THE PIVOTAL PROTOCOL – EDUCATIONAL REFERENCE SERIES

Biomarker Tracking Template and Interpretation Guide

A structured lab tracking reference for members of The Pivotal Protocol curriculum. Includes baseline panels, tracking tables, interpretation context, and physician communication tools.

Educational purposes only. This document does not constitute medical advice, clinical diagnosis, or treatment recommendation. All reference ranges are general educational context - your physician interprets your results in the context of your complete clinical picture. The Pivotal Protocol is an education and teaching operation.

1. The Baseline Panel: What to Order and Why

A comprehensive baseline panel before beginning any research peptide protocol serves as the measurement anchor. Without it, there is no way to determine whether any change in labs is due to the protocol, baseline variability, or an unrelated health event.

TEST / PANEL	STANDARD REFERENCE RANGE	FUNCTIONAL OPTIMAL RANGE	WHY IT MATTERS
IGF-1	Age-dependent (see lab report)	Upper third of age-matched range	Primary GH-axis output marker; key for GH secretagogue monitoring
Fasted Glucose	70-99 mg/dL	72-90 mg/dL	GH elevation can induce transient insulin resistance
Fasting Insulin	2-25 uIU/mL	2-8 uIU/mL	Insulin sensitivity indicator; contextualizes glucose readings
HbA1c	<5.7%	<5.4%	90-day glucose average; baseline essential before GH-axis protocol
CBC (Complete Blood Count)	Lab-standard	Mid-range on all parameters	Broad health baseline; flags anemia, infection, or hematological issues
CMP (Comprehensive Metabolic)	Lab-standard	Mid-range on all parameters	Kidney and liver function, electrolytes, protein - baseline required
Lipid Panel	TC <200, LDL <100, HDL >40 (M) / >50 (F), TG <150	LDL <80, HDL >60, TG <100	Some GH-axis changes can affect lipids; baseline needed to detect

TEST / PANEL	STANDARD REFERENCE RANGE	FUNCTIONAL OPTIMAL RANGE	WHY IT MATTERS
Thyroid: TSH, Free T3, Free T4	TSH 0.4-4.0 mIU/L; T3/T4 lab-dependent	TSH 1.0-2.0 mIU/L; T3/T4 upper quartile	GH axis and thyroid interact; subclinical hypothyroidism blunts GH response
Testosterone Total	300-1000 ng/dL (M); 15-70 ng/dL (F)	600-900 ng/dL (M); 40-70 ng/dL (F)	Sex hormone baseline; some protocols affect endogenous testosterone axis
Testosterone Free	Lab-dependent	Upper quartile of age-matched	Bioavailable fraction; more clinically meaningful than total alone
Estradiol (E2)	10-40 pg/mL (M); cycle-dependent (F)	20-30 pg/mL (M)	Needed to contextualize testosterone; GH can influence aromatization
SHBG	10-57 nmol/L (M)	20-40 nmol/L (M)	Affects free fraction of testosterone; GH protocols may lower SHBG
LH, FSH	Lab-standard	Within range	HPG axis baseline; useful if evaluating endogenous gonadal function
CRP (high-sensitivity)	<3.0 mg/L	<1.0 mg/L	Inflammatory baseline; BPC-157, TB-500 may affect inflammatory markers
Homocysteine	<15 umol/L	<8 umol/L	Cardiovascular risk marker; general longevity protocol baseline

TEST / PANEL	STANDARD REFERENCE RANGE	FUNCTIONAL OPTIMAL RANGE	WHY IT MATTERS
ESR	0-20 mm/hr (M); 0-30 mm/hr (F)	Low-normal	Inflammatory marker complement to CRP

2. Why Optimal Ranges Differ from Reference Ranges

Standard laboratory reference ranges are derived from the distribution of values in the population used to calibrate the test - which typically includes people with undiagnosed conditions, poor metabolic health, and age-related decline. "Normal" on a standard range can mean "not diagnostically abnormal" rather than "physiologically optimal."

Educational context:

- Functional medicine, longevity medicine, and performance medicine practitioners generally use tighter optimal ranges
- Optimal ranges in this document reflect published longevity and performance research context, not clinical diagnostic thresholds
- Your physician interprets your specific values in your specific context. These tables are educational reference, not diagnostic instruction.

3. IGF-1 Tracking Table

Record four readings across your protocol cycle. Include date, value, and the protocol status at time of draw.

DRAW	DATE	IGF-1 VALUE (NG/ML)	PROTOCOL STATUS AT DRAW	HOURS SINCE LAST GH PEPTIDE DOSE	NOTES
Baseline			Off protocol (2+ weeks washout)	N/A	
Mid-Cycle (Week 6)					
End of Cycle (Week 12)					
Post-Cycle (Week 16)			Off protocol 4 weeks	N/A	

Interpretation note:

4. Fasted Glucose and Insulin Trend Table

TIMEPOINT	DATE	FASTED GLUCOSE (MG/DL)	FASTING INSULIN (UIU/ML)	HBA1C (%)	HOMA-IR (OPTIONAL
Baseline					
Week 6				Optional	
Week 12					
Post-Cycle (Wk 16)					

HOMA-IR = (Fasting Glucose mg/dL x Fasting Insulin uIU/mL) / 405. Under 1.0 is excellent; 1.0-2.0 normal; above 2.9 suggests insulin resistance.

5. Hormone Panel Tracker

MARKER	UNIT	BASELINE	WEEK 6	WEEK 12	POST-CYCLE
Testosterone Total	ng/dL				
Testosterone Free	pg/mL				
Estradiol (E2)	pg/mL				
SHBG	nmol/L				
LH	mIU/mL				
FSH	mIU/mL				
Prolactin	ng/mL				

Note on GHRP-2 and GHRP-6:

6. Thyroid Tracker

MARKER	UNIT	BASELINE	WEEK 6	WEEK 12	POST-CYCLE	REF RAN
TSH	mIU/L					0.4-
Free T3	pg/mL					Lab
Free T4	ng/dL					Lab-
Reverse T3	ng/dL					<25

Tesamorelin and other GHRH analogs have demonstrated ability to improve thyroid hormone metabolism in some research contexts. Subclinical hypothyroidism may blunt GH-axis peptide response - worth flagging to your physician.

7. Inflammatory Markers Tracker

MARKER	UNIT	BASELINE	WEEK 6	WEEK 12	POST-CYCLE
hsCRP	mg/L	[redacted]			
[redacted]					
ESR	mm/hr	[redacted]			
[redacted]					

BPC-157 and TB-500 context: [redacted]

8. Body Composition Tracking

MEASUREMENT	UNIT	BASELINE	WEEK 4	WEEK 8	WEEK 12
Body Weight	lbs / kg				
Waist Circumference	inches / cm				
Hip Circumference	inches / cm				
Upper Arm (flexed)	inches / cm				
Chest (at nipple line)	inches / cm				
DEXA Body Fat %	%		Optional	Optional	
DEXA Lean Mass	lbs / kg		Optional	Optional	

Measure at the same time of day (ideally morning fasted) and in consistent conditions for valid trend data. DEXA scans provide the most accurate body composition snapshot.

9. Sleep Quality Score Tracker

WEEK	AVERAGE SLEEP SCORE (1-10)	AVG HOURS	TIME TO FALL ASLEEP (MIN)	NIGHT WAKINGS	DREAM RECA
Baseline (pre-cycle)					
Week 1-2					
Week 3-4					
Week 5-6					
Week 7-8					
Week 9-10					
Week 11-12					
Post-Cycle					

Vivid dreaming is a commonly reported early indicator of GH secretagogue activity. It reflects delta-wave sleep enhancement. This is considered a qualitative marker of protocol engagement, not a required outcome.

10. Subjective Well-Being Scale (Weekly)

WEEK	ENERGY (1-10)	MOOD (1-10)	COGNITION (1-10)	LIBIDO (1-10)	RECOVERY (1-10)
Pre-Cycle					
Week 1					
Week 2					
Week 3					
Week 4					
Week 5					
Week 6					
Week 7					
Week 8					
Week 9					
Week 10					
Week 11					

WEEK	ENERGY (1-10)	MOOD (1-10)	COGNITION (1-10)	LIBIDO (1-10)	RECOVERY (1-10)
Week 12					
Post-Cycle					

11. Red Flag Lab Values: Pause Protocol and Contact Physician

PAUSE PROTOCOL If any of the following are observed, Do not attempt to self-correct with dose changes. Physician consult required before resuming.

MARKER	RED FLAG THRESHOLD	CONCERN
IGF-1	Above upper limit of age-matched reference range	GH excess; acromegaly risk at sustained supraphysiologic levels
Fasted Glucose	Above 126 mg/dL on two readings, or above 110 mg/dL with HbA1c rise	Impaired glucose regulation; GH-induced insulin resistance
HbA1c	5.7% or above (from a sub-5.7 baseline); or any rise of 0.4+ points	Chronic glucose dysregulation
ALT or AST	Above 3x upper limit of normal	Hepatocellular stress
Creatinine	Above 1.5 mg/dL (M) or 1.2 mg/dL (F) with upward trend	Renal function concern
Prolactin	Above upper limit of normal (20-25 ng/mL in men; higher in women)	May indicate GHRP-mediated prolactin elevation; suppress further stimulation
Hemoglobin	Below 11 g/dL (significant anemia)	Underlying condition requiring evaluation before protocol continuation
TSH	Above 4.5 mIU/L or below 0.3 mIU/L with symptoms	Thyroid dysfunction may require treatment before protocol optimization
LDL	Rise of 30+ mg/dL from baseline in 12 weeks without dietary explanation	Unexpected lipid effect; physician review warranted

12. How to Present This Data to Your Physician

Physicians respond best to organized, chronological data presented without self-diagnosis or demands. A structured approach:

1. **Lead with baseline vs. current comparison.** Print your tracking tables and circle any values that changed more than 10% from baseline. This is the conversation anchor.
2. **State what educational protocol you are following** - including compound names (using generic research names, not brand names), dose ranges per educational material, frequency, and duration. Your physician needs this information to provide relevant guidance.
3. **Separate symptoms from labs.** Describe physical observations separately from lab trends. Do not conflate correlation with causation in your presentation.
4. **Ask specific questions.** "My IGF-1 rose from 120 to 185 ng/mL - is that within a range you are comfortable monitoring?" is more productive than "is my IGF-1 okay?"
5. **Bring this guide.** The reference ranges and red-flag thresholds in this document can facilitate a productive conversation about what to monitor and when to be concerned.

13. Retesting Schedule

PRE-CYCLE	WEEK 6	WEEK 12	WEEK 16
Full CBC, CMP, Lipids, IGF-1, Fasted Glucose, Fasting Insulin, HbA1c, Full hormone panel, Thyroid panel, CRP, Homocysteine	IGF-1, Fasted Glucose, Fasting Insulin, ALT/AST, Creatinine, Testosterone Total/Free, Estradiol, Prolactin (if GHRP-2 or GHRP-6), CRP	Full CBC, CMP, Lipids, IGF-1, HbA1c, Full hormone panel, Thyroid panel, CRP, Body composition (DEXA if available)	IGF-1, Fasted Glucose, HbA1c, Testosterone Total/Free, Estradiol, TSH, CRP. Confirm return to baseline. Inform next cycle planning.

If any red-flag value appears between scheduled draws:

All reference ranges are educational context. Your physician interprets your results in the full context of your clinical picture.