HEALTH OPTIMIZATION · CLINICAL ASSESSMENT · APRIL 2026

The Algorithm Said 68. *The Data Says 56.*

Standard biological age tools are built for average people. Here's what a rigorous 8-system, 38-biomarker analysis actually shows for a genuine outlier at 71.

56	−15	+2.9	624
BIOLOGICAL AGE	YEARS VS CHRONOLOGICAL	BONE DENSITY Z-SCORE	TESTOSTERONE NG/DL

DATA SOURCES: SIPHOX 57-BIOMARKER PANEL · DEXA SCAN · CLINICAL RMR · CGM · CARDIOVASCULAR MARKERS

In March 2026, I completed the most comprehensive single clinical assessment of my life — a 57-biomarker blood panel through SiPhox, a DEXA body composition scan, a clinically measured resting metabolic rate, and continuous glucose monitoring data spanning months. I fed all of it into a standard biological age algorithm. It came back: **68 years old.**

I'm 71 chronologically. So the algorithm said I was three years younger. Mildly flattering. Thoroughly wrong.

Here's the problem. These tools are built on population regression models — statistical averages that weight heavily toward BMI, total cholesterol, and standard metabolic markers. They don't know what to do with a bone density Z-score of +2.9, testosterone of 624 ng/dL naturally at 71, a resting metabolic rate that runs faster than my age-matched peers, or a cardiovascular profile that lets me hold Zone 2 heart rate for 50 consecutive minutes. When those markers go into the algorithm, it penalizes me for a body fat percentage and total cholesterol number without understanding the context behind them.

So I built a different model. Eight physiological systems. Thirty-eight data points. Proper clinical weighting based on mortality research. This is what it actually shows.

> "*Standard algorithms are built for the average. I'm not average. The data makes that case better than I can.*"

Why Standard Algorithms Fail Outliers

Every biological age algorithm I've encountered uses some variation of the same methodology: take a population dataset, build a regression model that predicts chronological age from biomarkers, then run your individual numbers through it. The result tells you where you land relative to the population.

That works fine if you're near the center of the distribution. If you're an outlier, it systematically misclassifies you. Here's how:

The cholesterol problem. My total cholesterol is 264 mg/dL. Every standard algorithm sees that number and assigns a biological age penalty. What the algorithm doesn't know: my ApoB:ApoA1 ratio is 0.64 — optimal. My LDL:HDL ratio is 2.2 — good. My HDL is 72. I'm now on pravastatin to address the absolute values. The ratio story — which is what actually predicts cardiovascular events — looks completely different from the raw numbers.

The BMI problem. My BMI at 6'2", 209 lbs is 26.9. Slightly above "normal." The algorithm counts that against me. What the algorithm doesn't know: I have 140.8 lbs of lean mass, a bone density T-score of +2.4, and the body composition of someone who hasn't lost lean mass through a 58-pound weight loss. BMI is one of the least useful biomarkers in existence for someone who lifts four days a week.

The missing markers problem. No standard consumer algorithm weights testosterone, DHEA-S, bone density Z-score, resting metabolic rate, or sustained aerobic capacity appropriately — because most people don't have those numbers. I do. And they're exceptional.

The Clinical Dataset

Before I walk through the methodology, here are the raw inputs — the actual clinical data this assessment is built on.

SiPhox 57-Biomarker Panel — March 16, 2026

HORMONAL — SELECTED MARKERS

MARKER	RESULT	OPTIMAL RANGE	STATUS
Testosterone (Total)	624 ng/dL	400–800	Optimal
Free Testosterone	8.81 ng/dL	7–20	Optimal
DHEA-S	166.4 µg/dL	150–350	Optimal
TSH	0.9 mIU/L	0.5–2.5	Optimal
Cortisol (morning)	23.4 µg/dL	10–15	Elevated
Estradiol	48.2 pg/mL	10–40	Elevated

CARDIOVASCULAR — SELECTED MARKERS

MARKER	RESULT	OPTIMAL RANGE	STATUS
ApoB	132 mg/dL	40–70	Elevated — Rx active
LDL Cholesterol	160 mg/dL	40–90	Elevated — Rx active
HDL Cholesterol	72 mg/dL	>60	Good
Triglycerides	160 mg/dL	40–70	Elevated
ApoB:ApoA1 Ratio	0.64	0–0.7	Optimal
LDL:HDL Ratio	2.2	0–2.5	Good

METABOLIC & RENAL

MARKER	RESULT	OPTIMAL RANGE	STATUS
HbA1c	6.2%	4.0–5.6%	Fair — improving (was 7.4% July 2025)
eGFR	98.44 mL/min/1.73m^2	>90	Excellent
Albumin	5.4 g/dL	4.0–5.0	Optimal
hsCRP	1.06 mg/L	<1.0	Borderline

MARKER	RESULT	OPTIMAL RANGE	STATUS
Vitamin D	72.8 ng/mL	50–80	Good
Vitamin B12	540 pg/mL	400–900	Optimal

DEXA Body Composition — March 23, 2026

METRIC	VALUE	NOTE
Body Fat Percentage	30.1%	Primary reduction target
Total Fat Mass	64.1 lbs	Trunk concentration — android pattern
Lean Mass	140.8 lbs	Preserved through 58 lb weight loss
Visceral Adipose Tissue (VAT)	135.86 in^3	21% above At-Risk threshold of 112 in^3
Android:Gynoid Ratio	1.22	Target <1.0 — central adiposity confirmed
Bone Density T-Score	+2.4	Well above average — skeleton of a ~45yo
Bone Density Z-Score	+2.9	Top 0.2% for age 71 — exceptional

Functional Measurements

METRIC	VALUE	SIGNIFICANCE
Resting Metabolic Rate (clinical)	2,269 kcal/day	Faster than age-matched peers. Gas analysis confirmed.
Blood Pressure	117/73 mmHg	Textbook optimal
Resting Heart Rate	67–70 bpm	Strong cardiovascular efficiency

METRIC	VALUE	SIGNIFICANCE
CGM Time in Range	96–97%	Near-clinical-trial level glycemic control
Fasting Glucose	80–90 mg/dL	Consistent daily baseline
Zone 2 Exercise	50 min, 101–113 bpm	Sustained without degradation — weights + cardio

The 8-System Biological Age Model

Rather than a single algorithm, this assessment evaluates eight distinct physiological systems, each carrying a weight that reflects its relative contribution to all-cause mortality per current longevity literature. The composite is a weighted mean across all systems.

METHODOLOGY NOTE

Each system biological age is derived by mapping individual biomarkers within that system to their age-reference data — asking not "what is this number" but "what age does this number represent." Weights: Cardiovascular 25%, Metabolic 20%, Hormonal 15%, Musculoskeletal 15%, Renal/Hepatic 10%, Inflammatory 8%, Nutritional 5%, Body Composition 2%.

The 2% weight on Body Composition reflects its status as the primary active intervention target, not its clinical irrelevance. Body composition drives the cardiovascular and metabolic scores substantially — addressing it will cascade improvement across multiple systems.

RENAL / HEPATIC · 10% WEIGHT

45

eGFR 98 · Albumin 5.4 · Creatinine 0.82 · BUN 16 — all optimal. Kidneys performing at the level of a healthy 45-year-old.

MUSCULOSKELETAL · 15% WEIGHT

50

T-score +2.4 · Z-score +2.9 · Lean mass 140.8 lbs preserved through 58 lb weight loss. Exercise symmetry: 0.4–0.6 lb bilateral difference.

NUTRITIONAL · 5% WEIGHT

50

B12 540 · Folate 16.4 · Vitamin D 72.8 — all in optimal range. No deficiencies detected.

ENDOCRINE / HORMONAL · 15% WEIGHT

52

Testosterone 624 ng/dL (avg 71yo: 200–400) · DHEA-S 166 · TSH 0.9. Cortisol 23.4 is elevated under stress load — the primary downside pressure.

INFLAMMATORY · 8% WEIGHT

57

hsCRP 1.06 (borderline) · Cortisol 23.4 (elevated, context-driven). Both have clear pathways to improvement as protocol matures.

METABOLIC · 20% WEIGHT

58

RMR 2,269 kcal/day (exceptional) tempered by A1C 6.2%, TG 160, and VLDL 32. Trend is strongly positive — A1C was 7.4% in July 2025.

CARDIOVASCULAR · 25% WEIGHT

60

BP 117/73 · HR 67–70 · HDL 72 (positive). ApoB 132 and LDL 160 (negative, Rx active). Ratios are protective; absolutes are the target.

BODY COMPOSITION · 2% WEIGHT

62

Body fat 30.1% · VAT 135.86 in^3 (21% above At-Risk). The primary intervention target. Zone 2 protocol is the primary driver.

COMPOSITE WEIGHTED BIOLOGICAL AGE — APRIL 2026

56

15 years younger than chronological age of 71 · Based on 38 biomarkers across 8 systems

The composite of 56 reflects the full picture — including the cardiovascular lipid phenotype that is actively being addressed with pravastatin. This is not a cherry-picked number. The cardiovascular system biological age of 60 is real, it's the primary limiter, and it has a clear pharmacological intervention running now.

But look at what's pulling the number down: bone density that puts me in the top 0.2% of men my age. Testosterone at a level most men 20 years younger haven't seen in years. Kidneys functioning like a 45-year-old's. A resting metabolic rate running faster than age peers at clinical gas analysis. These are not minor findings. They represent genuine physiological advantage that a three-year gap from a consumer algorithm cannot capture.

> "*The Z-score of +2.9 for bone density means I have the skeleton of a man nearly three standard deviations above the average 71-year-old. The algorithm I was using doesn't have a field for Z-score.*"

The Protocol Behind the Numbers

None of this happened by accident. I've been running a systematic health transformation protocol since July 2025 — documented,

measured, and clinically validated at Vanderbilt. Here is the full active stack as of April 2026.

PHARMACOLOGICAL

Pravastatin — initiated April 2026 to address ApoB 132 and LDL 160. Target: ApoB to 70–90 range by June 15 quarterly checkpoint. This is the single highest-value biological age lever currently running.

SUPPLEMENT

DIM (Diindolylmethane) 100–200mg — targeting Estradiol 48.2 → 35–42. Supports healthy estrogen metabolism and reduces aromatization while Zone 2 addresses the root cause (VAT).

EXERCISE

Zone 2 Cardio — 30 min, 4% incline — primary VAT intervention. Sustained 101–113 bpm throughout 50-minute combined sessions. Heart rate never drops during the session. This is the most important single lifestyle intervention for visceral fat reduction.

EXERCISE

Resistance Training 4×/week — lean mass preservation through the weight loss phase. Muscle tissue is what keeps testosterone, bone density, and RMR from declining. Losing 58 lbs without losing lean mass is the difficult part. I've done it.

FASTING

Extended Therapeutic Fasting — cycling protocol targeting insulin sensitivity, metabolic flexibility, and VAT mobilization. The most powerful tool I have for restoring cellular metabolic efficiency.

MONITORING

Dexcom G7 CGM — continuous glucose data 24/7. Fasting glucose consistently in the 80–90 range. Time in range: 96–97%. I was on insulin nine months ago. The CGM is how I stay in range without medication.

MONITORING

Renpho 8-electrode scale — daily body composition tracking calibrated against DEXA gold standard. Every daily reading is

adjusted by the measured device offset so the trend data is clinically meaningful.

Where This Is Going: The June 15 Projection

June 15, 2026 is my next quarterly checkpoint — DEXA, SiPhox full panel, and Renpho calibration all on the same 90-day cycle. Here is what I expect the data to show, and why.

- APOB & LDL

  Pravastatin should deliver a 25–40% LDL reduction over 8–12 weeks. Projected ApoB: 85–105 mg/dL. If this hits, the cardiovascular system biological age moves from 60 to approximately 50, and the composite biological age drops to **52–54**.

- VAT VOLUME

  Zone 2 protocol plus fasting cycles should deliver approximately 8% VAT reduction over 90 days. Projected: 122–127 in³ (from 135.86). Still above the 112 in³ threshold, but directionally clear. The trajectory reaches optimal by mid-2027.

- ESTRADIOL

  DIM plus body fat reduction should bring estradiol from 48.2 toward 35–42 pg/mL. This improves the testosterone utilization picture and normalizes the aromatization loop.

- CORTISOL

  This is the wild card. Cortisol at 23.4 is driven by situational stress load — active litigation, a business transition, and a personal life in motion. As those structural stressors resolve, the biochemistry follows. Projection: 16–19 µg/dL.

- BIOLOGICAL AGE

> If ApoB normalizes and VAT continues its trajectory, the composite biological age projects to **52–54** by the June 15 assessment. That is the target.

What This Means for Life Expectancy

I want to be careful here, because life expectancy modeling at the individual level involves meaningful uncertainty. What I can offer is an evidence-based adjustment framework applied to the SSA actuarial baseline for a 71-year-old American male of 82.4 years.

FACTOR	ADJUSTMENT	BASIS
Blood pressure 117/73	+2.5 yrs	Top quartile for age — strong cardiovascular protection
Aerobic exercise capacity (Zone 2 sustained)	+3.5 yrs	Top 10% aerobic performance for age — most powerful longevity predictor
Bone density Z-score +2.9	+1.5 yrs	Near-zero fracture risk; fractures are major mortality events after 70
Testosterone 624 ng/dL naturally	+1.5 yrs	Protective: sarcopenia, cognitive decline, cardiovascular function
eGFR 98 — excellent renal function	+1.5 yrs	CKD is significant all-cause mortality driver
RMR faster than age peers	+1.0 yr	Metabolic vitality marker
CGM time in range 97%	+0.5 yr	Glycemic control from prior insulin dependency
ApoB 132 — atherogenic particle burden	−2.5 yrs	Being addressed with pravastatin — partially recoverable
	−2.0 yrs	

FACTOR	ADJUSTMENT	BASIS
VAT 135.86 in³ — elevated visceral fat		Zone 2 protocol active — recoverable over 12–18 months
A1C 6.2% — T2D history	−1.0 yr	Trend strongly positive; residual risk from prior severity

Net adjustment from the 82.4 baseline: approximately **+7.6 years**, placing the central estimate at **90 years**. That is the current protocol trajectory. If pravastatin normalizes ApoB and VAT reaches optimal range by 2027, the negative adjustments shrink materially and the range shifts to 90–93.

The upside scenario — all metabolic markers optimized, cortisol normalized, body fat below 25% — supports the 93–96 range. I don't say that to be vain. I say it because every intervention I'm running right now is specifically aimed at the markers with the largest downside drag on that number.

The Honest Assessment

My biological age is 56. Not 42 (overclaiming), not 68 (algorithm error). Fifty-six — fifteen years younger than I am on paper, grounded in clinical data across eight systems.

The cardiovascular lipid phenotype is real. The elevated VAT is real. I'm not minimizing them. What I am saying is that those are the two things I'm actively fixing right now with the best available pharmacological and lifestyle interventions. And everything else — the bones, the testosterone, the kidneys, the metabolic rate, the cardiovascular performance — is exceptional.

I turned 71 in a gym. I'm not slowing down. The data makes that case better than I can.

Build Your Own Protocol

I track everything, document everything, and share the methodology that's produced these results. The full protocol — testing stack, supplement approach, fasting framework — is available through my consulting practice.

WORK WITH ME

FREE RESOURCES

Data sources: SiPhox 57-biomarker panel (March 16, 2026) · DEXA scan, Live Lean Nashville (March 23, 2026) · Clinical RMR gas analysis (March 23, 2026) · Dexcom G7 CGM (continuous) · Renpho 8-electrode bioimpedance scale (calibrated).
Clinical validation: Vanderbilt University Medical Center · Giles A. Lippard, APRN

This article documents one individual's clinical data and personal health optimization protocol. Nothing here constitutes medical advice. Work with your physician before making changes to your health protocol.