

Sensitivity Analysis in ri:val

Imagine that the company Bio-Tec is just in negotiations with BigPharma about a potential partnership for their project BT-950. Figure 1 displays the term sheet in its current version.

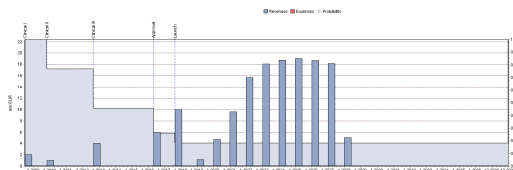


Figure 1: Current term sheet

Bio-Tec now wants to find out to which assumptions its value is particularly vulnerable. For this it runs a sensitivity analysis, where it shocks each parameter by 10% and observes the change in value to the original set of assumptions (figure 2).

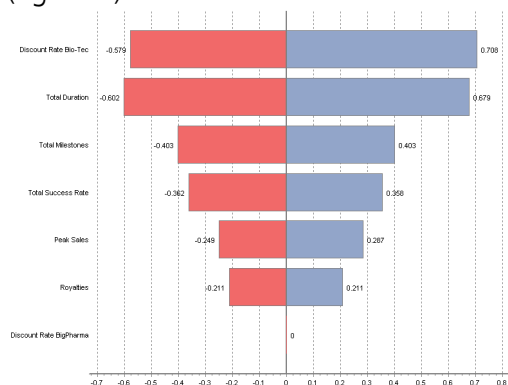


Figure 2: Sensitivity analysis for Bio-Tec

In order to understand their partner's position, Bio-Tec also runs an analysis from BigPharma's perspective (figure 3). This way Bio-Tec becomes aware of BigPharma's concern. In the negotiation Bio-Tec can give way in points that are important to BigPharma but do not hurt Bio-Tec's value. On the other hand Bio-Tec wants to include some securities concerning their most important value drivers, especially if BigPharma does not attribute the same priority to them.

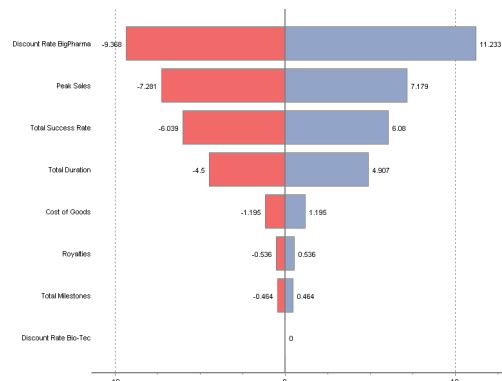


Figure 3: Sensitivity analysis for BigPharma

We see that for Bio-Tec and BigPharma understandably the own discount rate is the most critical parameter. For Bio-Tec almost equally important are the timelines of the project, i.e. when the milestones arrive. Bio-Tec might want to control the timelines by establishing a development plan together and by having a joint supervisory committee. In figure 3 we also see that BigPharma's value is more sensitive to cost of goods than to royalties. Bio-Tec, being more familiar with the production of the compound, could offer to participate in the optimisation of the production process in exchange of a share of the reduced cost of goods. In general we see that BigPharma is much more concerned about the parameters of the project and not so much about the license contract in itself, sensitivities towards milestones and royalties rank relatively low. Bio-Tec is more or less equally concerned about the project and the license terms. If Bio-Tec can reduce some of BigPharma's concerns it is likely to expect higher terms.