LIFE SCIENCES SNAPSHOT

A Quarterly Report on Financing Trends

LEVERAGING ALTERNATIVE FINANCING
Q4 2023

orrick

Data provided by

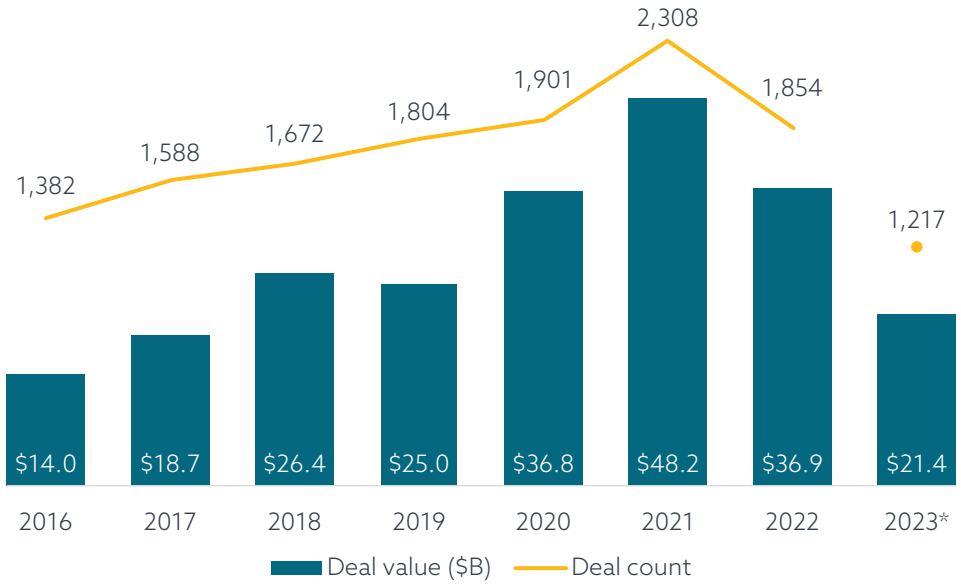
PitchBook

Key Takeaways

This report series examines quarterly trends in life sciences venture investment. Key findings for Q3 2023 include:

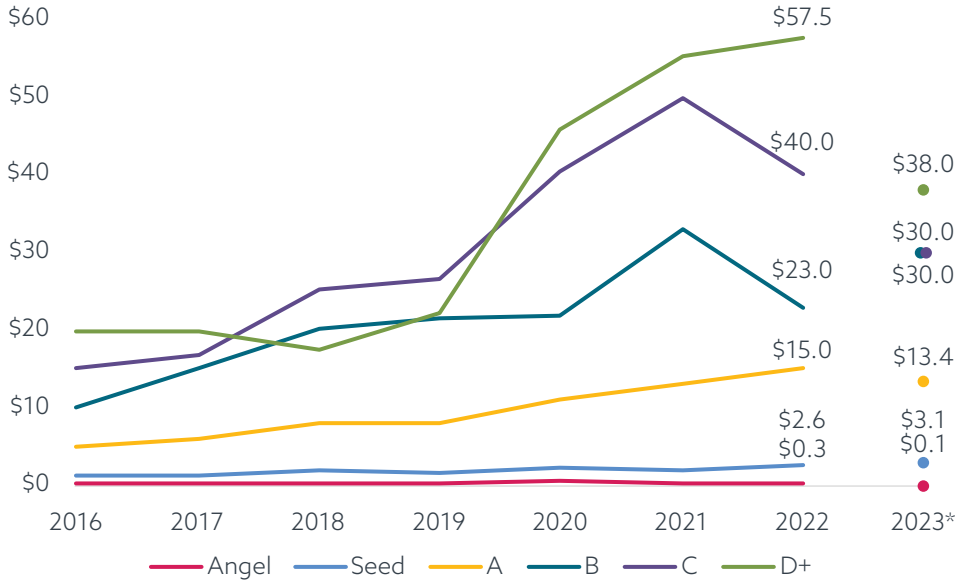
- Life sciences VC deal value in Q3 2023 totaled $7.7 billion, representing an uptick from last quarter across fewer deals. Total deal value has grown each quarter in 2023 for a year-to-date (YTD) total of $21.4 billion, compared with $28.9 billion closed in the same period in 2022.
- Valuations are flat YTD for most company stages except for the angel and seed stage, which has seen its median pre-money valuation grow 10.8% this year (as seen on page 3). The median deal size also grew for the seed category but declined for most other series.
- Q3 was an unexpected bright spot for exits with $9.0 billion generated across 30 exits, marking the most lucrative quarter for exits since Q4 2021. Total YTD exit activity remains relatively low compared with previous years, but with a few more large IPOs, 2023 may mark the beginning of a slow recovery for life science exits.

Life sciences VC deal activity



Source: PitchBook | Geography: US
*As of September 30, 2023

Median life sciences VC deal value ($M) by series



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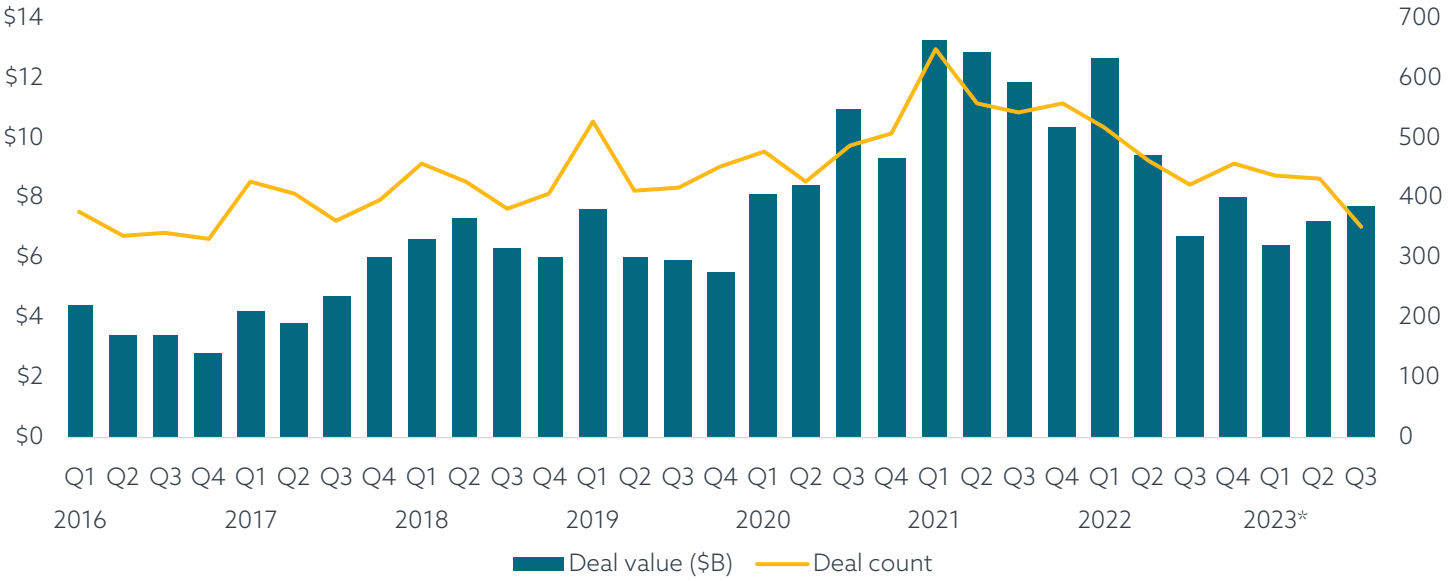
Market Analysis

Life sciences VC deal activity by quarter



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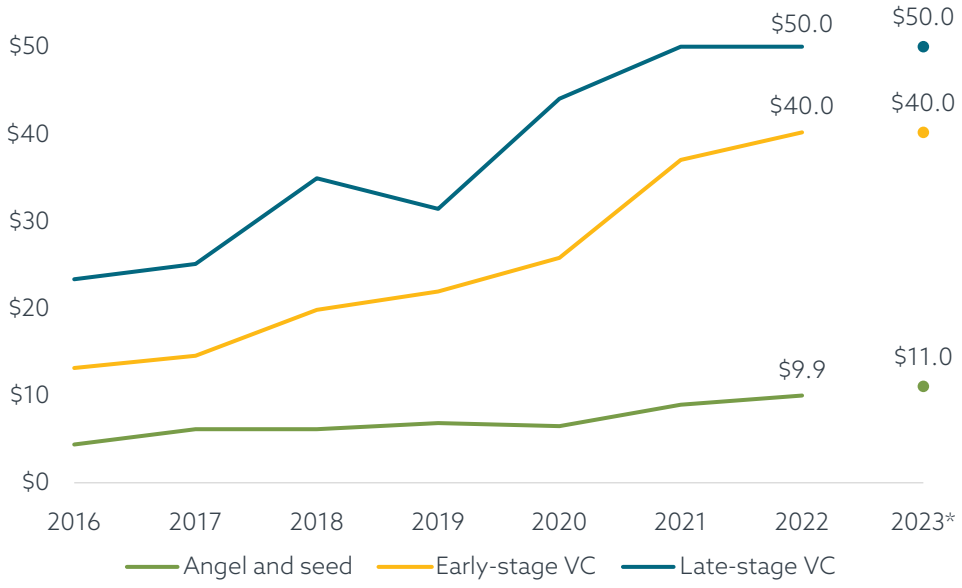
Q3 marked the third consecutive quarterly increase in life sciences VC deal value, providing some optimism despite the broader slowdown. While deal value has increased, deal count has declined each quarter in 2023. As discussed in the previous edition of this report, this inverse relationship indicates that greater selectiveness persists among check writers. The total YTD deal value of $21.4 billion falls short of the $28.9 billion generated in the same period in 2022, but this is more indicative of broader cyclicality than it is of industry-specific woes. For example, advancements in gene therapy and artificial intelligence & machine learning applications for drug discovery continue to generate buzz.

Median life sciences VC pre-money valuation ($M) by stage



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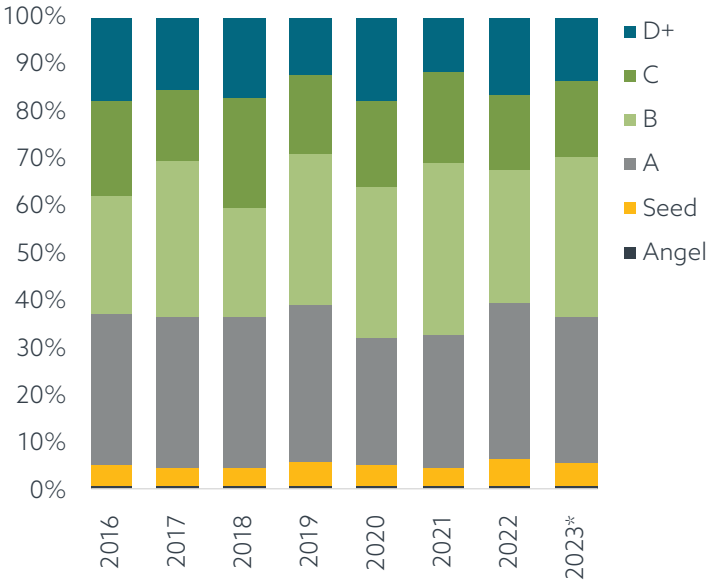
Deal sizes continue to trend downward this year after rising sharply in 2020 and 2021, normalizing after a period of COVID-19 pandemic shock waves and open-handed venture firms. Seed and Series B companies defied this trend, however, with the median deal size for both categories experiencing double-digit growth YTD. Deals over $100 million have become much more common over the past decade, with 20 such deals logged in Q3 2023 compared with just six in all of 2013. In recent years, these deals have grown to represent just under half of total deal value in the industry. While median deal sizes have trended downward, megadeals remain a powerful driver of industry activity.

It is worth noting the momentum on the smaller end of the spectrum as well. Alongside a rising median seed deal size, the angel and seed stage experienced 10.8% growth in its median pre-money valuation, while all other stages fell flat. Opportunities to acquire early cap-table real estate are attractive for investors facing stronger headwinds for their later-stage investments. The pre-seed/seed category has seen a gradual uptick in its proportion of total deal count over the past several years, indicating a supported pipeline of new entrants and a developing population of younger startups. Median valuations for the early- and late-stage categories have plateaued since 2022 but remain at record highs of $40.0 million and $50.0 million, respectively, despite this lack of growth. Many companies and investors have contended with valuation corrections since early 2022 and reset their expectations.

Exit activity experienced a notable positive change in Q3 2023, with the $9.0 billion in value representing more than four times the amount closed in Q2 and the highest quarterly exit value since Q4 2021. The increase in value was driven primarily by four deals of $1.0 billion or more, including two IPOs and two acquisitions. IPOs have now generated more cumulative value than acquisitions YTD, while the opposite was true in 2022. Some cautious optimism has returned after more than a year and a half of a desolate IPO market across the venture ecosystem. A small number of trailblazing market debuts have been well received this year, but time will tell if an increasing number of IPOs will follow.

Share of life sciences VC deal value by series



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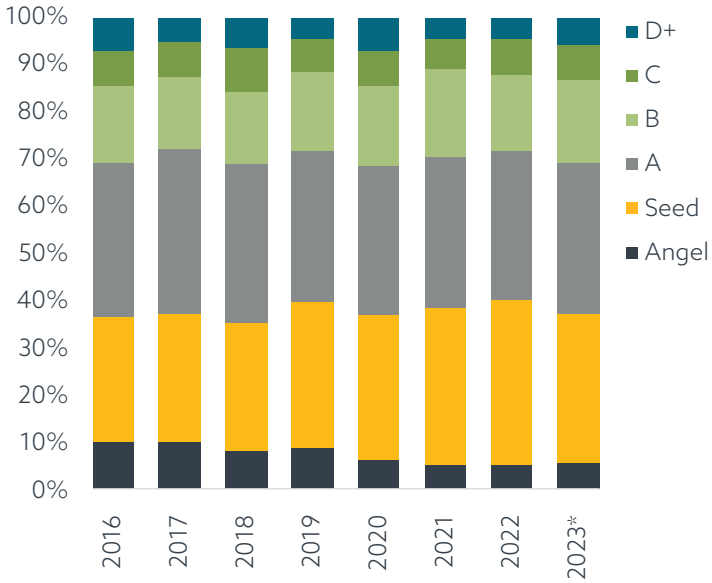
Share of life sciences VC deal count by series



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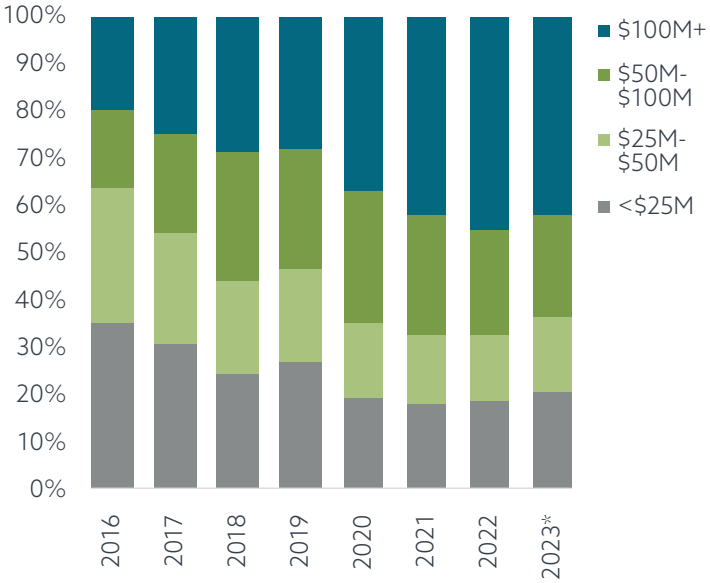
Share of life sciences VC deal value by size range



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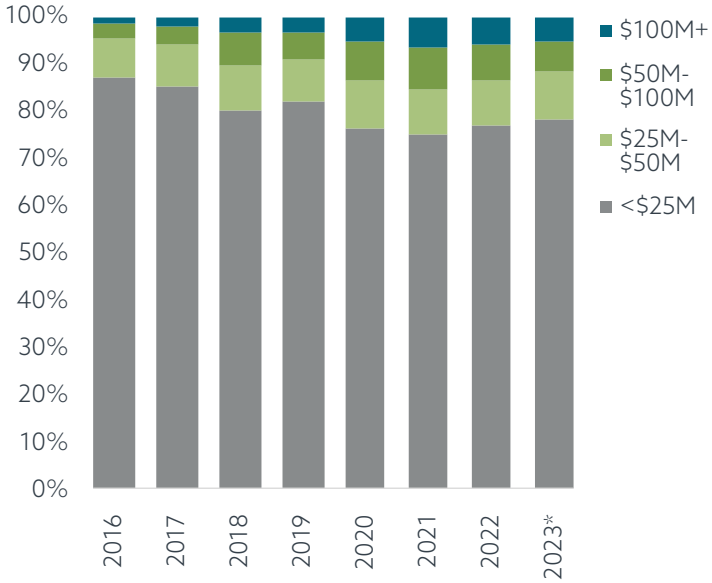
Share of life sciences VC deal count by size range



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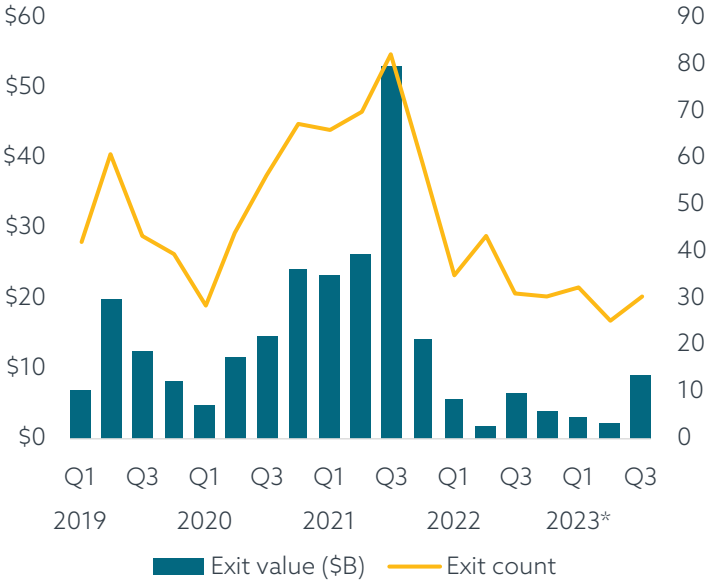
Life sciences VC exit activity by quarter



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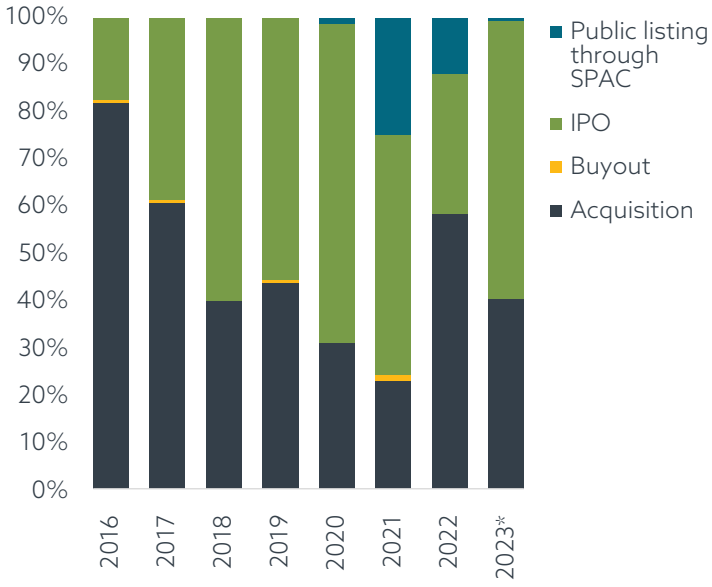
Share of life sciences VC exit value by type



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Roundtable

INTRODUCTION

In this discussion we will speak about venture and growth debt as a funding option for fast-growing, late-stage startups. This vehicle has become especially common in the life sciences industry due to the significant research and development costs and lack of revenue generation and profitability. We sat down with SFJ Pharmaceuticals and HSBC to get their takes on how to effectively leverage alternative financing, including debt, for growth in the current market.

Panel 1

Facilitator

Mike O'Donnell
Partner, Orrick

Robert DeBenedetto
Founder,
President & CEO,
SFJ Pharmaceuticals

Geoff Owen
Chief Business Officer,
SFJ Pharmaceuticals

Barbara White, MD
EVP, Chief Medical Officer,
SFJ Pharmaceuticals

Mike O'Donnell: Bob, tell us about SFJ. You are a pioneer in this financing approach. How did you get into this?

Robert (Bob) DeBenedetto: I looked at the pharmaceutical market and how companies raise capital, especially small biotech companies. And how the large pharma companies allocated capital. I'll start with the top 20-30 pharmaceutical companies in the world, as an example.

A large pharma company might be sitting on >$10 billion of cash. You would think that they would have enough cash to fund everything that they have in their pipeline, but that's not always true. You spend the cash and it's an expense that reduces your earnings for the year, which then can translate into a reduced stock value for the company. So, even if they have the cash, spending it could create downward pressure on their stock, especially when companies start to have patent cliffs. If they know they are facing a patent cliff over the next couple of years that means they're going to have even more pressure on their earnings.

What I've noticed with the large pharma companies is that they would have, for example, 100 products in their pipeline. They may have development budget for 60 of those but not the other 40. Of those 40, maybe 20 are not their top priority or off-strategy, so they'll out-license those to another company. That leaves 20 that could have future importance but are lacking capital and development resources. These are the "stranded" products which our type of funding can help accelerate through late-stage development.

A lot of times these companies would develop an asset in one line of therapy, or one therapeutic area, such as lung cancer. Later, they develop in the other potential indications. They're not maximizing the value of the asset. While it may be prudent for the pharma company to avoid multiple bets on the same drug in different indications without further de-risking, the application of SFJ's capital and resources can help maximize the full potential of a drug, faster.

We took a look at the above scenarios and said, "Wouldn't it be great if there was a company that invests not only in small biotech and startups, but also in the large pharma companies' pipelines?" We said to the large caps, "Okay, you have an oncology drug. You're going to develop in lung cancer. Why don't we develop it in the

kidney cancer at the same time? "Or, you can develop it in first line lung cancer. Let us develop it in second line lung cancer." This really caught on with the large pharma companies. We did multiple deals related to this potential for pipeline/asset acceleration.

The other perspective is that of smaller biotech companies. Small biotech companies are constantly raising capital, be it a private company that does an A round followed by B then C, or a public biotech company that must constantly issue shares. Every time a small biotech company issues shares or does another funded round it dilutes the value of the prior investors. SFJ's form of capital is less dilutive to the biotech company. And in all cases above, SFJ takes the development and regulatory approval risk. If the drug does not get approved, it costs the pharma / biotech nothing. It is SFJ's loss.

For example, if a company believes that, after bridging to successful Phase 2 and 3 readouts, the value of the company is going to increase by five, ten times, it could make more financial sense to have SFJ fund a key clinical development project. SFJ's form of funding does two things: 1. It avoids diluting the prior investors; and 2. It maximizes the value of the company long term.

That was the value proposition behind SFJ Pharmaceuticals, and it really played out well, with both large pharma and small biotech companies.

Mike: How many of these deals have you done? Can you talk about some of the parties that took advantage of this approach?

Bob: We've done 13 deals to date. We've been trying to do one deal on average a year. And now we're going into another phase where we expect to do multiple deals per year. We're expecting to close our largest deal to date within the next few weeks. Some of our prior partners include Pfizer (especially in the oncology area), Eisai (a large Japanese pharmaceutical company...on an oncology drug), Baxter/Baxalta (immunology), Apellis (a small biotech company on a rare blood disease drug), and Nektar (a small biotech company in the oncology space).

Mike: How big are these deals and how are they typically structured?

Bob: The deals vary in size. They go from the smallest deal at about $60 million to the largest deal which is about $325 million. They're gaining in size. Our sweet spot is at or around $200 million but we can flex up or down as needed.

We're flexible in the financial structure of the deal. It depends on what our partner wants and how we can meet their needs. With large pharma companies, they usually prefer to reimburse SFJ (in a success scenario) through royalties or commercial sales milestones. And typically the royalties are capped (i.e. once we get a to a certain return, the cap will kick in, and we won't get anything beyond that). Small biotech companies often prefer to pay through a schedule of fixed payments after regulatory approval is achieved. In all cases, SFJ's success is contingent upon regulatory approval. So, if we invest $200 million in a drug that fails and doesn't get regulatory approval, we write off our investment. And that's what the attraction is for a lot of companies, especially biotech companies. They could borrow $200 million from the bank and, if the trial fails, they still owe the money back. Or they could take the same amount of funding from us and, if they do not achieve regulatory approval, they don't owe us anything.

Mike: I'll turn it over to Geoff on the business development side: What are you looking for in potential deal partners? What does it take to get you interested in a company as a potential recipient of funding?

Geoff Owen: The large cap pharma companies know us well and they retain a very strong interest in this model. We sometimes will not hear from or have an opportunity with a company for a few years, and then certain things happen in their development landscape or in their financial planning that result in partnering discussions. With technology moving so fast, even some of the very largest pharmas have more projects than they can fund within their time-based budget constraints. So, we stay in regular touch with them and expect to do about a deal per year in the future with this group. We've done three biotech partnerships thus far... smaller cap companies of course. We like for our biotech partners to have a market cap at or above $500-600 million, reflecting some access to capital, beyond SFJ. Alternatively, they may be private and backed by very strong investors. The reason for this guardrail is that we don't want to "win" via regulatory approval success but still "lose" because our partner is unable to reimburse SFJ due to capital access limitations. We also like what we call a "three-way" model in which SFJ bridges (via development funding and regulatory de-risking) a promising drug to a larger pharma. It's a timely structure that we've worked very hard on. So, if a larger company is interested in adding a biotech asset to their future commercial portfolio, we can bridge it to them via our funding and development. Some other aspects of our partnerships are perhaps more obvious. In our case, we focus on the pivotal trial space (i.e. registrational trials). When it comes to trying to get a deal done, we're going to look for robust proof-of-concept (Phase 2) data. We're going to look for a clearly articulated, regulatory pathway, evidenced by agency sign off, Incidentally, this can be from ex-US agencies, not just the FDA, as SFJ has a global development footprint. Our global presence and expertise enable us to facilitate multi-market trials, contemporaneous with the US effort. Finally, to the extent needed, we will collaborate with our partners on an optimized and rational trial design.

Mike: How long does it typically take to get a deal done? Get into the term sheet stage and then go from there.

Geoff: We will not to be the rate-limiter and will move as fast as is needed for opportunities that we like. I would estimate 10-12 weeks, if both sides are fully committed and trying to get to closing.

Mike: Are there any therapeutic areas that are particular interest for you right now?

Geoff: Our answer to that is that we're agnostic. What we're not agnostic about is robust proof of concept and readiness for a phase 3 trial. I will caveat that by saying that, if a company is anticipating a robust proof of concept, we should be talking so that there won't be too big of a time gap to design and initiate the pivotal trial in a POC success scenario. As far as therapeutic area goes, some are obviously more treacherous historically than others. But, if the data is compelling and the agency or agencies, as the case may be, are signed off, and it meets these other criteria, we'll be very open to exploring what might be possible. We need to have conviction and be able to convince our investors that the study that we're proposing to fund will have a 60 to 70% probability of technical and regulatory success. If it meets those criteria, we're agnostic about therapeutic area, and we've looked within just about all of them. As Bob said, SFJ offers a partner the ability to move attractive projects more into parallel (vs. sequence) to extract the greatest value from a drug.

Mike: Barbara, SFJ has a great track record in getting drugs approved. Tell us about your team and SFJ's role in the drug development and regulatory approval process.

Barbara White: SFJ has a team of clinical development experts that cover multiple functional areas, which include regulatory affairs, program management, clinical operations, medical, safety, statistics, programming, data management, clinical supply, and manufacturing quality. We have the entire cadre of experts that are needed for late-stage development. We also have a group of expert consultants to augment that expertise in particular therapeutic areas and regions. This team also supports our business development and due diligence functions. It's this depth of experience in multiple areas that allows us to be agnostic of therapeutic area. I would like to underscore that we are comfortable with development projects around the globe, including Asia Pac.

Our working model is flexible to meet the partner's needs. Our involvement can range from funding-only, (in which there's no active SFJ role in the clinical development or regulatory submissions) to where SFJ conducts and oversees the entire late-stage clinical development program and is involved in developing and submitting the regulatory applications through full approval. Our involvement operationally can also be somewhere in between, where we can co-develop by geography or co-develop by task. It is the strength of the expertise and our flexibility that allows us to complement our partners and add value to their programs.

Mike: Would it be fair to say your team can take a collaborative approach to working with the partner, and you can provide as much or as little assistance as is needed and work with them as closely as they would like in order to get a project across the finish line?

Barbara: Absolutely.

Geoff: SFJ is a drug development organization that happens to have access to very significant risk capital for the pivotal trial space. I'm glad that Barbara articulated that. In our business model, capital is intrinsic to partnering; however, as we've discussed, we differentiate ourselves by marrying that with the expertise and global resources. To learn more, a prospective partner can visit our website at www.sfj-pharma.com.

Mike: It's a unique and very powerful combination, and it's proven to be popular and successful. Your track record speaks for itself, and although others have tried a little bit to copy this model, most of those organizations tend to be more just providing funding not providing the in-depth clinical support that you all do. And that's what I think really makes SFJ special.

I want to thank you for your time and presenting SFJ. I'm sure this will be very much of interest to companies who are looking to raise financing to get their drugs across the finish line.

Panel 2

Facilitator

Stephen Thau
Partner, Orrick

Facilitator

Neel Lilani
Global Head of Tech Clients, Orrick

Clark Hayes
Managing Director - Life Sciences and Healthcare, HSBC USA Commercial Banking

Neel Lilani: Clark, thanks for joining us today. Let's start with your views on the state of venture debt financing in the life sciences sector and highlight what stage you're seeing higher concentrations of activity at as well.

Clark Hayes: I would say that it is a very active market right now. The collapse of the SVB franchise and some other financial institutions kind of put a pause on the market. It's only since early September that activity has started to ramp, and it went from slow to incredibly busy. We're seeing it across all verticals: biotech, diagnostics, med-device, tools and digital health.

On the biotech front, private companies are being funded by insiders with some activity on the new lead side. Twenty three months ago, the public market in healthcare started a downward trend and it has continued. I was speaking with a friend of mine who's a senior investment banker in healthcare and he shared that this is the toughest biotech market that he has seen in his career. He's really looking for some type of impetus in the market to get things moving. That's probably not likely until the second half of next year — assuming everything goes well from now until then. Private companies have an easier time raising capital for preclinical phase one, two, even three in the current environment. On the public side, some 200 companies in the healthcare space, most of which are biotech, are trading below cash.

Many of these companies are under 100 million in market cap. Access to capital in that particular space is really challenging, and probably the most used instruments right now are PIPES. That's what we're seeing, and it takes us to: Can we finance our company a different way? That's where we're getting a lot of the requests across all the verticals.

Neel: Do you think that the condition of public equities is driving more growth stage life sciences companies to focus on debt products instead of considering an IPO?

Clark: Typically, what you'll see is a crossover to take a company public. Crossover activities are down right now. I think we will start seeing some activity there with down rounds being the new flat rounds.

Given the depressed public market big investors are not ready to start investing, and you can't fill those investor books right now. I was speaking with a really good company last week, late-stage digital health, and they're going to postpone a crossover and wait another 6 to 12 months to see what happens. The other piece I'd say is, public health care is a leading indicator when we're going into a downturn. I started to see it in the fourth quarter of '21 and it just continued on to the present.

As public markets pick up, n the venture side will begin new company creation as opposed to portfolio management and make sure that their portfolios are adequately funded. The one other thing I'd add to that is as crossover activity picks up, that's a leading indicator for the public market.

Stephen Thau: When a public company is trading below cash, how do you evaluate their fit for debt products?

Clark: Generally speaking we like to see cash on the balance sheet of at least 18 months of runway. Can we do a deal on 12 to 18 months of runway? Yes, however, the other problem and the most important piece of the formula is next round investment risk. For public profile next round investment risk, how do we gauge that? We look at who's in the cap table review who the investors are. We like to see 35 40% that are healthcare institutional investors. If 35-40% is made represent healthcare that is a preferred profile as they understand FDA Risk and healthcare investing risks. Generalists and retail investors typically are transactional in nature. They started leaving in Q4 of '21. So how do we gauge next round investment risk? What's the market cap? What's the stock price?

Clark: You need to have some cushion with the market cap and with the stock price as there can be a number of things that can be going on with stock price too. It is critical to understand the drivers behind next round investment risk. Certainly the mix of debt and equity should be a key consideration as well.

Clark: Certainly, understanding the science and the clinical profile are key underwriting considerations to determine if you can provide a debt financing.

Stephen: Yeah, and I would imagine on the private side it's sort of a similar analysis, except that there's usually sort of more obvious who's on the cap table than in private and so you can apply that filter more easily, I would imagine.

Clark: Yes, on the private side it's a little bit different. From a lending perspective, the way the model has been built, using the same analogy — cash, burn, runway, next round investment risk. On the private side, you have institutional health care, life science investors in the form of VC's and you typically know who those players are in the market.

Clark: What you need to do in terms of looking at those opportunities is to understand what their investment thesis is, what fund it came out of, what's the vintage, whether it has callable capital, recallable capital and so forth. And then, of course, how much dry powder do they have for the investment?

Neel: What are some of those key investors that you look for on the private side when determining a measure of confidence or that would give you a measure of confidence that the right people are involved with the company?

Clark: For biopharma, device tools and digital health. I would say, there's a good, 40 or 50 investors where you see them all the time. Many of them invest across all those verticals, maybe two-thirds do or half and then the other half, or a third specifically focus on biotech or something like that.

Neel: Can we dig in a little bit into the mechanics of some of the deals that you're putting into place, in particular maybe we can start with how the macro high interest rate environment is influencing the way that you're thinking about writing venture debt deals — the terms that you're proposing, and how covenants get structured in those transactions?

Clark: On the interest rate side, it's straightforward, but there are some nuances that I'm seeing with this downturn that I didn't see with the last one. What I mean by that is, whens a lender is competing against other lenders, the most important things to the management team and the board, especially, in order of priority are commitment level, availability at close. And then they're also looking for maximum interest-only periods of 18, 24, 36 months. Pricing comes in last every single time, so no matter how expensive debt is, it is cheaper than equity. The markets move in parallels, so when we're in a rising interest rate environment and the economy is struggling, the investors are kind of pulling back a little bit, equity is always expensive. So, you're looking at flat to down rounds with investors gaining more ownership interest. On the debt side, even with SOFR, I think it's 5.31% and Wall Street Journal Prime is 8.5%. The debt funds use SOFR, and they'll layer in a spread on top of that. That's pretty expensive debt, but keep in mind these are typically bigger deals versus bank deals. Also, debt funds have to put capital out at close, their cost of capital is much higher. In terms of bank debt, the players out in the market are institutions like HSBC U.S., PacWest, First Citizens Bank, Comerica and Bridge Bank. Bank financing is typically cheaper given the deposit base, you can go much lower on the interest rate, and you can actually put capital out without requiring anything drawn at close, which is a big differentiator between debt funds and banks. But to answer your question, debt is still cheaper than equity and right now that is why the debt markets are really active.

Stephen: Is the market changing how you think about covenants in particular for life science's companies that are not going to be revenue generating for an extended period of time. Has that evolved?

Clark: Yes, it is evolving, but it depends on the lender. The structure has to align with the companies line of business. However, there are times where you can loosen a covenant structure if there are mitigating factors such as the investor syndicate, stage of company, exceptional cash runway, etc. Typically there are no financial covenants on growth capital deals per se, meaning term debt, which is venture debt. An exception would be a revenue generating company that's still losing money and even then, you may not have a financial covenant on it. It depends on the size and the risk profile and other mitigating factors. If you have a working capital facility, leveraging up AR, or a monthly recurring revenue line,depending on what line of business it is, you may want to track certain things like revenue and liquidity or EBITDA. If a lender has a throwaway l covenant, which is to say that the covenant was meaningless it had no teeth. Thus, if the company experienced impaired operations the covenant structure would not protect the lender. I think it's partially driven by every lender out there who is fighting for every single deal and some of them are willing to throw away structure to put some outs on the books. We need to be disciplined about it to protect the bank and our clients.

Neel: Clark, any closing thoughts?

Clark: I look at public companies all the time and not just for debt deals— but to see what's going on, what are the transactions, and so on. There is a perspective that the equity markets, and I'll speak to health care only, could be coming back in the third or fourth quarter of next year. And if they do, that's fantastic. It's still unknown if we're going to have another 25-basis point increase in interest rates. That's as far as I understand it; we also have some macro issues. Currently, with, the funding of the government, which

is a significant concern, probably more so than only a couple of weeks ago given the current situation in Washington. We have a presidential election coming and so, there are a lot of things happening that could affect the capital markets. And nobody could have predicted where we would have been in the second quarter of 2022.All to say that we hope for a more stable public healthcare market soon.

Neel: Given your view of the market that venture deals momentum trails public equities by 120 to 150 days behind, how are you viewing the coming year?

Clark: It took a bit longer for VC's to slow down their investing cycle, so it really stretched out to more like 150 days post Q4'21 if you go on baseline of mid December or thereabouts. I've talked to some big investors recently and they're focused on making sure that their companies are financed. And there's still some new investing out there. Going back to the public markets for a minute I believe the efficiency of the market either through M&A, reverse merger, sale of assets or closing down of companies will bring some efficiency and stability back to the market.

Neel: Thank you so much, Clark. We deeply appreciate the time and the perspectives.

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