CERTIFICATE OF ANALYSIS

SAMPLE SUMMARY

Client:	Peptra Health	**Appearance:**	White lyophilized powder
Product:	Tirzepatide 15mg	**Sample Type:**	Lyophilized powder (vial)
Accession #:	AMT-2026-0417	**Manufacturer:**	Peptra Health (client supplied)
Search Code:	M3HEXQSMAS	**CAS No.:**	2023788-19-2
Identity:	Confirmed	**Mol. Weight:**	4813.53 Da
Purity:	99.63%	**Test Type:**	Quantitative Analysis (HPLC) + Identity Confirmation (LC-MS)
Received:	2026-08-04		
Reported:	2026-08-07		
Lot:	PH-517924		
Net Content:	15.12 mg		

Sequence: H-Tyr-Aib-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Ile-Aib-Leu-Asp-Lys-Ile-Ala-Gln-Lys(γGlu-AEEA-AEEA-C20 diacid)-Ala-Phe-Val-Gln-Trp-Leu-Ile-Ala-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Pro-Ser-NH_2

ANALYTICAL RESULTS

Test	Label Claim	Result	Purity	Outcome
Identity (LC-MS)	Tirzepatide	Confirmed	—	**Pass**
Purity (HPLC-UV)	15 mg	15.12 mg	99.63%	**Pass**

SAFETY & CONTAMINANT TESTING

Endotoxin testing performed using the Limulus Amebocyte Lysate (LAL) assay in accordance with USP <85> under validated laboratory conditions.

Endotoxin Replicate 1:	**Pass**	Assay Sensitivity: ≤0.05 EU/mL
Endotoxin Replicate 2:	**Pass**	Assay Sensitivity: ≤0.05 EU/mL

Heavy metals screening performed by ICP-MS in accordance with USP <232>/<233>.

Element	Result	Limit	Outcome
Lead (Pb)	<0.05 ppm	≤0.5 ppm	**Pass**
Arsenic (As)	<0.10 ppm	≤1.5 ppm	**Pass**
Cadmium (Cd)	<0.05 ppm	≤0.5 ppm	**Pass**

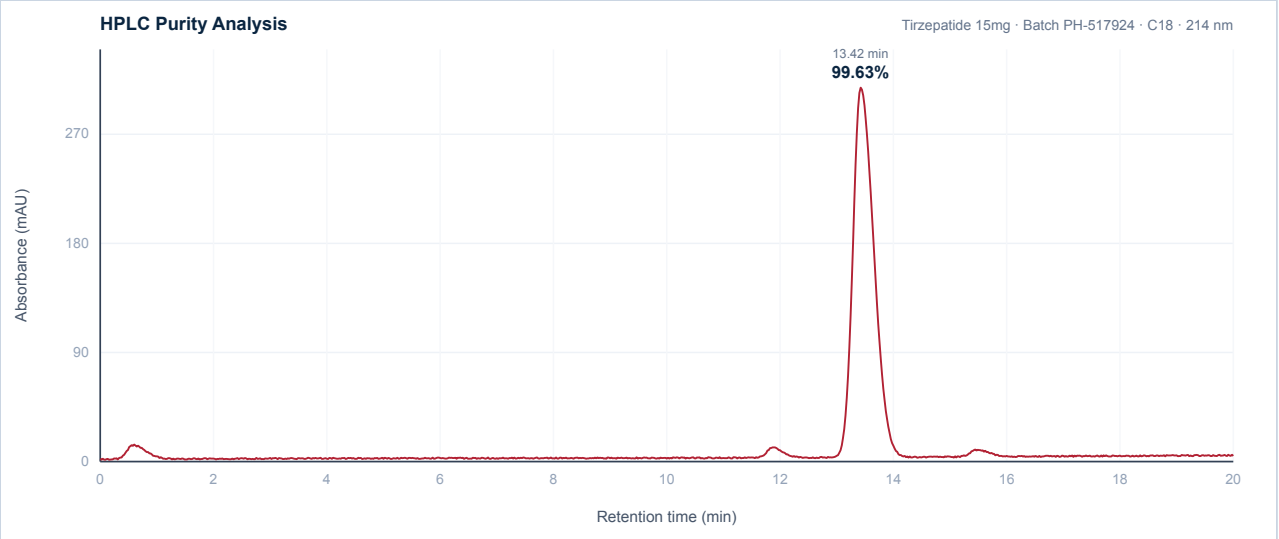
Element	Result	Limit	Outcome
Mercury (Hg)	<0.02 ppm	≤0.3 ppm	**Pass**

Sterility / microbial screening by PCR-based bioburden assay (USP <71> compatible).

Sterility / Microbial Screening: **No microbial growth detected**

HPLC PURITY ANALYSIS

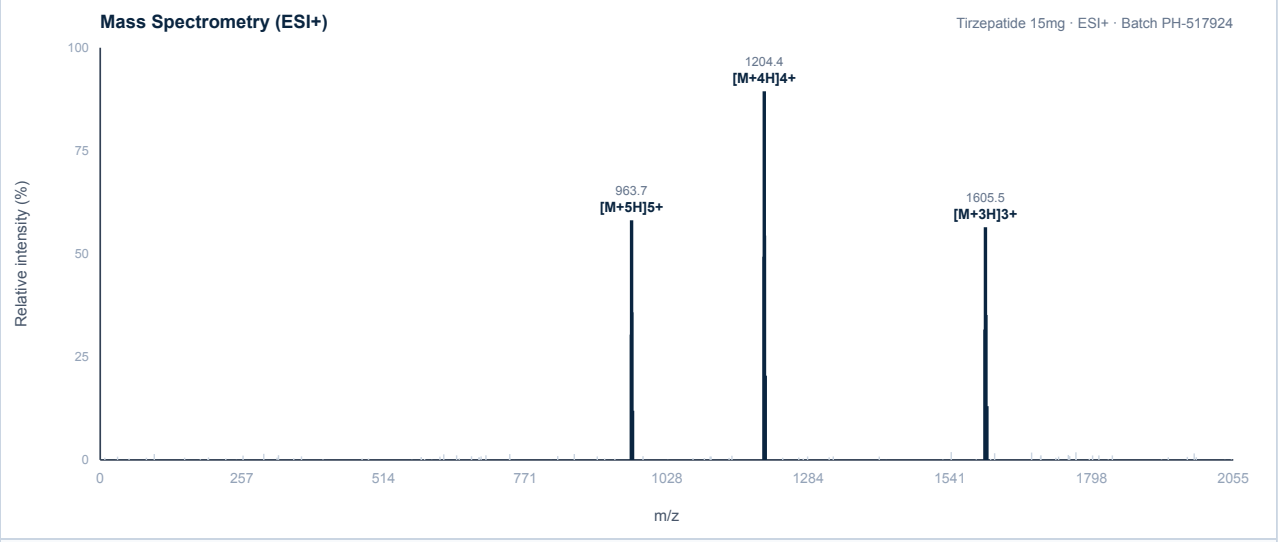
Column:	C18, 4.6 x 250 mm, 5 µm	**Mobile Phase:**	H2O / MeCN with 0.1% TFA
Gradient:	20-60% B over 20 min	**Flow Rate:**	1.0 mL/min
Detection:	UV at 214 nm	**Injection:**	10 µL
Retention:	13.42 min	**Purity:**	99.63%



Chromatogram — Absorbance (mAU) vs. Retention time (min)

MASS SPECTROMETRY — IDENTITY CONFIRMATION

Method:	LC-MS (ESI+)	**Theoretical:**	4813.53 Da
Observed:	4813.54 Da	**Mass Error:**	+2 ppm



Mass Confirmation — Intensity vs. m/z

CONCLUSION

Identity of Tirzepatide confirmed by LC-MS (deconvoluted mass 4813.54 Da matches the theoretical 4813.53 Da within tolerance). HPLC purity 99.63% (main peak 13.42 min). Measured content 15.12 mg is within ±10% of the 15 mg label claim. Endotoxin, heavy metals and sterility screening within acceptance limits. Sample passes.

Dual GIP / GLP-1 receptor agonist. Minor peptide-related impurities (deletion/truncated sequences) detected at trace levels; each individual impurity below the 0.5% identification threshold (Ph. Eur. Substances for Pharmaceutical Use).

Dr. Camille Voss — Principal Chemist

Reported: 2026-08-07