



Portfolio Management

UCB is a global biopharmaceutical company. Their mission is to provide novel therapeutic solutions for patients with severe diseases treated by specialists, particularly in the fields of central nervous system disorders, inflammatory disorders and oncology.

Business Problem

UCB manage a complex portfolio of projects in research and development. To maximize the value of the development portfolio frequent decisions must be made: what priority should be given to different projects? Should a project be out-licensed to another pharmaceutical company? How should resources be allocated in order to maximize the return on investment? In order to make the right decisions it is necessary to have a clear idea of the risks, costs and potential rewards associated with each project, and to understand these factors in a whole-portfolio context.

Tessella Solution

Working closely with staff at UCB, Analyticon (a wholly-owned subsidiary of Tessella) has developed software tools to support all aspects of the development portfolio analysis process. Data input workbooks provide a standard format and guidelines on data entry to help project teams prepare data on a consistent basis across the whole portfolio. They also assist with the quantification of risk and help project teams to visualize how risk is

spread across the different phases of development.

A portfolio analysis tool quickly calculates measures of project and portfolio value. Its graphical user interface means that the user can quickly select which projects, potential portfolios, strategies and indications are to be considered. Once an analysis is selected, the resulting calculations are underpinned by sophisticated mathematical methods to ensure that the value of potential portfolios is accurately calculated. This takes into account the possibility of project failure at each phase and the dependencies between separate branches of development.

Many of the costs, risks and rewards used to calculate project value will be imperfectly known. Analyticon's tools allow the level of uncertainty on these inputs to be specified. They then rigorously calculate the resulting uncertainty on outputs of interest. This information can be used to provide confidence levels on a measure of project or portfolio value such as risk-adjusted Net Present Value (NPV), shown in the graph below. Alternatively, sensitivity analyses can be used



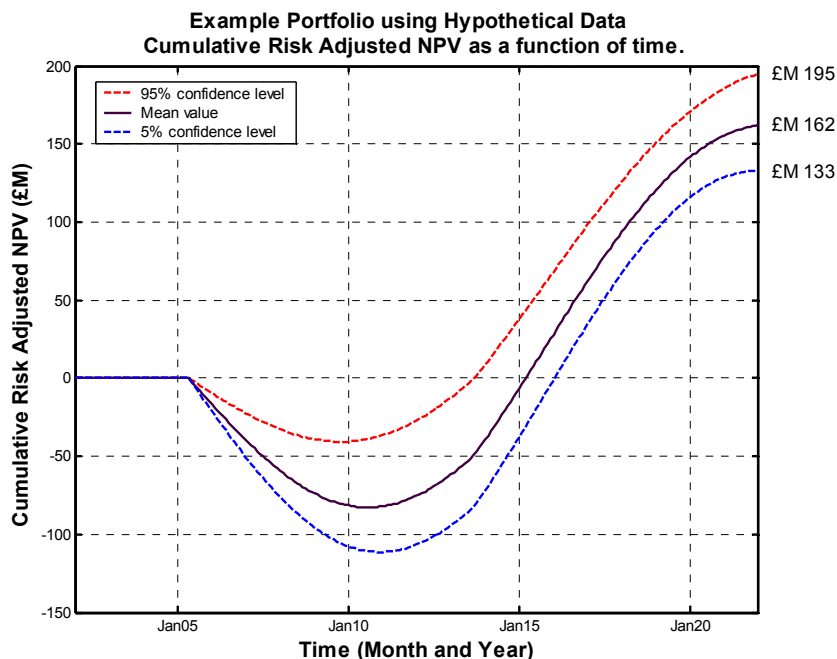
to show where uncertainty in the inputs is causing the greatest uncertainty in the output values. Effort can then be focused on obtaining more information in those areas which have the greatest impact on investment decisions.

The portfolio tool produces a large number of graphical outputs designed to allow decision-makers assimilate data easily. The data that underlies these graphs is not lost within the figure – it can be automatically exported to Excel in case further analyses are required.

Use of Analyticon's tools to support a number of Development portfolio reviews has allowed staff at UCB to identify ways in which the process of collecting data, performing analyses and presenting results to senior management can be made as streamlined as possible. Analyticon is responding to these findings by enhancing the portfolio tool to further automate the analysis process.

Results and Benefits

Analyticon's software tools have been successfully used to support a number of development portfolio reviews. The ability to analyze data using the portfolio tool means that decision-makers at UCB can quickly understand how a change or potential change in one of their projects will impact the whole portfolio. Because all projects are valued in a consistent manner and the effect of uncertain information is clearly shown, decision-makers can have confidence in the results of the analysis. These tools allow an objective approach to decision-making and maximizing the value of the UCB development portfolio.



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