

CASE STUDY

STRATEGIC COURSE CORRECTION FOR A BLOCKBUSTER ONCOLOGY DRUG

RE-ESTIMATING THE MARKET OPPORTUNITY AND BRAND PENETRATION AT ACCOUNT AND TUMOR TYPE LEVEL



Longitudinal patient history in APLD can help in accurate market assessment based on trends in patient progression, line of treatment and regimens when triangulated with other data sources.

The management knew the market potential but needed evidence to enable an implementable and consistent execution strategy

BUSINESS SCENARIO

Product: A blockbuster oncology drug indicated for three tumor types with specific treatment regimens for each. A top pharma company that had done well to grow the product to a blockbuster status but was struggling with understanding and achieving its full potential.

SITUATION 1: A TOP-DOWN BLIND-SPOT

The management was struggling with the next level of product growth strategy. There was:

- No definitive market assessment across each tumor type with
 - no account and competition benchmarks at the tumor level
 - inconsistent market share estimates
- No definitive understanding of customer-brand loyalty and penetration

SITUATION 2: A BOTTOM-UP UNDERCURRENT

The management was feeling rumblings of a demotivated field force leading to inconsistent performances with:

- dissatisfied sales reps, questioning the product strategy cascade at the territory level
- wide variations of sales across territory

THE CHALLENGE

Despite creating a blockbuster product with extensive usage and uptake, the company struggled with integrating internal commercial operations with growth plans. The management knew the market potential but needed evidence to enable an implementable and consistent execution strategy.

The management team needed to answer their hypotheses with evidence, and some of the reasons why questions were challenging to answer were simple:

1. **Data available, but patchy:** evidently, the product was a blockbuster, so there was data available. The challenge was to use the available data to draw the next level growth plan. The problem was multi-fold:
 - **Data interlinking:** It was challenging to combine APLD claims data (patient and tumor level), account-level demand data (volume at account level) and client's internal data as they came from different sources and in different formats
 - **Last-mile inconsistency:** It was difficult to track usage for products used off-label or in combination regimens by line of therapy

2. **Data quality inconsistent across data sources:** the capture rate of APLD (the data source used for the market assessment at longitudinal patient-level analysis) was low (35-40%). The data depth was inconsistent across products. There was varying availability of historical trends. In some data sources, the data was completely missing or was improperly labeled across fields

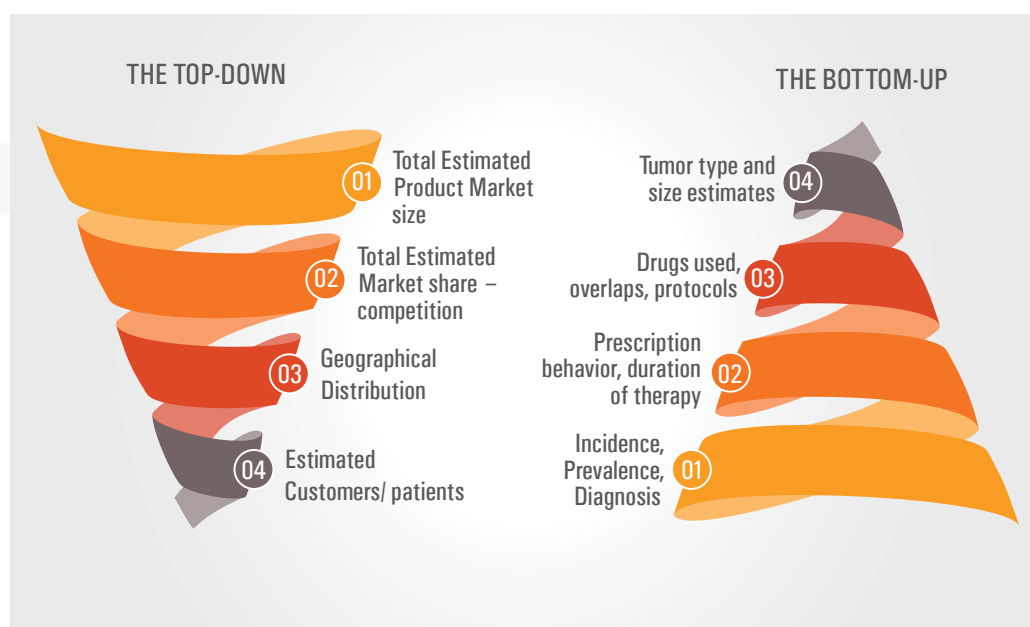
THE CLIENT-AXTRIA PARTNERSHIP

The base of the partnership was a genuine commitment to enabling the product to reach its true potential – both from a product growth perspective, and the ‘give-back’ thought of a greater number of cancer patients improving their prognosis and quality of life.

THE APPROACH

When the client approached Axtria with their situation, the approach involved looking at the challenge through the company’s lens and adding the market and therapy (domain) understanding to bridge and fill the gaps.

The methodology reviewed the top-down market assessment that the company had done across the product and tumor type level and married the estimate with a bottom-up approach.



To provide for a closed-door strategic decision on product growth and help them re-haul their targeting strategy and resource allocation, the final deliverable would involve:

- Tumor type-wise market size estimates
- Market segmentation, usage across each segment and account,
- Targeted product potential loyalists, with prescription behaviors and patient behaviors



AXTRIA'S METHODOLOGY:

Axtria leveraged patient-level claims data to identify patients across the tumor type with robust data and determine the line of therapy for such patients. This analysis was then combined with account-level units to arrive at the drug penetration and market potential for each tumor type.

To overcome the data availability and quality challenges, Axtria deployed three key stages into the estimation process:

- Identify **'Genuine' patients by tumor type** – patients that have complete information from both medical claims and Rx claims, no gaps in data over time and have a definitive diagnosis
- Identify treatment **regimens and lines of therapy** - a combination of disease state knowledge to interpret the patterns of treatment accurately, and careful analysis of longitudinal patient data to apply these interpretations in the context of available (incomplete) information
- Implement a **'Triangulation'** methodology to **scale up APLD market opportunity and drug penetration**

1. **Filter the diagnosed patients:** to those that have undergone relevant procedures
2. **Filter the diagnosed patients:** to those that have received relevant prescriptions
3. **Eliminate patients:** with rejected or reversed claims

FILTER AND ELIMINATE



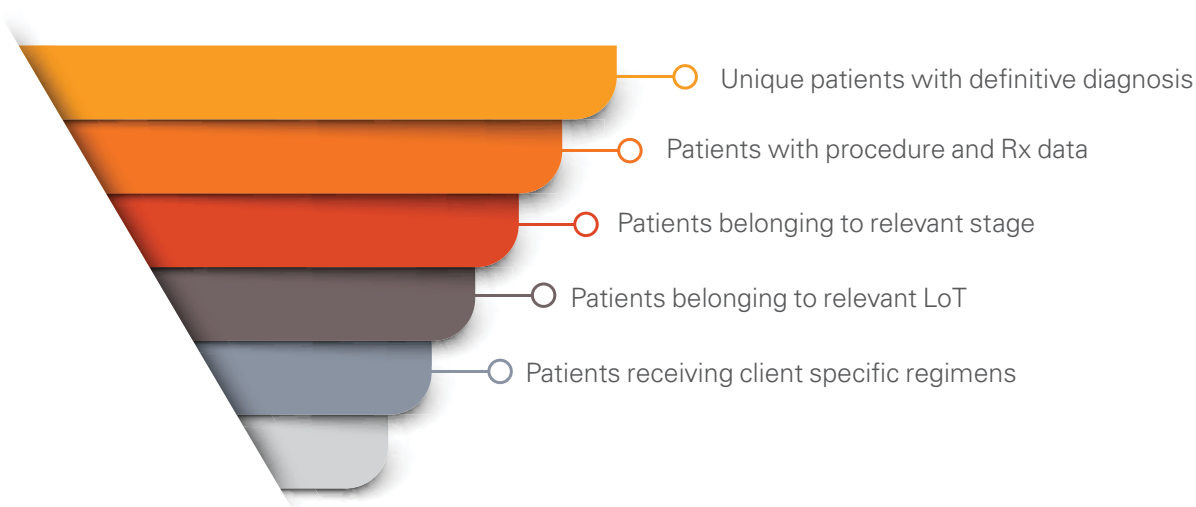
IDENTIFY

1. **Patients belonging to the relevant stage, disease sub-type and line of therapy:** based on the disease knowledge on usage patterns of drugs and duration of therapy,
2. **Unique patients:** with a definite diagnosis for each tumor type
3. **Diagnosis and treatment windows:** based on first diagnosis, overlap of drugs usage and gap days between therapies

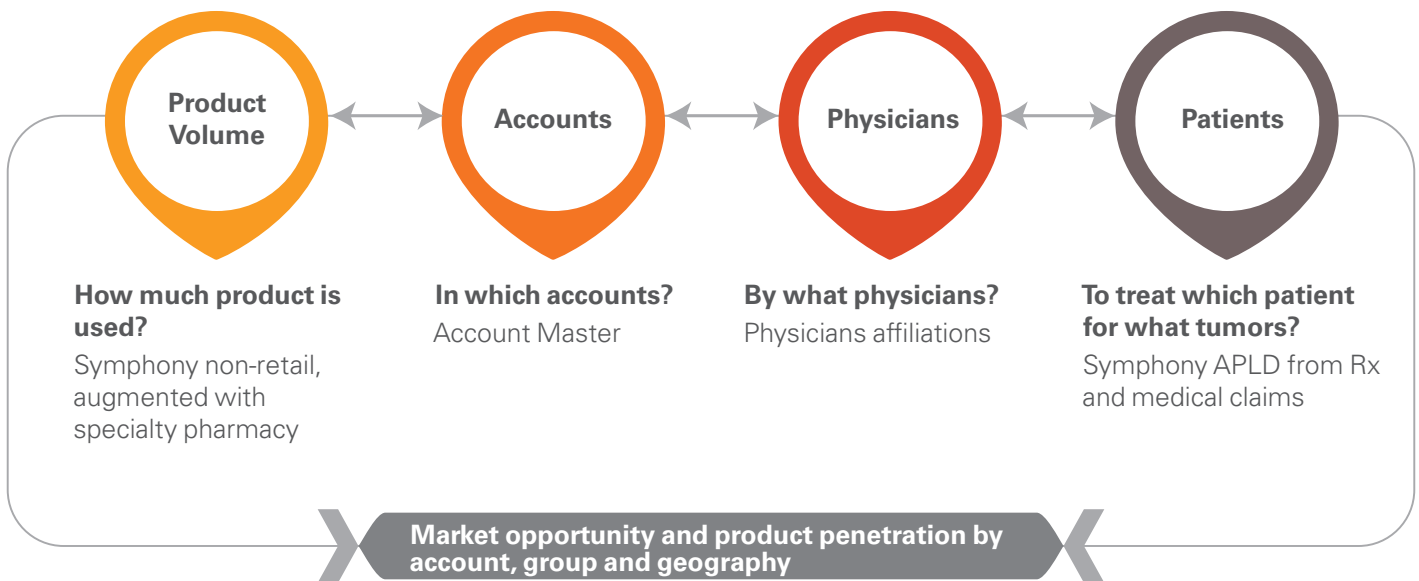
TRIANGULATE

1. Combine the procedure and prescription datasets to come to an initial patient universe
2. Bring together existing sources to triangulate the available data and to scale up APLD market opportunity and drug penetration

PRODUCT PENETRATION AND MARKET OPPORTUNITY WERE CALCULATED BY USING WEIGHTED AVERAGES ON AVAILABLE DATA SETS



THE OUTCOME OF THE PROCESS



KEY TAKEAWAYS

The Client-Axtria partnership led to:

1. Accurate identification of the target market across tumor type
2. Product usage by lines of therapy and specific treatment regimens
3. Alignment of patient treatment activity to accounts
4. Estimates of penetration by-product at an account level
5. A clean dashboard, with KPIs defined across each stakeholder type for a reliable measure of market opportunity and brand penetration at an account-level for each tumor type

CLIENT BENEFITS

The client benefited with the following:

- Motivated reps with actionable information for focused targeting allowing them to tailor their messaging to carry out more informed and pointed conversations with physicians
- Vindication of organization vision for the product growth with significantly better allocation of resources based on the market opportunity



CONCLUSION

Oncology market is estimated to be \$200 billion, growing at 10-13% by 2022¹ across the 23 different tumor types. The market continues to evolve rapidly, and so has the complexity of treatment.

Oncology drugs are indicated for niche patient groups and are generally used in combination regimens and particular lines of therapies which poses significant implications for sales and marketing analytics. Longitudinal patient history in APLD can help in accurate market assessment based on trends in patient progression, line of treatment and regimens.

However, since this data has missing patients or medical and Rx claims, it cannot be used standalone for deterministic analysis. Use of advanced analytics models and triangulation of various sources of data –sales, prescription, longitudinal patient, claims, diagnosis, and others, can help generate reliable estimates of product penetration and high potential opportunities allowing tailored messaging and better targeting to physicians.

REFERENCES

1. Global Oncology Trends 2018, Innovation, Expansion and Disruption, IQVIA Institute Report, May 2018

Founded in 2010, Axtria is a global provider of cloud software and data analytics to the Life Sciences industry. We help Life Sciences companies transform the product commercialization journey to drive sales growth and improve healthcare outcomes for patients. We continue to leapfrog competition with platforms that deploy Artificial Intelligence and Machine Learning. Our cloud-based platforms - Axtria DataMAX™, Axtria SalesIQ™, and Axtria MarketingIQ™ - enable customers to efficiently manage data, leverage data science to deliver insights for sales and marketing planning, and manage end-to-end commercial operations. We help customers in the complete journey from Data to Insights to Operations.

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