Financing 101 for Biotech Startups

One of the biggest challenges for early-stage companies is lack of funding. New entrepreneurs seeking capital need to research potential investors who are the right fit for their company and understand the various investment structures used to finance company growth. This guide serves as primer to financing your biotech throughout the company's lifecycle, from incorporation to licensing or sale of the company, with a focus on early-stage investments.

Starting with Equity

Equity is the distribution of ownership of a company. By definition, a **corporation** is a legal entity that is owned and controlled by its shareholders, and ownership is generally represented by shares of stock. Early on, founding company teams will determine how the shares will be split amongst the co-founders, based on their experience and commitment to the company. As more money is needed, a company will seek out additional investors, who will provide capital in exchange for equity.

Major Stages of Startup Financing

Although the following terms are in common use, the categories are not as fixed as the definitions would seem to indicate. It may be better to think of these categories as stages of company growth and amounts of capital needed at any given time.

- **Seed round** is generally the first money in, and is used to validate the idea and conduct initial proof-of-concept studies. Seed funding can come from friends and family, NIH grants, nonprofits, and/or angel investors. On average, companies will raise anywhere from $100,000 to $2 million in this initial funding round.

- **Series A round** is the first institutional round of financing, after seed capital runs out. Funding is typically raised from venture capitalists (VC) and sometimes angels and venture philanthropies. At this stage, the lead investor negotiates the terms of the round and is offered a seat on the board.

- **Series B/C/D rounds** involve larger capital investments that are required to take the company through to a licensing deal with pharma or to an initial public offering (IPO). Funding can be raised from VCs and corporate partnerships.

- **Mezzanine financing and bridge loans** can happen in between rounds. This typically occurs after some validation of the therapeutic (e.g. successful results from a clinical trial). Mezzanine capital is typically the final round of funding before an IPO. Bridge loans may help a company reach the next round of financing.

- **Exits** are liquidity events where investors can recoup investments and sell their shares. These include licensing deals, company acquisitions, or an IPO by selling stock to the public.

Assessing your Company's Value

Valuation is the monetary measure of how much your company is worth. This metric is used to determine how much money an investor will provide in exchange for how much equity they will own at a particular stage of financing.

- **Pre-money valuation** is the estimated value of a company before each investment round. It determines what percentage of equity will be issued to an investor in exchange for their investment.

- **Post-money valuation** is the pre-money valuation plus the total investment you intend to collect in that round. Equity is calculated by dividing the investment for the current round by the post-money valuation.

Example:

The pre-money valuation of a company is $7.5 million. If an investor offers a $2.5 million investment, then the post-money valuation is $10 million and the investor will then own 25% of the company following that round of financing.

However, if the pre-money valuation of the company was only $5 million, then the investor's $2.5 million investment would get them 33.33% of the company.

A lower pre-money valuation means a larger percentage of equity will be issued to the investor to obtain the same amount of investment. On the other hand, high post-money valuations enable company founders to keep a larger share of their business.

Setting reasonable valuations

Entrepreneurs must balance how much of the company they're willing to sell against how much the investor is willing to invest, keeping in mind that each round of financing will result in a reduction of the founders' percentage.

While high valuations are favorable for the founders, investors want to see realistic valuations. Valuations for early stage companies should be justified by looking at **comparables** (companies in the same space at the same stage) to predict what the company will be worth. In addition, investors factor in the risk and future company value to calculate the valuation. This is not an exact science, but is based on their past investing experience in the industry and gut feeling. Other factors include company stage, management team, and whether there is *in vivo* proof-of-concept data. Valuations are typically lower at the earliest stages and for teams with first-time entrepreneurs.

As the company matures, other methods may be used to calculate valuation including discounted cash flow, which estimates future company revenues subtracted by the costs associated with generating those revenues and making certain assumptions about the time value of money, meaning the assumption that a dollar today is worth more than a dollar tomorrow.

Common Types of Investment Securities

Investors generally give companies money in exchange for equity or loans that can eventually be converted into stock. This gives the investors rights that are preferential to those of common stockholders. And since common stock is usually the stock that is registered for a public offering, investors want the option to own the kind of security that will be publicly traded.

- **Preferred stock** is equity that is typically issued to outside investors in your company, whereas common stock is typically issued to company founders and employees. Preferred stock comes with special rights – it allows investors to collect their original investment and accumulated annual dividends before common shareholders can realize any return on their equity.

- **Convertible notes** are loans that convert into equity under certain circumstances. The equity can be valued at a fixed price per share. Or for early stage companies, equity is typically valued at a price per share to be determined by the future valuation of the company. This will be set by the investors at the next round of financing. The note will specify the amount of additional investment required in the next round to force a conversion of the notes to stock. If the next round of financing does not occur, the note may convert to common stock at a specified rate or remain as debt.

  This type of security may be more appropriate for earlier stage financing (like seed funding) because it allows an investor to participate without having to calculate valuation at such an early stage. Since this is a loan and not an investment, this option tends to be faster and less expensive in terms of paperwork and legal fees.

- **Warrants** are the right to buy a set number of shares in the future at a set price in exchange for an investment. These may be added as "deal sweeteners" to provide more favorable terms for the investor.

Each time a company issues new shares of common stock, or securities which can convert to common stock, the ownership percentage of existing shareholders will be diluted (or reduced), unless the shareholders agreement has an anti-dilution clause for certain parties. However, if the company has increased in value before the new issuance, the value of the shares held by existing shareholders should be more valuable, even though the percentage of ownership drops.

References

Kolchinsky, P. *The entrepreneur's guide to a biotech startup*. *4th Ed.* 2004. Evelexa BioResources.