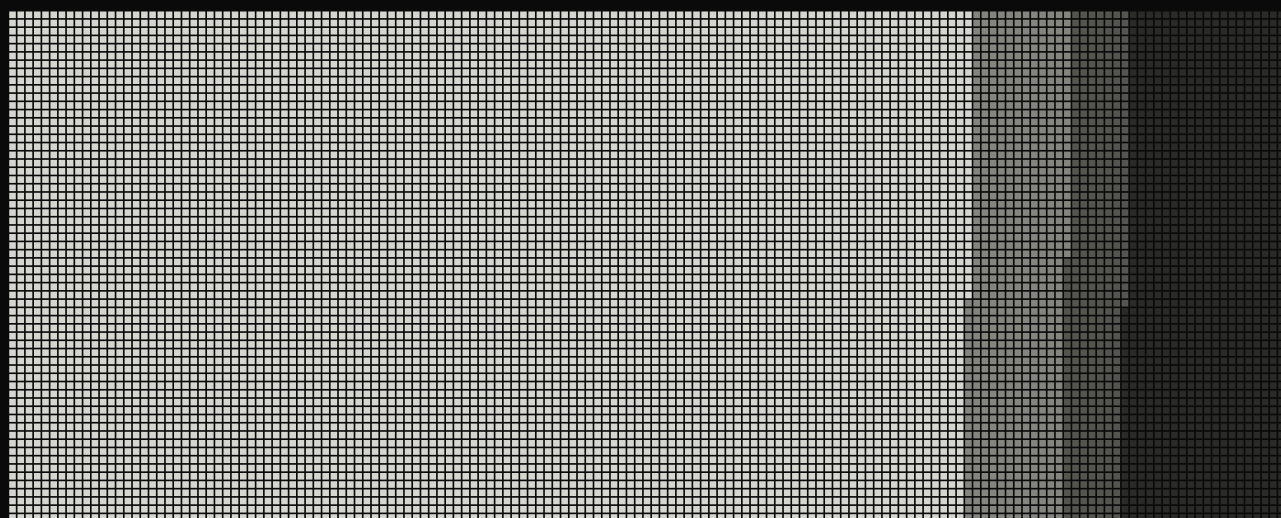


State of Analytical Evidence in Research Peptides

What certificates of analysis in the US and European research-peptide market actually document — and why the answer depends less on the vendor than on the laboratory that signs.

Version 4.1.1 · 20 September 2026 · CC BY 4.0 · Dataset and method published



■ 74.9% report a measured purity ■ 739 state a specification ■ 440 name purity with no value ■ no purity stated
Every certificate in the corpus, one square each.

9,646

certificates of analysis, read and coded one by one

41

issuing laboratories identified

278

eligible vendors across the United States and Europe

27

defects found and corrected across eight audits, all published

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DECLARATION OF INTEREST

This study was commissioned and funded by Condor Research, which sells research peptides in the market it audits. Condor does not yet publish certificates of analysis, so none of its documents are in the corpus; a vendor auditing its competitors is still not a neutral party. Every figure is reproducible from the published pipeline against the published dataset. **Verify rather than trust.**

EDITION

Version 4.1.1. Figures as of 20 September 2026; this PDF revised 7 October 2026. Changes are listed under [Versions and corrections](#).

ONLINE EDITION

condorresearch.com/state-of-analytical-evidence

LICENCE

CC BY 4.0. Reuse the data, the figures and the text with credit.

01

Five findings

01

93.2 pp

The issuing laboratory decides what a certificate shows. Inside the same vendors, chromatography appears in 3.4% of one issuer's certificates and 96.6% of the others'.

02

74.9%

of certificates report a measured purity, though 87.1% state one. The difference is 739 specifications and 440 certificates with no value.

03

43.9%

of the 278 eligible vendors publish no recoverable analytical evidence.

04

23 of 202

vendors publish all eight basic elements — purity, chromatography, lot, mass spectrometry, verification, contamination panels and accreditation.

05

1 of 5

regional comparisons survives: European certificates declare chromatography at 59.8% against 84.0% in the United States.

02

A census of published documents, not of products

A certificate stating 99.7% purity is evidence that a figure was published — not that any vial is pure. Nothing here is a claim about the quality of any vendor's goods, including our own.

Every analytical signal in every certificate is coded on three levels: **absent**, **named** — the technique appears — or **reported**, meaning a result is shown. Most of what follows lives in the distance between the second and the third.

The corpus holds 9,646 certificates collected from the public pages of 278 eligible vendors in the United States and Europe, signed by 41 identifiable laboratories. 8,936 of them (92.6%) carry a laboratory we could attribute.

03

The laboratory, not the vendor, decides what a certificate contains

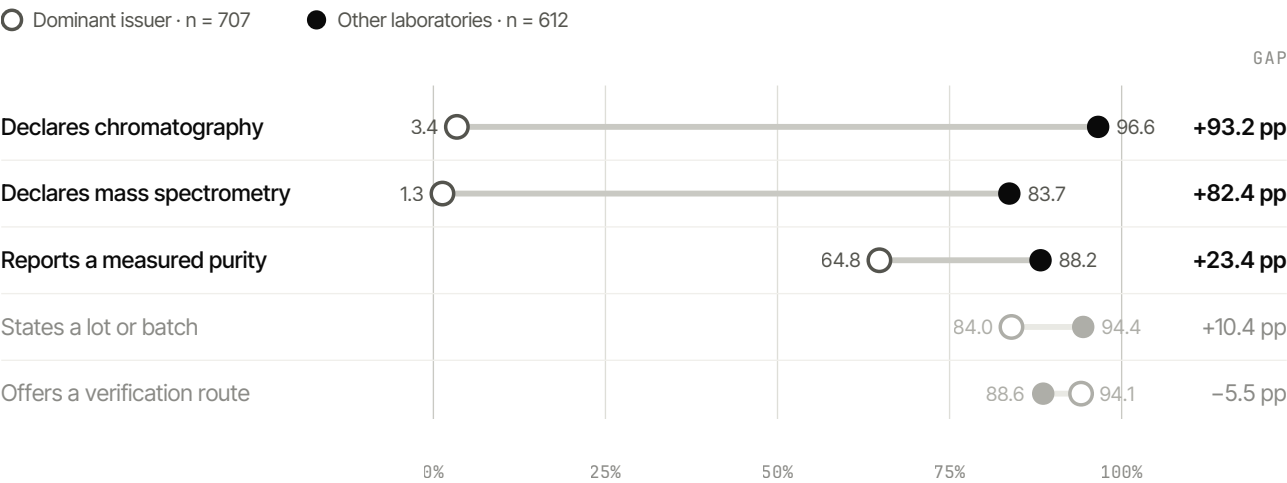
The cleanest test is to hold the vendor constant. Among the **25 vendors that use both the dominant issuer and at least one other laboratory**, catalogue and collection are the same; only the signature changes. Chromatography appears in 3.4% of the dominant issuer's certificates and 96.6% of the others' — a 93.2-point gap that no plausible measurement error could produce.

This is a controlled comparison, not a randomised one: a vendor may route one class of product, or a fuller test panel, to one laboratory. That would not create a gap this size, but it means the share attributable purely to the issuer sits somewhat below the headline figure. And the absence of a chromatogram is a property of the report, not proof the analysis was never run.

EXHIBIT 1

Inside the same vendors, the laboratory — not the vendor — decides whether a certificate shows its chromatography

Share of certificates reporting each result, among the 25 vendors that use both the dominant issuer and another laboratory, %



Source: Condor Research, *State of Analytical Evidence in Research Peptides, 2026* (v4.1), census of 9,646 certificates of analysis. Controlled, not randomised: vendor and catalogue are held constant; product and analytical panel ordered are not. Grey rows are near-ties.

Read one issuer at a time, the pattern is a set of report templates. The table below measures what each laboratory's **published** certificates show — which reflects what vendors ordered and what the report format displays, not what the laboratory is able to do. A vendor that orders a purity test alone gets a purity-only certificate from any issuer.

EXHIBIT 2

What each laboratory's published certificates contain — which is what vendors ordered, not what the laboratory can do

Share of each issuer's certificates reporting a result, %. The 16 laboratories with 80 or more certificates, covering 8,153 of 8,936 attributed certificates. Darker cells, higher share.

LABORATORY	CERTS	PURITY	CHROM.	MS	ENDOTOX.	METALS	MICRO	LOT	VERIF.
Freedom Diagnostics	2,554	91	92	93	44	6	10	97	100
Janoshik Analytical	1,440	66	2	0	6	4	4	84	95
ILS Laboratories	720	98	97	0	76	73	73	98	100
Kovera Labs	577	85	85	82	72	68	60	100	100
Ethos Analytics	557	0	71	0	45	60	60	100	0
Bioviridian	420	94	100	100	50	30	8	92	100
BioRegen	322	89	90	87	2	0	2	82	88
Vanguard Laboratory	315	50	90	0	39	34	39	93	0
Liquilabs s.r.o.	268	39	85	33	93	89	90	100	57
Aegis Bioanalytical Laboratories single vendor	186	100	100	95	100	100	100	100	100
TrustPointe Analytics LLC	183	35	34	0	31	28	7	6	98
Horizon Analytical	155	52	64	64	35	0	0	100	100
MZ BioLabs	131	91	92	84	1	0	0	91	0
OP Labs (in-house issuer) vendor's own laboratory	122	100	100	92	100	0	100	3	0
BTLabs	111	58	85	0	31	0	0	94	0
Chromate	92	96	100	0	29	25	10	79	99

Source: Condor Research, *State of Analytical Evidence in Research Peptides, 2026* (v4.1), census of 9,646 certificates of analysis. Every zero in this table was checked against a random sample of the original certificates; two reading errors were corrected, the rest are real. Accreditation is not shown per laboratory: that detector is measured to undercount.

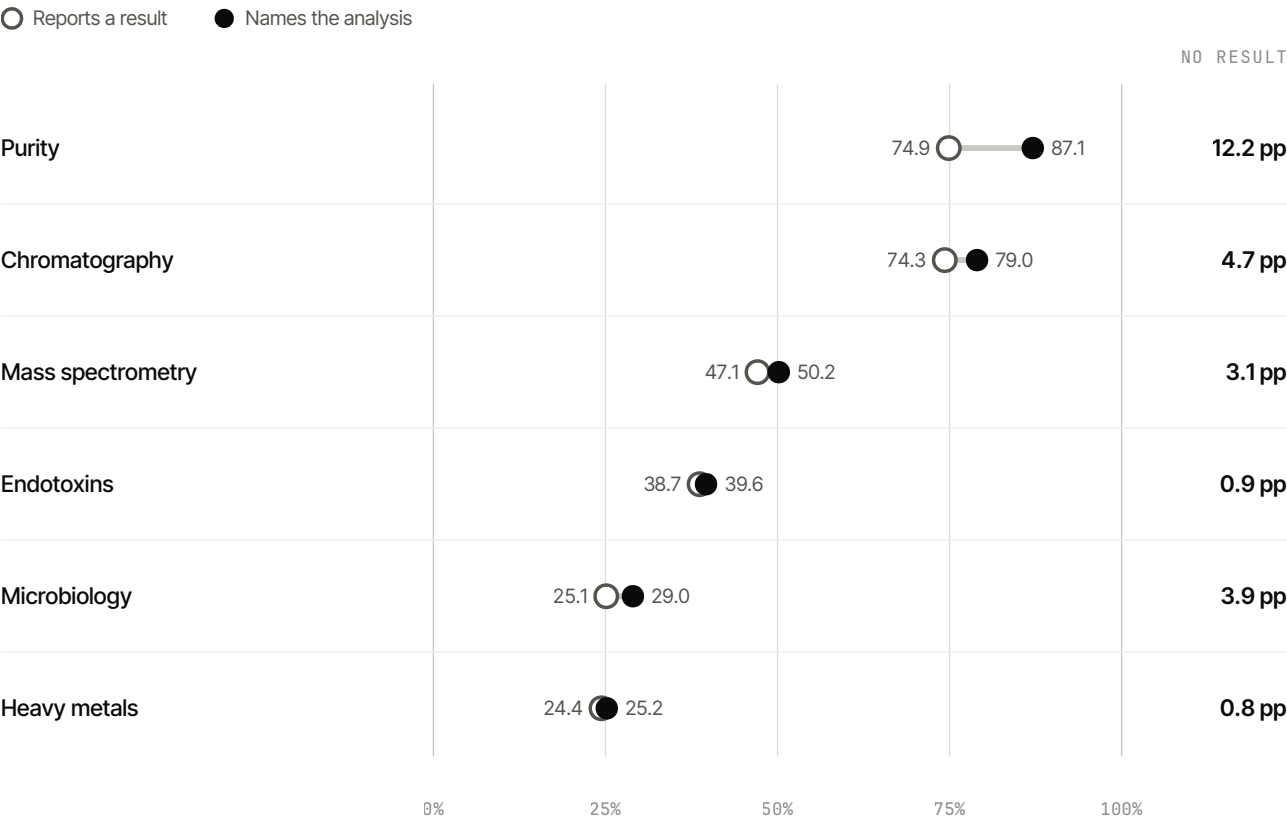
Naming an analysis is not reporting it

For most signals the two numbers sit close: a certificate that names chromatography usually shows its result. **Purity is the exception.** 87.1% of certificates state a purity, but 74.9% report a measurement. The difference is 739 certificates stating a specification — >99%, a threshold claimed rather than a number an instrument produced — and 440 that name purity with no value at all.

EXHIBIT 3

Most analyses a certificate names, it also reports — purity is the exception

Share of 9,646 certificates that name each analysis, and that report a result from it, %



Source: Condor Research, *State of Analytical Evidence in Research Peptides, 2026* (v4.1), census of 9,646 certificates of analysis. Purity gap: 1,179 certificates — 739 state a specification such as ">99%", 440 name purity with no value.

05

Most of the market publishes nothing recoverable

43.9%

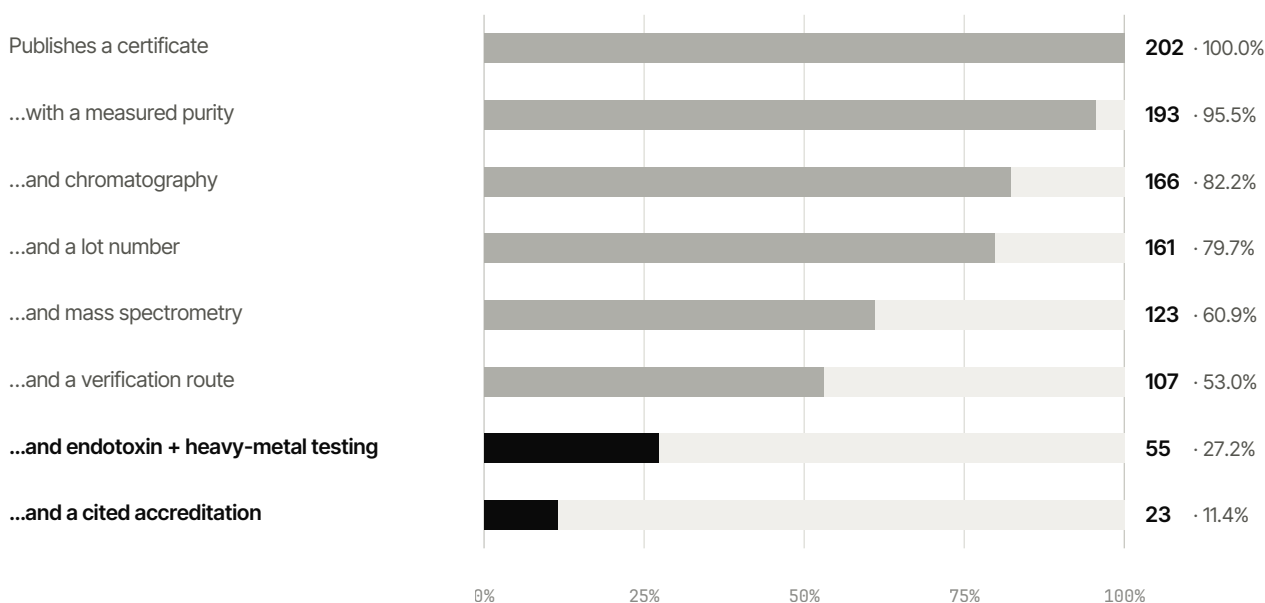
of the 278 eligible vendors publish no recoverable analytical evidence — 122 of 278.

“Publishes nothing” means nothing recoverable by this collection method; evidence behind a login or sent on request is not counted. Among the vendors that do publish, the screen is gentle until it reaches the requirements that cost money.

EXHIBIT 4

Only 23 of 202 vendors publish all eight basic elements of a certificate

Vendors remaining as each requirement is added, cumulative, among the 202 vendors with a certificate in the corpus



Source: Condor Research, *State of Analytical Evidence in Research Peptides, 2026* (v4.1), census of 9,646 certificates of analysis. The two requirements that collapse the count cannot be met by writing anything: a contamination panel has to be ordered and paid for, and accreditation belongs to the laboratory.

EXHIBIT 5 • INTERACTIVE

Set your own standard

Tick any combination of requirements; the count recalculates across the 202 vendors with a certificate in the corpus. Available in the online edition: condorresearch.com/state-of-analytical-evidence/#exhibit-5

06

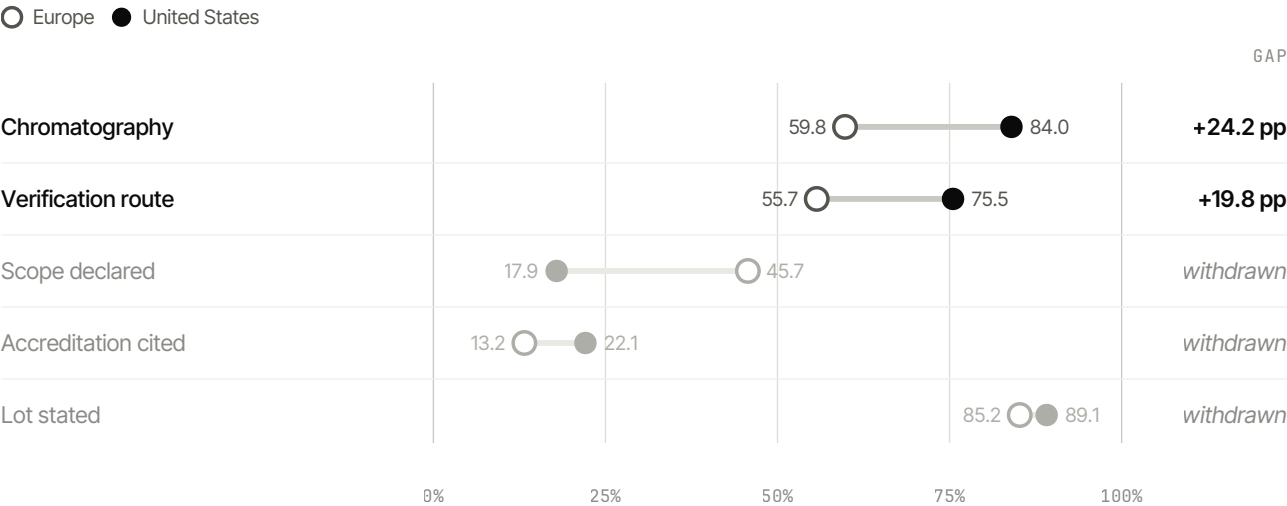
One regional difference survives scrutiny

Earlier versions of this study published five comparisons between Europe and the United States. Four do not survive — not because the data changed, but because the study now measures how often its own detectors miss what they look for.

EXHIBIT 6

Only one regional difference survives scrutiny: European certificates show chromatography less often

Share of certificates reporting each signal, Europe (n = 1,942) against the United States (n = 7,662), %



Source: Condor Research, *State of Analytical Evidence in Research Peptides, 2026* (v4.1), census of 9,646 certificates of analysis. Grey rows are withdrawn: lot is inside the margin of error; scope and accreditation rest on detectors measured to miss 28% and 8% of cases.

07

What we got wrong, and corrected

This study has been audited eight times and 27 defects have been found and corrected. Publishing them is not a disclaimer; it is the reason the remaining figures can be trusted.

EXHIBIT 7

Six claims from earlier versions did not survive audit

Published claims withdrawn or superseded after eight audits and 27 corrected defects

CLAIM AS PUBLISHED	STATUS
"Not one of 1,165 European documents cites any accreditation"	False. 256 of 1,942 European certificates cite one. A multiprocessing defect meant native PDFs were never read.
"82.2% of certificates report purity"	Conflated. 87.1% state a purity; 74.9% report a measurement.
"59 of 100 vendors use the dominant issuer; 82 use a single laboratory"	Superseded. Recomputed once laboratory attribution reached 93.7% of certificates.
"Two incompatible models of trust"	Withdrawn. Other laboratories offer a verification route at 88.6%, nearly as often as the dominant issuer.
Lot and scope: Europe against the US	Withdrawn. One gap is inside the margin of error; the other rests on a detector with ~52% sensitivity.
A corpus of 8,768 certificates	Superseded. 9,646 after OCR recovery and removing 41 safety data sheets.

Source: Condor Research, *State of Analytical Evidence in Research Peptides, 2026* (v4.1), census of 9,646 certificates of analysis. The full record of every defect found and corrected is published with the dataset.

08

How to read these figures

Accreditation (≥20.2%) and declared scope (≥23.6%) are floors, not prevalences.

Their detectors were tested against sampled negatives and undercount.

Published values describe the published record,
not material in circulation. Publishing is voluntary, and certificates with poor results are less likely to be posted.

The laboratory comparison is controlled, not randomised.
Product and analytical panel ordered are not held constant.

Unknown errors are not ruled out.
43 automated invariants cover the defect classes found so far, not the ones nobody has found yet.

09

How we know: method and reliability

150/150

purity digits read exactly, in a blind validation sample

97.3%

semantic agreement on the same sample, giving a ~3-point error margin

43

automated invariants, byte-identical output across repeated runs

8

independent audits, each reading the original documents

Certificates were collected from vendors' public pages, de-duplicated by content, read from native text or OCR, and coded by a single pipeline against a written coding manual. Where code and manual disagree, the manual governs. Sensitivity was measured by sampling negatives, not only positives, which is why two signals are published as floors.

Laboratory accreditation is recorded against [ISO/IEC 17025](#); elemental impurities follow [ICH Q3D\(R2\)](#); endotoxin and microbiological limits follow the [United States Pharmacopeia](#). Guidance on certificate content is published by the [FDA](#) and the [EMA](#).

10

Cite and download

Reuse is free under CC BY 4.0: the data, the figures and the text. Credit is all that is asked, and every downloaded figure already carries it. **A backlink is not required.**

RECOMMENDED CITATION • APA

Condor Research. (2026). *State of analytical evidence in research peptides, 2026* (Version 4.1) [Data set]. <https://condorresearch.com/state-of-analytical-evidence/>

CHICAGO

Condor Research. 2026. "State of Analytical Evidence in Research Peptides, 2026." Version 4.1. September 20, 2026. <https://condorresearch.com/state-of-analytical-evidence/>

BIBTEX

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Online edition

Interactive exhibits, PNG
and SVG of every figure

Dataset

CSV · 10,345
observations · 38 fields

Full report

PDF · this document

VERSIONS AND CORRECTIONS

4.1.1 · 7 October 2026

Editorial revision of the PDF. The declaration of interest now matches the online edition: Condor does not yet publish certificates of analysis, so none of its documents are in the corpus. The previous PDF said Condor's own documents were in the corpus; that sentence was wrong. Layout, typography and exhibits redrawn. No figure, finding, caveat or limitation changed; cite as Version 4.1.

4.1 · 20 September 2026

Current figures. Earlier claims withdrawn or superseded are listed in Exhibit 7; the full record of every defect found and corrected is published with the dataset.

Research Use Only. Everything on this page describes published documents. Nothing here is a dosing instruction, a therapeutic claim, or guidance for human or veterinary use. The compounds discussed are sold strictly for laboratory research.

Condor Research

State of Analytical Evidence in Research Peptides, 2026

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Set in Inter Tight and JetBrains Mono. Exhibits drawn as vectors from the public dataset (SHA-1 a56b58368edc).