Integral BioStrategy

STRATEGIC SCIENTIFIC HYPOTHESIS ENGAGEMENT — ILLUSTRATIVE

Strategic Scientific Hypothesis Engagement — Asset Y, an oral incretin for obesity

What would a partner's diligence challenge — and which experiment most strengthens the story?

Ivan A. Valdez, PhD

June 2026 · integralbiostrategy.com

Integral BioStrategy — partner-led scientific strategy, anchored in metabolic disease

Integral BioStrategy is partner-led by Ivan A. Valdez, PhD and Alfred Atallah, JD — combining deep science with transaction-informed judgment, with specialized advisors added by scope. Two complementary lanes, built together.

Ivan A. Valdez, PhD

Scientific strategy

Turns complex biology into testable hypotheses and defensible strategy — mechanism, evidence architecture, and positioning. Integration is the edge: connected biology moving across metabolic organs while evidence is built one indication at a time.

Alfred Atallah, JD

Deal & partnering strategy

Partner-led for teams negotiating a partnership, license, or financing — structuring the deal, the terms, and the protections, so the value created in the science is not given away at the table.

Note: Partner-led; specialized advisors added by scope. De-identified illustrative deck.

How we work: a scoped, evidence-graded engagement — the science and the deal built together

1

Frame the hypotheses

Isolate the team's load-bearing claims and restate the unproven ones as falsifiable, mechanism-first hypotheses.

2

Grade the evidence

Map each claim to its evidence and grade it — well-supported, plausible, premature, unsupported — the way a partner's scientists will.

3

Design the settling readouts

For each hypothesis, the one experiment that settles it — with a decision tree of what every outcome means.

4

Pair with the deal lens

Translate each outcome into timing, leverage, and protections — so the asset enters partner talks with the diligence already addressed.

Scoping-call first; engagements are scoped in writing. Scientific and strategic advisory only.

Note: Engagement model shown on an illustrative invented asset; no real client.

The foundation: deep science, transactional judgment, and open research on the record

15 yrs

In metabolic-disease research, across three labs

20 yrs

In transactional law and dealmaking

4

Registered DOIs — open, citable research on the record

Openly licensed and built to be citable, with registered DOIs on our deposited reports and essays. The same evidence discipline we bring to a client engagement.

Note: Figures mirror integralbiostrategy.com; partner-led, de-identified.

CONTENTS

The oral story is partner-ready; three load-bearing claims are mechanistic questions — two are deal-breakers

Oral dosing is a well-supported differentiator. But “best-in-class,” “durable,” and “muscle-sparing” are asserted ahead of the data — and each is a mechanistic question a partner will press. We convert them into three falsifiable hypotheses; two are deal-breakers worth settling before outreach.

The answer, up front: settle two deal-breaker hypotheses before partner outreach.

A muscle-sparing mechanism readout (H1) and an off-treatment durability arm (H2) convert the two most-challenged claims to evidence — the rest of this deck is the reasoning behind that.

What holds: oral dosing is a genuine, well-supported class differentiator.

The route-of-administration advantage is real if efficacy holds head-to-head.

What doesn't: “durable” and “muscle-sparing” are premature — and are mechanism questions, not slogans.

Each is decided by a specific experiment, mapped hypothesis by hypothesis in Section 06.

Note: Illustrative example — invented asset, no real client. Class biology cited is public and dated, used only to illustrate method.
Source: Integral BioStrategy analysis of public class evidence; illustrative invented asset.

Three hypotheses decide the thesis — each a falsifiable mechanism question with a settling experiment

The thesis rests on three claims that are not yet evidence. Each becomes a falsifiable, mechanism-first hypothesis with one experiment that settles it and a decision tree of what each outcome means for the science and the deal.

H1 — muscle-sparing is a mechanism claim, not a weight claim.

Up to ~40% of incretin weight loss is lean mass; sparing it takes an anabolic / anti-myostatin mechanism, not an oral route.

H2 — durability is a set-point question, not a dosing question.

Body weight is physiologically defended; “durable” means lowering the set-point, not suppressing intake while dosed.

H3 — best-in-class oral is an exposure-reproducibility question.

Oral-peptide exposure is highly variable with a severe food effect; trial efficacy must survive real-world dosing.

Note: Each hypothesis is developed in Section 06 with its settling experiment and decision tree.
Source: Integral BioStrategy analysis; public class biology (Kaiser 2025; oral-peptide clinical pharmacology). Illustrative invented asset.

What we recommend: generate the two deal-breaker readouts before outreach, then enter partner talks with diligence addressed

Generate the two deal-breaker readouts before partner outreach — the H1 muscle-sparing mechanism study and the H2 off-treatment durability arm — so Asset Y enters partner conversations with its most-challenged claims already converted to evidence.

- **H1 readout — converts "muscle-sparing" from claim to mechanism-backed evidence.**
  DXA body composition + activin/myostatin markers; the only result that makes the claim ownable rather than found-in-an-afternoon.
- **H2 readout — makes "durable" a testable, designed-in endpoint.**
  An off-treatment arm distinguishes a lowered set-point from intake suppression; obesity is chronic and relapsing.
- **H3 is foundational and on the critical path — characterize oral exposure early.**
  A food-effect / variability surprise is far cheaper to find now than in a partner's diligence.

Note: Illustrative invented asset; not medical, investment, or regulatory advice.
Source: Integral BioStrategy analysis — the recommendation stated up front; the body of the deck is the supporting reasoning.

01 · THE ASSET

The thesis, under pressure

Stress-test each element of the thesis — what holds, what is conditional, what is not yet supported.

Oral dosing holds; best-in-class is conditional; durable and muscle-sparing are not yet supported

Oral incretin	**hold**	A genuine class differentiator — holds.
Best-in-class efficacy	**conditional**	Early weight loss is competitive, but on cross-trial comparison, which a partner discounts.
Durable	**not yet supported**	No off-treatment data exists; body weight is physiologically defended.
Muscle-sparing	**not yet supported**	No body-composition data exists; lean-mass loss is the class's open question.

Source: Integral BioStrategy analysis; team thesis stress-tested element by element.

A partner's scientists will credit oral dosing — and discount the cross-trial, durability, and muscle claims

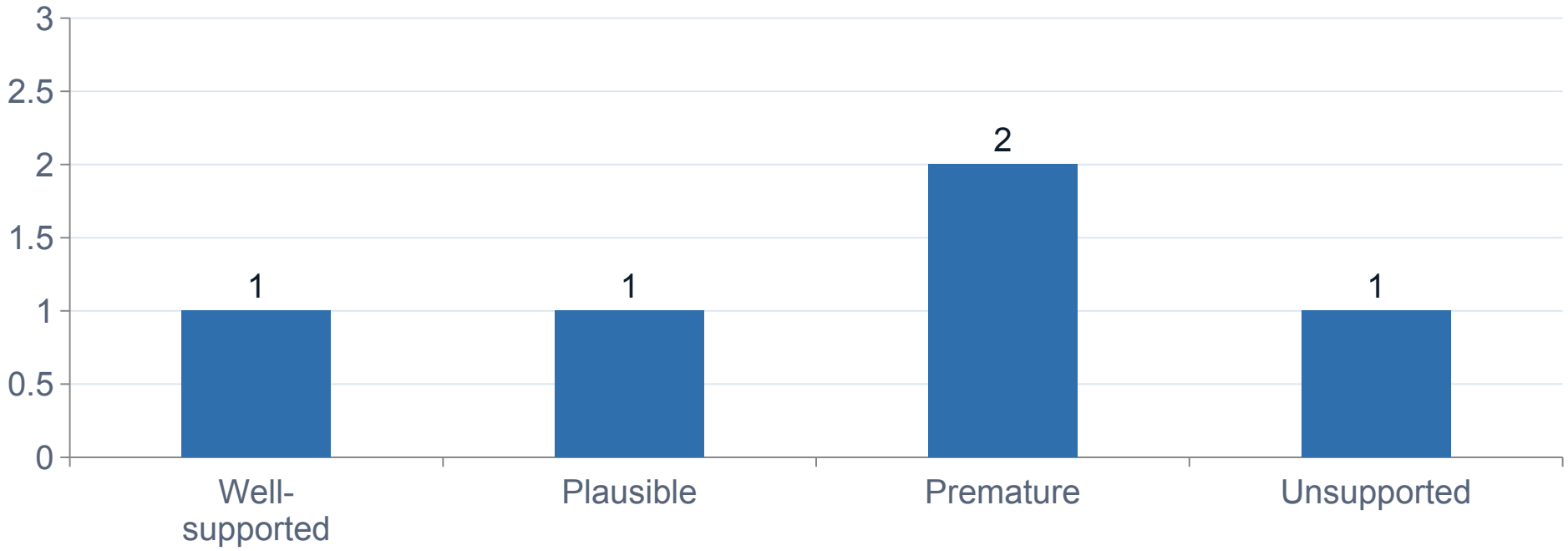
EXHIBIT 1 · INTEGRAL BIOSTRATEGY

Evidence-grading scorecard

The team's claim	Grade	What a partner's scientists will see
"Oral dosing is a differentiator"	well-supported	A real class gap; ~43% of the obesity pipeline is now oral.
"Best-in-class weight loss"	plausible	Competitive early loss, but cross-trial, not head-to-head (bar is high: semaglutide ~15–17%; tirzepatide up to ~22.5%).
"Durable benefit"	premature	No off-treatment data; class evidence shows weight/glycemia return after discontinuation — obesity is chronic and relapsing.
"Muscle-sparing profile"	premature	No body-composition data; up to ~40% of weight lost can be lean tissue; clinical significance not established.
"Adherence will be strong"	unsupported	Real-world persistence is poor — 53.6% discontinue GLP-1s by year 1, 72.2% by year 2; worse in weight-loss-only use.

Note: Grades: well-supported · plausible · premature · unsupported. Illustrative invented asset.
Source: Public benchmarks (STEP 1; SURMOUNT-1); GLP-1 persistence (JAMA Network Open, 2025, n=125,474); lean-mass loss + activin/myostatin (Kaiser, Cardiology in Review, 2025); Integral BioStrategy analysis.

Only one of five load-bearing claims is well-supported today — three are premature or unsupported



The asset's story rests more on claims a partner will discount than on claims it will credit — closing that gap is the work of the three hypotheses.

Note: Counts the same five claims graded on the prior slide. Illustrative invented asset.
Source: Integral BioStrategy analysis; the five load-bearing claims from the evidence-grading scorecard.

02 · COMPETITIVE & MARKET

Where the asset sits scientifically

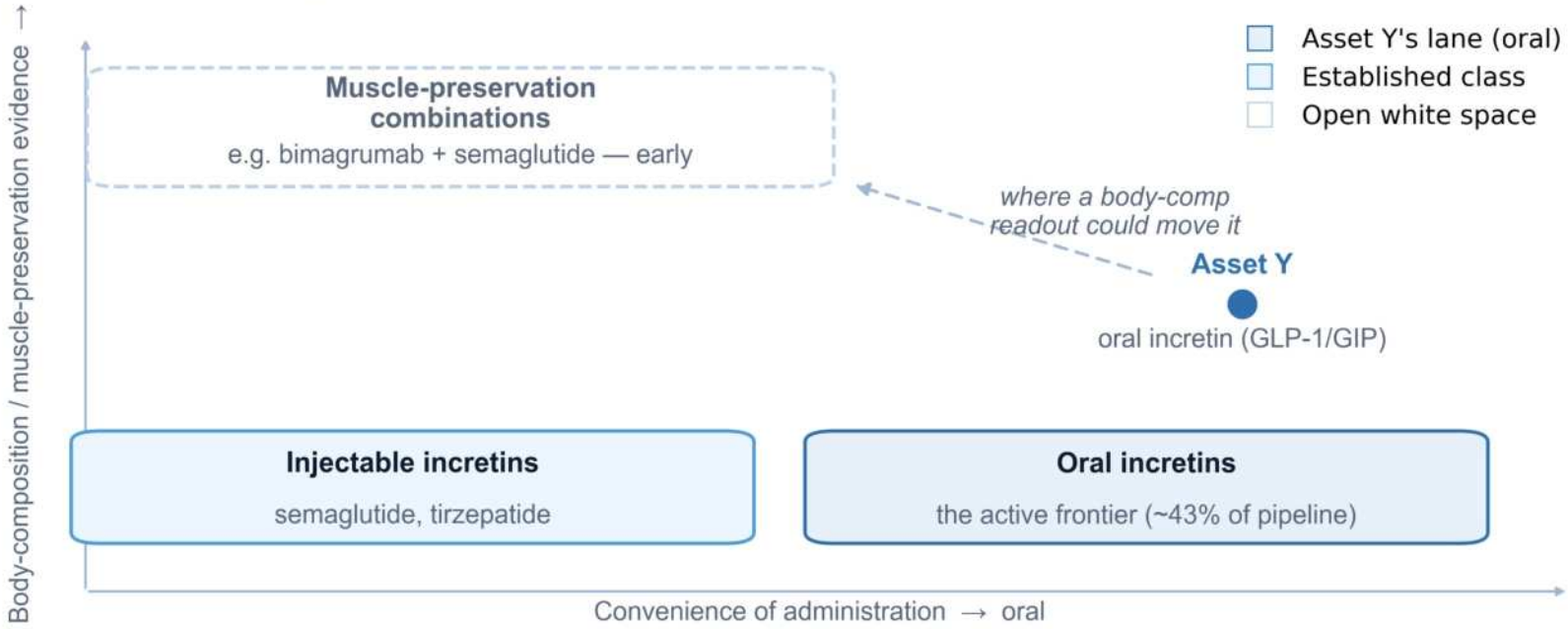
Mechanism and evidence position — not market share.

Asset Y competes on route of administration, not absolute efficacy — and muscle-preservation is open white space

EXHIBIT 2 · INTEGRAL BIOSTRATEGY

Mechanism-positioning map

Where Asset Y sits scientifically — route and evidence, not market share



The differentiation lives in the oral lane — and a credible body-composition mechanism (H1) could move the asset into open white space.

Note: Scientific position, not market share. A large, growing share of the obesity pipeline is oral.
Source: Integral BioStrategy analysis of public class positioning; illustrative invented asset.

Oral preference narrows a population in the millions to Asset Y's reachable launch lane

EXHIBIT 3 · INTEGRAL BIOSTRATEGY

Addressable-population funnel

Illustrative — relative tiers, not a headcount (reachable population in the millions)

Note: Relative scale, not a headcount — the reachable population is in the millions. Illustrative invented asset.
Source: Illustrative addressable-population tiers; Integral BioStrategy analysis.

03 · EXPERT INSIGHTS

What the experts say

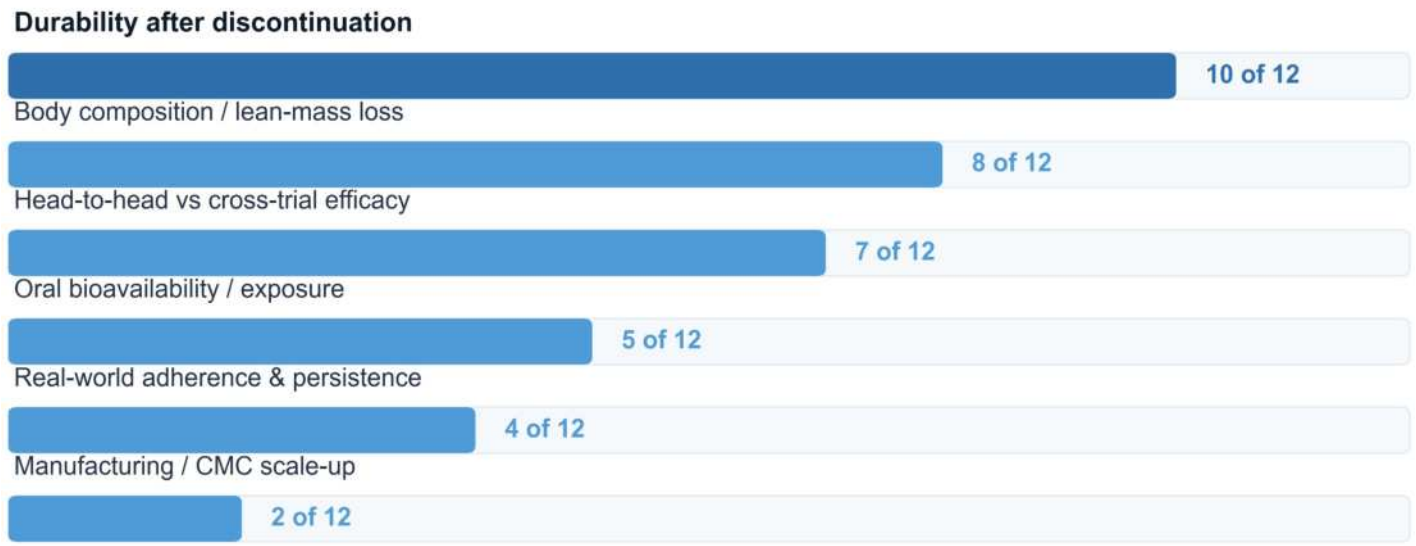
Synthesized from the experts convened for this engagement (illustrative).

Durability dominates the expert read — 10 of 12 raised it unprompted

EXHIBIT 4 · INTEGRAL BIOSTRATEGY

Expert-concern distribution

Concerns raised across 12 experts convened for the engagement (illustrative)



The field's own experts point at the same questions the hypotheses formalize — durability and body composition first.

Note: Illustrative, de-identified — counts of unprompted concerns, not named individuals.
Source: Concerns raised across 12 experts convened for this engagement; Integral BioStrategy analysis.

Durability after discontinuation is the single question that decides partnering interest

> *"Durability after discontinuation is the single question that decides partnering interest — design for it now, not later."*
>
> **— Metabolism KOL**

> *"Body composition and lean mass will become regulatory and payer questions within ~2 years; an asset without that data will look dated in diligence."*
>
> **— Obesity-trial investigator**

> *"Oral dosing is the real differentiator — but only if the exposure holds up outside a controlled trial."*
>
> **— Business-development advisor**

Note: Attributions are illustrative roles, not named individuals.
Source: Synthesized KOL input convened for this engagement (illustrative).

Composition-of-matter is crowded; Asset Y's room is in oral-formulation and combination claims

EXHIBIT 7 · INTEGRAL BIOSTRATEGY

IP / patent-landscape scan (illustrative)

● Open white space ● Partially open ● Crowded / boxed in

Patent-family category	Crowding	Expiry horizon	Room for Asset Y
Composition-of-matter (molecule / salt / form)		Near-term — legacy GLP-1/GIP families mature	● Crowded; design around or in-license
Oral formulation / permeation enhancer		Mid-term	● Asset Y's room — file early and broadly
Dosing regimen / titration		Mid-term	● Partially open; method claims defensible
Combination (muscle-sparing co-agent)		Long-term — area still forming	● Open white space; tie to the DXA readout
Manufacturing / process		Mid-term	● Moderately crowded; trade-secret some steps

File early and broadly on oral-formulation and the muscle-sparing combination — the open white space, and tie the combination filings to the H1 readout.

Note: Strategic IP-landscape scan for prioritization — not a legal opinion or freedom-to-operate analysis; confirm with patent counsel. Illustrative invented asset.
Source: Illustrative IP-landscape categories for oral incretins / obesity; Integral BioStrategy analysis. Anonymized — no patent numbers or assignees.

04 · RECOMMENDATIONS

The gaps a partner will flag

Three gaps diligence will press — and each becomes one of the three hypotheses.

Three gaps: durability is asserted not shown; body composition is a blind spot; oral efficacy must hold in the real world

1

Durability is asserted, not shown

“Works while taken” is not “changes the course of the disease.” A partner will ask what happens off-treatment. → H2.

2

Body composition is a blind spot

Lean-mass loss is the live scientific question of the class; “muscle-sparing” with no mechanism is found in an afternoon. → H1.

3

Oral efficacy must survive real-world dosing

Trial efficacy on cross-trial comparison is discounted; oral exposure variability can erode it further. → H3.

Source: Integral BioStrategy analysis; each gap maps to a falsifiable hypothesis in Section 06.

05 · RECOMMENDATIONS

The three hypotheses that decide the thesis

Each load-bearing claim, restated as a falsifiable mechanism-first hypothesis — with the experiment that settles it and a decision tree of what every outcome means.

H1 · Muscle-sparing is a mechanism claim, not a weight claim

THE CLAIM UNDER PRESSURE ***"Asset Y is muscle-sparing."***

WHY WE'RE ASKING

Across incretins, as much as ~40% of weight lost can be lean body mass — so muscle-sparing is the class's open question, not a property of being oral. The public routes that protect lean mass are pharmacologic: blocking activin type II receptor / myostatin signaling (e.g. bimagrumab) builds muscle as fat is lost. So Asset Y spares lean mass only if it preserves anabolic — or blunts catabolic activin/myostatin — signaling, not because it's oral.

AIM

Determine whether Asset Y's weight loss preserves lean mass — and whether any preservation tracks a measurable anabolic signal — versus the class-typical lean-mass loss.

THE EXPERIMENT

Model — diet-induced-obese; Asset Y vs an injectable incretin comparator (± an activin/myostatin reference)

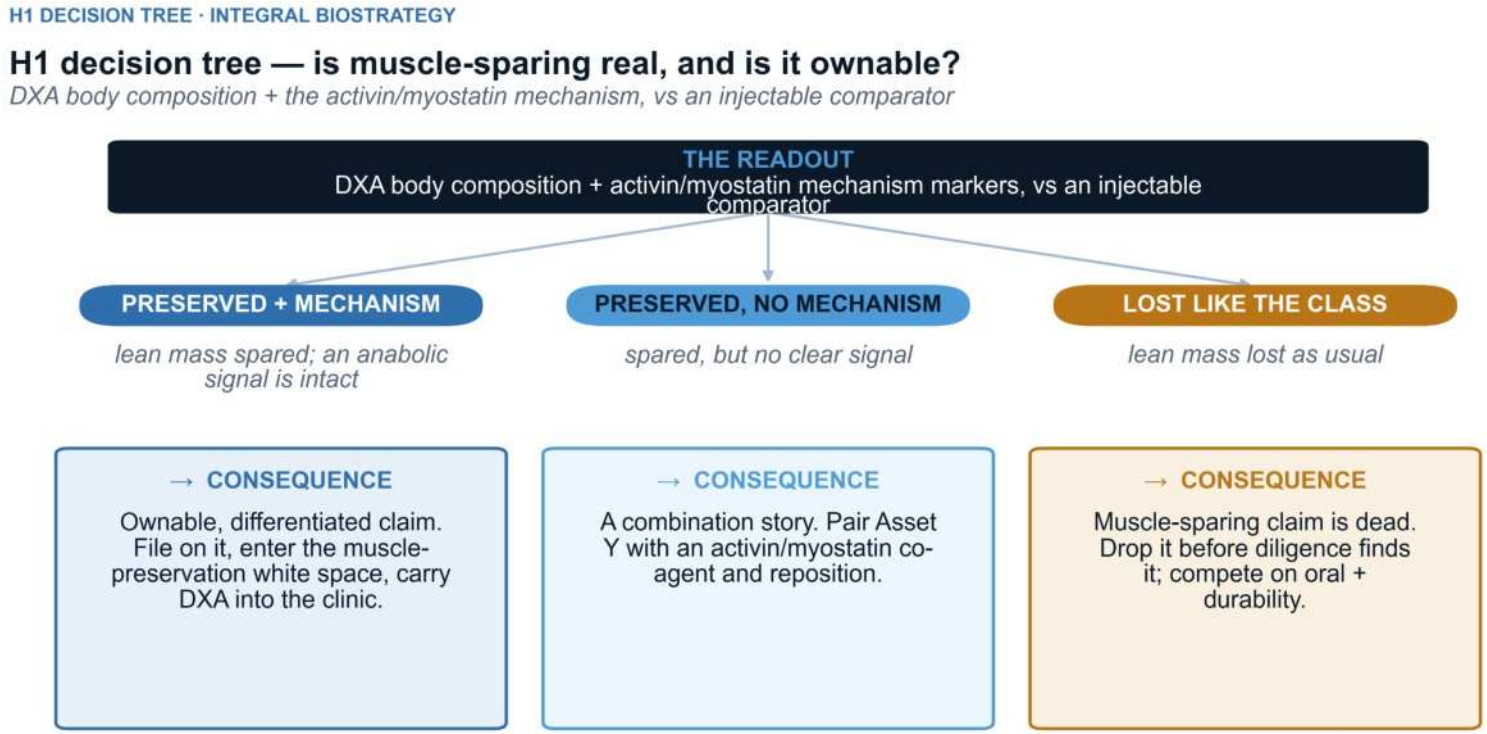
Readouts — DXA body composition (fat vs lean); muscle-fiber cross-sectional area; activin–myostatin pathway markers

Timeline — ~8–12 weeks

Note: Decision tree on the next slide. Illustrative invented asset; public class biology only.

Source: Lean-mass loss + activin/myostatin mechanism: Kaiser et al., Cardiology in Review, 2025 (DOI 10.1097/CRD.0000000000001113). Integral BioStrategy analysis; illustrative invented asset.

If muscle-sparing is real and mechanistic, it is ownable white space; if not, retire the claim before diligence



Two of three outcomes still create value — an ownable claim or a combination path; only the third retires the claim, and far better now than in a partner's data room.

Note: Decision tree for H1 — every outcome pre-mapped to a strategic + deal consequence.
Source: Integral BioStrategy analysis; outcomes mapped to the muscle-sparing mechanism (Kaiser 2025). Illustrative invented asset.

H2 · Durability is a set-point question, not a dosing question

THE CLAIM UNDER PRESSURE ***"Asset Y's benefit is durable."***

WHY WE'RE ASKING

Weight regain after incretin discontinuation is well documented, and body weight is physiologically defended: after loss, energy expenditure falls and appetite rises (metabolic adaptation), pulling weight back toward a defended set-point. So "durable" is not how long a patient takes the drug — it is whether Asset Y lowers that set-point (a lasting change) versus only suppressing intake while present. A partner reads "durable" as disease-modifying; the data must tell the two apart.

AIM

Determine whether Asset Y lowers the defended set-point — attenuated regain and blunted adaptation off-treatment — versus only suppressing intake during exposure.

THE EXPERIMENT

Model — diet-induced-obese with an off-treatment / randomized-withdrawal arm after a defined treatment period

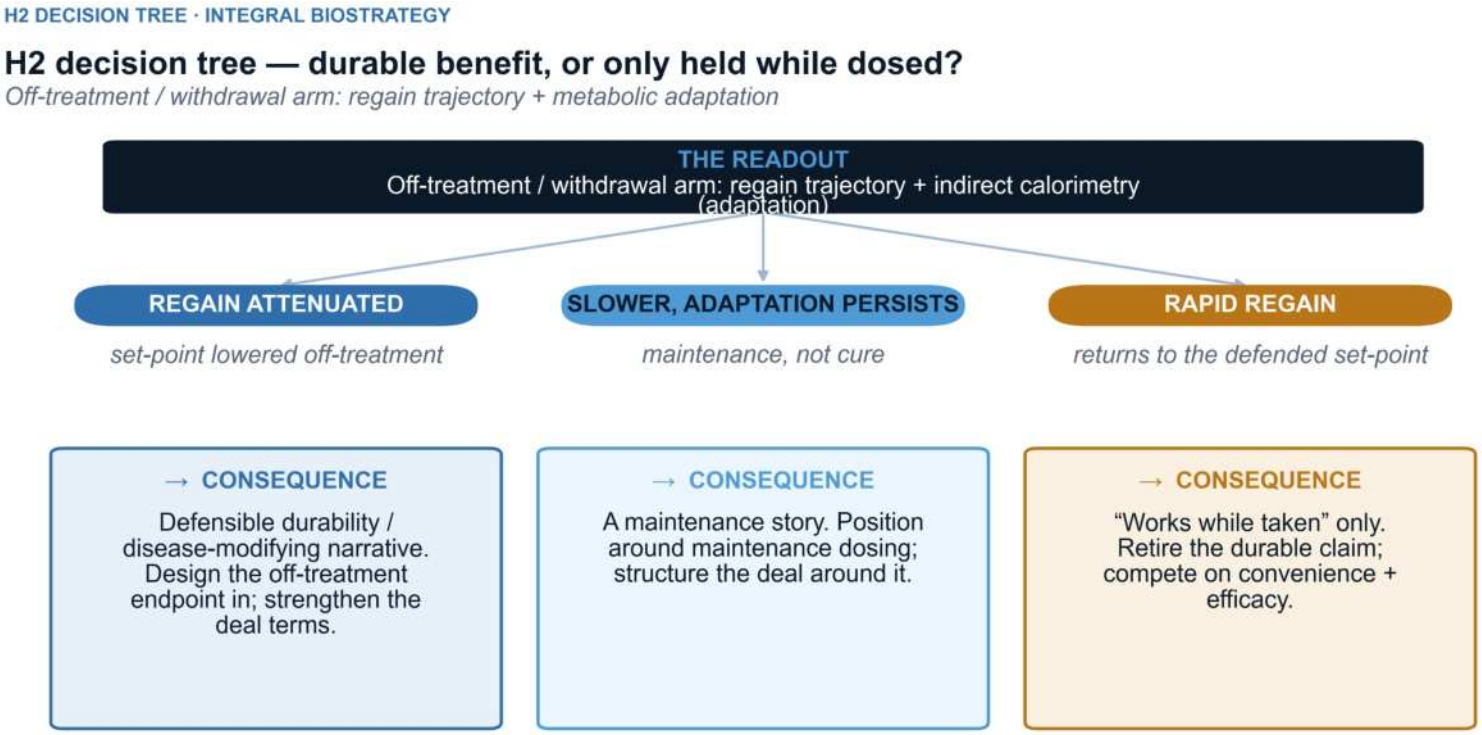
Readouts — post-withdrawal weight trajectory; indirect calorimetry (energy expenditure / adaptation); food intake

Timeline — treatment + an equal-length off-treatment window

Note: Decision tree on the next slide. Illustrative invented asset.

Source: Weight regain after discontinuation: STEP 1 extension (Wilding et al., Diabetes, Obesity and Metabolism, 2022, PMID 35441470); defended body weight / metabolic adaptation physiology. Integral BioStrategy analysis.

Durability resolves into a clean disease-modifying story, a maintenance story, or a convenience play



Each outcome is a different deal: a lowered set-point supports a stronger upfront; a maintenance result argues for milestone-weighted terms around the open question.

Note: Decision tree for H2 — each outcome is a different deal.
Source: Integral BioStrategy analysis; outcomes mapped to the set-point / metabolic-adaptation model. Illustrative invented asset.

H3 · Best-in-class oral is an exposure-reproducibility question

THE CLAIM UNDER PRESSURE ***"Asset Y is a best-in-class oral incretin."***

WHY WE'RE ASKING

The oral path is real but unforgiving. Oral semaglutide's bioavailability is ~1%, with a severe food effect — under fed conditions a majority of subjects had no detectable drug — and "single-digit highly variable" exposure that demands strict fasting/water dosing. Best-in-class efficacy in a trial means little if real-world exposure is inconsistent: food-effect and variability erode the effective dose, and adherence follows. So this is an exposure-reproducibility claim, not only a potency claim.

AIM

Determine whether Asset Y delivers consistent, injectable-comparable exposure under realistic dosing — quantifying variability, food effect, and the exposure–response relationship.

THE EXPERIMENT

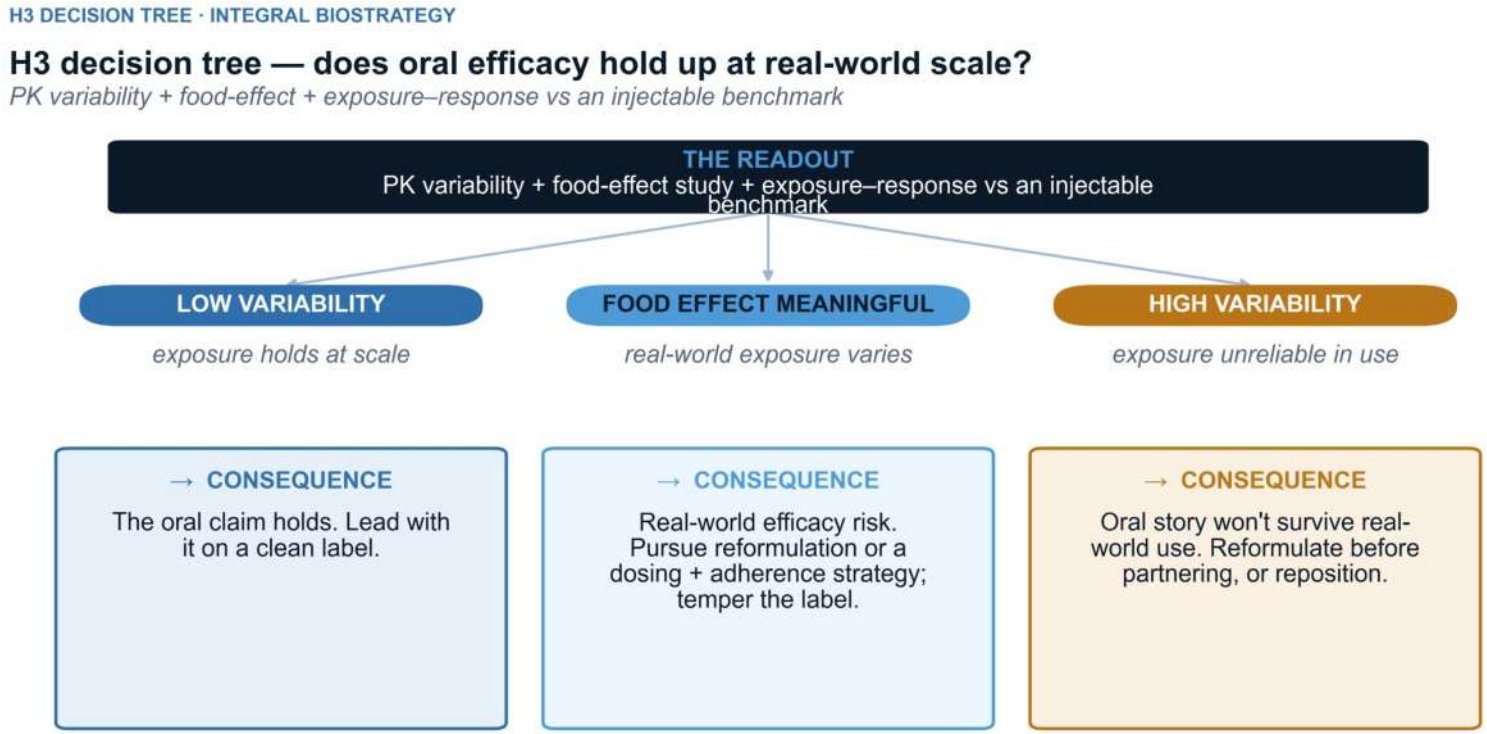
Studies — PK variability characterization; a food-effect study (fed vs fasted); exposure–response modeling vs an injectable benchmark

Timeline — standard early clinical pharmacology — already near the critical path

Note: Decision tree on the next slide. Illustrative invented asset; public class data only.

Source: Oral-peptide exposure: FDA clinical-pharmacology review (oral semaglutide, NDA 213051); Clinical Diabetes (ADA), 2024. GLP-1 persistence: JAMA Network Open, 2025. Integral BioStrategy analysis.

Oral exposure either holds at scale, needs a formulation / adherence fix, or forces a reformulation before partnering



This is foundational and on the critical path anyway — generate it early so a food-effect surprise doesn't surface mid-diligence.

Note: Decision tree for H3 — foundational, on the critical path regardless.
Source: Integral BioStrategy analysis; outcomes mapped to oral-peptide exposure behavior (FDA clin-pharm; Clinical Diabetes, 2024). Illustrative invented asset.

06 · RECOMMENDATIONS

What to run first

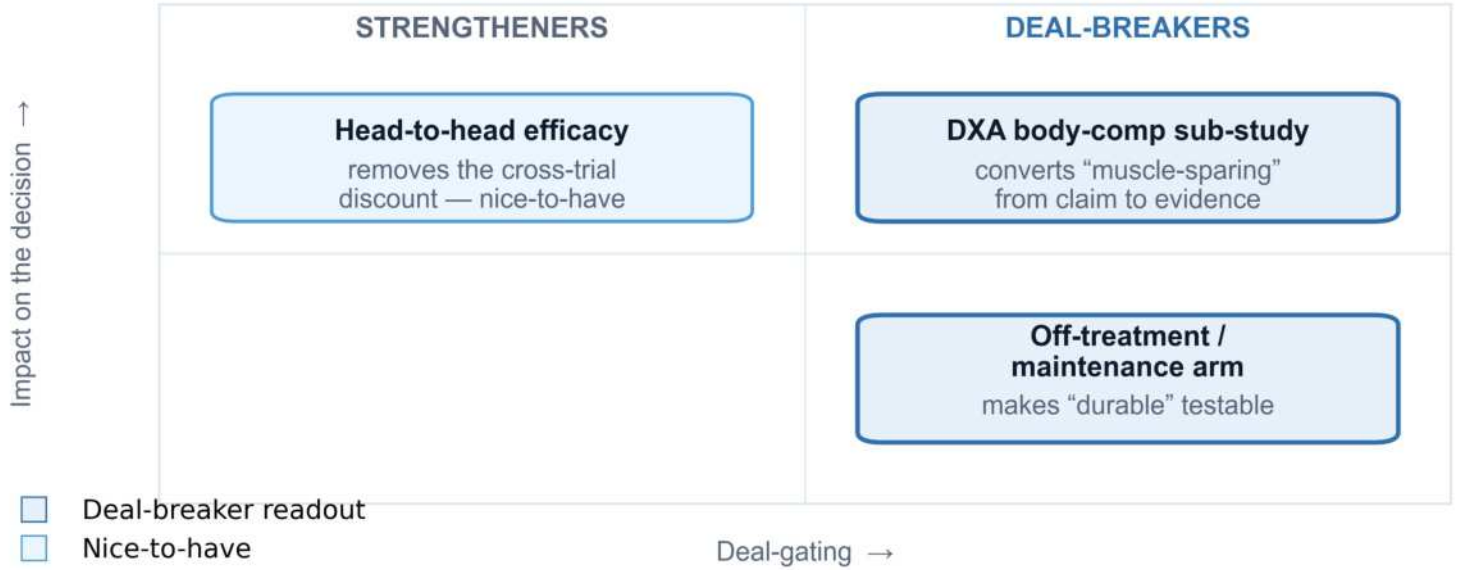
Prioritize the experiments that change the partnering decision — two deal-breakers, one on the critical path, one supporting.

Two of the three hypotheses are deal-breakers worth generating before outreach

EXHIBIT 5 · INTEGRAL BIOSTRATEGY

Prioritized-readouts matrix

Two readouts are deal-breakers; head-to-head efficacy is nice-to-have



The H1 mechanism study and the H2 off-treatment arm answer the two questions a partner cannot ignore.

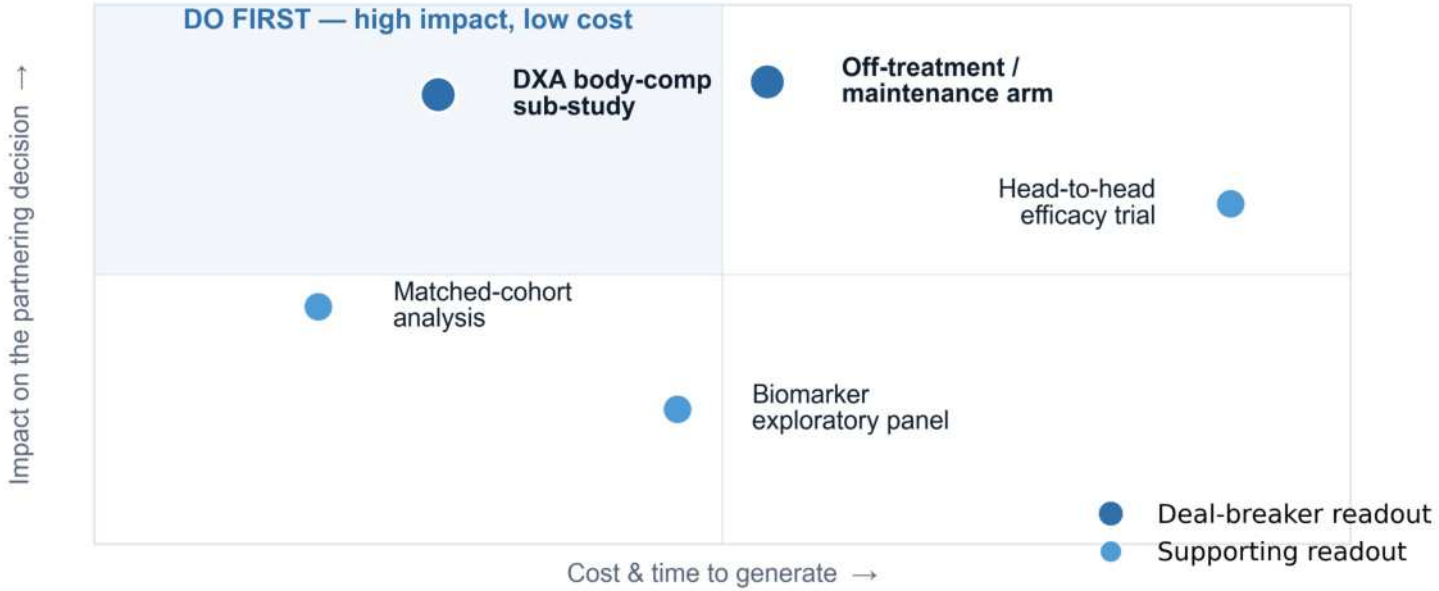
Note: Priority by impact on the decision × deal-gating. Illustrative invented asset.
Source: Integral BioStrategy analysis; the muscle-sparing mechanism (H1) and the off-treatment durability arm (H2) are the gating readouts. Illustrative invented asset.

The two deal-breaker readouts are also the cheapest to generate — so do them first

EXHIBIT 6 · INTEGRAL BIOSTRATEGY

Readout prioritization — impact vs cost

Impact on the partnering decision vs cost & time to generate (illustrative)



High impact, low cost: the H1 mechanism study and the H2 off-treatment arm sit in the do-first quadrant.

Note: Positions are illustrative relative estimates, not a costing. Illustrative invented asset.
Source: Integral BioStrategy analysis; readout impact vs cost & time positioning (illustrative).

Each prioritized readout is designed to clear the endpoint and efficacy bar a partner's diligence applies

What the next study must satisfy	The bar / precedent	How the prioritized readout meets it
Body composition / lean mass (H1)	DXA is the accepted endpoint; up to ~40% of weight lost can be lean tissue (Kaiser 2025)	DXA + activin/myostatin markers convert “muscle-sparing” to mechanism-backed evidence
Durability after discontinuation (H2)	Off-treatment / randomized-withdrawal designs are how durability is shown; weight is defended	Off-treatment arm makes “durable” a testable, designed-in endpoint
Oral exposure at scale (H3)	Oral-peptide exposure is highly variable with a severe food effect	PK-variability + food-effect studies show whether trial efficacy survives real-world dosing

Note: Strategic and scientific context, not regulatory or legal advice. Illustrative invented asset; precedents are public and dated.
Source: Public class precedents (STEP 1; SURMOUNT-1; Kaiser 2025; oral-peptide clin-pharm); Integral BioStrategy analysis.

Every load-bearing risk maps to a mitigation — and each mitigation is one of the three hypotheses

Risk	Why it matters	Mitigation (hypothesis)
Durability unproven (scientific)	“Works while taken” is not disease-modifying; a partner will press on what happens off-treatment	Off-treatment / withdrawal arm — H2
Lean-mass loss (scientific)	Body composition is the live question of the class; a “muscle-sparing” claim with no mechanism is found in an afternoon	DXA + activin/myostatin mechanism study — H1
Oral exposure variability (technical)	Real-world food-effect and variability can erode trial-grade efficacy and adherence	PK-variability + food-effect studies — H3
Fast-moving oral field (competitive)	A large, growing share of the obesity pipeline is now oral; the differentiation window can close	Sequence and speed — generate the deal-breakers first, then move on the oral lane

Note: Risk register across scientific / technical / competitive; each mitigation is one of the three hypotheses. Illustrative invented asset.
Source: Public benchmarks (STEP 1; SURMOUNT-1; GLP-1 persistence, JAMA Network Open, 2025; Kaiser 2025); Integral BioStrategy analysis.

Generating the two deal-breaker readouts before outreach strengthens the negotiating position — and the protections

Timing & leverage. The two deal-breaker readouts (H1, H2) are the gating items. Generating them before partner outreach strengthens the negotiating position rather than conceding them in diligence.

Sequencing. Each hypothesis outcome maps to a different deal: a clean H1/H2 supports a stronger upfront and cleaner terms; a partial outcome argues for structured, milestone-weighted terms around the open question.

Protections. Partner discussions — including cross-border (e.g. China) — should run under NDA and a clear letter of intent before data-room access, with entity and IP housekeeping in order.

THE PARTNER-LED MODEL

Integral BioStrategy pairs the scientific assessment with partner-led transaction judgment, so the science and the deal are built together.

Source: Integral BioStrategy analysis — the partner-side lens on timing, leverage, and protections.

Three hypotheses answered turn the thesis into evidence — so Asset Y enters partner talks with diligence already addressed

Early-phase weight loss is class-competitive and oral dosing addresses a recognized gap. Three hypotheses decide the thesis; two are deal-breakers the team can settle before partner conversations, so the asset enters diligence with its most-challenged claims already converted to evidence.

- **The oral story is the durable differentiator — if exposure holds at real-world scale (H3).**
  Oral dosing addresses a recognized class gap; the lane is where the differentiation lives.
- **Two deal-breaker readouts convert the most-challenged claims into evidence (H1, H2).**
  Body composition with mechanism, and off-treatment durability, are designed in — not deferred to diligence.
- **Scientific positioning by Integral BioStrategy — science and deal built together.**
  The partner-led model pairs the scientific assessment with transaction judgment.

Note: Illustrative sample — not a client engagement, and not medical, investment, or regulatory advice.
Source: Integral BioStrategy analysis; partner-facing summary of the engagement.

∫ Integral BioStrategy

Integral BioStrategy — integrated biology, translated into strategy

Scientific and strategic advisory only. Legal, regulatory, investment, clinical, and medical advice are outside standard engagements unless separately scoped in writing with the appropriate qualified contributor.

Request a confidential scoping call

integralbiostrategy.com · contact@integralbiostrategy.com

Appendix · APPENDIX

Methodology & sources

How we did this, and the public sources used to illustrate the method on an invented asset.

How we did this: claims graded, then the load-bearing-but-unproven ones converted into falsifiable hypotheses

1. **Framed the load-bearing claims.** Isolated the claims the asset's story rests on — oral dosing, best-in-class weight loss, durable benefit, muscle-sparing, adherence.

2. **Mapped each claim to its evidence and graded it** — well-supported, plausible, premature, or unsupported — the way a partner's scientists will read it.

3. **Converted the premature-but-load-bearing claims into falsifiable, mechanism-first hypotheses** — each with the one experiment that settles it and a decision tree of what every outcome means.

4. **Synthesized expert input and the competitive / IP context** — durability and body composition recurred; positioned on mechanism and route, not share.

5. **Prioritized the readouts** by impact on the partnering decision × cost/speed, and paired each outcome with the deal lens.

EVIDENCE GRADES

Well-supported — Strong, directly applicable evidence a partner will credit.

Plausible — Reasonable but conditional — rests on cross-trial or indirect evidence.

Premature — Asserted ahead of the data; the experiment has not been run.

Unsupported — Contradicted by, or absent from, the available evidence.

Note: Method shown on an invented asset; no real client or client data. Illustrative and de-identified.
Source: Integral BioStrategy hypothesis-engagement method, applied to an illustrative invented asset.

Sources — selected public references used to illustrate the method

1. Lean-mass loss with incretins + the activin type II receptor / myostatin mechanism (bimagrumab) — Kaiser et al., Cardiology in Review, 2025 (DOI 10.1097/CRD.0000000000001113): as much as ~40% of weight lost can be lean body mass. [H1]

2. Weight regain after discontinuation of semaglutide — STEP 1 extension (Wilding et al., Diabetes, Obesity and Metabolism, 2022; PMID 35441470). [H2]

3. Defended body weight / metabolic adaptation after weight loss — established physiology of energy-expenditure and appetite counter-regulation. [H2]

4. Oral semaglutide bioavailability (~1%), SNAC permeation enhancer, food effect, exposure variability — FDA clinical-pharmacology review (NDA 213051); Clinical Diabetes (ADA), 2024. [H3]

5. Class efficacy benchmarks — semaglutide ~15–17% (STEP program; STEP 1); tirzepatide up to ~22.5% (SURMOUNT-1).

6. GLP-1 real-world persistence — 53.6% discontinue by year 1; 72.2% by year 2 (JAMA Network Open, 2025, n=125,474).

7. IP / patent-landscape categories — illustrative composition-of-matter, oral-formulation, dosing-regimen, combination, and manufacturing families; anonymized, no patent numbers or assignees.

Note: No real client, no client data. Reference list shown at the source/footer type size. Illustrative invented asset.
Source: Public, dated class evidence used only to illustrate the method on an invented asset; Integral BioStrategy analysis.