

Non-Dilutive Financing Alternatives for Biotech Companies

A biotech company has to pass several fund raising rounds before it can launch the drug and generate revenues. If this is finally achieved the reward for all shareholders is huge as shown by examples like Genentech, Sepracor, or Actelion. Nevertheless, while raising funds investors and entrepreneurs alike are aware that this good case scenario can only be reached with a certain probability, and in the remainder of the cases the invested money is virtually lost. This risk is often not perceived by all parties in the same way. Typically, new investors are more cautious and attribute a lower value to the drug or the company than already existing shareholders and entrepreneurs. Consequently, existing investors think that the new investors dilute them excessively.

If the fund raising cannot be completed at a valuation that is perceived as fair, then the company disposes of several alternative ways of financing that avoid dilution:

- Licensing
- Debt financing
- Venture debt
- Convertible debt
- Royalty financing

Licensing

Instead of raising money a company can also decide to license its project to an industry partner. With upfront payments and early milestone payments the company gets hold of cash to fund the

development of its subsequent projects. A license contract saves the company from spending more capital for the further development of the project and allows realising already a part of the value of the project prior to its commercialisation. This considerable improvement of the risk profile is only achieved to the expense of a significant reduction of the upside potential. The following two figures display the cash needs and proceeds that stem from a phase I project when self-conducted or when licensed.

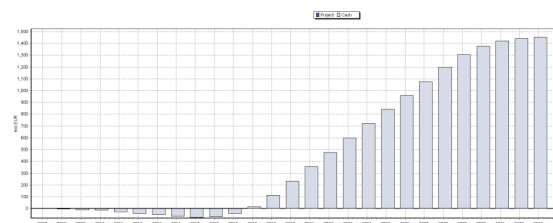


Figure 1: Cumulative cash balance if project is self-conducted

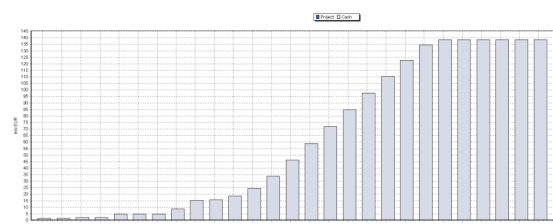


Figure 2: Cumulative cash balance if project is licensed

If the company conducts the project on its own then it needs to raise at least EUR 77 Mio, which will progressively dilute current investors. The current shareholders give away too much control in case the company cannot raise money at a valuation they deem fair. To avoid excessive dilution the company can also consider out-licensing the project to a pharmaceutical company. In this scenario no more

cash is needed to fund the project. But if the project finally comes to market, the company can only earn a total of EUR 140 Mio from the license contract compared to EUR 1.5 Bio if it takes the project to the market on its own.

If a company does not want to give up all the upside then some hybrid license models are available. The two license partners can agree to co-develop the project, and the biotech company keeps for instance the right to commercialise it in its home market. If remaining cash and the proceeds from the license contract do not cover the upcoming development expenses, then the license contract can be linked to an equity investment of the licensee. Other clauses like research funding or co-promotion equally facilitate the growth and development of the biotech company. Nowadays a myriad of clauses allow structuring the license agreement to meet the financial and strategic needs of both parties.

The proceeds of the license agreement are not dilutive, but they are subject to tax. The biotech company can circumvent these taxes by incurring the upfront payment as an equity investment at a high pre-money valuation.

Depending on the terms of the agreement the biotech company must decide whether its shareholders are better served by signing the license contract or by raising capital and getting diluted. Only a thorough valuation of

the whole company in both situations allows a detailed comparison of these two options.

Debt Financing

Another source of financing is debt. The company receives capital it has to pay back at a later, predetermined point in time, at a certain interest rate. Debt does not dilute investors at all and is not subject to tax. Nevertheless the company is put at risk of default in case it is unable to repay the debt at some point in time. Creditors are said to have seniority over shareholders, i.e. if the company is not able to repay the debt, all remaining assets belong to the creditors and the shareholders are left with empty hands. To biotech companies debt is often unavailable, because usually stable revenue streams are necessary to be eligible to debt financing. To pharmaceutical companies debt is an ideal instrument to optimise its capital structure, i.e. to provide their shareholders with some leverage.

Venture debt

In recent years venture debt has evolved as debt financing for earlier stage companies. Venture debt is usually available at rates of 15%-18%. Typically, venture debt has to be paid back monthly over a time horizon of 24 to 48 months. Next to the debt rate the creditors ask for some warrants and also for some fees, which makes the debt a little more expensive. Venture debt usually does not exceed a nominal amount of USD 25 Mio. Again it is the management's task

to decide whether venture debt represents a viable alternative to equity financing. Usually a biotech company that is eligible to venture debt is better off issuing a convertible bond.

Convertible debt

The biotech companies can still make use of the advantages of debt financing under the form of convertible debt. The companies issue a convertible bond, which is nothing more than debt that can be converted into an equity holding in the company if the share price performs particularly well. The bondholders, i.e. the investors, want to participate in the upside potential of the company that has been made possible by the means of their financing. In exchange they accept a much lower interest rate on the debt part of the convertible bond.

Biotech companies in later clinical development can already make use of convertible debt. Switzerland's Cytos issued a convertible bond with its most advanced project in clinical phase II.

Usually the features of a convertible bond (low debt rate, conversion premium) make a convertible bond more attractive than directly diluting equity. If the company value increases, the convertible debt transforms into relatively cheap equity. If the value deteriorates on the other hand, the company would have been better off having issued plain equity, because the convertible debt represents now a risk of

bankruptcy. Financial modelling of various pessimistic scenarios allows relating this default risk to the attractive terms of a convertible bond. The market place generally perceives the issuance of a convertible bond as an optimistic signal of the company.

Royalty financing

Royalty financing is a way of securitising future revenue streams. It is an attractive way for large financial investors such as hedge funds to participate in relatively stable and uncorrelated drug revenues. The drug development company has immediate access to financing without diluting its shareholders; in exchange it owes a part of the future drug revenues to the financial investors. These revenues can stem either from direct sales or from royalties. This sort of financing is especially attractive when a knowledgeable investor recognises a drug's potential that is undervalued by the public market. Usually royalty financing is only available for approved drugs, although there have already been closed some deals in late phase III. For companies with structural problems in their balance sheets a royalty/revenue deal could be a good remedy to increase their cash holdings again.

When considering a royalty/revenue deal the company typically needs to analyse whether the cost of capital of the deal is better than what it would get from investors in an equity-round.

Conclusion

The more advanced a company the more alternatives it has to fund its operations. A company that has already stable revenue streams has access to equity, debt, and royalty financing, and can also out-license its products. There is not one scenario that is automatically better than the others. Valuation allows comparing the different options and selecting the most attractive one.

For a biotech company that is still in R&D with its most advanced project these options become more limited. Often the only alternative to equity financing is licensing. A license agreement can often be a very attractive alternative because the licensee usually is a knowledgeable partner recognising the potential of the project. Finally, the company's management has to decide which alternative serves the shareholders best. Often the dilution of an equity-round can be too severe, inclining the balance towards a license deal, which can be designed to the specific needs of the company. In any case, management should look out for alternatives, which always improves their bargaining position.

Table 1: Funding Alternatives

	Dilutive	Subject to tax	Transaction Costs	Cost of Capital	Access
Equity	yes	no	high	various	all
Debt	no	no	high	low	established
Venture	little	no	hidden	15%-	close to
Debt			fees	18%	profitability
Convertible	reduced	no	high	medium	advanced
Debt					
Royalty	no	yes	low	15%-	In approval
				20%	or approved
License	no	yes	low	various	all