A Pharmaceutical Commercial Strategy Case

Background

GlobalPharmaMedical (GPM) is a large pharmaceutical and medical device company that markets leading brands in the Metabolic, Oncology and Neurosciences therapeutic areas. GPM's Neurosciences product, NeuroPriza, is indicated for treatment of symptoms of certain neurodegenerative diseases. NeuroPriza has been available since 2010 and has steadily gained market share. It now enjoys market share of 50% in a growing market.

There is potential for NeuroPriza to maintain its share for 10 to 15 more years if aggressive life-cycle management strategies are pursued. Neither NeuroPriza nor its competitors can significantly slow disease progression. At least two other companies have promising second-generation products in Phase III trials; these products may be shown to halt disease progression. At least one other company has a third-generation product in development which could reverse or even prevent disease.

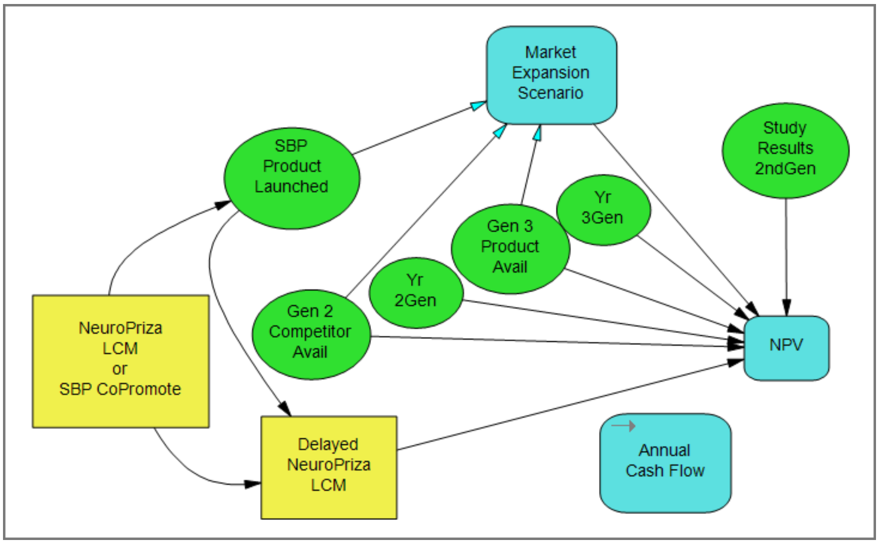

Figure 1. DPL™ Influence Diagram for Commercial Strategy Case

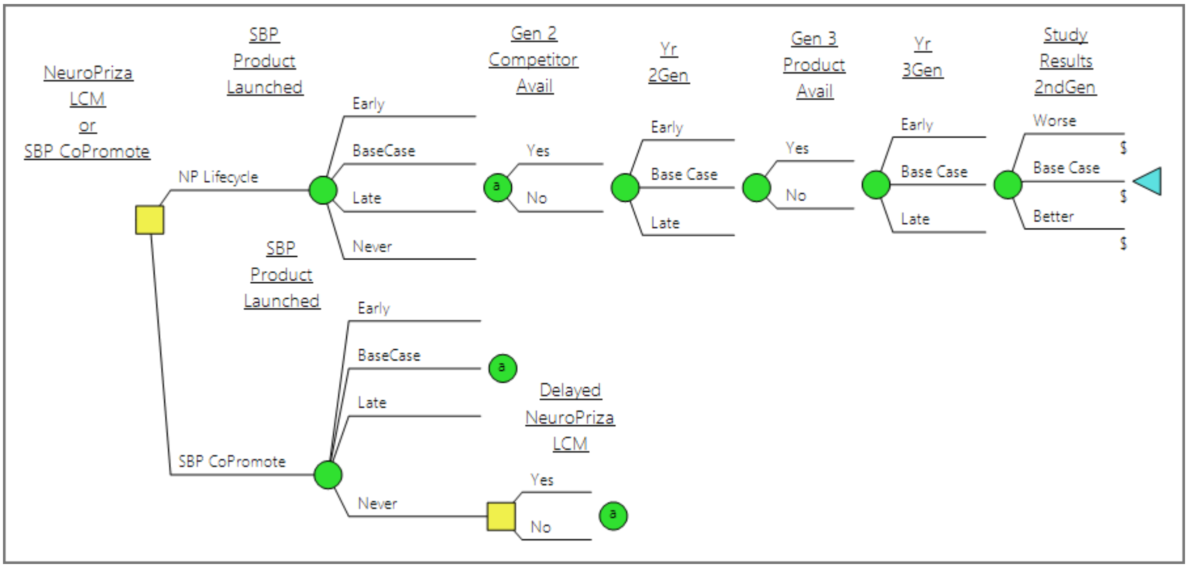

Figure 2. DPL™ Decision Tree for Commercial Strategy Case

Management's Decision: Whether to Pursue a Competitive Co-Promotion Opportunity

GPM has been approached by SmallerBioPharm (SBP), a firm developing a second-generation product that is close to approval. GPM has begun preliminary discussions with SBP about a co-promotion deal for SBP's new product, which according to SBP has an 80% chance of FDA approval and could be launched in the next few years.

However, if GPM agrees to co-promote this second-generation product, they must abandon plans to pursue life-cycle management (LCM) of the NeuroPriza brand. GPM's management needs help evaluating the risk and value of this opportunity in contrast with the planned NeuroPriza strategy. Right now, GPM has to decide whether to formally continue the co-promotion deal negotiations.

The DPL™ Decision Tree in **Figure 1** shows how this decision was initially analyzed. The Decision Tree incorporates several key competitive uncertainties. The Decision Tree also links to an Excel forecast that was developed to estimate the gross sales and net revenue streams through 2032 under various scenarios.

DPL Case Study

Results of Decision Analysis

The DPL™ Decision Analysis shows that a co-promotion deal with SBP has a higher expected NPV than continuing with the NeuroPriza life-cycle management strategy, under the current assumptions. The expected value of the Co-Promote alternative is about $680 million compared with about $626 million for NeuroPriza LCM. If the co-promotion deal is pursued, there is still a chance that SBP's product will fail FDA approval. If this happens, GPM should pursue a delayed NeuroPriza LCM strategy at that future time.

The Policy Tree™ in **Figure 3** shows the expected values associated with each possible path on a subset of the tree. The full Policy Tree™ is much larger. The bolded lines in the Policy Tree™ illustrate the optimal policy recommended by this analysis.

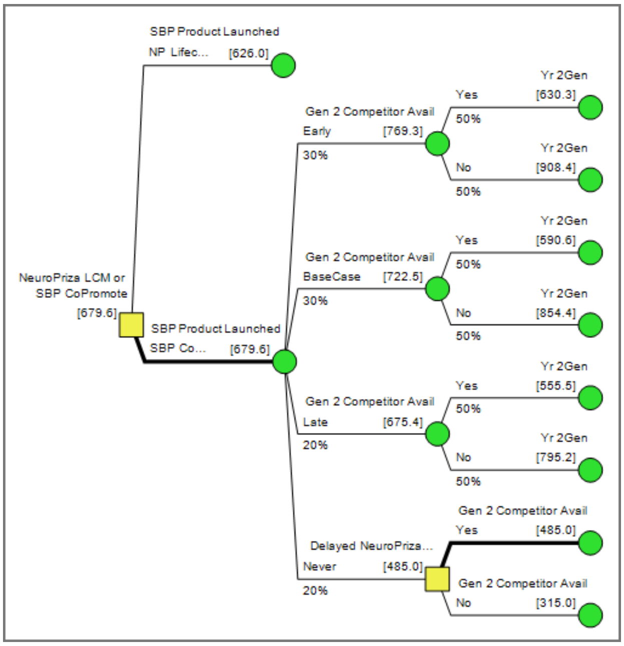

Figure 3. Policy Tree™ showing Optimal Policy

Insights: Risk, Reward, and Cash Flow over Time

The Risk Profiles in **Figure 4** compare the two initial decision alternatives. Although the expected NPV is highest for the Co-Promote alternative, this alternative also has more downside risk. **Figure 5**, an Option Value Chart, displays the value of flexibility at each decision point. **Figure 6** shows the 10th, 50th, and 90th percentiles of the cash flow in each year if the Co-Promote deal is pursued. The range of possible annual cash flows is wide - more than $250M per year in the later years.

GPM management is warned that the Co-Promote alternative is somewhat risky. Also, details of the deal terms – pricing, costs, and royalty percentages - must be carefully examined, as sensitivity analysis shows that they will significantly affect value.

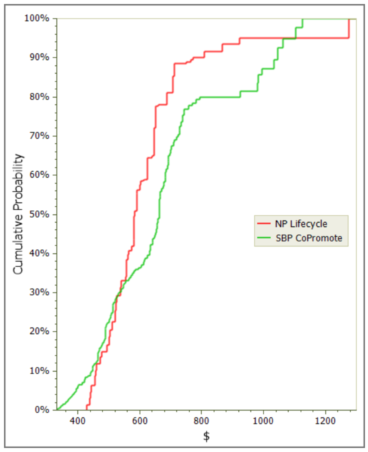

Figure 4. Risk Profiles for the Initial Alternatives

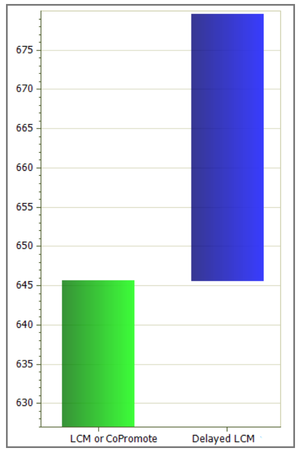

Figure 5. Option Value Chart

Conclusions and Recommendations

The expected NPV of the Co-Promote alternative is about $55 million more than the value of the NeuroPriza life-cycle management strategy, but the additional value comes with some risk. Some variables in the analysis are quite uncertain and require further research. Moreover, the deal parameters are still being negotiated. The DPL™ model will be used for continued evaluation of the risk-reward tradeoffs of the proposed deal as the discussions continue.

Ultimately, GPM management is impressed by the value and potential of the Co-Promote alternative, and believes that the downside risk can be mitigated.

Based on the analysis, GPM decides to formally pursue the co-promotion deal negotiations with SBP.

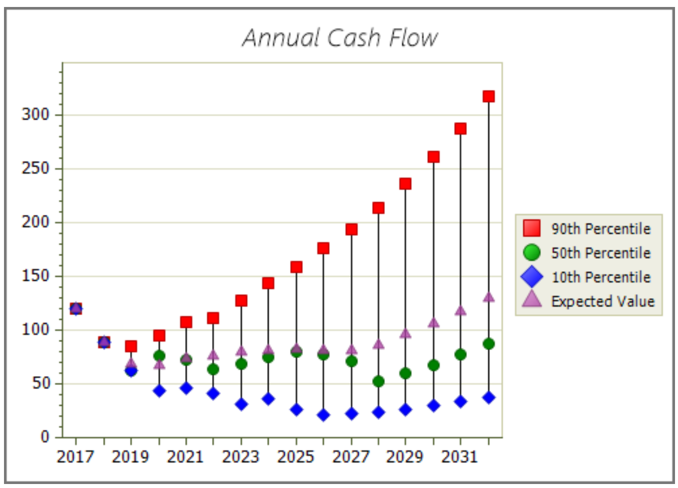

Figure 6. Time Series Percentile Chart displaying Cash Flow Uncertainty for Co-Promotion Deal