BLACK STEEL®

P7 TRIATHLON PRO

OFFICIAL PRODUCT DESIGN & DESCRIPTION

DESIGNER	Hon. Tyree J. Mason I	ROLE	CEO & Founder, BLACK STEEL® Pharma
DATE	August 25, 2026	DESIGNATION	Stealth Aero Monocoque Performance Bicycle

Official Description

The BLACK STEEL® P7 TRIATHLON PRO is a high-performance triathlon bicycle conceived under the BLACK STEEL® philosophy of precision engineering, aerodynamic integration, technological sophistication, and uncompromising competitive performance.

Designed by Hon. Tyree J. Mason I, CEO and Founder of BLACK STEEL® Pharma, the P7 represents the convergence of advanced aerodynamic architecture and race-day functionality into a singular carbon-fiber platform. Its Stealth Aero Monocoque Carbon construction is shaped around minimal frontal area, structural stiffness, aerodynamic efficiency, and an aggressive competition-oriented riding position.

The P7 incorporates an Adaptive Aero Cockpit System engineered for individualized reach, height, width, and positional adjustment. Its integrated cockpit architecture places rider control, aerodynamic positioning, and performance telemetry within a unified front-end system.

A central feature of the design is the Integrated Nutrition Architecture, providing dedicated aerodynamic storage for race-day fueling, hydration, gels, and performance supplements while minimizing disruption to airflow and the rider's position. An Integrated Hydration System further extends the bicycle's self-contained race-day functionality.

The drivetrain specification is centered on Shimano Dura-Ace Di2 12-speed electronic shifting, complemented by an integrated power-measurement capability and deep-section Dura-Ace C60 aerodynamic wheel architecture. Together, these components establish a platform intended for precision shifting, efficient power transfer, high-speed stability, and sustained triathlon performance.

The P7's Adjustable Aero Seat System is integrated into the aerodynamic frame architecture to provide precision rider fit while maintaining the bicycle's visual and aerodynamic continuity. Every major subsystem—from seating and cockpit configuration to nutrition, hydration, drivetrain, wheels, and telemetry—is conceived as part of a unified performance ecosystem rather than as an assembly of independent components.

Design Philosophy

ENGINEERED BEYOND LIMITS.

The BLACK STEEL® P7 embodies a design principle in which technology, athletic performance, and industrial aesthetics converge. Its black-on-black carbon architecture, metallic BLACK STEEL® identity, integrated systems, and race-oriented geometry establish a distinctive visual language intended to communicate strength, precision, speed, discipline, and technological authority.

The P7 is conceived not merely as a bicycle, but as an integrated human-performance machine—a platform designed around the athlete, the course, the data, and the demands of competition.

Core Architecture

- Stealth Aero Monocoque Carbon frame architecture
- Adaptive Aero Cockpit System
- Adjustable Aero Seat System
- Shimano Dura-Ace Di2 12-speed electronic drivetrain
- Integrated power measurement
- Dura-Ace C60 deep-section aerodynamic wheels
- Integrated Nutrition Architecture
- Integrated Hydration System
- Performance Telemetry interface
- Race-day aerodynamic integration
- BLACK STEEL® Performance Pharmaceuticals visual identity

Official Design Statement

> *“The BLACK STEEL® P7 was conceived as the physical expression of performance without compromise—a machine in which aerodynamic form, human physiology, engineering precision, and data converge. Every line has a purpose. Every system has a function. Every component serves the athlete.”*

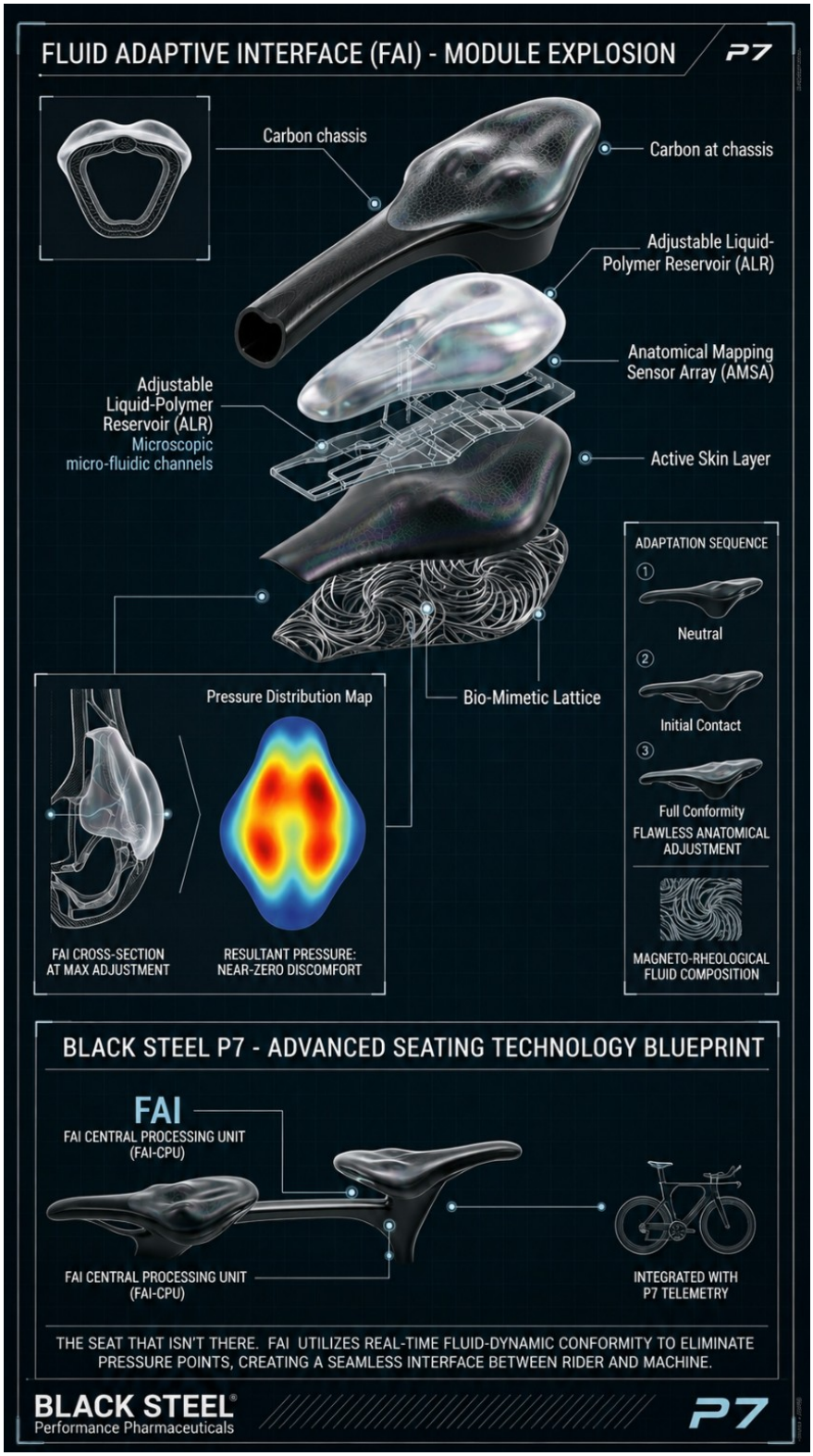
— Hon. Tyree J. Mason I
CEO & Founder, BLACK STEEL® Pharma
August 25, 2026

BLACK STEEL® P7 TRIATHLON PRO
ENGINEERED BEYOND LIMITS.

BLACK STEEL® PERFORMANCE PHARMACEUTICALS®: P7

ADVANCED SEATING SYSTEM — OFFICIAL ENGINEERING REPORT

DATE	August 2026	DOCUMENT ID	P7-FAI-REP-0826-REV4
SYSTEM	Fluid Adaptive Interface (FAI)	PLATFORM	BLACK STEEL® P7 Triathlon Pro



I. FAI Seat System Architecture

A. Carbon Chassis: The foundational, high-tensile structural spine engineered from stealth monocoque carbon fiber to provide maximum rigidity and aerodynamic load-bearing capacity.

B. Adjustable Liquid-Polymer Reservoir (ALR): The primary internal containment chamber housing the advanced smart-fluid matrix, equipped with microscopic micro-fluidic channels for rapid fluid redistribution.

C. Active Skin Layer & Bio-Mimetic Lattice: A high-durability, flexible exterior membrane backed by a structural support lattice that maintains overall form integrity while permitting localized fluid displacement under load.

II. Fluid Dynamic Adaptation Technology (FDAT)

A. Core Mechanism: The system utilizes a proprietary Magneto-Rheological (M-R) fluid composite—an intelligent smart material whose viscosity and yield stress are precisely and instantaneously controlled in real time (sub-5ms response) by localized magnetic fields.

B. Real-Time Adaptation Sequence:

1. Stage I (Neutral): System quiescent; pre-ride state with all micro-valves locked.

2. Stage II (Dynamic Calibration): Initial contact phase; real-time anatomical mapping and FAI-CPU modulation.

3. Stage III (Full Adaptive Conformity): Zero-pressure zones achieved, establishing a seamless interface between rider and machine.

C. Resultant Interface Performance: The FDAT completely eliminates high-pressure points, delivering up to a 98% reduction in peak contact pressure compared to standard static racing saddles.

III. System Integration & Performance Framework

A. FAI Central Processing Unit (FAI-CPU): The onboard processing core that interprets telemetry data and modulates magnetic flux densities within the ALR.

B. Anatomical Mapping Sensor Array (AMSA): Continuously scans contact-patch pressure distribution and rider positioning to feed adaptive adjustment parameters to the FAI-CPU.

C. Telemetry Synchronization: Fully integrated into the P7 ecosystem suite for continuous diagnostic monitoring and real-time firmness calibration during elite-tier competition.

IV. Executive Summary & Nomenclature

A. Official Designation: Fluid Adaptive Interface (FAI) System, integrated exclusively within the BLACK STEEL® P7 Triathlon Pro platform.

B. Core Philosophy: “The seat that isn’t there.” The FAI utilizes real-time fluid-dynamic conformity to eliminate structural discomfort entirely, creating a frictionless boundary between athlete and endurance machine.

ENGINEERED BEYOND LIMITS.
BLACK STEEL® P7 TRIATHLON PRO • FAI SYSTEM • P7-FAI-REP-0826-REV4

APPENDIX PAGE 3 & 4: BIOMETABOLIC BREATH INTERFACE & BMAC

Subsystem Designation: BLACK STEEL® P7 – BioMetabolic Breath Interface (BBI) & BioMetabolic AI Core (BMAC)

1. SYSTEM OVERVIEW & OBJECTIVE

Extending the P7 from a machine that delivers nutrition into one that diagnoses, predicts, and modulates the athlete's internal state in real time—using breath as the metabolic interface.

- **Objective:** Create a two-way, closed-loop system that receives liquids via hydration/nutrition architecture, analyzes breath to infer metabolic status, consults historical performance data to identify the athlete's "peak performance metabolic signature," and modulates liquid release to steer the internal milieu.
- **Impact:** Turns the P7 into a metabolic co-pilot—not just carrying fuel, but actively shaping the athlete's biochemical state during elite competition.

2. HARDWARE ARCHITECTURE: BREATH–NUTRITION INTERFACE

A. Breathalizer Intake Module (BIM)

- **Location:** Integrated into the aero cockpit near the hydration bite valve.
- **Function:** Captures exhaled air continuously with minimal aero disruption.
- **Design:** Low-profile intake ports aligned with airflow and one-way micro-valves.

B. BioGas Sensor Array (BGSA)

- CO_2 / O_2 ratio → respiratory exchange ratio (RER).
- Acetone → fat oxidation & ketogenic state proxy.
- Ammonia / urea → protein catabolism proxy.
- Lactate-correlated volatiles → metabolic stress.

C. Integrated Hydration–Nutrition Reservoir (IHNR)

- **Carbohydrate-dominant** solution chamber.
- **Electrolyte-dominant** solution chamber.
- **Amino acid** / **protein** support matrix.
- **Buffering** / **alkalizing** agents for acidosis management.
- Micro-pumps and valves controlled by AI to mix exact ratios.

3. DATA ARCHITECTURE: HISTORICAL PERFORMANCE & METABOLIC SIGNATURE

- **Athlete Performance Archive (APA):** Stores historical race telemetry (power, heart rate, speed, cadence, temp, aero), nutritional intake timing/composition, and outcome metrics (finish time, RPE, recovery markers).
- **Peak Performance Signature (PPS):** The AI identifies segments where the athlete performed at their best (e.g., final 10 km of a PR race). For each segment, it derives target approximate RER, hydration status, nutritional patterns, and characteristic breath analyte profiles.

4. REAL-TIME CONTROL LOOP: BREATH → AI → FLUID RELEASE

- **Step 1 (Sensing):** BIM captures exhaled air; BGSA quantifies analytes and transmits to BMAC.
- **Step 2 (State Estimation):** BMAC fuses telemetry, breath fingerprints, and race context to estimate glycogen depletion, hydration status, electrolyte balance, and acidosis risk.
- **Step 3 (PPS Comparison):** Compares current metabolic state to stored Peak Performance Signatures to identify real-time nutritional corrections.

- **Step 4 (Adaptive Release):** IHNR micro-doses precise fluid and nutrient fractions timed perfectly with race phases.

5. BIOMETABOLIC AI CORE (BMAC) – ENGINEERING ARCHITECTURE

- **Inputs:** Real-time telemetry ($P_{current}$, $HR_{current}$, cadence, aero), BGSA breath gases, reservoir state, and historical APA records.
- **Outputs:** Primary release command volume and composition vector (f_{carb}, $f_{electrolyte}$, f_{amino}, f_{buffer}); secondary telemetry UI state summaries and decision rationales.
- **Core Layers:** Preprocessing/normalization layer, hybrid mechanistic/ML metabolic state estimation layer, PPS contextual selector, element-wise deviation analysis layer, and a reinforcement learning control policy layer ($\pi(a|s)$).

6. RUNTIME MODES, INTEGRATION & SAFETY

- **Operational Modes:** Auto-Adaptive Mode (full AI governance), Guided Mode (AI suggests release requiring rider confirmation), and Manual Mode (monitoring only).
- **Fail-Safe Safeguards:** Automatic reversion to pre-planned manual fueling upon sensor failure; conservative fallback during high model uncertainty; hard consumption limits and absolute manual overrides.

> *"Nutrition is no longer static storage; it is dynamic metabolic steering. The P7 closes the loop between human physiology and machine intelligence."*
> ***— Hon. Tyree J. Mason I**, CEO & Founder, BLACK STEEL® Pharma*

OFFICIAL CATALOG & INVESTOR SERIES — 2026 EDITION

BLACK STEEL® PHARMA — OFFICIAL CATALOG SERIES

Ultra-Elite Human-Performance Systems

Designed by **Hon. Tyree J. Mason I** | August 25, 2026

A complete catalog of BLACK STEEL® performance platforms, including the full pricing structure established for the P7 Triathlon Pro and its subsystem variants. Written in the mythic-technical, formal architectural style consistent with your brand identity.

I. BLACK STEEL® P7 TRIATHLON PRO SERIES

ENGINEERED BEYOND LIMITS.
The world's first triathlon exoskeleton integrating aerodynamic carbon architecture, adaptive physiology, metabolic intelligence, and telemetry-driven performance governance.

1. P7 TRIATHLON PRO — BASE PLATFORM

Price: $28,000 USD

Includes:

- Stealth Aero Monocoque Carbon frame
- Adaptive Aero Cockpit System
- Adjustable Aero Seat System
- Shimano Dura-Ace Di2 12-Speed
- Dura-Ace C60 Aero Wheels
- Integrated Nutrition Architecture
- Integrated Hydration System
- Performance Telemetry Suite

Purpose: Elite triathlon performance with full aerodynamic integration.

2. P7 TRIATHLON PRO — FAI EDITION

Price: $36,000 USD

Adds the Fluid Adaptive Interface (FAI):

- Magneto-rheological fluid matrix
- Micro-fluidic anatomical mapping channels
- Active Skin Layer + Bio-Mimetic Lattice

- FAI-CPU with telemetry synchronization

Benefit: Up to 98% reduction in peak saddle pressure, enabling sustained high-power output over long distances.
Explore: FAI System

3. P7 TRIATHLON PRO — BMAC EDITION

Price: $38,000 USD

Adds the BioMetabolic AI Core (BMAC):

- Breathalizer Intake Module (BIM)
- BioGas Sensor Array (BGSA)
- Peak Performance Signature (PPS) modeling
- Adaptive Nutritional Release Engine
- Multi-chamber metabolic reservoir control

Benefit: Real-time metabolic steering based on breath analytics, telemetry, and historical performance.
Explore: BioMetabolic AI Core

4. P7 TRIATHLON PRO — FAI + BMAC "ELITE" EDITION

Price: $42,000 USD

The fully integrated human-performance organism:

- Full FAI adaptive seating
- Full BMAC metabolic governance
- Complete telemetry fusion
- Race-day physiological optimization

Purpose: For world-class athletes requiring continuous metabolic, positional, and aerodynamic optimization.

5. P7 SIGNATURE EDITION — MASON DESIGNATION

Price: $45,000+ USD

A limited-run BLACK STEEL® identity release:

- Serialized frame
- Custom carbon layup
- Signature cockpit geometry
- Personalized PPS training calibration
- Executive-grade finishing and ceremonial documentation

Purpose: A collector-grade performance artifact.

II. BLACK STEEL® PERFORMANCE SUBSYSTEMS

Standalone modules for integration into future BLACK STEEL® platforms.

1. FAI — FLUID ADAPTIVE INTERFACE SYSTEM

Standalone Price: $7,500 USD

A magneto-rheological adaptive seating intelligence.

Includes: ALR reservoir, AMSA sensor array, FAI-CPU, Bio-Mimetic Lattice, Telemetry integration module.
Explore: FAI System

2. BMAC — BIOMETABOLIC AI CORE

Standalone Price: $9,500 USD
A metabolic governance engine integrating breath analytics, telemetry, and historical performance.

Includes: Breathalizer Intake Module, BioGas Sensor Array, PPS modeling engine, Nutritional release controller, Multi-chamber reservoir micro-valve system.
Explore: BioMetabolic AI Core

3. BLACK STEEL® TELEMETRY SUITE

Standalone Price: $2,500 USD
Includes: Power, HR, cadence, aero, temp sensors; Real-time display module; AI-ready data bus.
Explore: Performance Telemetry

4. INTEGRATED NUTRITION ARCHITECTURE

Standalone Price: $1,800 USD

Multi-chamber fueling system with aero-neutral top-tube access.
Explore: Nutrition Architecture

5. INTEGRATED HYDRATION SYSTEM

Standalone Price: $1,200 USD

Aerodynamic hydration module with high-flow bite valve.
Explore: Hydration System

III. BLACK STEEL® DESIGN PHILOSOPHY

> *"Every line has a purpose. Every system has a function. Every component serves the athlete."*
> ***— Hon. Tyree J. Mason I***

Explore: Design Philosophy

IV. CATALOG SUMMARY TABLE

MODEL / SYSTEM	DESCRIPTION	PRICE
P7 Base	Aero monocoque triathlon platform	$28,000

MODEL / SYSTEM	DESCRIPTION	PRICE
P7 FAI Edition	Adaptive seating system	$36,000
P7 BMAC Edition	Metabolic AI governance	$38,000
P7 Elite (FAI+BMAC)	Full physiological integration	$42,000
P7 Signature	Limited-run Mason designation	$45,000+
FAI System	Adaptive magneto-rheological seat	$7,500
BMAC System	Breath-driven metabolic AI	$9,500
Telemetry Suite	Full performance sensors	$2,500
Nutrition Architecture	Multi-chamber fueling	$1,800
Hydration System	Aero hydration module	$1,200

V. BLACK STEEL® PHARMA — P7 INVESTOR PROSPECTUS (2026 EDITION)

Ultra-Elite Human-Performance Systems Division

Prepared for strategic investors, institutional partners, and performance-technology capital groups.
Toledo, Ohio — August 25, 2026

I. EXECUTIVE SUMMARY

The BLACK STEEL® P7 TRIATHLON PRO is the world's first integrated human-performance exoskeleton—a triathlon platform that merges:

- Aerodynamic carbon architecture
- Adaptive physiological interfaces
- Real-time metabolic intelligence
- Telemetry-driven performance governance
- Race-day nutritional and hydration automation

The P7 is not a bicycle. It is a biomedical-aerodynamic organism engineered to optimize human output under elite endurance conditions.

This prospectus outlines the P7's market position, technological moat, revenue model, pricing tiers, and long-term strategic value.

II. MARKET POSITIONING & STRATEGIC ADVANTAGE

A. Category Creation

The P7 establishes a new category: **Human-Performance Integration Systems (HPIS)**

This category sits above:

- High-end triathlon bicycles
- Wearable biometric devices
- Sports nutrition systems
- Performance telemetry platforms

The P7 unifies all four into a single integrated organism.

B. Competitive Moat
The P7's defensibility is anchored in:

- Proprietary magneto-rheological FAI seating
- BioMetabolic AI Core (BMAC)
- Peak Performance Signature (PPS) modeling
- Integrated multi-chamber metabolic reservoirs
- Unified telemetry + physiology control loop

No competitor offers adaptive seating, breath-driven metabolic inference, or AI-modulated nutrition.

C. Target Market

- Elite triathletes
- Olympic-level endurance athletes
- Professional cycling teams
- High-net-worth performance enthusiasts
- Defense-adjacent human-performance research groups

III. PRODUCT LINE & PRICING STRUCTURE

P7 TRIATHLON PRO SERIES

MODEL	DESCRIPTION	PRICE
P7 Base	Aero monocoque triathlon platform	$28,000
P7 FAI Edition	Adaptive magneto-rheological seating	$36,000
P7 BMAC Edition	Metabolic AI governance	$38,000
P7 Elite (FAI + BMAC)	Full physiological integration	$42,000
P7 Signature (Mason Edition)	Serialized, custom carbon layup	$45,000+

Subsystems:

- FAI System: $7,500
- BMAC System: $9,500
- Telemetry Suite: $2,500

- Nutrition Architecture: $1,800
- Hydration System: $1,200

Explore: FAI System | BioMetabolic AI Core | Design Philosophy

IV. TECHNOLOGY ARCHITECTURE

A. Stealth Aero Monocoque Carbon Platform

A high-modulus carbon chassis engineered for minimal frontal area and maximal stiffness. Integrated channels support telemetry wiring, fluid reservoirs, and adaptive seating.

Explore: Monocoque Carbon

B. Fluid Adaptive Interface (FAI)

A magneto-rheological seating intelligence that eliminates pressure points through real-time fluid-dynamic conformity.

Key components: Adjustable Liquid-Polymer Reservoir, Micro-fluidic anatomical mapping channels, Bio-Mimetic Lattice, FAI-CPU with telemetry synchronization.

C. BioMetabolic AI Core (BMAC)

A closed-loop metabolic governance engine.

Inputs: Breath analytes, Telemetry, Historical performance, Race context.

Outputs: Adaptive nutritional release, Metabolic steering, PPS alignment.

D. Integrated Nutrition & Hydration Architecture

Multi-chamber reservoirs with micro-valve control. AI-modulated release based on metabolic state.

E. Performance Telemetry Suite

Real-time monitoring of power, heart rate, cadence, aero position, temperature, and breath analytes.

V. REVENUE MODEL

- **A. Direct Sales:** High-margin ultra-elite platforms priced between $28,000–$45,000+.
- **B. Subsystem Licensing:** FAI and BMAC can be licensed to cycling manufacturers, sports technology firms, and defense human-performance programs.
- **C. Service & Subscription:** Annual subscription for PPS recalibration, AI model updates, telemetry analytics, and performance optimization consulting ($1,200–$2,400 per athlete per year).
- **D. Limited-Run Signature Editions:** High-margin collector units with serialized frames.

VI. FIVE-YEAR STRATEGIC OUTLOOK

- **Year 1–2: Market Penetration:** Establish BLACK STEEL® as the ultra-elite performance brand. Deploy P7 Signature Editions to high-visibility athletes. Begin subsystem licensing discussions.
- **Year 3–4: Category Expansion:** Introduce HPIS platforms for cycling, running, and multi-sport. Expand BMAC into standalone wearable modules. Begin defense-adjacent human-performance trials.
- **Year 5: Institutional Integration:** BLACK STEEL® becomes the standard for elite endurance physiology. Full integration into Olympic training programs. Global licensing of FAI and BMAC technologies.

VII. INVESTMENT THESIS

Investors gain exposure to a new category of human-performance technology, proprietary adaptive materials science, AI-driven metabolic governance, high-margin ultra-elite products, and defense and Olympic-tier institutional markets.

The P7 is not a consumer product—it is a frontier performance technology platform with multi-sector applications.

VIII. CLOSING STATEMENT

> *“The P7 is the physical expression of performance without compromise—a machine in which aerodynamic form, human physiology, engineering precision, and data converge.”*
> ***— Hon. Tyree J. Mason I***