



# PHARMACEUTICAL COMMERCIAL FORECASTING:

Case Studies on the Importance of Informed Assumptions

**Authors: Ryan Coe, Ph.D.  
& Matt Haynes, Ph.D.**

## Case Studies on the Importance of Informed Assumptions

Revenue forecasts for new products carry broad consequences for innovators in pharma and biotech, as forecasting errors can lead to misallocation of funds, incorrect “go or no-go” decisions, and destruction of value. The difficulty of launching a product since the start of the COVID-19 pandemic has not made the calculus simpler. Understanding the full scope of commercial potential at launch requires an in-depth review of the product, the stakeholders, and the company itself, with each of those steps containing pitfalls and oversights which commonly confound the forecast model’s final

output. Over the past eight years, Triangle Insights Group has partnered with more than 100 small, medium, and large pharmaceutical companies for revenue forecasting and net present value (NPV) analyses to prepare new product launches in a variety of therapeutic areas and technologies. Selected key learnings from three recent engagements are described below, in which common assumptions during a standard forecasting project could have led to sizeable forecasting errors. However, Triangle created actionable strategies to improve these outcomes.

### 1. Generic Cuts to Adoption to Arrive at Total Addressable Patients

In Triangle’s experience, clients typically understand the need for a dispassionate assessment when engaging with stakeholders and take great pains to optimize the

characteristics they choose to include in their target product profiles. However, in some cases, Triangle has found that some innovators are comfortable applying

**Figure 1. Total Volume of Prescription Writing Across Multiple Prior Authorization Scenarios**



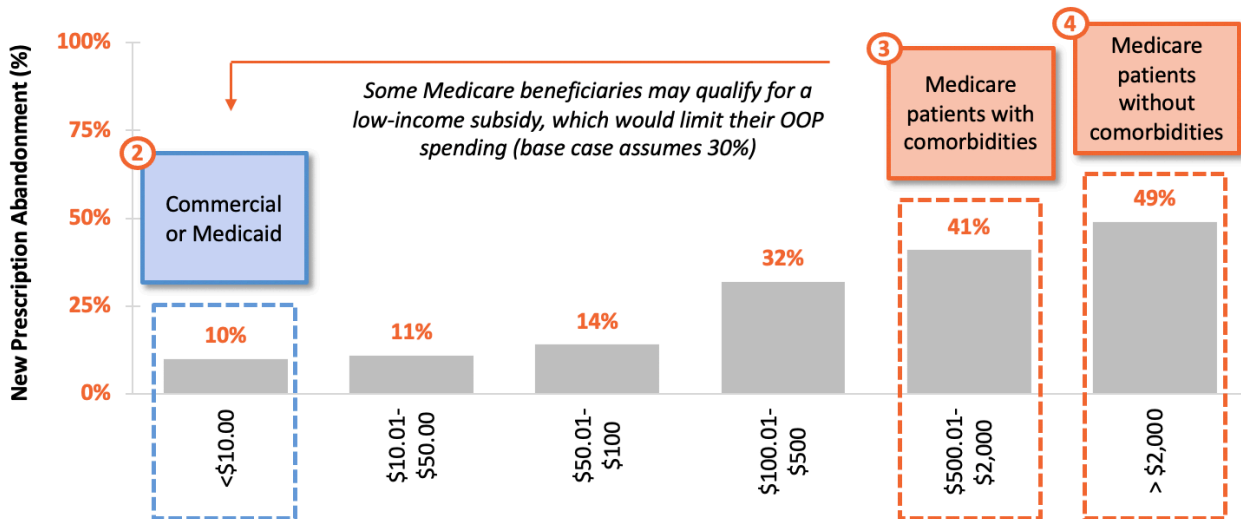
**Total Volume of Prescription Writing Across Multiple Prior Authorization Scenarios.** Triangle Insights was able to quantify the loss of prescription volume by collecting physician responses to increased prior authorization requirements for the specific physician segment and indication.

arbitrary haircuts to top-line estimates of treated populations from primary research, rather than including key factors that help to clarify physician and patient behavior. Recently, Triangle avoided this common pitfall when we engaged with an ex-US, one-product company to develop a US market forecast for their clinical-stage Cystic Fibrosis product.

At a cost of ~\$50K per six-month course of therapy for this product, one might expect top-line adoption to be unrepresentative of stakeholder behavior as payer restriction and patient abandonment impact real-world use. However, the physician specialty under consideration was identified to be relatively insensitive to prior authorizations compared with other specialties, even when the restrictions were quite onerous (e.g.,

multiple step edits; Figure 1). In addition, by leveraging a proprietary insurance coverage database for product analog analysis, the Triangle team was able to provide detail into the expected prescription abandonment rate for patients by channel (Commercial vs Medicare; Figure 2) and provide focused insights into how best to approach these challenges in the Medicare channel. Assigning arbitrary haircuts to access, adherence, and abandonment would have left the client with a substantially lower volume opportunity. By taking a more granular approach to forecasting, Triangle was able to thoughtfully frame the positive impact patient support programs and physician education materials would have for the client to support their product’s eventual launch.

**Figure 2. New Patient Abandonment by OOP Cost for Anticancer Treatments, 2014-2015**



**Patient Abandonment by OOP Costs and Insurance Coverage.** Triangle Insights quantified the expected patient abandonment due to out-of-pocket cost requirements by multiple patient segments. In particular, Medicare patients without comorbidities were identified to be more likely to abandon their prescription than those with key comorbidities.

**Source:** McKinsey (2020) *Ready for launch: Reshaping pharma’s strategy in the next normal*. Accessed Q3 2022.

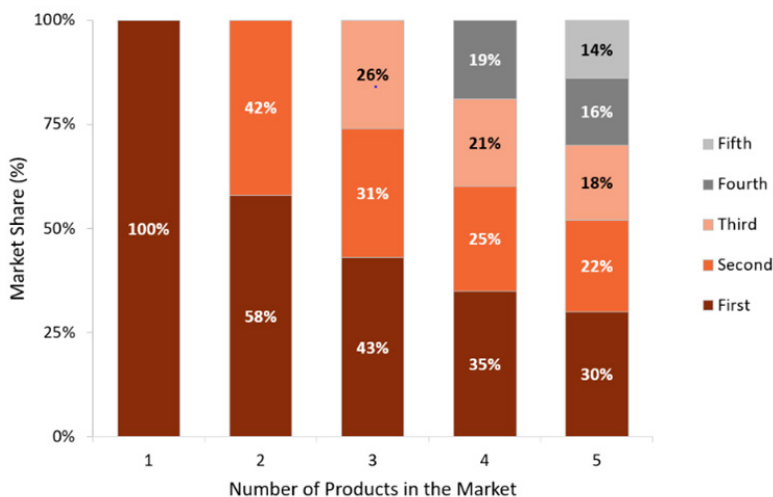
## 2. Generic Assumptions in Pricing Impact on Revenues and Profits in Competitive Markets

When preparing for a potential acquisition, life science companies may be content to rely on a small number of primary interviews to determine the revenue maximizing price for the forecasted product. In markets with tight competition, slim margins, and a product offering limited differentiation, forecasts would benefit from additional order-of-entry and price sensitivity analyses to confirm primary research responses. Triangle utilized this level of rigor recently when it engaged with a medium-sized US generics manufacturer to develop a forecast for the potential acquisition of a medical device that administers several common IV antibiotics.

Given the competitive and entrenched nature of the market and the limited differentiation offered by this device, the Triangle team performed two independent analyses to arrive at a profit-maximizing price for the new product. Triangle’s initial analysis leveraged

interviews with health system pharmacy directors to determine product adoption at multiple price points (data not shown). In a complementary analysis, Triangle estimated the product’s potential market share based on generalized order of entry (Figure 3) and the product’s relative premium to its on-market competitors (data not shown). Both analyses were then triangulated to the absolute percentage change in market share by price through a validated regression model, strengthening the client’s confidence in the forecast, and allowing them to accurately determine the price which maximized gross profit (and ultimately the ideal terms for in-licensing). Had the client only optimized for revenue through a single analysis, alteration of deal terms during negotiations could have compromised their product’s eventual commercial performance and overall revenue potential.

**Figure 3. Adoption of Pharmaceutical Products by Order of Entry**



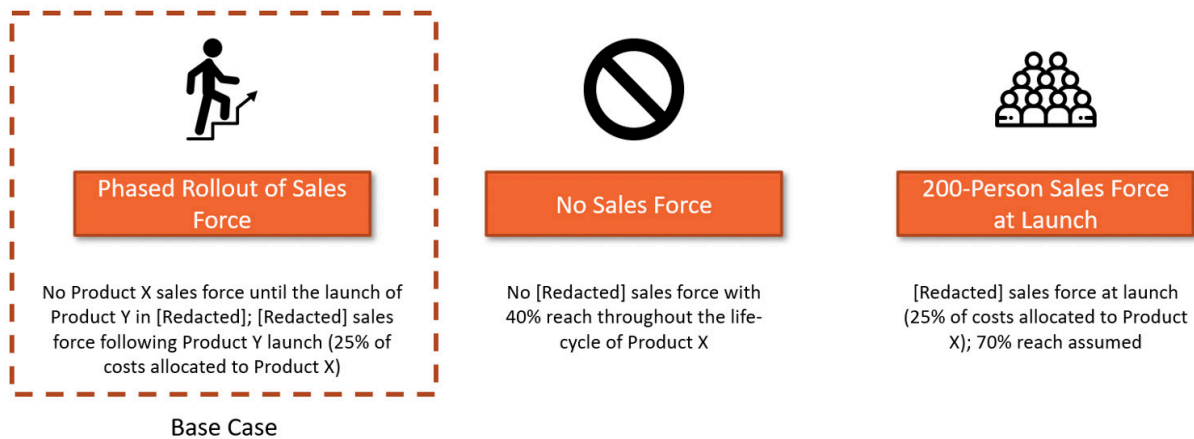
**Adoption of Pharmaceutical Products by Order of Entry.** Triangle Insights was able to estimate the average market share based in part on the order of entry and the number of competitive products on the market.

### 3. Generic Internal Cost and Execution Assumptions

While profitability and NPV analyses are undoubtedly useful in preparation for a new product’s launch, innovators who stop short of a broader company-level assessment may also miss key opportunities for their overall firm. For example, NPV analyses that use generalized assumptions of sales force reach, costs, and launch timing at the product level may miss critical components to overall portfolio profitability or strategic advantages. Recently, a large multinational client of Triangle’s considered launching into the US market an obstetric product used in labor and delivery. While the product is currently available internationally and needed only minor US investment to be approved, initial analysis found its US adoption would be limited due to its higher price and the entrenchment of the current standard of care. More specifically, the initial forecast projected revenues of less than \$50M per year and a minimal NPV overall – far below the typical “go” threshold for this client.

Despite these considerations, Triangle worked with the client to understand the positive externalities for the company at large. Since it would soon be launching another asset in the same therapeutic area, there may be profitable synergies between the two products. Given that sales force cost was the key driver of low profitability for the initial product launch, the Triangle team modeled three different strategic scenarios for sales force deployment into an NPV analysis (Figure 4). By only including account representatives for the initial product launch and deploying a full sales force in conjunction with the more robust product launch, our client was able to maximize their products’ synergies and positive externalities without negatively impacting their profitability. By engaging with the client to determine efficient strategies throughout the entire portfolio, instead of solely focusing on a single product launch, Triangle was able to recapture substantial value for the client.

**Figure 4. Sales-Force Rollout Strategies for New Product**



**Multiple Sales-Force Rollout Strategies.** Triangle Insights was able to model three separate sales force rollout scenarios for an NPV model, allowing the client to effectively plan for and execute a joint sales force rollout and maximize its portfolio potential for an otherwise costly product launch.

## Feedback from Triangle Insights Clients

In addition to the selected insights shared above, Triangle Insights takes pride in its client relationships and the strategic guidance that is offered, underscored

by an average client satisfaction score of 9.4/10 and feedback shared by clients themselves (Figure 5):

### Figure 5. Feedback from Triangle Insights Clients

*"The work enabled us to confidently negotiate significant, impactful changes to the structure of our transaction. This was our firm's first project with TIG, and we immediately booked you all for a second, so that should tell you everything!"*

*"Very professional, quick learners, and excellent strategic guidance."*

*"[TIG is a] top quality organization--extremely professional, great working dynamics, quality work, great insights, and able to adapt very well."*

*"From start to finish, all stakeholders at [Client] were highly impressed with the level of knowledge and understanding brought to the project."*

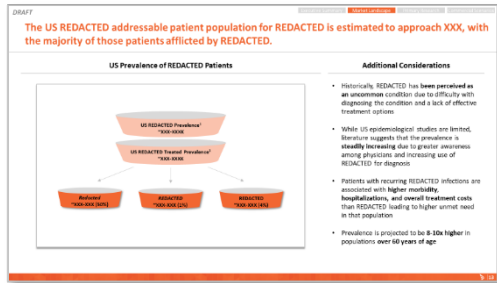
*"TIG was very responsive to our needs and displayed a great amount of flexibility while also keeping focused to what was most important."*

*"The TIG team members were great strategic partners. I would strongly recommend them to my colleagues and absolutely work with them again in the future!"*

**Feedback from Triangle Insights Clients.** Post-engagement feedback from commercial assessment clients underscores high client satisfaction scores (9.4/10 overall) as well as Triangle's commitment to strategic support for new and existing relationships.

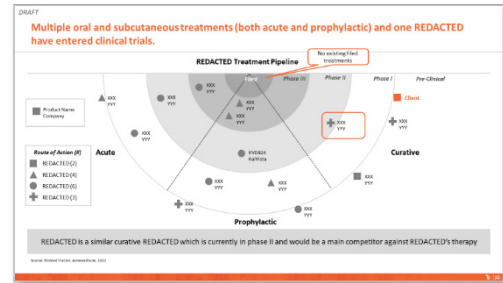
# Commercial Launch Forecasting and NPV Analysis: Summary of Approaches by Triangle Insights Group

## Secondary Market Research



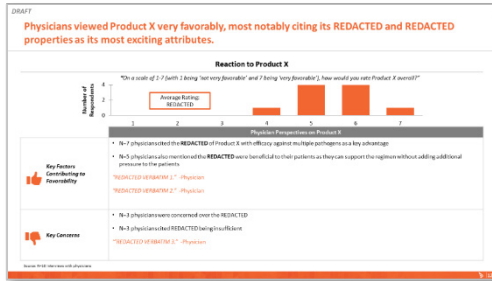
Reviewing academic journals and secondary sources to thoughtfully estimate epidemiology, assess current treatment patterns, and identify key unmet needs.

## Competitive & Pipeline Analysis



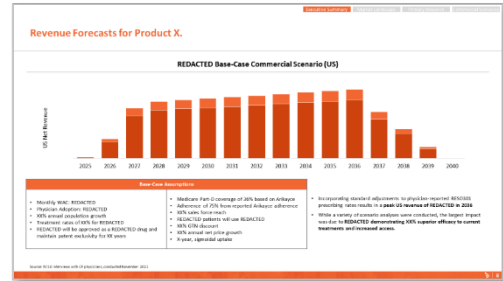
Leveraging secondary sources and proprietary databases to determine the current and future competitive/collaborative dynamics of the market.

## Stakeholder Interviews



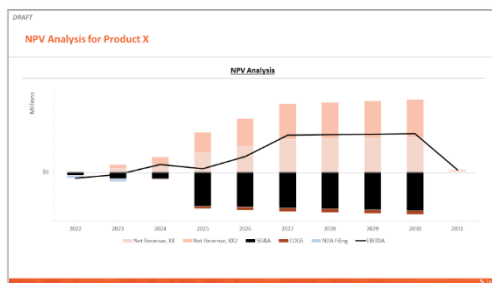
Uncovering stakeholders' unique approaches to the current standard of care, as well as their opinion of and anticipated approach to target product profile(s).

## Revenue Forecasting



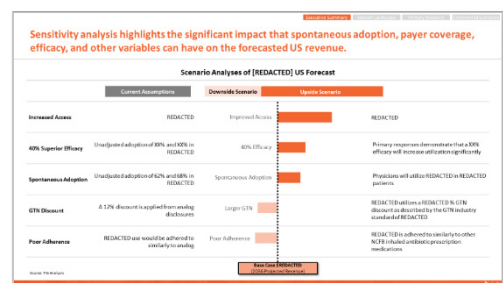
Estimating a target product's revenues and life cycle based on physician adoption, payer access, patient adherence, sales force reach, and other key factors.

## NPV Assessment



Estimating a target product's profitability over its life cycle based on cost of goods, sales, other services, and incorporation of deal terms as appropriate.

## Sensitivity Analysis



Adjusting key model components for scenario testing and risk assessment as part of a commercial launch, deal negotiation, and other business situations.



**Raleigh-Durham Research Triangle**

512 S. Mangum St., #404

Durham, NC 27701

919.813.6100

**San Francisco Financial District**

505 Montgomery St., 11th Floor

San Francisco, CA 94111

628.222.5288

**New York Midtown**

450 Park Ave S., 12th Floor

New York, NY 10016

646.974.3536