

## **Project Narrative**

### **Predicting Early HCP Adoption for Next-Generation Obesity Therapies**

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#### **1. Strategic Context and Business Importance**

Amgen is making a **strategic long-term investment in the obesity and cardiometabolic (OBCD) market**, which is expected to become one of the largest therapeutic categories globally.

- The **U.S. obesity market alone is projected to exceed \$1 trillion over the long term**, with near-term expectations of ~\$250B over the next 7–10 years.
- Within this space, Amgen has **multiple pipeline assets**, the most important being **Maritide**, expected to launch in **late 2027 / early 2028**.
- Maritide has the potential to become a **portfolio-defining asset**, with revenue potential comparable to Amgen's current total portfolio.

Given this context, **launch excellence is mission-critical**, and data-driven decision-making around **early prescriber adoption** is a core capability Amgen wants to build.

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#### **2. Core Business Question**

At the heart of the discussion is a focused but high-impact question:

**Which HCPs (Healthcare Providers) are most likely to adopt a new obesity therapy early in its launch cycle, and how can that be predicted with confidence?**

This question supports:

- Targeted commercial engagement
  - Efficient field force deployment
  - Early market penetration
  - Learnings that can be scaled to Maritide's launch
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#### **3. Why Historical Launches Matter**

To answer this question, the team proposes **learning from prior obesity drug launches**, specifically GLP-1-based therapies, which have already reshaped the market.

Three recent launches provide **distinct and complementary behavioral signals**:

### **3.1 Category Creation (First GLP-1 Obesity Launch)**

- Example: **Wegovy** from **Novo Nordisk**
- Represented the **first major GLP-1 obesity treatment**
- Required:
  - High clinical conviction
  - Early-adopting HCPs willing to take perceived risk
  - Influence from KOLs and peer signaling

#### **Behavioral insight:**

Early adoption driven by *clinical severity, innovation appetite, and thought-leadership influence.*

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### **3.2 Switch Behavior (Second Entrant)**

- Example: **Zepbound / Mounjaro** from **Eli Lilly**
- Entered an **already established category**
- Adoption depended on:
  - Comparative efficacy
  - Duration of effect
  - Clinical differentiation
  - Justification for switching stable patients

#### **Behavioral insight:**

HCPs exhibit *switching inertia* unless clear clinical or economic advantages are evident.

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### **3.3 Mode-of-Administration Shift (Oral Therapy)**

- First **oral GLP-1-class obesity therapies** approved in late 2025
- Introduced a new adoption dimension:
  - Injectable vs oral preference
  - Patient lifestyle and adherence considerations

### **Behavioral insight:**

Some HCPs selectively adopt based on *patient acceptability and convenience*, not just efficacy.

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## **4. Proposed Analytical Approach**

The proposal is to **treat these three launches as separate learning systems**, not a single blended dataset.

### **4.1 Three-Model Framework**

Each historical launch informs a **distinct predictive model**:

#### **1. Category-Creation Model**

- Identifies innovation-forward HCPs
- Focuses on early adopters under uncertainty

#### **2. Switching Model**

- Captures HCPs who actively migrate patients between therapies

#### **3. Administration-Preference Model**

- Identifies HCPs sensitive to delivery format (injectable vs oral)

These models are then **combined to predict adoption likelihood** for future launches.

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## **5. Validation Strategy Using Near-Term Launches**

Before applying this framework to Maritide, the team proposes a **real-world validation exercise**:

- Use an upcoming **Eli Lilly oral obesity therapy** launch (expected April–May)
- Assume the role of “Eli Lilly”:
  - Build the model **before launch**
  - Observe real prescribing behavior **post-launch**
  - Validate predictive accuracy

### **Target benchmark:**

**~60% predictive accuracy** as a proof of concept.

If successful, the same methodology can be confidently scaled to Maritide.

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## 6. Data Landscape and Constraints

### 6.1 Data Sources

- **Claims Data** (e.g., IQVIA longitudinal claims)
  - Captures adjudicated prescriptions
  - Includes payer approvals and delays
- **Prescription Data**
  - Faster but less clinically rich
- **EHR Data (Optum)**
  - Used internally by Amgen's **C4 (Center for Research) team**
  - Supports Real-World Evidence (RWE): comorbidities, labs, prior meds, adverse events

### 6.2 Data Lag Reality

- Approval → shelf availability → prescribing → claims adjudication → vendor reporting
  - This introduces **weeks to months of delay**, which must be explicitly modeled.
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## 7. Time Horizon and Adoption Windows

There is an open discussion on:

- **90-day vs 180-day adoption windows**
- Shorter windows capture “true early adopters”
- Longer windows improve signal stability

Final decision to be aligned with Amgen leadership (Risha).

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## 8. Engagement and Commercial Model

### 8.1 Initial Phase (4–6 Weeks)

- Build baseline models
- Demonstrate early value
- Share insights and adoption predictions

## **8.2 Ongoing Phase (Paid Engagement)**

- Continuous monitoring of HCP behavior
- Model recalibration as real data flows in
- Progressive refinement leading up to Maritide's launch

### **Key positioning:**

This is not a one-time model, but a **living, learning system**.

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## **9. Broader Context (Out of Scope for Phase 1)**

The team acknowledges that:

- HCP adoption is only **one piece of the launch puzzle**
- Other dimensions include:
  - Patient identification
  - Market access and payer strategy
  - Field engagement optimization
  - Messaging and positioning

For now, the recommendation is to **stay sharply focused on early HCP adoption**, while leaving room to expand later.

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## **10. Next Steps and Ownership**

- **Deck creation:** Solution narrative and architecture
- **Internal review:** Mid-week
- **Client discussion:** Share deck with Risha before next call
- **Workshops proposed:**
  - Market definition
  - Competitive landscape
  - Pre-launch brand planning (if not already available)

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## **11. Executive Summary (One-Line)**

The project aims to build and validate a predictive system that identifies early HCP adopters of obesity therapies by learning from prior GLP-1 launches, validating the approach on an upcoming oral launch, and scaling the capability to support Amgen's Maritide launch with high confidence.