment

Functional Characterization

- SPR Binding kinetics
- Reporter Bioassay: GLP-1R/CRE Luciferase Reporter HEK293 Cell Line

Bioanalytical Support

- LC-MS/MS-based quantification in biological matrices
- Pharmacokinetic (PK) and exposure assessment

Immunogenicity assessments (ADA & NAb)

- Support for clinical and translational studies

Regulatory Alignment

Studies and analytical strategies aligned with:

- ICH Q2 (Analytical Method Validation)
- ICH Q6B (Specifications for Biotechnological Products)

ICH M10 (Bioanalytical Method Validation and Sample Analysis)

- Global regulatory expectations (FDA, EMA, PMDA, MHRA, etc.)
 - USP <1032>, <1033>, <1105>

GLP-compliant execution with fully validated, stability-indicating methods and regulatory-ready documentation

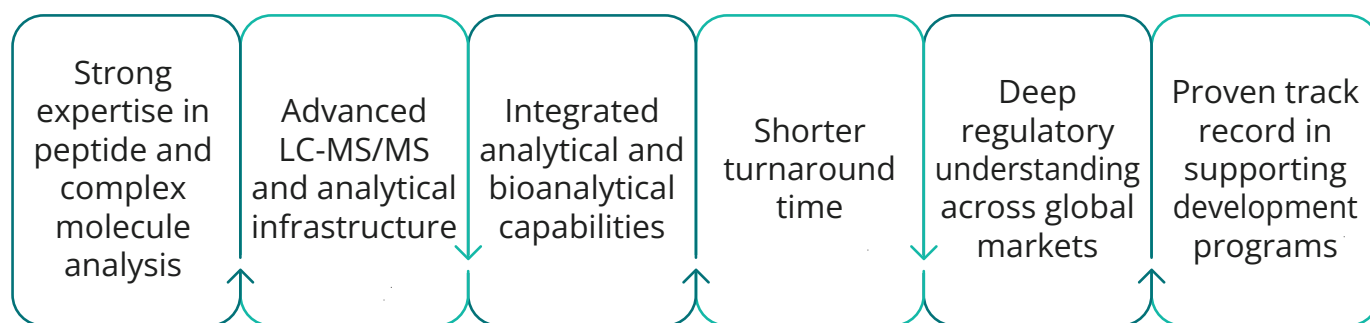
Strategic Outcomes

- Comprehensive impurity and degradation profiling
- Establishment of stability-indicating analytical methods
- Reliable and reproducible quantitative data
- Enhanced understanding of product quality attributes

These insights directly support:

- IND / CTA submissions
- Method validation and regulatory filings
- Clinical development and lifecycle management

Why Veeda Lifesciences



Partner with Confidence

Delivering precise, compliant, and insight-driven analytical solutions to accelerate your GLP-1 peptide development journey.



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Excellence
In Everything