



WHITE PAPER

# Data-Driven Drug Selection

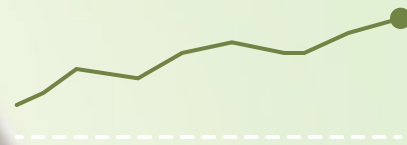
Better outcomes. Lower Costs.



PSORIASIS OUTCOMES

**86%**

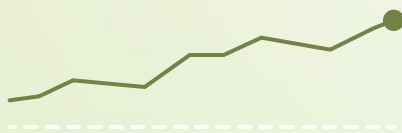
Maintained or improved  
BSA after switch



HIV OUTCOMES

**94%**

Maintained or improved  
viral load after switch



Clinical Outcomes in HIV and Psoriasis  
Through Personalized Pharmacy Review

Prepared by VIVIO Health February 2026

#### KEY FINDINGS

Across both HIV and psoriasis cohorts, the vast majority of members who were switched to clinically appropriate lower-cost therapies maintained or improved their clinical outcomes over the course of a full year—**94% in HIV** and **86% in psoriasis**.



## Executive Summary

The American healthcare system spends hundreds of billions of dollars annually on prescription drugs, yet few parties attempt to answer the foundational question of whether a drug will work for a given person. Formulary decisions are often driven by manufacturer rebates rather than clinical evidence. This misalignment between financial incentives and patient outcomes results in suboptimal treatment selections, avoidable adverse events, and paradoxically higher total costs of care.

VIVIO Health has built a clinical model that replaces rebate-driven formulary restrictions with data-driven, personalized drug selection. Our approach assigns each member a dedicated clinical review to identify the right drug for the right person at the right price. This white paper presents twelve-month outcomes data across two complex therapeutic areas—HIV and psoriasis—demonstrating that this model delivers clinical results that meet or exceed the standard of care while simultaneously reducing pharmacy spend.

# The Problem:

## Rebate-Driven Formularies

Traditional pharmacy benefit management relies heavily on rebate negotiations with drug manufacturers to determine which therapies appear on a plan's formulary. While rebates reduce the net cost of a given drug to the plan, they introduce a fundamental conflict of interest: the drugs that generate the largest rebates are not necessarily the drugs that produce the best outcomes for a given patient.

In practice, this means patients are frequently steered toward high-cost branded medications—not because those medications are clinically superior for their specific condition, but because the rebate economics are favorable to the pharmacy benefit manager. The consequences are significant: patients may remain on therapies that are more expensive than necessary, clinically equivalent alternatives go unused, and the overall cost trajectory of specialty pharmacy continues to accelerate.

Additionally, most specialty drugs fail for the majority of people in the trials, contrary to what many assume. For some specialty drugs, less than 10% of patients respond. Since formularies are enforced across a population, some percentage of people will inherently be on the wrong drug given their data. This is a data problem – drug trial data, medical data, and cost data – that should not be solved as a contracting problem with better formularies.

This dynamic is especially pronounced in specialty drug categories such as HIV antiretroviral therapy and biologic treatments for inflammatory conditions such as psoriasis, where annual per-patient costs can range from \$30,000 to over \$80,000. In these categories, even modest improvements in drug selection efficiency can yield substantial savings—but only if outcomes are protected.



# The VIVIO Approach: Personalized, Evidence-Based Review

VIVIO's model is built on a simple but powerful thesis: when clinical expertise and real-world data—not rebate incentives—drive drug selection, both outcomes and costs improve. Our process works as follows for high-cost drugs (Specialty, HIV, and GLP-1 medications):

## PERSONALIZED CLINICAL REVIEW:

Each member's prescription is reviewed by VIVIO's clinical team. Rather than applying blanket formulary restrictions, the team evaluates the individual's diagnosis, treatment history, comorbidities, and current therapy to identify the appropriate treatment options.

## CONTINUOUS OUTCOMES MONITORING:

VIVIO tracks clinical outcomes over time using objective laboratory and clinical measures. Members are monitored on a regular basis post-switch, with results compared against pre-switch baselines.

This closed-loop system—review, switch, monitor, intervene—ensures that cost savings are never achieved at the expense of patient health.

## EVIDENCE-BASED SWITCHING:

Where a clinically appropriate, lower-cost alternative exists, VIVIO facilitates a therapy switch in coordination with the prescribing physician. Switches are only recommended when supported by published clinical evidence.

## PRESCRIBER ENGAGEMENT:

In the rare cases where a member's condition worsens after a switch, VIVIO's clinical team proactively contacts the prescribing physician to discuss alternative treatment strategies, ensuring that no member falls through the cracks.



# Clinical Outcomes

The following sections present twelve-month outcomes data for two cohorts: HIV members tracked by viral load, and psoriasis members tracked by Body Surface Area (BSA) involvement. In both cases, VIVIO compared objective clinical measures taken before the therapy switch against measures taken approximately one year later.

# HIV Antiretroviral Therapy

## BACKGROUND

Members living with HIV who enrolled with VIVIO were evaluated for potential regimen optimization. The clinical team reviewed each member's current antiretroviral regimen and, where appropriate, recommended a switch to a clinically equivalent but lower-cost alternative. In the majority of cases, this involved transitioning from a single-tablet, once-daily regimen to a two-tablet, once-daily regimen—a change that maintains dosing simplicity while significantly reducing cost.

Viral load lab results were collected prior to the switch (2023 baseline) and again approximately one year later (2024 follow-up) to assess whether the regimen change affected virologic control.

## RESULTS

**94%**

Maintained or improved viral load

**6%**

Increased viral load (prescriber contacted)

Based on **18 members** with paired lab results (2023 vs 2024)

**16 members** switched from single-tablet to two-tablet regimen

**93%**

Maintained or improved viral load

**7%**

Increased viral load (prescriber contacted)

# HIV Antiretroviral Therapy

## ANALYSIS

The HIV outcomes exceeded expectations. A 94% rate of maintained or improved viral load across the full cohort is a strong signal that VIVIO's personalized switching methodology does not compromise virologic suppression. This is particularly noteworthy given that the majority of switches (16 of 18) involved moving from a single-tablet regimen to a two-tablet regimen—a change that some clinicians have expressed concern could affect adherence.

The data directly addresses this concern: among the 16 members who made this specific transition, 93% maintained or improved their viral load. The single member who experienced an increase in viral load was identified through VIVIO's monitoring protocol and the prescribing physician was promptly contacted for clinical follow-up.

### HIV OUTCOME HIGHLIGHT

94% of HIV members maintained or improved viral load after regimen switch, including 93% of those moved from single-tablet to two-tablet once-daily dosing. These results confirm that clinically guided switches preserve virologic suppression while reducing drug costs.

# Psoriasis Biologic Therapy

## BACKGROUND

Members with moderate-to-severe psoriasis who were receiving high-cost biologic therapies were reviewed by VIVIO's clinical team between 2024 and 2025. Where clinical evidence supported the change, members were transitioned to a lower-cost biologic alternative. Body Surface Area (BSA) involvement—the standard clinical measure of psoriasis severity—was recorded before and after the switch to evaluate therapeutic equivalence.

## RESULTS



## ANALYSIS

The psoriasis results are particularly striking. Not only did 86% of members maintain or improve their BSA, but a majority—57%—actually showed measurable improvement in disease severity after the switch. This finding challenges the conventional assumption that switching biologic therapies introduces clinical risk; in this cohort, switching under clinical guidance was more often associated with improvement than with any deterioration.

Only 4 of 29 members (14%) experienced an increase in BSA after switching. While any worsening warrants clinical attention, this rate compares favorably to the natural fluctuation in psoriasis severity observed even among patients who remain on a stable regimen. It also underscores the importance of VIVIO's continuous monitoring framework, which ensures that members whose condition changes are identified and supported.

### PSORIASIS OUTCOME HIGHLIGHT

86% of psoriasis members maintained or improved BSA after switching to a lower-cost biologic. Notably, 57% showed outright improvement—a result that exceeded initial projections and challenges the assumption that biologic switches inherently carry clinical risk.

# Discussion: Why Data-Driven Decisions Outperform Rebate-Driven Restrictions

The outcomes presented in this white paper support a straightforward conclusion: when drug selection is guided by clinical evidence and personalized review rather than rebate economics, patients do as well or better—and costs come down.

There are several reasons why this model produces superior results:

## PRECISION OVER UNIFORMITY.

Rebate-driven formularies apply the same restrictions to every member regardless of individual clinical context. VIVIO's model evaluates each case individually, ensuring that switches are only made when clinically appropriate. This reduces the risk of adverse outcomes and increases the likelihood that the selected therapy is a good fit.

## PHYSICIAN COLLABORATION.

By engaging prescribers as partners rather than adversaries, VIVIO builds clinical trust and ensures that treatment decisions are made collaboratively. This results in higher-quality switches and faster intervention when issues arise. VIVIO's team of pharmacists and physicians are experts in drug trial data and disease progression models, and often share data many prescribers may not have seen or heard presented previously.

## ACCOUNTABILITY THROUGH MONITORING.

Traditional formulary management rarely tracks what happens after a switch is made. VIVIO's ongoing monitoring protocol with objective clinical measures creates accountability and provides an early warning system when outcomes deviate from expectations.

## ALIGNED INCENTIVES.

When the goal is the right drug for the right person at the right price—rather than the drug with the highest rebate—incentives align naturally with patient outcomes. Better outcomes reduce downstream medical costs, emergency utilization, and treatment failures.

# Limitations

This analysis is primarily limited by its small sample size due to member turnover and balancing assessment collection with impact on member experience. That said, these limitations do not diminish the promise of these early findings. The fact that members broadly maintained or improved their clinical outcomes following a switch to an appropriate lower-cost therapy provides an encouraging proof-of-concept of VIVIO's clinical program.

# Implications for Plan Sponsors and Payers

For employers, health plans, and other plan sponsors, these findings carry significant implications. The data demonstrates that it is possible to meaningfully reduce specialty pharmacy costs without sacrificing—and in many cases while improving—clinical outcomes. This represents a departure from the false choice that the industry has long accepted: that cost savings and quality of care are inherently in tension.

Plan sponsors who adopt a data-driven drug selection model can expect a reduction in per-member specialty drug costs driven by optimized therapy selection rather than blunt access restrictions; sustained or improved clinical outcomes as measured by objective, condition-specific metrics; greater transparency in how drug selection decisions are made, with clear clinical rationale for each recommendation; and a proactive safety net through continuous monitoring and prescriber engagement when member outcomes change.

Importantly, this data-driven approach focused on outcomes and lowest net cost reduces employer fiduciary risk. VIVIO was cited positively as an alternative vendor in the PBM space in the recent J&J, Wells Fargo, and JP Morgan lawsuits.





# Conclusion

The results of VIVIO's twelve-month outcomes analysis across HIV and psoriasis cohorts provide compelling evidence that data-driven, personalized drug selection is not just a theoretical ideal—it is a practical, measurable reality. With 94% of HIV members and 86% of psoriasis members maintaining or improving their clinical outcomes after switching to lower-cost therapies, the data speaks clearly: the right drug for the right person at the right price is achievable, and it produces better results than the status quo.

As specialty drug costs continue to rise and plan sponsors search for sustainable solutions, the question is no longer whether a better model exists. It does. The question is how quickly the industry will move to adopt it.

*For more information about VIVIO Health's clinical outcomes methodology and data-driven drug selection model, contact VIVIO Health.*