

Peptide Reference Cheat Sheet

The reconstitution math, the unit conversions, and - the part no other sheet gives you - which of these 60 compounds have actually been dosed in a human trial and which have not.

WHAT THE BADGES MEAN	HUMAN TRIAL DATA - 26 compounds	ANIMAL DATA ONLY - 23 compounds	NO DOSING LITERATURE - 11 compounds
	Page 2. The schedule shown is the one actually administered in a named trial or on an approved label, with the source.	Page 3. The published work is animal or cell-culture only. No human schedule exists, so none is printed.	Page 3. No meaningful published dosing literature in humans. We say so rather than invent a range.

01 The only three formulas you need

	FORMULA	WORKED EXAMPLE
CONCENTRATION	vial size (mg) / bacteriostatic water (mL)	A 10 mg vial with 2 mL gives 5 mg/mL. You choose this number - the vial does not.
DRAW VOLUME	target amount (mg) / concentration (mg/mL)	At 5 mg/mL, a 250 mcg target is 0.25 / 5 = 0.05 mL.
SYRINGE UNITS	draw volume (mL) x 100	A U-100 syringe reads 100 units per mL, so 0.05 mL is 5 units.

02 Concentration quick reference - what a 10 mg vial becomes

BAC WATER ADDED	CONCENTRATION	100 mcg =	250 mcg =	500 mcg =	1 mg =	2 mg =
1 mL	10 mg/mL	1 units	2.5 units	5 units	10 units	20 units
2 mL	5 mg/mL	2 units	5 units	10 units	20 units	40 units
2.5 mL	4 mg/mL	2.5 units	6.2 units	12.5 units	25 units	50 units
3 mL	3.33 mg/mL	3 units	7.5 units	15 units	30 units	60 units
4 mL	2.5 mg/mL	4 units	10 units	20 units	40 units	80 units
5 mL	2 mg/mL	5 units	12.5 units	25 units	50 units	100 units

Units measure VOLUME, not amount. The same 20 units is a different quantity of compound at every concentration above.

03 Unit conversions

MASS	VOLUME AND SYRINGE UNITS	INTERNATIONAL UNITS (IU)
1 mg = 1000 mcg 1 g = 1000 mg 250 mcg = 0.25 mg 500 mcg = 0.5 mg 1500 mcg = 1.5 mg	U-100: 100 units = 1 mL, so 1 unit = 0.01 mL U-50: same 100 units/mL scale, holds 0.5 mL - wider spacing, easier small draws U-40: 40 units = 1 mL. A DIFFERENT scale - reading a U-40 as U-100 is a 2.5x error. 0.1 mL = 10u 0.25 mL = 25u 0.5 mL = 50u 1.0 mL = 100u	There is NO universal IU-to-mg conversion. An International Unit is defined separately for each substance. Somatropin convention: 3 IU per mg (so 6 IU = 2 mg). That factor is correct for that and nothing else. Most research peptides have no IU definition at all - if a vendor quotes IU for one that does not, ask why.

04 Before you mix - the five errors that actually happen

#	ERROR	WHAT TO DO INSTEAD
1	Shaking the vial	Foaming denatures peptides. Run water down the inside wall and swirl.
2	Reading units as an amount	"20 units" is meaningless without the concentration behind it.
3	Freezing a mixed vial	Freeze-thaw destroys peptides in solution. Freeze dry powder only.
4	A scale slip on small vials	A 0.1 mg IGF-1 LR3 vial is 100 mcg total - a hundredth of a 10 mg vial.
5	Trusting a mismatched COA	If the batch number does not match your vial, the document describes material you did not receive.

05 Compounds with human trial data - 26 of 60

Every schedule below is what was actually administered in the study named in the final column - it reproduces a trial, it is not a recommendation. Arrows mean an escalation; a pipe separates alternatives. Y in the SRS column = stocked by Summit Research Supply (code PEPDOSE).

COMPOUND	SRS	VIALS	AMOUNTS ADMINISTERED IN THE TRIAL	SOURCE
Semaglutide	Y	10, 15, 20, 30, 50 mg	0.25 mg -> 0.5 mg -> 1.0 mg -> 1.7 mg -> 2.4 mg (once weekly)	Wilding JPH et al., "Once-Weekly Semaglutide in Adults with Overweight or Obesity", NEJM 2021 (STEP 1)
Tirzepatide	Y	10, 20, 30, 60, 100, 120 mg	2.5 mg -> 5 mg -> 7.5 mg -> 10 mg -> 12.5 mg -> 15 mg (once weekly)	Jastreboff AM et al., "Tirzepatide Once Weekly for the Treatment of Obesity", NEJM 2022 (SURMOUNT-1)
Retatrutide	Y	10, 15, 20, 30, 50 mg	2 mg -> 4 mg -> 6 mg -> 8 mg -> 10 mg -> 12 mg (once weekly)	Jastreboff AM et al., "Triple-Hormone-Receptor Agonist Retatrutide for Obesity - A Phase 2 Trial", NEJM 2023
Cagrilintide	-	-	0.3 mg -> 0.6 mg -> 1.2 mg -> 2.4 mg -> 4.5 mg (once weekly)	Lau DCW et al., "Once-weekly cagrilintide for weight management in people with overweight and obesity", The Lancet 2021
CagriSema	-	-	0.25 mg / 0.25 mg -> 0.5 mg / 0.5 mg -> 1.0 mg / 1.0 mg -> 1.7 mg / 1.7 mg -> 2.4 mg / 2.4 mg (once weekly)	REDEFINE clinical programme, cagrilintide/semaglutide in obesity
AOD-9604	Y	5 mg	1 mg -> 5, 10, 20, 30 mg (daily)	AOD-9604 phase 2b clinical development in obesity
L-Carnitine	Y	5000 mg	50 mg/kg (loading, then divided doses) 990 mg (two to three times daily)	Levocarnitine prescribing information, carnitine deficiency indication
ARA-290	-	-	4 mg (daily, subcutaneous)	Dahan A et al., ARA-290 in sarcoidosis patients with symptoms of small fibre neuropathy, phase 2
Sermorelin	Y	5, 10 mg	0.03 mg/kg (once daily at bedtime, subcutaneous) 1 mcg/kg (single intravenous dose)	Sermorelin acetate (Geref) prescribing information, idiopathic growth hormone deficiency indication
Ipamorelin	Y	10 mg	0.03 mg/kg (twice daily, intravenous infusion)	Beck DE et al., "Prospective, randomized, controlled, proof-of-concept study of the ghrelin mimetic ipamorelin for the management of postoperative ileus", Int J Colorectal Dis 2014 (NCT00672074)
Tesamorelin	Y	10 mg	2 mg (once daily, subcutaneous)	Tesamorelin (Egrifta) prescribing information, HIV-associated lipodystrophy indication
CJC-1295 with DAC	Y	5 mg	1, 2, 4, 8, 15, 30 mcg/kg (single subcutaneous dose) 30, 60, 90 mcg/kg (single subcutaneous dose) Weekly or biweekly (2-3 doses)	Teichman SL et al., "Prolonged stimulation of growth hormone and IGF-I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults", J Clin Endocrinol Metab 2006
GHRP-2	-	-	100 mcg (single intravenous dose)	Palmorelin (GHRP-2) growth hormone stimulation test literature
GHRP-6	-	-	1 mcg/kg (single intravenous dose)	GHRP-6 human growth hormone secretion studies
Semax	Y	10 mg	0.1% solution (drops per nostril, several times daily) 1% solution (intranasal, acute stroke setting)	Semax clinical literature (Russian registration, ischaemic stroke and cognitive indications)
Selank	Y	10 mg	0.15% solution (drops per nostril, daily)	Selank clinical literature (Russian registration, anxiety indications)
Cerebrolysin	-	-	30 mL (once daily, intravenous infusion) 50 mL (once daily, intravenous infusion) 10 mL (daily, intramuscular or intravenous)	Cerebrolysin clinical trial literature in acute ischaemic stroke and vascular dementia
SS-31	Y	10 mg	40 mg -> 4, 20, 40 mg (once daily, subcutaneous)	Elamipretide clinical programme (MMPOWER series in primary mitochondrial myopathy)
NAD+	Y	500 mg	750 mg (single infusion over 6 hours, intravenous)	Grant R et al., "A Pilot Study Investigating Changes in the Human Plasma and Urine NAD+ Metabolome During a 6 Hour Intravenous Infusion of NAD+", Front Aging Neurosci 2019
Glutathione	Y	1500 mg	1400 mg (three times weekly, intravenous)	Intravenous glutathione in Parkinson disease - randomized placebo-controlled trial literature
Epitalon	Y	10 mg	10 mg per administration (daily or alternate days across a ~10-day course)	Khavinson VK et al., peptide bioregulator and Epithalamin geriatric literature
Thymosin Alpha-1	Y	10 mg	1.6 mg (twice weekly, subcutaneous)	Thymalfasin (Zadaxin) prescribing information, chronic hepatitis B indication
PT-141	Y	10 mg	1.75 mg (as needed, subcutaneous, at least 45 minutes before anticipated activity) 1 dose per 24 hours (no more than 8 doses per month)	Bremelanotide (Vyleesi) prescribing information, HSDD indication
Melanotan I	Y	10 mg	16 mg implant (every 2 months, subcutaneous implant)	Afamelanotide (Scenesse) prescribing information, erythropoietic protoporphyria indication
Kisspeptin-10	Y	10 mg	Dosed per kg per hour (continuous intravenous infusion) Single bolus, kisspeptin-54 (subcutaneous, in trial settings)	Dhillon WS and colleagues, kisspeptin human reproductive physiology and IVF trigger studies
Oxytocin	-	-	Titrated milliunits/minute (continuous intravenous infusion) 24 IU (single intranasal dose)	Oxytocin prescribing information (obstetric indications) and intranasal oxytocin social-cognition research literature

06 Compounds with no established human dosing - 34 of 60

This is the half of the market that other cheat sheets fill in with confident numbers. No human trial has established a dose for any compound on this page. Ranges you see quoted for them elsewhere are extrapolations from animal work or simply repeated between vendors - not measured human amounts. That does not make these compounds useless; it makes any specific number about them unsupported.

COMPOUND	SRS	EVIDENCE	WHY NO SCHEDULE IS PRINTED
5-Amino-1MQ	Y	Animal only	The published work on 5-Amino-1MQ is rodent and cell-culture research. There is no human trial, no approved label, and therefore no human schedule...
SLU-PP-332	-	Animal only	SLU-PP-332 has been studied in mice only. There is no human pharmacokinetic data, no human trial, and no basis for a human schedule. Any figure...
LIPO-C	Y	None	LIPO-C is not a standardised product. Different compounders use different agents at different ratios, so there is no single formulation to study and...
BPC-157	Y	Animal only	This is the single most important thing to know about BPC-157: despite how widely it is discussed, there are no published human clinical trials...
TB-500	Y	Animal only	The human trials in this area studied full-length thymosin beta-4, not the TB-500 fragment sold as a research chemical, and mostly used topical or...
BPC-157 + TB-500 Blend	Y	Animal only	Neither component has a human dosing trial, so a combination of the two cannot have one either. No study has examined this pairing in humans at any...
KPV	Y	Animal only	KPV has a reasonable preclinical literature in colitis and inflammation models, but no published human trial establishing an injected schedule. The...
GLOW Blend	Y	Animal only	None of the three components has an established human injected schedule, so the blend cannot have one. No trial has studied this combination. The...
KLOW Blend	Y	Animal only	As with GLOW, no component has an established human injected schedule and the four-way combination has never been studied in humans. The blend...
LL-37	-	Animal only	Human work with LL-37 has been largely topical and in a wound-healing context; there is no established systemic injected schedule. LL-37 is also...
PE-22-28	-	Animal only	PE-22-28 has been studied in rodents only. There is no human trial, no pharmacokinetic data in humans, and no citable schedule.
CJC-1295 + Ipamorelin	Y	Animal only	The individual components have human pharmacology data, but this specific combination has not been studied in a human trial. There is no citable...
Tesamorelin + Ipamorelin	Y	Animal only	Tesamorelin has an approved label and ipamorelin has phase 2 data, but the combination has never been studied in a human trial. Neither compound's...
IGF-1 LR3	Y	Animal only	This distinction matters and is routinely blurred: recombinant human IGF-1 (mecasermin, marketed as Increlex) is an approved drug with a real label...
PEG-MGF	-	Animal only	MGF and its pegylated form have been studied in rodent muscle-damage models and in cell culture. There is no human trial, no pharmacokinetic data in...
Follistatin	Y	Animal only	The human work in this area has used follistatin gene therapy - a viral vector delivering the FS-344 gene in small trials for muscular dystrophy - ...
Semax + Selank Blend	Y	Animal only	Each component has its own Russian clinical literature as a separate intranasal product. The combination in a single injectable vial has not been...
DSIP	Y	Animal only	DSIP has a scattering of small human studies from the late 1970s and 1980s, mostly in chronic insomnia and pain, but they used varied routes and...
Dihexa	Y	Animal only	Dihexa has been studied in rodents only - principally in scopolamine-induced and lesion models of cognitive impairment. There is no human trial, no...
Adamax	Y	None	There is essentially no peer-reviewed literature on Adamax under that name - no human trial, no animal pharmacology of substance, and no independent...
MOTS-c	Y	Animal only	MOTS-c is measured in human blood as an endogenous peptide, and those observational studies are sometimes misread as dosing evidence. They are not - ...
FOXO4-DRI	-	Animal only	FOXO4-DRI comes from a single influential 2017 mouse study and follow-on preclinical work. There has never been a human trial. There is no human...
Cartalax	-	None	Cartalax belongs to a family of short peptide bioregulators developed and studied almost exclusively by one Russian research group. There is no...
Pinealon	-	None	As with the rest of this family, the literature is limited, largely single-group and largely Russian-language, with no independent human trial...
Cortagen	-	None	No independent human trial, no English-language clinical literature of substance, and no citable schedule. Same limitation as the rest of the...
Vesugen	-	None	No independent human trial and no citable dosing literature. Same family, same limitation.
Ovagen	-	None	No independent human trial and no citable dosing literature.
Prostamax	-	None	No independent human trial and no citable dosing literature.
Testagen	-	None	No independent human trial and no citable dosing literature.
Thymalin	Y	None	Thymalin has Russian clinical use and an associated Russian-language literature, including some long-term geriatric follow-up from the Khavinson...
Melanotan II	Y	Animal only	Melanotan II was never developed to approval. Its two descendants were: PT-141 for sexual dysfunction and afamelanotide for photoprotection - each a...
GHK-Cu	Y	Animal only	GHK-Cu has genuine human evidence - but it is topical and cosmetic, from creams and post-procedure skin studies where the relevant figure is a...
SNAP-8	-	None	SNAP-8 is a topical cosmetic ingredient formulated into creams at low percentages. There is no injectable use, no human injection trial, and no...
PNC-27	-	Animal only	PNC-27 has been studied in cell culture and in some animal tumour models. There has never been a human clinical trial. There is no human...

07 Storage and stability

FORM	STORE AT	REALISTIC WINDOW	NOTES
Lyophilized, unopened	Freezer, -20 C	Long term - the stable form	Keep sealed. Peptides are hygroscopic; absorbed moisture shortens shelf life.
Lyophilized, short term	Fridge, 2-8 C	Weeks to months	Fine if the vial goes into use soon. Avoid repeated warming.
Reconstituted, general	Fridge, 2-8 C, dark	Plan in weeks, not months	NEVER freeze. Freeze-thaw damages peptides in solution.
Reconstituted, fragile	Fridge, 2-8 C, dark	Shorter still	Reduced glutathione oxidises; IGF-1 analogs are less robust than short peptides.
Any cloudy vial	Discard	n/a	Cloudiness or particles mean precipitation, degradation or contamination. None are recoverable.

08 Grade a certificate of analysis before you buy

[]	CHECK	WHY IT MATTERS
[]	Batch / lot number present	A COA for a generic sample documents nothing about your vial.
[]	Batch matches YOUR vial	The single most skipped check, and the one that matters most.
[]	HPLC purity figure	Commonly 98%+ for research peptides.
[]	Chromatogram shown	The trace itself. A number without it is an assertion.
[]	Mass-spec identity	Confirms it is the RIGHT compound. Purity and identity are different questions.
[]	Independent third-party lab	Not only in-house testing.
[]	Recent analysis date	Not a document from years ago.

6-7 ticks = strong documentation. 4-5 = adequate, ask for what is missing. 0-3 = thin paperwork, be cautious.

09 Terms worth knowing

Bacteriostatic water	Sterile water with 0.9% benzyl alcohol - lets a vial be entered repeatedly.	Sterile water	No preservative. Single use only.
Lyophilized	Freeze-dried. The stable form peptides ship in.	Half-life	Time for circulating levels to halve. Determines dosing frequency.
DAC	Albumin-binding group. CJC-1295 with DAC lasts days; without, minutes.	Secretagogue	Makes the body release its own hormone rather than supplying it.
RUO	Research Use Only - not made to pharmaceutical standards. Not a formality.	Titration	Stepwise increase. In the GLP-1 trials it manages tolerability, not efficacy.

10 Where to source

SUPPLIER	CODE	WHY IT IS OUR FEATURED PICK	VERIFY YOURSELF
Summit Research Supply	PEPDOSE	Batch certificate of analysis on every product, independent third-party testing through two labs (ACS Labs and Janoshik), US fulfilment, and a 40+ compound catalogue. Dual-lab verification is uncommon in this market and is the strongest single signal we can point to.	Ask for the COA for your batch and check the lot number against the vial you receive. The checklist above applies to Summit exactly as it does to anyone else. PepGuru earns a commission on Summit links; that is disclosed on every page and does not change the checklist.

Full interactive versions of everything here - 60 protocol pages with citations, 33 per-compound reconstitution calculators, a unit converter, a COA grader and a 51-term glossary - are free at pepguru.app

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