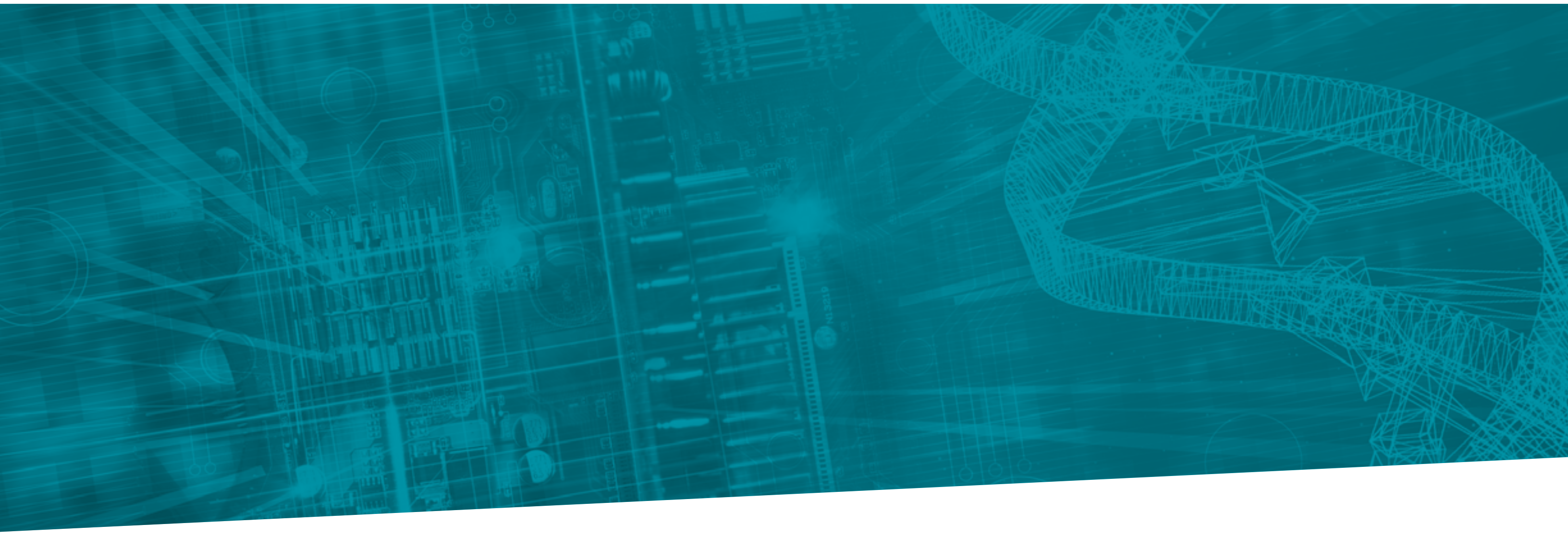
WILSON SONSINI

2022 TECHNOLOGY AND LIFE SCIENCES PIPE REPORT

Table of Contents

Introduction



Wilson Sonsini Goodrich & Rosati's *2022 Technology and Life Sciences PIPE Report* presents analysis related to 108 private investments in public equity (PIPEs) by U.S.-based technology and life sciences companies between January 1 and December 31, 2022.

This report examines PIPEs by operating companies and sets forth quantitative and qualitative results concerning proceeds and security types; registration rights; transfer restrictions; governance terms; protective covenants; conversion and redemption rights; anti-dilution protections; and other material transaction terms. The report is limited to PIPEs in which the company raised at least $10 million and had at least one closing in 2022.

The significant reduction in U.S. public capital markets activity experienced in 2022 has continued to affect companies' access to the markets in 2023. We expect that these market challenges, along with the additional financing difficulties resulting from high-profile bank failures during the first quarter of 2023, will continue to complicate capital raises for the immediate future and companies may increasingly turn to PIPEs as a way to meet their financing needs.

This report does not address PIPEs by special purpose acquisition companies (SPACs). SPACs are publicly traded companies whose activities are limited to identifying an operating company with which to combine. Combining with a SPAC is an alternative to a traditional initial public offering (IPO) for an operating company. The PIPE market for SPACs saw heightened levels of activity in 2020 and 2021 but has since cooled significantly along with the rest of the new issue equity market. This report also does not address equity lines of credit in which a company has the right to sell shares of common stock to an investor at a fixed discount to the market price. Both of these transaction types present special issues and considerations that are outside the scope of this report.

The data included in this report was obtained from public company disclosures and documents filed with the U.S. Securities and Exchange Commission, as well as third-party data obtained from research provided by S&P Global Market Intelligence and financial data and analytics provider FactSet.

We would like to thank the team that conducted the research and provided editorial input for this report. The partners on the team included Michael Nordtvedt, Victor Nilsson, and Michael Rosati, with additional contributions from Heath DeJean, Charlie McDonald, Katie Obermiller, Kristijonas Rastauskas, Olivia Richey, Ashley Slack, and June Wang.

Please feel free to share your comments or questions about PIPEs by contacting Michael Nordtvedt (mnordtvedt@wsgr.com) or any other Wilson Sonsini capital markets partner.

Overview

What Is a PIPE?

Every offer and sale of securities in the United States must either be registered with the U.S. Securities and Exchange Commission (SEC) or made pursuant to an exemption from the registration requirements. A PIPE is a private placement (an exempt sale) of a public company's securities directly to a limited number of investors—hence the name, Private Investment in Public Equity.

In an SEC-registered offering, the securities sold are immediately freely tradable by the investors without the need to register the resale (subject to certain limitations for affiliates of the company). In contrast, securities sold in a PIPE are "restricted securities" that cannot be freely resold for at least six months unless the company registers the resale with the SEC. As a result, almost all PIPE investors negotiate for registration rights to require the company to file a resale registration statement with the SEC within a short window after closing. In rare circumstances, investors unconcerned about near-term liquidity, or which will otherwise be restricted from reselling in the first six months after closing, may be willing to invest in a PIPE without registration rights.

"A PIPE is a private placement (an exempt sale) of a public company's securities directly to a limited number of investors—hence the name, Private Investment in Public Equity."

Types of Securities

A company can sell any type of security in a PIPE that it could in an SEC-registered offering, such as common stock, preferred stock, convertible notes, and other equity-linked securities—including warrants, and debt securities.

In 2022, approximately two-thirds of the technology company PIPEs examined in this report were sales of convertible notes, which are debt securities convertible into common stock. Because technology companies generate revenue, they are generally better able to satisfy debt repayment obligations than life sciences companies. In addition, convertible notes can be structured to mitigate the accounting impact on earnings per share (EPS), which can be an important consideration to companies that are valued on an EPS basis.

In contrast, approximately two-thirds of life sciences company PIPEs examined in this report were sales of common stock and/or pre-funded warrants. Unlike technology companies, life sciences companies typically generate limited (or no) revenue and spend significant amounts on clinical development and are not valued on an EPS basis. As a result, convertible note and debt PIPEs are less common with life sciences companies.

Pre-funded warrants are warrants for which investors pay (pre-fund) all but a trivial amount of the exercise price at closing of the transaction. Some investors, particularly life sciences investors, prefer pre-funded warrants to common stock to avoid certain SEC reporting and other obligations associated with holding common stock. See the section on "Beneficial Ownership Limitation" for additional information. For purposes of this report, we group pre-funded warrants together with common stock because they are essentially the same economically.

Preferred stock PIPEs can be particularly attractive to investors because preferred equity retains the upside of equity while the liquidation preference gives investors downside protection by ranking senior to common stock in the event of a bankruptcy. PIPE preferred stock may be structured as plain vanilla preferred stock with no special rights, or may be highly structured with bespoke dividend, liquidation, conversion, or voting provisions, providing a company with greater flexibility than with a sale of common stock. Preferred stock may also be used to avoid a shareholder vote requirement or beneficial ownership limitations. See the sections on "Stockholder Approval" and "Beneficial Ownership Limitation" for more information.

Finally, to sweeten the economics for potential investors in a PIPE, many companies also offer warrants alongside another type of security. Warrant coverage can, however, raise the cost of capital associated with a PIPE and result in significant additional dilution to existing stockholders if the warrants are exercised.

Pricing

Traditional SEC-registered offerings typically involve public marketing efforts (or at least relatively widespread targeting of institutional investors). In challenged capital markets or situations where alternatives have been exhausted, a company may be loathe to embark on such an effort if it lacks confidence that the offering will be successful—the company does not want to be perceived as "damaged goods" if it publicly announces an offering that it cannot complete.

"After record levels of activity in the public capital markets in 2021, financing activity by publicly traded technology and life sciences companies largely grounded to a halt in 2022."

After record levels of activity in the public capital markets in 2021, financing activity by publicly traded technology and life sciences companies largely grounded to a halt in 2022. Inflation, rising interest rates, geopolitical uncertainty, and macroeconomic weakness, among other factors, deterred investors from deploying cash in capital-intensive growth stories.

PIPEs can be a good alternative to traditional SEC-registered offerings, particularly during periods of market volatility, because they are exempt from the SEC's registration requirements and can therefore be negotiated discreetly and publicly announced after the parties agree to terms. However, given the lack of company leverage (usually) and near-term illiquidity of the securities sold, the cost of capital is typically higher for PIPEs than SEC-registered offerings. There are exceptions to this general rule, such as private equity funds that may expect to have significant influence over management or strategic investors that are motivated by commercial considerations.

Regulation FD Compliance

"The fact that a company is pursuing a PIPE almost always constitutes MNPI, so potential investors must agree to maintain the confidentiality of such MNPI and not trade in company securities until the PIPE is publicly announced or it is abandoned."

An early step in a PIPE process is for potential investors to enter into a non-disclosure agreement (NDA) with the company. Publicly traded companies are subject to Regulation Fair Disclosure (Regulation FD), which is designed to give all market participants equal access to material nonpublic information (MNPI) so that select investors do not gain an unfair advantage. The fact that a company is pursuing a PIPE almost always constitutes MNPI, so potential investors must agree to maintain the confidentiality of such MNPI and not trade in company securities until the PIPE is publicly announced or it is abandoned.

It is common, especially for life sciences companies, to execute NDAs as part of ongoing investor education efforts that are not immediately related to financing activities. Sometimes, those conversations evolve and lead to PIPEs. In organized PIPEs, a company intermediary, typically a placement agent, contacts potential investors and gives them non-company-specific information (such as industry sector, offering size, etc.) to determine whether they would be willing to receive MNPI. Interested investors are then "wall crossed"—given the name of the company and other offering details—subject to the NDA. Because investors are prohibited from trading in the company's securities for as long as they are in possession of MNPI, they will frequently insist that the company "cleanses" them by publicly disclosing any MNPI received during the PIPE process whether or not the PIPE closes. If, however, the PIPE is seen as opportunistic and the MNPI is limited solely to offering-specific information, cleansing disclosure is typically not required should the company ultimately decide not to proceed with the offering.

Due Diligence

PIPE investors commonly make their investment decision based on information that is already publicly available. Indeed, many investors insist that a company not expose them to any MNPI beyond offering-specific information because it affects their ability to trade in the company's securities. However, some investors that view a particular PIPE as a long-term, fundamental investment opportunity may conduct due diligence beyond a review of a company's SEC filings or other publicly available information.

In connection with an SEC-registered transaction, certain participants like underwriters and company directors can limit exposure to claims that a company's public disclosures contained a material misstatement or omission if they conduct reasonable due diligence. Customarily, establishing this due diligence defense involves obtaining a "comfort letter" from the company's auditors and "negative assurance letters" from company and underwriters' counsel that speak to the accuracy and completeness of the company's SEC filings, but the necessary effort to provide such letters is time-consuming and expensive. Such efforts are rarely requested in connection with PIPEs. This dynamic, coupled with the typical limited scope of investor investigation, means that the due diligence costs in a PIPE are typically less than in an SEC-registered offering.

Timing

Depending on the complexity of the security being sold and other terms sought by investors, a PIPE usually can be structured and negotiated in under two weeks. As discussed above, PIPEs allow a company to avoid public marketing efforts and pre-transaction SEC review, which often result in a longer overall transaction process. PIPEs involving structured securities, or special governance or other terms, typically take longer to negotiate than common stock PIPEs. In such cases, negotiation costs can approach or even exceed the savings associated with relatively limited due diligence.

"Depending on the complexity of the security being sold and other terms sought by investors, a PIPE usually can be structured and negotiated in under two weeks."

Rule 10b-5 Liability

The Securities Act includes multiple provisions that may expose a company to liability in connection with a securities offering. Section 11 of the Securities Act imposes liability against parties responsible for preparing a registration statement for losses resulting from material misstatements or omissions in the registration statement, while Section 12 imposes liability on a person who offers or sells a security in violation of Securities Act registration requirements. However, because a PIPE is an offering exempt from registration and does not involve a registration statement, these transactions are not subject to Section 11 or 12 liability.

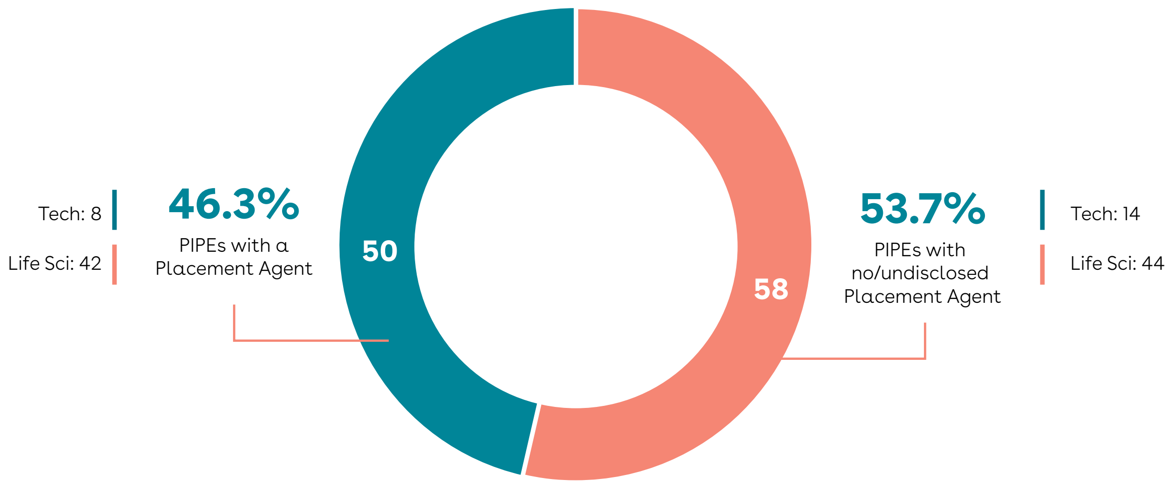
Even though the nature of a PIPE as a private placement and the absence of offering documentation allow the company to avoid liability to PIPE investors under Section 11 or 12 of the Securities Act, the company remains subject to liability under Rule 10b-5 of the Exchange Act for material misstatements or omissions in connection with the sale of the PIPE securities and in connection with any public disclosures made to existing stockholders regarding the status of any financing efforts, including the PIPE. Remedies for a 10b-5 violation can include payment of penalties as well as consequential damages of investors who participated in the PIPE in reliance on a misstatement or omission.

"The company remains subject to liability under Rule 10b-5 of the Exchange Act for material misstatements or omissions in connection with the sale of the PIPE securities and in connection with any public disclosures made to existing stockholders regarding the status of any financing efforts, including the PIPE.

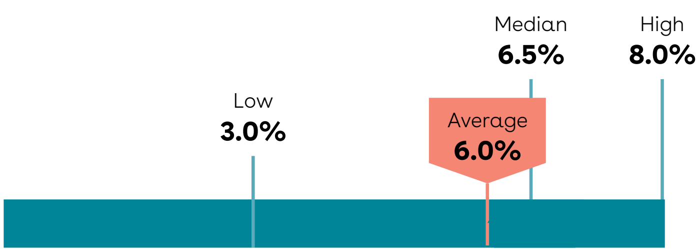
Placement Agent

Companies sometimes engage one or more placement agents to facilitate a PIPE by, among other things, wall crossing potential investors, serving as a conduit of communication and synthesizer of information, and in some instances, conducting due diligence on the company.

Of the 108 PIPEs surveyed, 50 (46.3%) disclosed the use of one or more placement agents. Of those 50 transactions, eight were by technology companies and 42 were by life sciences companies.



Average Placement Agent Compensation



Of the 50 PIPEs surveyed that disclosed the use of placement agents, 23 (46.0%) disclosed the agent's compensation. The average placement agent compensation among these transactions was 6.0% of the PIPE value, while the median was 6.5%.

Documentation

Deal documentation in a PIPE transaction is specific to the type of securities being purchased, but typically includes:

- Purchase agreement
- Registration rights agreement
- Documents governing the terms of the securities (for example, note or indenture for convertible notes or other debt securities; certificate of designations for preferred stock; form of warrant or pre-funded warrant; etc.)
- Investor rights / voting agreement (if investors are granted governance rights)
- Placement agent engagement letter (if placement agent is engaged by the company)
- Resale registration statement, filed post-closing

PIPEs: Advantages and Disadvantages

Advantages

- Can be negotiated and executed relatively quickly because the private placement part of the transaction will not be subject to SEC or FINRA review, no offering disclosure document needs to be prepared, there will typically be limited-to-no diligence undertaken, and no negative assurance letter and no comfort letter will be delivered
- The structure and speed of a PIPE can lower overall transaction expenses compared to a registered public offering
- Offers significant flexibility for a company to determine which types of securities to sell

Disadvantages

- The common stock being sold or used to price a convertible security will often be issued at a discount to the current market price
- The inclusion of warrants increases potential dilution to existing investors
- Investors may insist on price-based anti-dilution provisions in structured products and may negotiate specific restrictive or financial covenants
- Preparation and maintenance of a resale registration statement increases transaction expenses compared to a pure private placement

Select PIPE Issues

"Baby Shelf" Rule

A PIPE may be the only realistic option to raise needed funds for a company with a small market capitalization. Seasoned issuers are eligible under SEC rules to offer securities on a delayed or continuous basis on a Registration Statement on Form S-3. That means that a company can file and have the SEC review and declare effective a registration statement in advance of when the company intends to finance (or in some cases have the registration statement automatically be effective at filing). This flexibility in turn allows a company to mitigate the market and execution risk associated with publicly declaring its intentions to finance and having to wait while the SEC reviews its registration statement.

However, a company with a public float of less than $75 million may only sell under a Form S-3 securities having an aggregate market value of not more than one-third of the company's "public float" (market capitalization after backing out shares held by the company's officers, directors, and other affiliates) during any 12-month period. This "baby shelf" rule can prevent a small-cap company from conducting an SEC-registered offering as a practical matter.

Although the baby shelf rule only expressly applies to the primary sale of securities by a company and not an investor's resale of securities, the SEC has sometimes taken the position that a resale of PIPE securities is an indirect primary offering. A company in this position typically registers the resale of the maximum number of shares allowable under the baby shelf rule and/or registers the resale on a long-form Registration Statement on Form S-1, which may require additional SEC review and increase administrative burden and cost.

Fiduciary Duties

Directors and officers owe fiduciary duties to a company's stockholders, including the duty of care and duty of loyalty.

- The duty of care focuses on the decision-making process: acting on an informed basis after consideration of relevant materials and alternative courses of action and after proper deliberation.
- The duty of loyalty requires acting in the best interests of the company and its stockholders, and properly disclosing and addressing any conflicts of interest.

Given that PIPEs often involve onerous economic, governance, and operational terms and involve selling securities to insiders as investors of last resort, directors and officers should be sensitive to their fiduciary duties, particularly when a PIPE is large enough to raise considerations related to whether or not it will result in a change in control of a company. If directors and officers exercise their duty of care and implement appropriate procedures when one or more insider stands on both sides of a PIPE, courts will generally respect the business judgment of the board of directors even if a PIPE does not result in a positive outcome for a company.

Antitrust Considerations

Generally, PIPEs involving the sale of voting securities valued at more than $111.4 million (the "size-of-transaction" threshold) where one side of the transaction has more than $22.3 million in total assets or annual net sales and the other side has more than $222.7 million in total assets or annual net sales (the "size-of-person" threshold)* require filings with the U.S. Federal Trade Commission and the U.S. Department of Justice pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (the HSR Act). If a filing is required, the PIPE cannot close until the expiration or early termination of a 30-day statutory waiting period or, in the case of a

* *All dollar amounts referenced in this section are subject to annual adjustment by the FTC based on changes in the gross national product.*

request by the U.S. government for additional information, significantly longer periods of time. If the company receives a second request, its options are to abandon the PIPE, litigate the issue, or negotiate a settlement with the government—usually requiring asset divestitures, technology licensing, or both—to remedy any competitive harm the government believes may result from the proposed transaction.

> "If the company receives a second request, its options are to abandon the PIPE, litigate the issue, or negotiate a settlement with the government."

Even if the size-of-transaction and size-of-person thresholds are triggered, certain exemptions may be available to enable the parties to expedite a closing. For example, the HSR Act provides that an investor may acquire up to 10% of a company's voting securities (regardless of their value) without making an HSR filing if the acquisition is solely for investment purposes. The precise scope of the passive investor exemption is not well defined and has been construed narrowly; it is not available when an investor seeks to acquire control of the company or intends to obtain a board seat (including through a director nomination right) or otherwise influence the company's basic management decisions (including by holding a management position). Moreover, the investor's ownership of a competitor to the company prevents their ability to rely on the passive investor exemption.

In addition, PIPEs involving the sale of nonvoting securities, meaning securities that do not confer the right to vote for the company's board of directors or similar body, do not require an HSR filing. Although an acquisition of securities that do not confer present voting rights is exempt from HSR filing requirements, the subsequent conversion of a convertible security or exercise of a warrant for voting securities would be reportable if it trips the size-of-transaction threshold. Convertible securities and warrants sold in a PIPE are therefore sometimes structured to restrict convertibility or exercise, for example until the statutory waiting period has run or HSR clearance has been obtained.

CFIUS Considerations

The Committee on Foreign Investment in the United States (CFIUS) has authority to review, among other transactions, foreign participation in PIPEs by certain U.S. businesses. If a foreign person (or U.S. person under the "control" of a foreign person) participates in a PIPE, and if that foreign investment qualifies as a "covered transaction," the parties must decide whether a filing to CFIUS is mandatory or whether to voluntarily submit the transaction to CFIUS for advance review.

A filing to CFIUS may be made either via a short-form declaration containing basic information concerning the transaction or a longer, formal written notice. Depending on the value of the transaction, a formal notice for a PIPE valued at over $500,000 requires payment of a filing fee ranging from $750 to $300,000. Submission of the short-form declaration does not trigger a fee, but not all transactions are amenable to resolution using the short-form declaration. When a declaration is used, CFIUS may provide a decision 30 days after the filing is accepted as complete; when a formal notice is used, the timeframe for a CFIUS decision is significantly longer—at least 45 days, but often several months or more. The time and associated expense often will make PIPE financing impractical if a CFIUS filing should be made.

> "The time and associated expense often will make PIPE financing impractical if a CFIUS filing should be made."

To trigger a mandatory CFIUS filing, it is a necessary (but not sufficient) condition that the U.S. business be involved with "critical technologies," "critical infrastructure," or "sensitive personal data"—involvement in any of these categorizes the business as a "TID U.S. business" ("T" for technology, "I" for infrastructure, and "D" for data). However, even for transactions that do not involve TID U.S. businesses—and therefore do not trigger mandatory CFIUS filings—CFIUS often has the discretionary authority to review a transaction pre- or post-closing. This authority may exist if the foreign participant in the PIPE obtains even nominal equity in the business, and in some circumstances even convertible non-voting securities may create CFIUS jurisdiction. If CFIUS determines that a covered transaction presents a threat to national security, it may effectively block the transaction, force divestment by the foreign person (if the transaction has closed), or order mitigation measures to resolve the concerns. There is no time limitation for CFIUS to act. For transactions that do not trigger mandatory filings but that may be subject to CFIUS discretionary review, parties may make a voluntary filing to obtain CFIUS clearance in advance of closing, which protects against adverse CFIUS action in the future and often is the only way to extinguish the risk of adverse CFIUS action when there is a foreign participant in a transaction.

CFIUS rules provide a safe harbor for transactions in which a foreign person makes a purely passive investment, meaning that the foreign person does not obtain more than 10% voting rights or significant veto rights; a board seat, observer seat, or nomination rights; access to "material non-public technical information"; or involvement in "substantive decision-making" of the business. See the section on "Beneficial Ownership Limitation" for additional information. Such passive participation often is advisable for foreign participants in PIPE financings to allow a company to take advantage of this safe harbor and avoid a mandatory CFIUS filing.

Covenants in Other Agreements

Credit Agreements/Indentures

A company's existing debt documents may restrict the incurrence of additional debt and use of proceeds in an equity offering, and may include mandatory prepayments, redemptions, repurchase events, delivery of cash upon conversion, fundamental changes, and related party transaction restrictions that may be triggered by a PIPE. A company considering a PIPE should carefully review its existing debt agreements to understand the implications of a PIPE and ensure that it would not cause a default under those agreements and that the company obtains any required third-party consents.

Charter Documents and Stockholder Agreements

A company considering a PIPE should also carefully review their organizational documents and any stockholder agreements to ensure that they have sufficient authorized shares to complete the transaction and to determine any necessary consents or waivers from existing stockholders. Even when the company is not required to get stockholder approval for the PIPE under stock exchange rules, stockholder approval would nevertheless typically be required if the company's organizational documents need to be amended to increase the number of authorized shares.

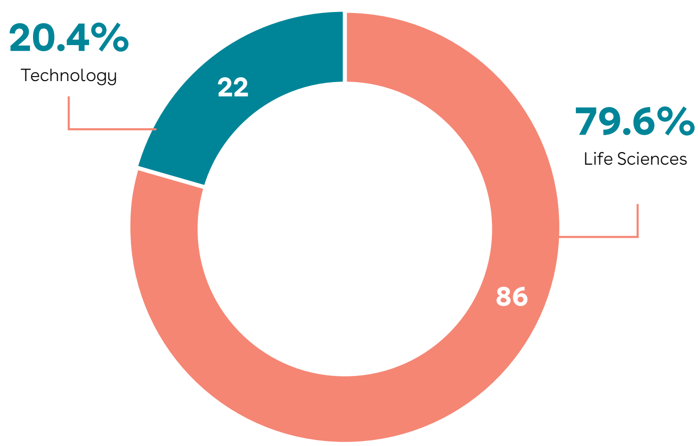
"Even when the company is not required to get stockholder approval for the PIPE under stock exchange rules, stockholder approval would nevertheless typically be required if the company's organizational documents need to be amended to increase the number of authorized shares."

Change of Control Issues

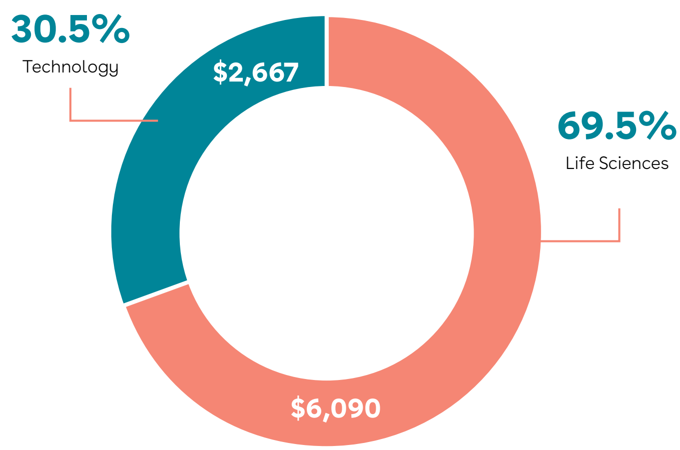
Depending on the amount and type of equity being issued, the number of investors, or changes to the board of directors resulting from the PIPE, a company should evaluate whether the transaction may trigger a change of control-related provision in any of its existing agreements. Triggering such provisions in equity plans and employment agreements, for example, could require early payment of bonuses or severance or result in the acceleration of equity award vesting.

2022 PIPE Activity

Number of Transactions

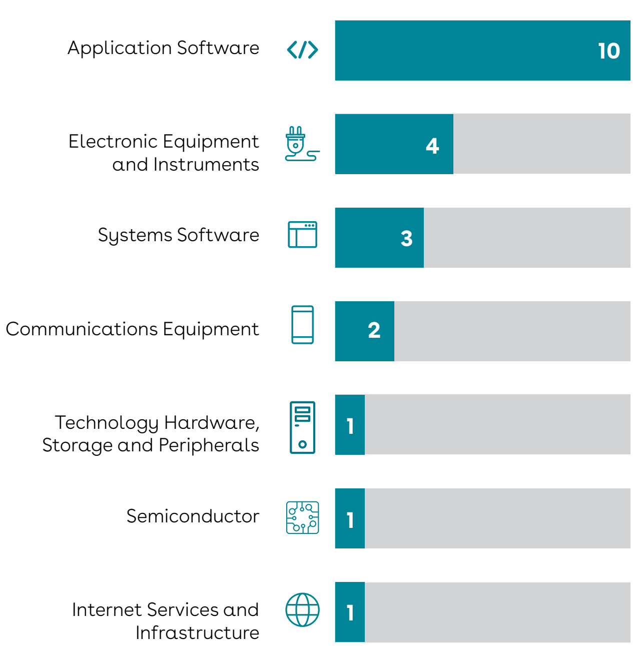


Aggregate Amounts Raised*

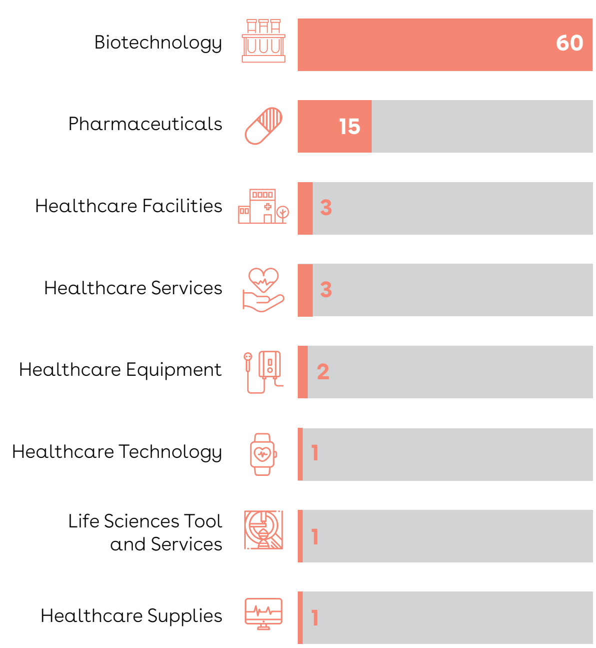


** in millions*

Technology Sector Breakdown



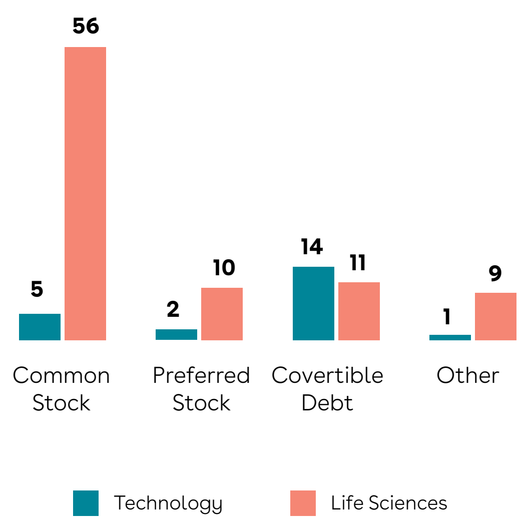
Life Sciences Sector Breakdown



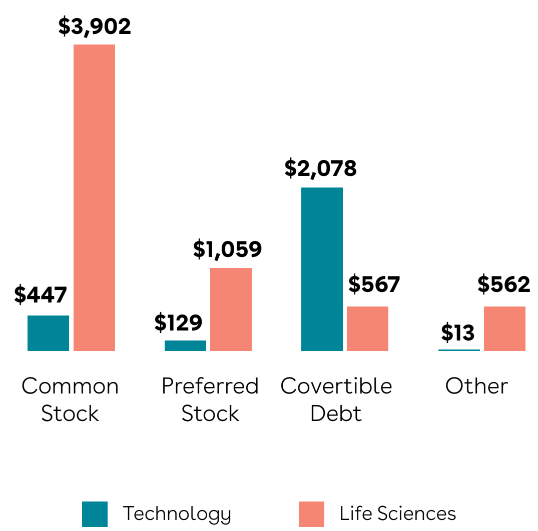
Security Types

	Technology			Life Sciences		
Security Type	**Total Placements**	**Placements with Warrant Coverage[1]**	**Total Deal Value (in millions)**	**Total Placements**	**Placements with Warrant Coverage[1]**	**Total Deal Value (in millions)**
Common Stock[2]	5	1	$ 447	56	15	$ 3,902
Preferred Stock[3]	2	0	$ 129	10	2	$ 1,059
Convertible Debt	14	6	$ 2,078	11	2	$ 567
Other[4]	1	0	$ 13	9	1	$ 562
Total	22	7	$ 2,667	86	20	$ 6,090

Transaction Count by Security Type



Amount Raised (in Millions) by Security Type



[1] *Includes PIPEs that issued warrants (other than pre-funded warrants) in addition to the specified security type.*

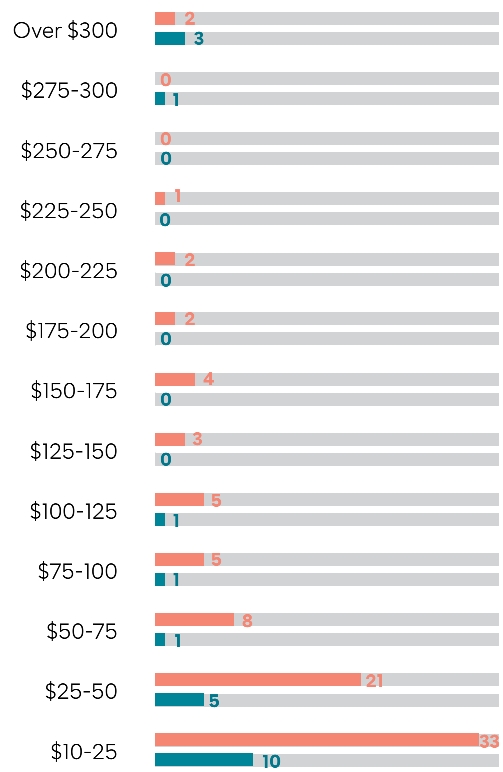
[2] *Includes two PIPEs that issued only pre-funded warrants, and 13 PIPEs that issued a combination of common stock and pre-funded warrants.*

[3] *Other than two non-convertible preferred stock PIPEs by life sciences companies, all other PIPEs listed here were for preferred stock convertible into the company's common stock.*

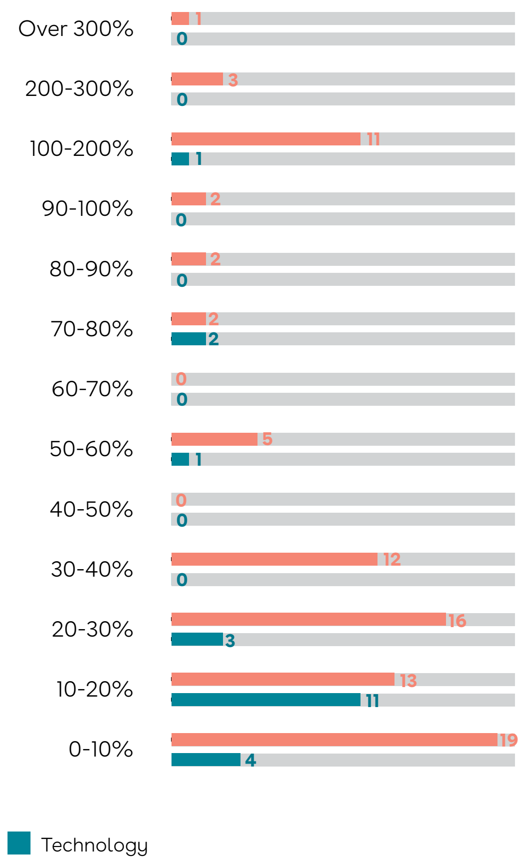
[4] *Includes PIPEs for multiple security types other than warrants.*

Size and Timing Distribution

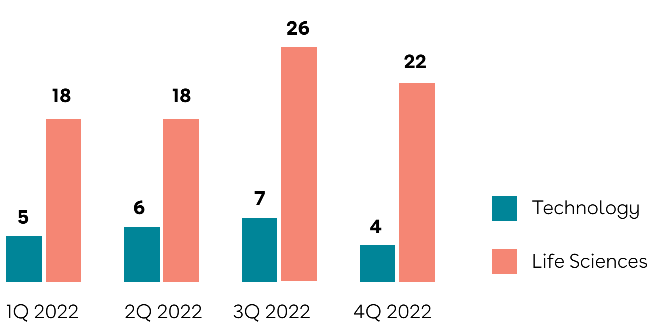
PIPE Value (in millions)



PIPE Value (as % of market value)

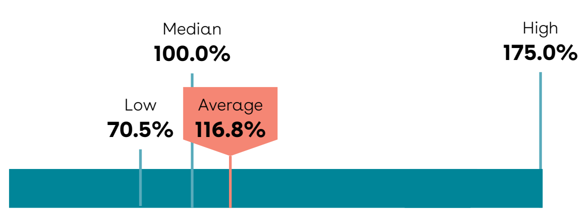


Announcement Distribution by Quarter*



* *Excludes two PIPEs that were announced in 2021 and closed in 1Q 2022.*

Security Price**



Among PIPEs issuing common stock and/or pre-funded warrants, prices ranged from 70.5% to 175.0% of the company's common stock price on the date the purchase agreement was signed, with an average of 116.8% and median of 100.0%.**

** *Excludes five PIPEs for common stock that were issued to insiders at a premium to the company's common stock price of over 200%.*

Types of Investors

Nature of 2022 PIPE Investors

Investors vary in their approach to PIPE opportunities. Some investors, typically hedge funds, are less interested in the fundamentals of a company and its prospects, will conduct extremely limited (or no) due diligence and focus almost exclusively on the financial terms of the investment and the ability to realize a return while limiting risk. As a result, PIPEs led by these pure financial investors often have a high cost of capital to the company. Others are institutional investors that spend time understanding a company's investment thesis and are similar to those that companies interact with in a traditional SEC-registered transaction. Private equity firms, which tend to be most interested in revenue-generating companies, are a source of capital that will typically seek to influence management through governance rights and PIPE securities terms. PIPEs with private equity firms therefore tend to involve more structuring than with other types of investors. Finally, strategic investors often have interests beyond the economics associated with the PIPE securities. For example, a big pharmaceutical company may invest in a biotechnology company in connection with a collaboration agreement for drug development, or a cloud platform may invest in a national home security company in connection with a commitment to purchase cloud services from the platform.

Insider Participation

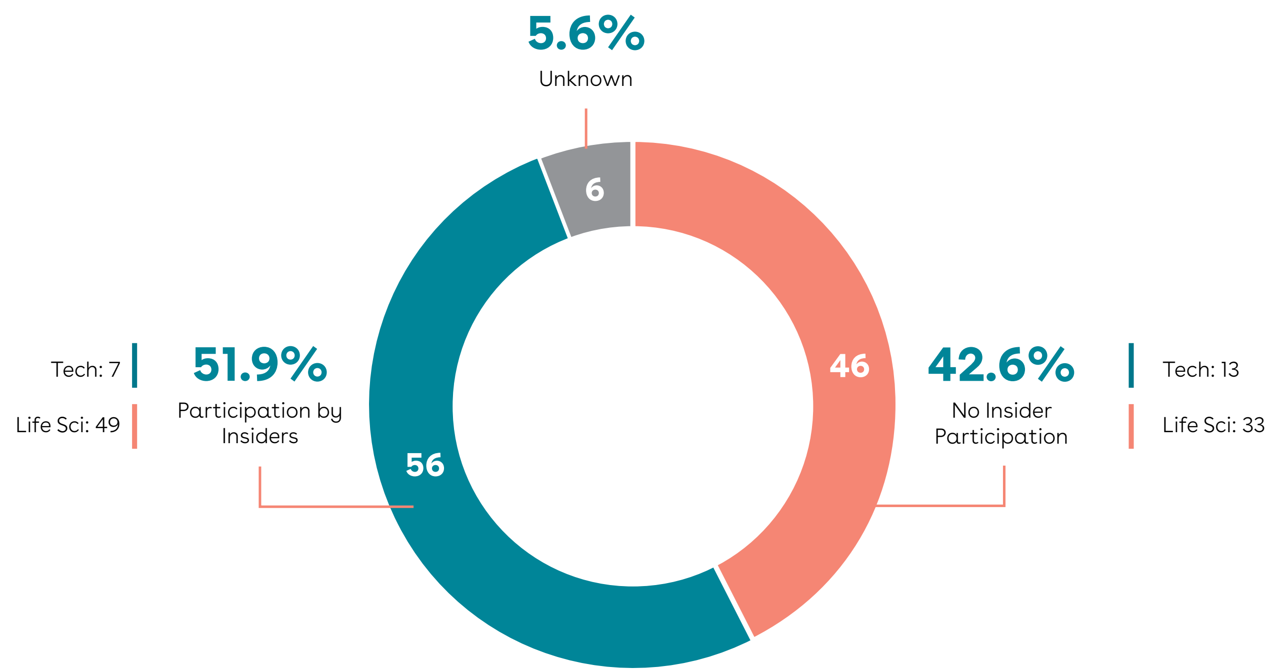
In challenged markets, it may be necessary for insiders to increase the amount of "skin in the game" to attract outside investors or simply to preserve the viability of a company. Insider participation in a PIPE can raise special issues, including navigating fiduciary duty issues, special stock exchange requirements, and perceived information asymmetry between the insiders and the market generally.

The New York Stock Exchange (NYSE) requires stockholder approval for the sale, issuance, or potential issuance of a company's common stock (or securities convertible into or exercisable for its common stock) to directors, officers, or substantial security holders where the number of common shares to be purchased exceeds either 1% of the number of common shares outstanding before the issuance or 1% of the voting power of the company. Other than in connection with sales of securities where the proceeds will be used to fund an acquisition of another company in which the related party has a direct or indirect interest, the NYSE's related-party rule does not apply if the sales price is greater than a minimum price based on the company's market price.

Nasdaq treats a discounted issuance to directors, officers, employees, and consultants as an "equity compensation arrangement" requiring stockholder approval. To avoid stockholder approval, such insiders purchasing securities in a PIPE must therefore purchase the securities at a price above the Nasdaq minimum price, calculated in the same way as the NYSE's minimum price (including any accompanying warrant coverage).

In addition, if the sale to insiders results in the issuance of more than 20% of the company's outstanding common stock or voting power, the company must navigate the stock exchanges' stockholder approval requirements. See the section on "Stockholder Approval" for additional information.

2022 PIPE Participation by Insiders



2022 PIPE Terms

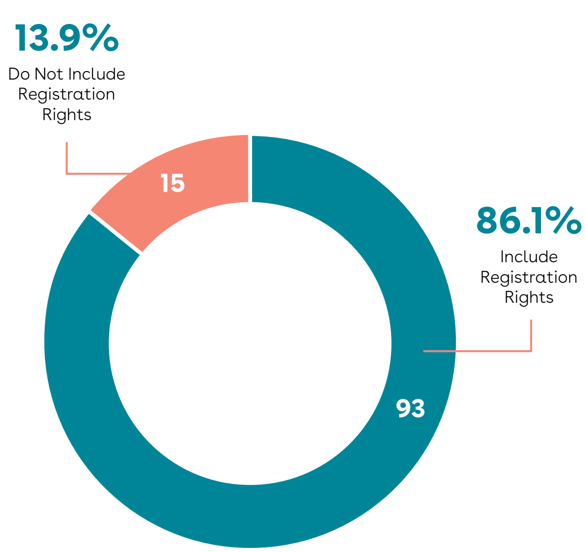
Registration Rights

PIPE investors typically require the company to file a registration statement with the SEC to register the resale of the PIPE securities (or, in the case of all equity-linked securities, typically just the resale of the shares of common stock underlying such securities). Usually, companies are required to file a resale registration and cause the SEC to declare it effective within a specified period after closing. Some PIPE investors also require "piggyback" rights to include their securities in future SEC-registered transactions by the company.

If a company fails to file or have the resale registration statement declared effective in a timely manner, or if it suspends the use of the registration statement for longer than is allowed under the registration rights agreement, it may be required to pay monetary penalties to the investors. A company typically retains the right to delay filing or suspend use of a resale registration statement if the company concludes that there are material misstatements or omissions in the registration statement (including the company's SEC filings that are incorporated by reference in the registration statement).

PIPE securities may also be resold pursuant to exemptions from SEC registration requirements. The most typical exemption that PIPE investors rely on is Rule 144, and registration rights often (though not always) terminate with respect to each PIPE investor when such investor may resell securities held by it without restriction under Rule 144. Non-affiliates of a public company may resell restricted securities under Rule 144 after they have held them for at least six months, subject to the company being current in its SEC reporting obligations at the time of sale until the securities have been held for at least a year. Affiliates are subject to additional Rule 144 requirements and are typically entitled to registration rights for a specified period, often three to five years or more. Similarly, investors in securities with terms that require an additional investment decision, such as warrants exercisable for cash, will also typically retain registration rights while the warrants remain outstanding.

Of the 108 PIPEs surveyed, 93 (86.1%) included registration rights, representing 81.8% of technology PIPEs and 87.2% of life sciences PIPEs.



Filing Deadline

Of the 93 PIPEs surveyed with registration rights, 86 (92.5%) included an affirmative obligation for the company to register the resale of the securities on a specified timeframe. Of these 86 PIPEs, the deadline for the company to file a registration statement was an average of 70 days following the relevant trigger event, while the median was 30 days.*

In relatively rare circumstances, the resale registration statement filing deadline was triggered by an event other than closing, including:

- Stockholder approval of the PIPE
- Lock-up expiration
- Completion of subsequent closings (for debt securities issued in multiple tranches)
- Completion of a subsequent offering (for PIPEs providing bridge financing until the company can complete a registered offering)
- Filing of the company's Annual Report with the SEC (cleansing any MNPI received by investors)

** Excludes two PIPEs requiring a registration statement to be filed as soon as practicable after closing, and two PIPEs with a filing deadline more than 18 months following closing.*

Effectiveness of Resale Registration Statement

Effectiveness Deadline

Of the 93 PIPEs surveyed with registration rights, 18 PIPEs (19.4%) required the resale registration statement to be declared effective as soon as practicable following filing, while 68 PIPEs (73.1%) required that the resale registration statement be declared effective within a specified time period, of which:*

- 31 PIPEs measured the period from the filing date, where such period was 2 to 120 days after filing, with an average of 38.1 days and a median of 30 days
- 36 PIPEs measured the period from the closing date, where such period was 20 to 210 days after closing, with an average of 83.3 days and a median of 75 days
- One PIPE for convertible securities required the resale registration statement to be declared effective within 60 days following stockholder approval of the issuance of the underlying shares

** Excludes two PIPEs with registration rights for which the related effectiveness deadline could not be determined.*

Effectiveness Period

Of the 93 PIPEs surveyed with registration rights, 84 PIPEs (90.3%) required the resale registration statement to be kept effective until the earliest of one or more specified events, including:

- Sale or disposition of the securities—79 PIPEs (94.0%)
- Securities becoming eligible for sale under Rule 144 without restriction—77 PIPEs (91.7%)
- A specified time following the registration—12 PIPEs (14.3%)
- Holder's beneficial ownership is reduced below a threshold percentage—2 PIPE (2.4%)

Suspension/Delay of Effectiveness

Of the 93 PIPEs surveyed with registration rights, 81 PIPEs (87.1%) allowed the company to delay filing or suspend use of a resale registration statement if the company concludes that there are material misstatements or omissions in the registration statement.

- Of the 81 PIPEs that provided for suspension or delay rights, 14 PIPEs limited the right to a maximum number of suspension or delay events in any 12-month period, allowing an average of 2.1 and a median of 2.0 such events.**
- Where the suspension period was limited in length, the maximum length of any one such period ranged from 10 to 90 consecutive days, with an average of 43.1 days and median of 30 days.
- Allowed suspension periods were limited to between 10 and 120 cumulative days during any 12-month period, with an average of 64.2 days and a median of 60 days.**

*** Excludes six PIPEs that provide a suspension right not subject to length limitations, and one PIPE for which suspension rights could not be confirmed.*

Underwritten Offering Demand Rights

Of the 93 PIPEs surveyed with registration rights, 15 PIPEs (16.1%) allow investors to compel the company to undertake and cooperate in an underwritten offering for the PIPE securities. Of the 15 PIPEs containing underwritten demand rights, eight PIPEs (53.3%) limited the number of allowed demands and six PIPEs (40.0%) required demand offerings to be for a minimum offering size.

Piggyback Rights

Of the 93 PIPEs surveyed with registration rights, 32 PIPEs (34.4%) included “piggyback” registration rights allowing investors to include their securities in future SEC-registered transactions by the company. Another 16 PIPEs (17.2%) did not include piggyback rights, but the company was otherwise prohibited from filing a registration statement for other securities until all of the PIPE securities have been registered.

Stockholder Approval

Both Nasdaq and the NYSE require a listed company to obtain stockholder approval prior to completing certain issuances of common stock or securities convertible into common stock where the issuance represents more than 20% of the outstanding common stock or voting power of the company (known as the "20% rule"). Both stock exchanges also provide an exception to the 20% rule for private placements at a purchase price above a minimum price based on the company's market price.

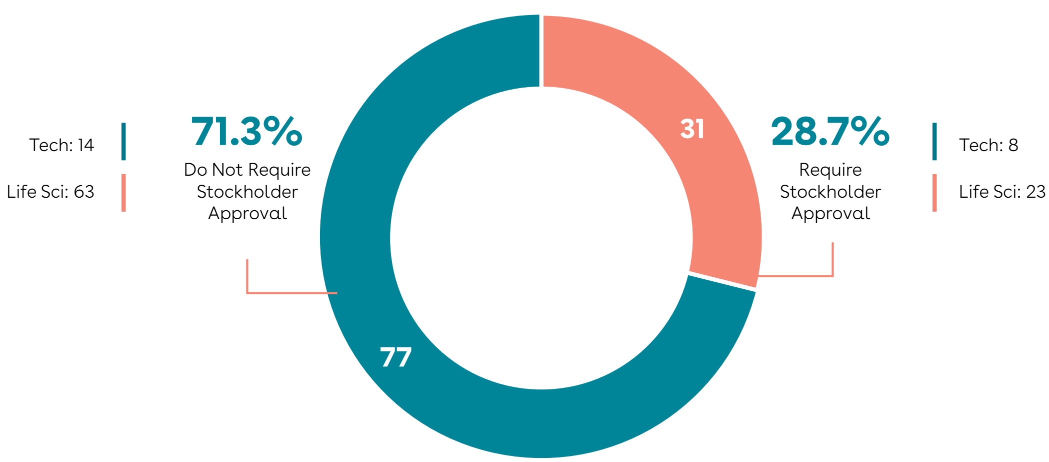
Larger PIPEs are often structured to avoid the stockholder approval requirement, for example by imposing a 19.99% beneficial ownership limitation through a cap on the convertibility or exercisability of equity-linked securities, issuing a combination of voting and nonvoting securities, or allowing conversion or exercise only upon stockholder approval.

Under Nasdaq rules, warrants are typically separated from the issuance of common stock if the warrants are not exercisable for at least six months following the closing; the exercise price for the warrants is set at a premium to the Nasdaq minimum price; and the exercise price is subject to adjustment only for stock splits, stock combinations, and similar events affecting all stockholders generally (i.e., no price-based anti-dilution adjustments). Similar strategies are also implemented to separate convertible securities from common stock.

A company must consider several factors when determining whether a stockholder vote will be required, including the timing of warrant exercise or conversion in relation to the PIPE closing, the inclusion of price-based anti-dilution provisions that may reduce conversion or exercise prices, and possible integration of the PIPE with other issuances.

When stockholder approval is required, the company will sometimes provide comfort to the PIPE investors that the required approvals will be obtained by executing voting agreements with insiders and significant stockholders.

Of the 108 PIPEs surveyed, 31 (28.7%) contemplated stockholder approval, representing 42.1% of technology PIPEs and 26.6% of life sciences PIPEs.



Among the 31 PIPES reviewed with stockholder approval requirements, the matters to be approved included:

- Issuance of more than 20% of outstanding common stock or voting power in the company
- Increases in the authorized stock of the company to accommodate future conversion or exercise of the PIPE securities
- Stock splits or reverse stock splits

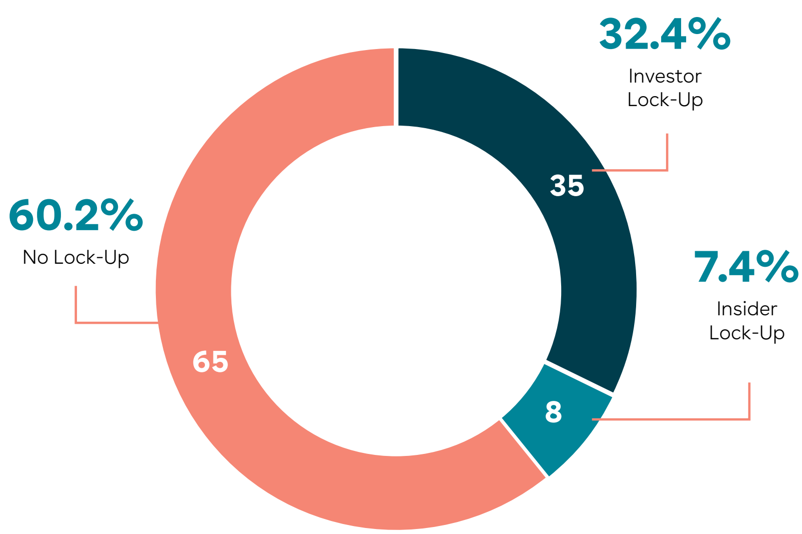
Although not directly related to the PIPE, when the proceeds of a PIPE are intended to finance a proposed merger or acquisition the PIPE will typically also require stockholder approval of the merger or acquisition.

Lock-Ups

Some PIPE investors agree to restrictions on their ability to resell PIPE securities in addition to those imposed by securities laws. Such "lock-up" agreements can signal that a strategic or other fundamental investor is committed to the company for the long term. Lock-ups may also be employed in situations in which an investor receives a significant amount of sensitive, confidential information in connection with its due diligence.

PIPE investors may also require that company insiders (its directors, officers, or other significant stockholders) agree not to sell company securities for a specified time period so that PIPE investors have the ability to gain liquidity for their investment without interference from sales by insiders.

Of the 108 PIPEs surveyed, 43 (39.8%) included lock-up restrictions, with the percentage of PIPEs containing such restrictions generally consistent between technology and life sciences companies. Of the 43 PIPEs that included lock-ups, 35 PIPEs (81.4%) included restrictions on the PIPE investors, while eight PIPEs (18.6%) included restrictions on insiders.



Of the 43 PIPEs surveyed that included lock-up restrictions*:

- Nine had a lock-up period of three months or less
- Six had a lock-up period between three and six months
- Six had a lock-up period between six months and one year
- Eight had a lock-up period of more than one year
- Nine had a lock-up ending on the occurrence of a future event

** Does not include five PIPEs that included a lock-up but did not file the lock-up agreement or otherwise publicly disclose the relevant period as of the publication of this report.*

Standstill and Voting Agreements

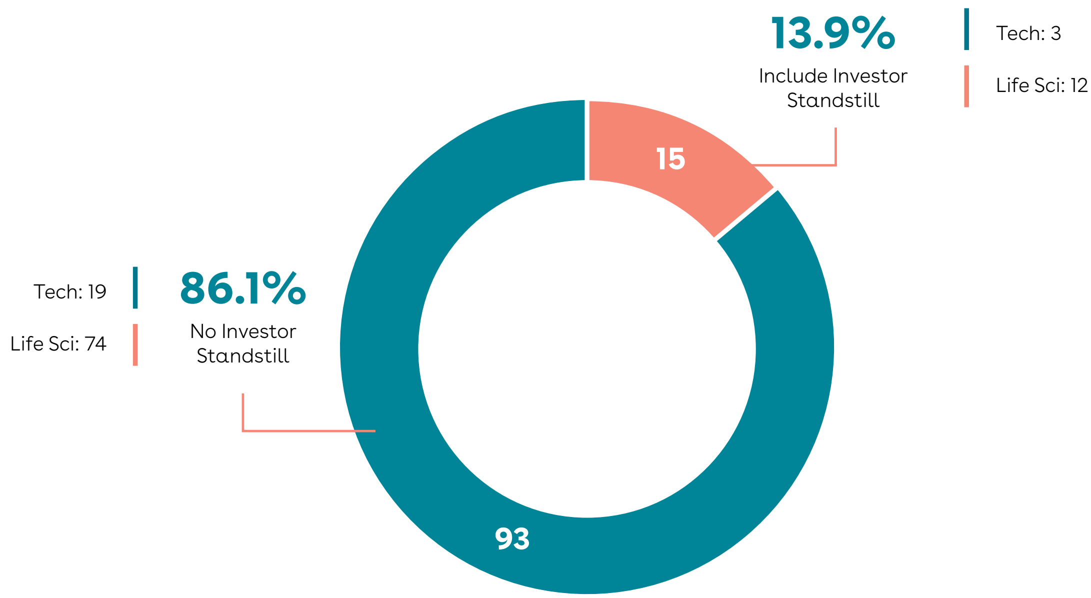
A company will sometimes require PIPE investors to agree to "standstill" agreements, particularly when investors are private equity funds or strategic investors who might leverage their investment into a takeover of the company. Standstills restrict investors from acquiring additional company securities, entering into voting agreements with other stockholders or participating in a "group" within the meaning of the U.S. securities laws for the purpose of exercising control over the company, pursuing proxy fights, or taking other actions that may result in a change of control or distract management and the board of directors from their strategic plans.

A company may also require PIPE investors to agree to vote their shares in favor of director nominees and other proposals recommended by the board of directors (other than in connection with certain fundamental or transformative actions), or in the case of preferred stock, in a manner consistent with the vote of the common stock.

Typically, such agreements remain in effect for a specified period or for so long as the PIPE investors' beneficial ownership exceeds a certain threshold percentage.

Investor Standstills

Of the 108 PIPEs surveyed, 15 (13.9%) included an investor standstill, with the percentage of PIPEs containing such restrictions generally consistent between technology and life sciences companies.



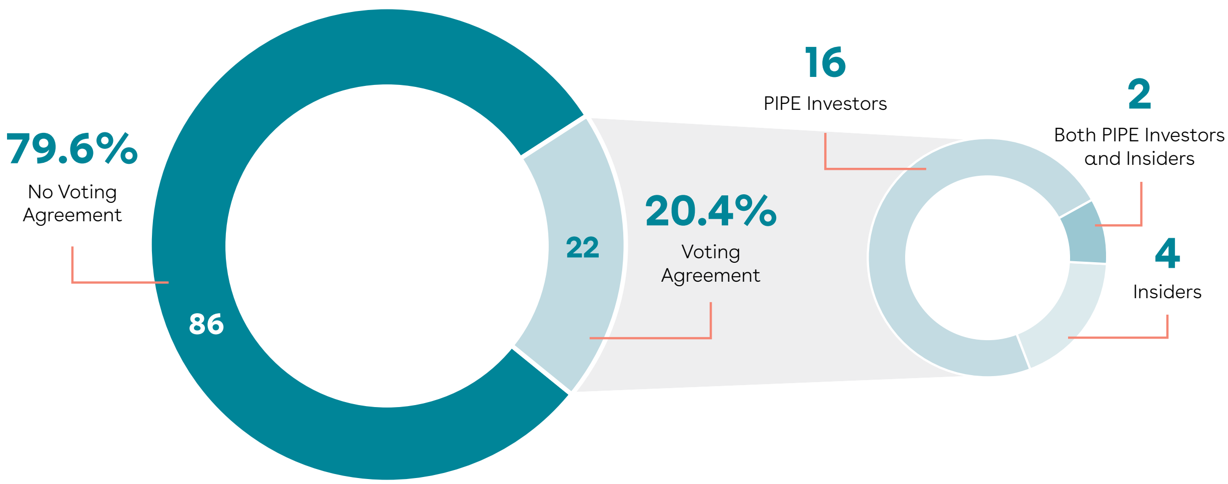
Of the 15 PIPEs with an investor standstill*:

- Seven terminate at a specified time
- One terminates on a threshold ownership percentage
- Three terminate on the earlier of a specified time or threshold ownership percentage
- One terminates once the PIPE security is no longer outstanding
- Two terminate on the occurrence of another future event

** Excludes one transaction with a standstill where the termination trigger could not be determined.*

Voting Agreements

Of the 108 PIPEs surveyed, 22 PIPEs (20.4%) included voting agreements, including 19 agreements with PIPE investors and six agreements with insiders not participating in the PIPE.



Of the voting agreements surveyed:

- 11 agreements provided for approval of matters related to the PIPE, including issuance of shares on conversion or exercise, increases in authorized shares, or stock splits
- Nine agreements required parties to vote in favor of proposals approved by the board (other than in connection with fundamental transactions), including for the election of directors
- Three agreements required parties to vote their shares in a way that mirrors the vote of unaffiliated common stock
- Two agreements provided for a vote in support of a contemplated merger or acquisition

Governance

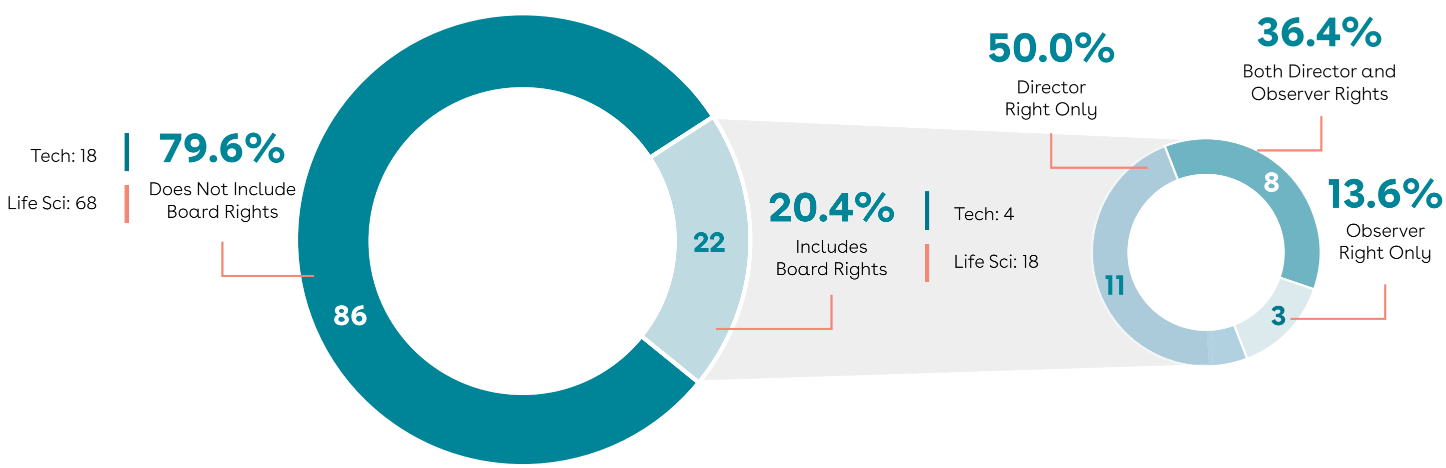
Governance rights tend to be among the most highly negotiated PIPE terms as they can dilute the influence of pre-PIPE directors and management or significantly constrain a company's ability to operate without first obtaining the PIPE investor's consent to certain actions.

Board Representation

Some PIPE investors require director nomination rights as a condition to their investment. Investors may also require the right to appoint a board observer who, while not a member of the board with all of the attendant fiduciary duties, is nonetheless given the same (or similar) information as directors and is allowed to attend board meetings. Participation in the boardroom gives investors insight into—and influence over—management, the company's prospects, and the value of their investment. Most PIPE investors are less actively involved and prefer to avoid the complications, such as fiduciary duties, SEC reporting, and trading restrictions, that such rights can entail.

When a PIPE investor is granted director nomination or observer rights, representation is usually proportional to the percentage of equity ownership and conditioned on maintaining ownership above a certain threshold.

Of the 108 PIPEs surveyed, 22 PIPEs (20.4%) included board designation or observer rights, with the percentage of PIPEs containing such rights generally consistent between technology and life sciences companies.



Protective Covenants

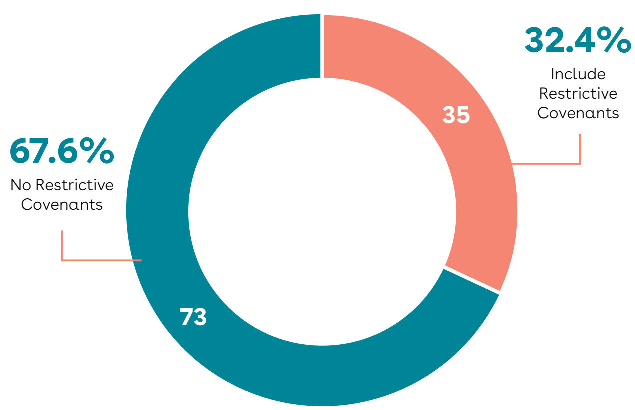
Due to the highly customized and direct nature of PIPE transactions, investors have more room to negotiate terms compared to a traditional SEC-registered, underwritten offering. In some PIPEs, investors will negotiate for affirmative, restrictive, or financial covenants that give them control over aspects of a company's business to protect their investment. Such covenants are particularly prevalent in debt security PIPEs and are similar to covenants in other debt transactions, but can also be found in preferred stock and other PIPEs.

Restrictive Covenants

Typical restrictive covenants may include restrictions related to:

- Mergers, consolidations, or asset sales
- Transactions with competitors or affiliates
- Stock splits, consolidations, increases in the company's authorized stock, or payment of dividends
- Issuance of more senior or parity securities
- Incurrence of indebtedness, creation of liens, or voluntary prepayment of existing indebtedness
- Capital expenditures

Of the 108 PIPEs surveyed, 35 (32.4%) included restrictive covenants,* of which 22 were debt placements, representing 88% of all surveyed debt transactions.

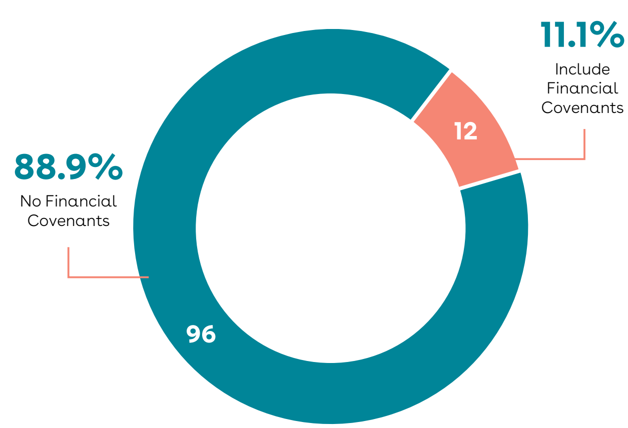


Financial Covenants

Financial covenants relate to calculations and metrics tied to a company's financial statements and may include:

- Minimum debt service, asset, interest, or fixed charge coverage ratio requirements
- Maintenance of annual recurring revenue (ARR) levels
- Minimum EBITDA requirements
- Maximum leverage ratio requirements
- Maintenance of minimum cash balances
- Changes in the company's business

Of the 108 PIPEs surveyed, 12 convertible securities PIPEs (11.1%) included financial covenants,* nine of which were debt placements, representing 36% of all surveyed debt transactions.

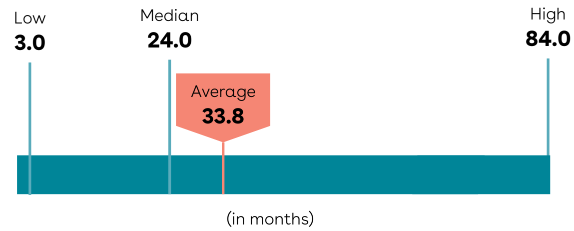


** Excludes two PIPEs for which covenant coverage could not be determined.*

Debt Terms

Maturity Date

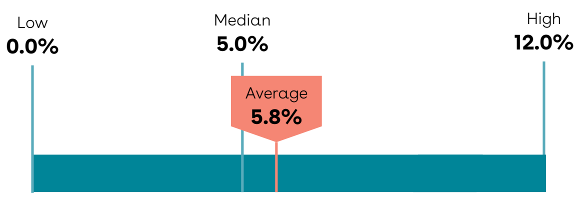
Of the 27 debt PIPEs surveyed, the maturity date was an average of 33.8 months following issuance, and the median maturity date was 24 months after issuance.



Interest

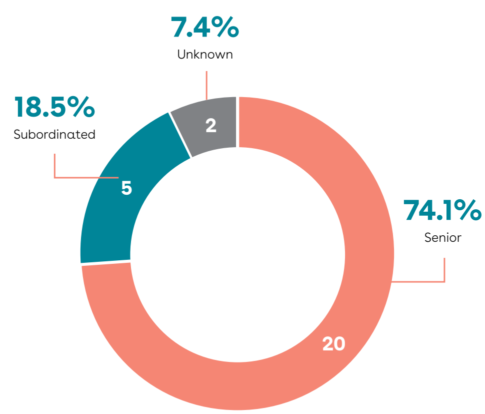
Of the 27 debt PIPEs surveyed, the average interest rate was 5.8%, and the median interest rate was 5.0%.*

** Excludes four PIPEs with a floating interest rate, and one PIPE with an interest rate that increases over time.*



Ranking

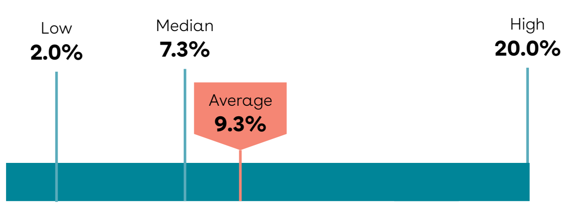
Of the 27 debt PIPEs surveyed, 20 (74.1%) were senior to other indebtedness of the company, and five (18.5%) were subordinated.



Original Issue Discount

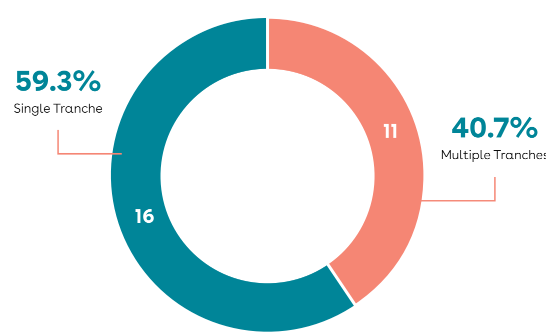
Of the 27 debt PIPEs surveyed, 12 (48.0%) disclosed an original issue discount, and 11 (44.0%) were issued at par.** Of the 12 debt PIPEs issued at a discount, the average issue discount was 9.3% of principal, and the median discount was 7.3% of principal.

*** Excludes two transactions where an original issue discount could not be confirmed.*



Tranched Lending

Of the 27 debt PIPEs surveyed, 11 PIPEs (40.7%) contemplated issuance in multiple tranches, and 16 PIPEs (59.3%) were issued in a single tranche.

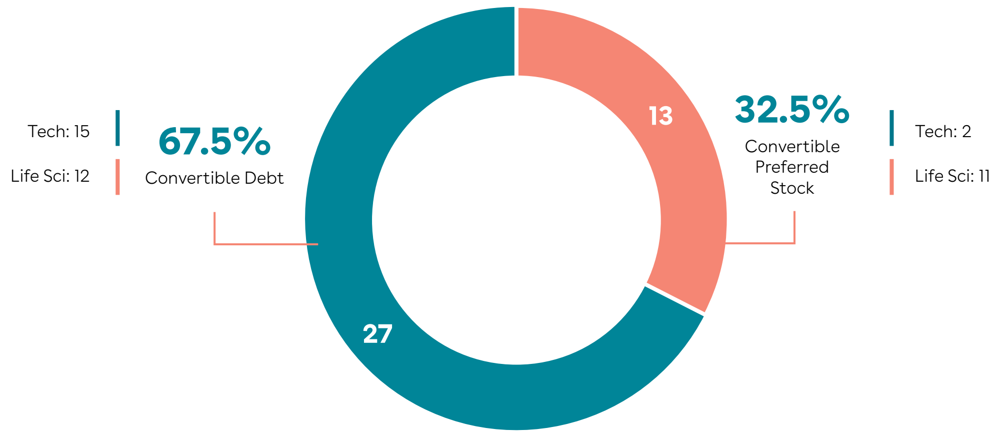


Convertible Debt Securities and Preferred Stock

Certain PIPEs involve the sale of convertible debt or preferred stock convertible into common stock.

Although there is great variance among the terms of convertible securities, this section covers several common provisions, including conversion rate adjustments; cash/payment-in-kind interest; voluntary redemption and/or repurchase rights; and mandatory redemption and/or repurchase rights. Throughout this section, “convertible securities” refers to both convertible debt and convertible preferred stock. When discussing terms that are similar in concept but have different terminology under convertible debt and preferred stock (e.g., interest and dividend), we use the applicable convertible debt term.

Breakdown of Convertible Securities

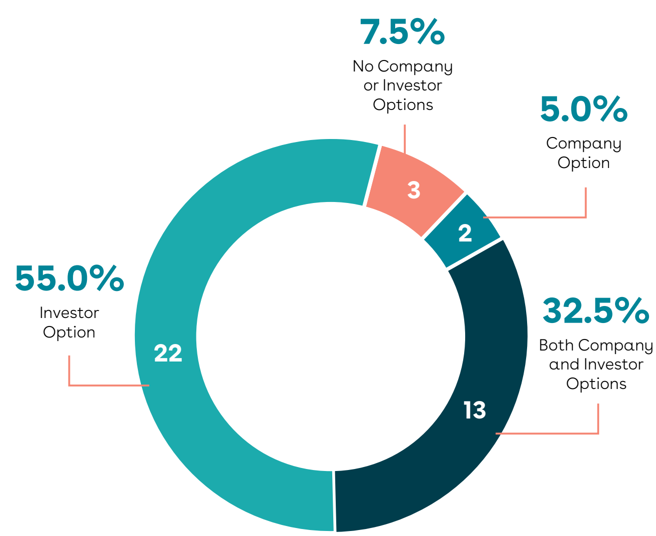


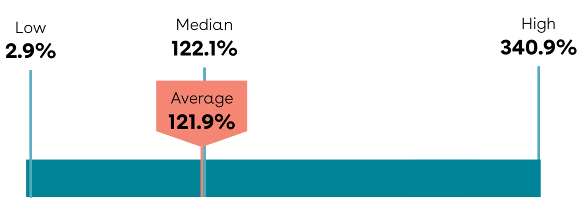
Nature of Conversion Right

Convertible security holders typically have the right to convert the securities at their option prior to maturity. Of the 40 PIPEs surveyed that included convertible securities, 35 PIPEs (87.5%) included a form of voluntary conversion right at the option of the investor, including on the occurrence of change of control events.

Of the 40 PIPEs surveyed that included convertible securities, 15 PIPEs (37.5%) included a form of conversion right at the option of the company if the trading price of the company’s common stock exceeds a specified threshold, which effectively allows the company to force the investor to convert the securities.

Of the 40 PIPEs surveyed that included convertible securities, six PIPEs (15.0%) also provided for automatic conversion upon the occurrence of a specified event, including the satisfaction of specified equity conditions, the receipt of stockholder approval for the issuance of underlying stock, or upon a specified date.





Conversion Premium

Of the 40 PIPEs surveyed that included convertible securities, conversion prices ranged from 2.9% to 340.9% of the company’s common stock price on the date the purchase agreement was signed, with an average of 121.9% and median of 122.1%.*

** Excludes three PIPEs with a variable conversion rate, and one PIPE for securities that converted into preferred stock instead of common stock.*

Conversion Rate Adjustments

Convertible securities customarily include conversion rate adjustments for specified corporate events, such as stock splits, reverse stock splits, stock dividends, and other similar events that generally affect all holders of common stock, allowing the investor to preserve the economic benefit of a corporate event without converting their security into common stock prior to the applicable event.

A more "toxic" variety of convertible security PIPE includes price-based conversion rate adjustments that lower the conversion price if the company issues common stock (or securities convertible or exercisable into common stock) in a future transaction at a price lower than the then-current conversion price of the convertible securities. Price-based conversion rate adjustments are typically calculated on either a full-ratchet or weighted-average basis. Full-ratchet adjustments can result in a so-called "death spiral," where future equity offerings trigger a cycle of conversion rate adjustments, resulting in more dilutive subsequent equity offerings and significant downward pressure on the market price of the company's common stock. Because of these risks, a company will typically only accept full-ratchet price-based anti-dilution adjustments in a financing of last resort.

Full Ratchet

The goal of a full-ratchet adjustment is to ensure that PIPE investors maintain the same ownership percentage underlying their convertible securities or warrants if a company completes a down-round financing.

This is achieved by reducing the conversion or exercise price to match the price of shares issued in the subsequent down round, irrespective of the size of the new issuance.

PIPE investors benefit from a full ratchet since they maintain the same ownership percentage, but other investors may be less likely to participate in a subsequent financing since their interest is subject to dilution.

Full-ratchet adjustments are considered an aggressive form of investor protection and are rare.

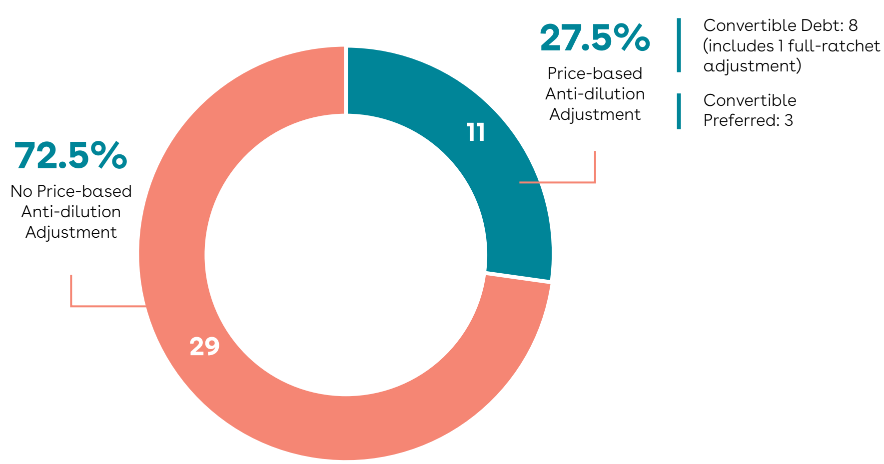
Weighted-Average

A weighted-average adjustment considers both the lower share price and the actual number of shares issued in a subsequent financing. The greater the number of shares issued, the bigger the conversion ratio adjustment will be.

A broad-based weighted-average formula considers the fully diluted capital stock of the company assuming full conversion of all convertible securities, while a narrow-based weighted-average formula only considers outstanding securities.

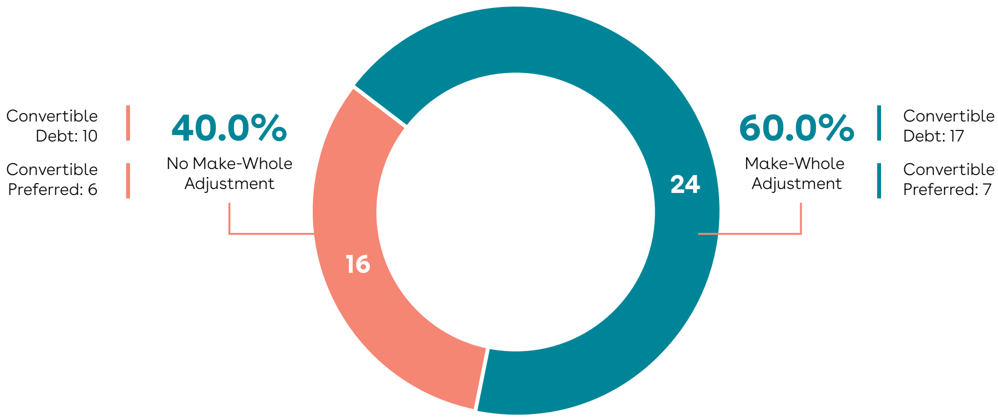
For adjustments that are tied to a company's stock prices in the public market instead of a specific future issuance, the formula used will typically use the volume-weighted average price (VWAP) of the company's stock during a look-back period preceding the adjustment.

Of the 40 PIPEs surveyed that included convertible securities, 11 PIPEs (27.5%) included price-based anti-dilution adjustments, representing 40.7% of convertible debt PIPEs and 23.1% of convertible preferred stock PIPEs. Of the 11 PIPEs surveyed that included these adjustments, one convertible debt PIPE included a full-ratchet adjustment.



Convertible securities also often include conversion rate adjustments upon the occurrence of certain change of control events (for example, if the company is acquired in an all-cash acquisition) to compensate investors for the negative impact such an event might have on the value of their imbedded conversion option. The number of so-called "make-whole" shares (or cash paid in lieu of delivering such shares under the terms of the instrument) is often determined based on both the takeover price per share in the change of control transaction and the proximity of the event to the maturity date of the convertible security.

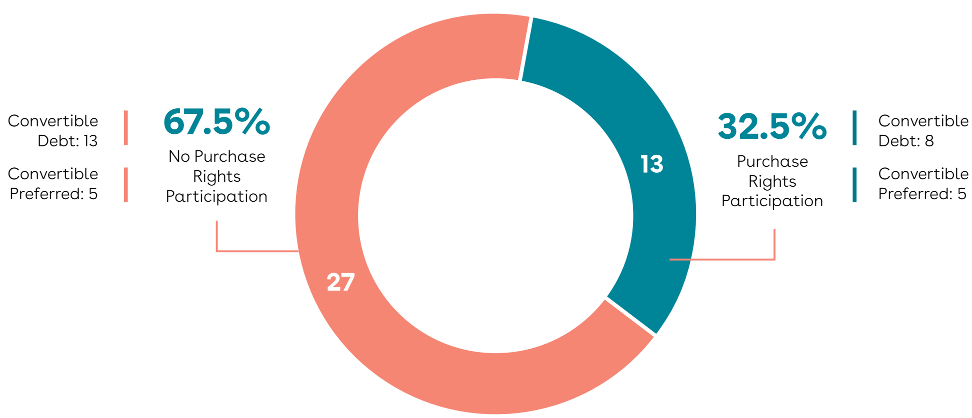
Of the 40 PIPEs that included convertible securities, 24 PIPEs (60.0%) included a "make-whole" adjustment upon the occurrence of specified takeover events.



Purchase Rights

In addition to conversion rate adjustments, a company may also protect PIPE investors against dilution by allowing them to access the benefits of any purchase rights granted pro rata to all holders of the company's common stock as if all of the outstanding PIPE securities had been converted immediately prior to the granting of the purchase rights by the company.

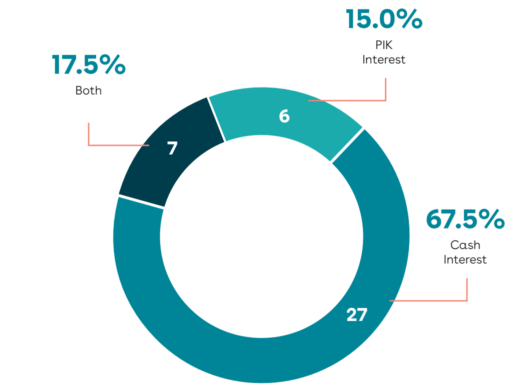
Of the 40 PIPEs that included convertible securities, 13 PIPEs (32.5%) granted PIPE investors access to any purchase rights granted to all existing stockholders, representing 29.6% of convertible debt PIPEs and 38.5% of convertible preferred stock PIPEs.



Cash and Payment-in-Kind Interest

Convertible securities often accrue interest at a specified rate while the instrument is outstanding. This interest is typically paid by the company in cash or as payment-in-kind (PIK) interest which, in lieu of a cash interest payment, accrues as an increase to the outstanding principal amount of the convertible security.

Of the 40 convertible securities PIPEs surveyed, 27 PIPEs (67.5%) provided for cash interest only (including, in the case of preferred stock, payment of dividends in the form of company common stock); six PIPEs (15.0%) provided for PIK interest only; and seven PIPEs (17.5%) provided for either cash or PIK interest payments.



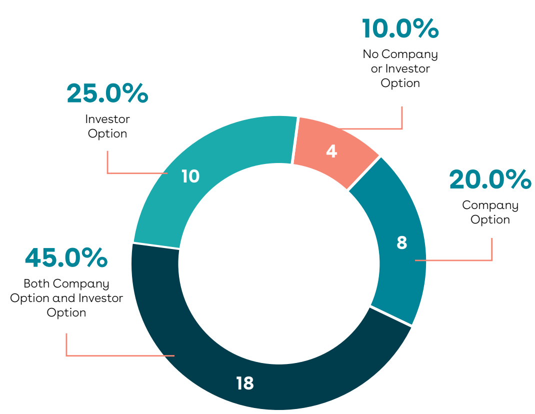
Redemption and Repurchase Rights

Convertible securities issued in PIPEs often include redemption or repurchase rights which give the investor and/or the company the obligation or the right, as applicable, to redeem or repurchase the securities from the investor at a specified price.

Of the 40 PIPEs surveyed that included convertible securities, 26 PIPEs (65.0%) included a form of voluntary redemption right at the option of the company, which effectively allows the company to force the investor to redeem the securities if the trading price of the company's common stock exceeds a specified threshold. Such a redemption right is typically exercised only when the convertible securities are significantly "in-the-money," and an investor would rather convert the instrument rather than have the instrument redeemed at par value, and results in the investor losing its conversion value.

Upon the occurrence of a change of control event, investors typically have the right to require the company to repurchase their convertible securities at par. Of the 40 PIPEs surveyed that included convertible securities, 28 PIPEs (70.0%) included a form of voluntary repurchase right at the option of the investor.

Of the 40 PIPEs surveyed that included convertible securities, two PIPEs (5.0%) also provided for automatic repurchase of the convertible securities by the Company upon the occurrence of a specified event, including the achievement of target equity market capitalization levels by a specified date or the completion of a future equity financing.



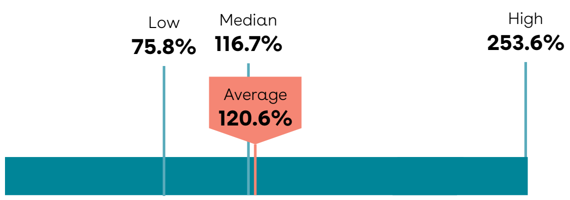
Warrant Coverage

Many PIPEs include some form of warrant coverage alongside other securities as additional enticement to potential investors. A warrant gives the holder the right to purchase the company's stock at a set price during a specific period and may allow investors to avoid SEC reporting and other obligations associated with holding common stock or prevent the need for stockholder approval.

Pre-funded warrants are warrants for which investors pay (pre-fund) all but a trivial amount of the exercise price at closing of the PIPE. Throughout this section, references to "warrants" do not include pre-funded warrants, which we discuss together with common stock because they are essentially economically the same.

Exercise Price

Warrants set a per-share exercise price which the investor must pay to receive common stock for the warrant. Like other PIPE securities, the parties to a PIPE may set the exercise price at a discount to the market price of the company's common stock at the time of issuance. Alternatively, the exercise price may be set equal to market price to comply with exchange rules and avoid stockholder approval, or in some cases the exercise price will be set at a premium to the market price as a signal to the public market regarding the inherent value of the company.



Of 28 PIPEs surveyed with accompanying warrant coverage, exercise prices ranged from 75.8% to 253.6% of the company's common stock price on the date the purchase agreement was signed, with an average of 120.6% and median of 116.7%.

Exercisability

A warrant may either be immediately exercisable upon issuance or may require the holder to wait for a specified time after issuance before the warrants may be exercised to separate the issuance of warrants from the issuance of common stock and avoid a stockholder vote under Nasdaq rules. See the section on "Stockholder Approval" for more information.

Of 28 PIPEs surveyed with accompanying warrant coverage:

- 23 PIPEs (82.1%) allowed the warrants to be exercised immediately
- Four PIPEs (11.8%) allowed exercise beginning six months following issuance
- One PIPE (2.9%) included warrants that become exercisable upon the occurrence of a future event trigger

Term

A warrant must be exercised within a specified term, commonly ranging from three to 10 years after the date of issuance depending on the nature of the transaction. However, a longer exercise period may also lengthen the term of any registration rights granted for the underlying shares, particularly when the holding period for the shares will not begin until the warrants are exercised. See the section on "Cash Exercise vs Net Share Settlement" for more information.

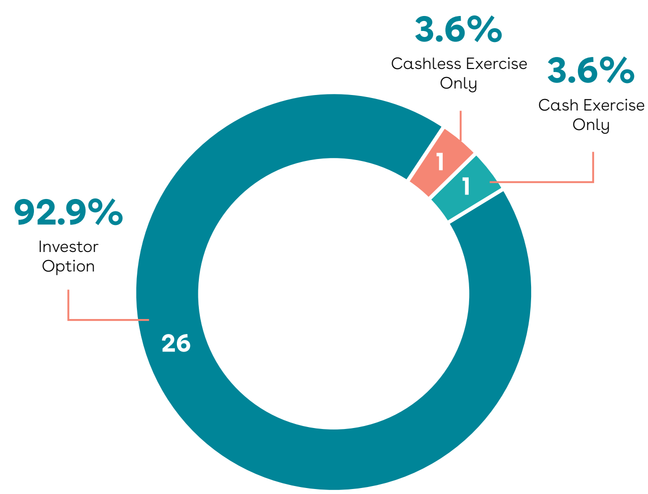
Of 28 PIPEs surveyed with accompanying warrant coverage, warrants were exercisable for a period ranging from two to 10 years following issuance, with both an average and median exercise period of 5.0 years following warrant issuance.

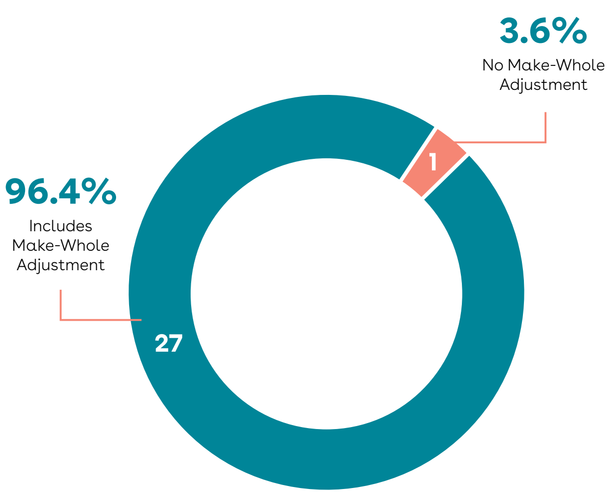
Cash Exercise Vs. Net Share Settlement

PIPE warrants typically provide for either cash exercise or net share settlement (known as a "cashless exercise"). Pursuant to a cash exercise, the PIPE investor pays the exercise price for warrants in cash when the warrants are exercised. In a cashless exercise, on the other hand, instead of cash the investor will surrender a portion of shares issued upon exercise back to the company as payment for the exercise price.

A cash exercise constitutes a new investment decision and resets the holding period for the shares issued upon exercise; unless a resale registration statement is available to cover the resale of the shares, investors must hold the shares for at least six months. However, cashless exercises are exempt from registration and PIPE investors may tack their holding period for the warrants to the underlying shares for purposes of Rule 144.

Of 28 PIPEs surveyed with accompanying warrant coverage, 26 PIPEs (92.9%) allowed either cash or cashless exercise at the option of the investor, one PIPE (3.6%) required cash exercise, and one PIPE (3.6%) required cashless exercise.





"Make-Whole" Adjustments

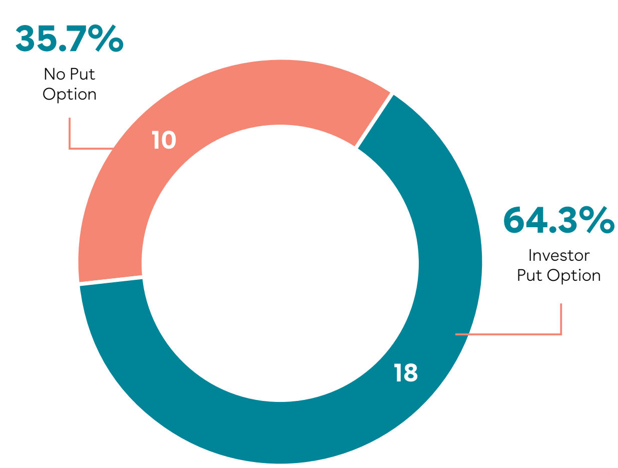
Warrants also often include exercise price adjustments upon the occurrence of certain fundamental changes (for example, change of control transactions) to compensate investors for the negative impact such an event might have on the value of their warrants. These "make-whole" adjustments are structured to give investors the benefit of any additional consideration or economic upside they would have been entitled to if the warrants had been exercised immediately prior to the fundamental change.

Of 28 PIPEs surveyed with accompanying warrant coverage, 27 PIPEs (96.4%) included an adjustment to the warrant upon the occurrence of a fundamental change.

Investor Put Option

Some warrants also include a put option allowing the investor to sell the warrants back to the company upon occurrence of a specified event, such as a change of control or other fundamental change, at either a set price or a fair value price calculated at the time of the sale in accordance with a specified formula, typically a Black-Scholes model.

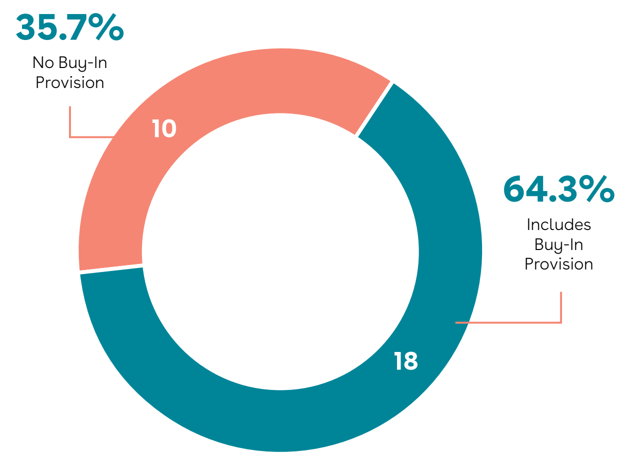
Of 28 PIPEs surveyed with accompanying warrant coverage, 18 PIPEs (64.3%) granted the investor a put option upon the occurrence of a fundamental transaction or change in control, all of which were valued using the Black-Scholes model.



Buy-In Rights

Most warrants include a "buy-in" provision whereby the company is required to make a cash payment to the investor if, upon exercise of the warrant, the company fails to deliver the warrant shares on the date required under the warrant. The amount of such cash payment is typically tied to the actual costs the investor incurs to purchase shares at market prices to cover any short position arising from the company's failure to timely deliver the warrant shares, for example, if the investor has sold shares in anticipation of the company's delivery of the warrant shares.

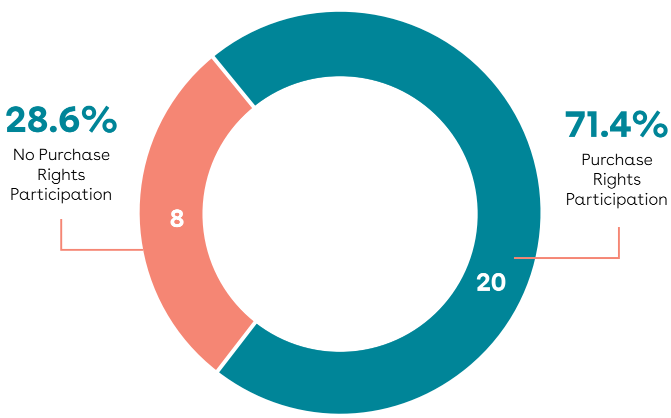
Of 28 PIPEs surveyed with accompanying warrant coverage, 18 PIPEs (64.3%) included buy-in provisions.



Purchase Rights

Like holders of convertible securities, warrant holders will often also receive the benefit of any purchase rights granted pro rata to all holders of the company's common stock as if all of the outstanding PIPE securities had been exercised immediately prior to the granting of the purchase rights. This right allows investors to pay additional consideration to prevent dilution of its equity ownership for any issuances that do not otherwise trigger anti-dilution protections that may be included in the warrants.

Of 28 PIPEs surveyed with accompanying warrant coverage, 20 PIPEs (71.4%) granted investors pro rata access to purchase rights granted by the company to holders of common stock generally.



Beneficial Ownership Limitation

U.S. securities laws impose reporting and other substantive requirements on beneficial owners of publicly traded securities, including:

- An obligation on beneficial owners of more than 5% of a class of publicly traded equity securities or securities that are convertible, exercisable, or exchangeable into a publicly traded security within 60 days to report their holdings and changes in holdings. The reporting obligations are more onerous for beneficial owners of more than 10% of such securities, and even more so if they intend to influence management or reach 20% or more.

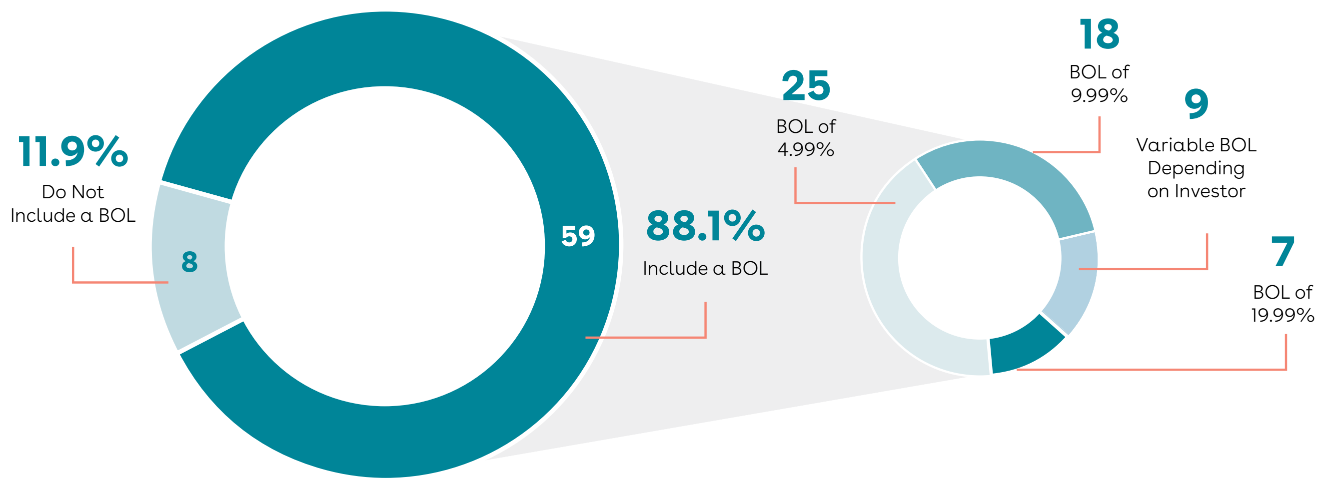
- An obligation on public company officers, directors and greater than 10% beneficial owners (Section 16 insiders) to report within two business days of most of transactions involving the company's publicly traded equity securities.

- Section 16 insiders are also subject to "short-swing" profit rules that require disgorgement to the company of any profit from a sale or purchase of the company's securities made within six months of a matchable purchase or sale.

U.S. securities laws defines "beneficial ownership" as the power to directly or indirectly vote or dispose of a security, including any equity-linked security that is convertible, exercisable, or exchangeable within 60 days.

To avoid the above obligations, equity-linked PIPE securities are often structured to restrict conversion, exercise, or exchange on less than 61 days' notice to the company if it would cause the investor to beneficially own shares above a specified percentage, usually 4.99% or 9.99%.

Of the 67 PIPEs surveyed that included warrants (including pre-funded warrants) or convertible securities, 59 PIPEs (88.1%) included a beneficial ownership limitation (BOL).



Other Dilution Protections

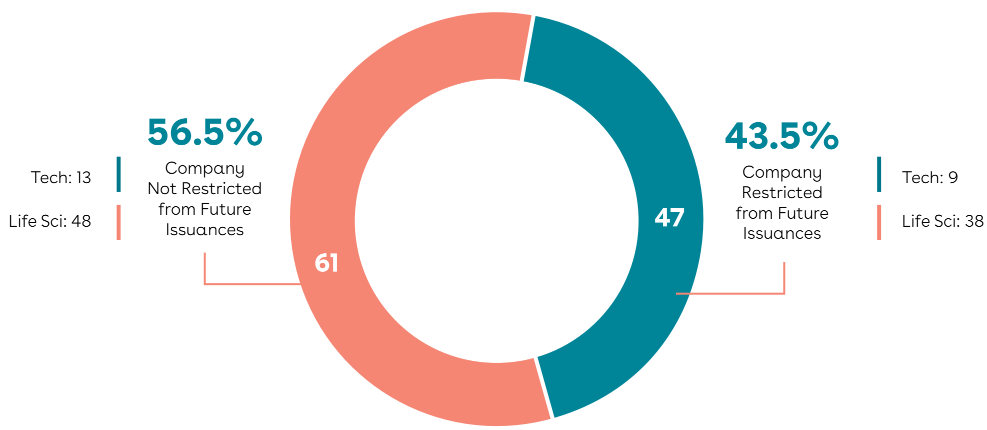
PIPE investors can also be protected from dilution by restrictions on the company's ability to issue securities post-closing. These restrictions may take the form of an outright prohibition on issuances for a specified period following closing, restrictions on issuances above a certain dollar threshold, or restrictions on future variable rate transactions, in each case without the consent of the investors.

PIPE investors sometimes negotiate for preemptive rights, or an option to participate in future issuances of equity or equity-linked securities, with participation typically limited to an amount sufficient to maintain the investor's preexisting ownership percentage (with the ownership percentage of holders of equity-linked securities based on an assumption that such securities will be fully exercised or converted).

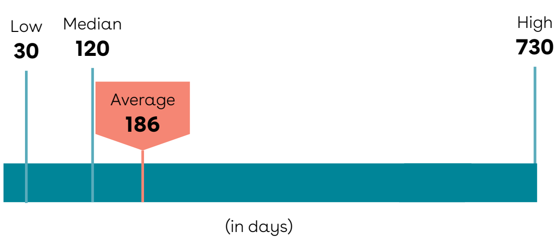
Typical carveouts from such restrictions and preemptive rights can include issuances to employees under benefit and compensation plans or to certain commercial partners, securities issued upon conversion or exercise of outstanding securities, and securities issued in M&A and other strategic transactions. Furthermore, because a PIPE is a private placement, preemptive rights may exclude securities issued by the company pursuant to an effective registration statement to avoid integration issues.

Future Issuances*

Of the 108 PIPEs surveyed, 47 PIPEs (43.5%) included restrictions on the ability of the company to pursue a subsequent issuance, with the percentage of PIPEs containing such restrictions generally consistent between technology and life sciences companies.



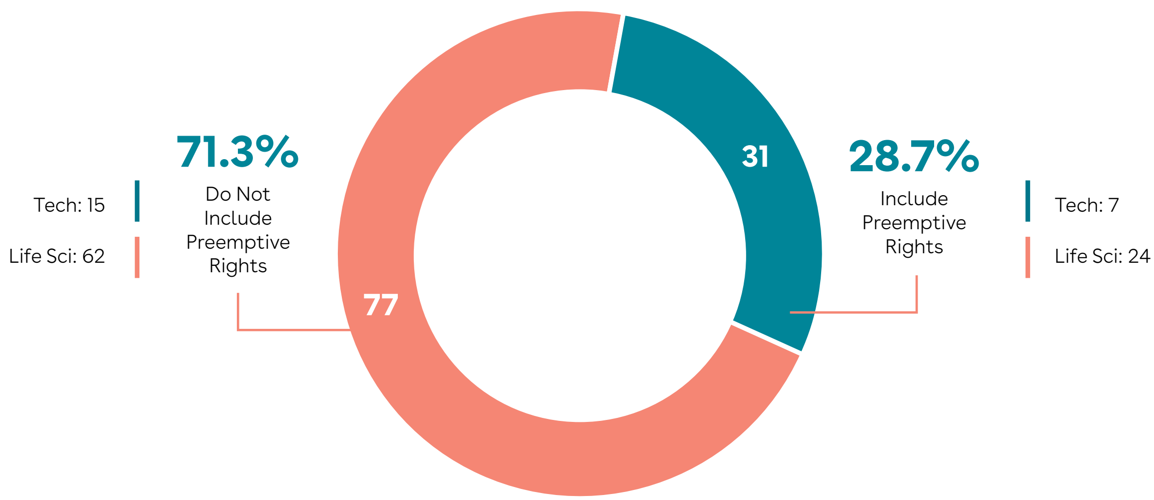
** Excludes PIPEs that are only subject to a restriction on future issuances by the company to the extent such issuance would be integrated with the PIPE.*



Of the 47 PIPEs reviewed that included a restriction on future issuances by the company for a specified period following closing, the average length of the period was 186 days, and the median was 120 days. Another 11 PIPEs (23.4%) terminated the restriction upon the occurrence of a future event instead of the PIPE closing.

Preemptive Rights

Of the 108 PIPEs surveyed, 31 PIPEs (28.7%) included preemptive rights, with the percentage of PIPEs containing such rights generally consistent between technology and life sciences companies.



Of the 31 PIPEs surveyed with preemptive rights:

- 22 PIPEs (71.0%) granted participation rights equal to an investor's pro rata ownership percentage (assuming full exercise or conversion, in the case of warrants or convertible securities)
- Nine PIPEs (29.0%) granted participation rights up to a fixed percentage of the subsequent issuance, regardless of pro rata ownership

Appendix A: Technology and Life Sciences PIPE Issuers*

Technology

- AEye, Inc. (NasdaqCM) 09/15/2022
- Akoustis Technologies, Inc. (NasdaqCM) 06/09/2022
- American Virtual Cloud Technologies, Inc. (NasdaqCM) 04/14/2022
- Asana, Inc. (NYSE) 09/06/2022
- Ascent Solar Technologies, Inc. (NasdaqCM) 12/20/2022
- authID Inc. (NasdaqCM) 03/18/2022
- ChargePoint Holdings, Inc. (NYSE) 04/04/2022
- Color Star Technology Co., Ltd. (NasdaqCM) 01/21/2022
- Cyngn Inc. (NasdaqCM) 04/28/2022
- Dave Inc. (NasdaqGM) 03/21/2022
- Digital Ally, Inc. (NasdaqCM) 10/13/2022
- IronNet, Inc. (NYSE) 09/14/2022
- Ondas Holdings Inc. (NasdaqCM) 10/26/2022
- Ribbon Communications Inc. (NasdaqGS) 08/12/2022
- Rubicon Technologies, Inc. (NYSE) 12/16/2022
- Smith Micro Software, Inc. (NasdaqCM) 08/11/2022
- Soluna Holdings, Inc. (NasdaqCM) 02/22/2022
- Sonim Technologies, Inc. (NasdaqCM) 04/14/2022
- Stronghold Digital Mining, Inc. (NasdaqGM) 05/15/2022
- Unity Software Inc. (NYSE) 07/13/2022
- Upland Software, Inc. (NasdaqGM) 07/14/2022
- Zuora, Inc. (NYSE) 03/02/2022

** PIPE transactions valued below $10 million, equity lines of credit, and de-SPAC PIPEs were excluded from this report. Listed dates represent the PIPE announcement date.*

Appendix A: Technology and Life Sciences PIPE Issuers*

Life Sciences

- 2seventy Bio, Inc. (NasdaqGS) 03/15/2022
- 9 Meters Biopharma, Inc. (NasdaqCM) 06/30/2022
- Aadi Bioscience, Inc. (NasdaqCM) 09/22/2022
- Abeona Therapeutics Inc. (NasdaqCM) 04/29/2022; 11/03/2022
- Akebia Therapeutics, Inc. (NasdaqCM) 02/18/2022
- Annexon, Inc. (NasdaqGS) 07/07/2022
- Aravive, Inc. (NasdaqGS) 01/03/2022; 10/24/2022
- Armata Pharmaceuticals, Inc. (NYSE) 02/09/2022
- ATI Physical Therapy, Inc. (NYSE) 02/24/2022
- Axcella Health Inc. (NasdaqGM) 09/20/2022
- Biodesix, Inc. (NasdaqGM) 04/07/2022
- Biohaven Pharmaceutical Holding Company (NYSE) 11/09/2021**
- Blue Water Vaccines, Inc. (NasdaqCM) 08/09/2022
- Bright Green Corporation (NasdaqCM) 09/07/2022
- Bright Health Group, Inc. (NYSE) 12/06/2021**
- Celcuity Inc. (NasdaqCM) 05/15/2022
- Celularity Inc. (NasdaqCM) 05/18/2022
- Century Therapeutics, Inc. (NasdaqGS) 01/07/2022
- CNS Pharmaceuticals, Inc. (NasdaqCM) 01/05/2022
- Compass Therapeutics, Inc. (NasdaqCM) 11/02/2022
- Creative Medical Technology Holdings, Inc. (NasdaqCM) 04/29/2022
- Cue Biopharma, Inc. (NasdaqCM) 11/14/2022
- Eargo, Inc. (NasdaqGS) 06/24/2022
- Elevation Oncology, Inc. (NasdaqGS) 07/27/2022
- Entasis Therapeutics Holdings Inc. (NasdaqGM) 02/18/2022
- Entrada Therapeutics, Inc. (NasdaqGM) 12/07/2022
- Eterna Therapeutics Inc. (NasdaqGM) 03/07/2022
- Fennec Pharmaceuticals Inc. (NasdaqCM) 08/01/2022
- GeoVax Labs, Inc. (NasdaqCM) 01/14/2022; 05/25/2022
- Gossamer Bio, Inc. (NasdaqGS) 07/12/2022
- GreenLight Biosciences Holdings (NasdaqGM) 08/11/2022
- Gritstone Bio, Inc. (NasdaqGS) 10/24/2022
- Hepion Pharmaceuticals, Inc. (NasdaqCM) 11/04/2022
- Heron Therapeutics, Inc. (NasdaqCM) 08/08/2022
- Immunic, Inc. (NasdaqGS) 10/10/2022
- Kala Pharmaceuticals, Inc. (NasdaqGS) 11/28/2022
- Karyopharm Therapeutics Inc. (NasdaqGS) 12/05/2022
- Kymera Therapeutics, Inc. (NasdaqGM) 08/18/2022
- Lyra Therapeutics, Inc. (NasdaqGM) 04/07/2022
- Madrigal Pharmaceuticals, Inc. (NasdaqGS) 12/21/2022
- MeiraGTx Holdings plc (NasdaqGS) 11/09/2022
- NeuroBo Pharmaceuticals, Inc. (NasdaqCM) 09/14/2022
- NRx Pharmaceuticals, Inc. (NasdaqGM) 01/31/2022; 11/04/2022
- Nuvectis Pharma, Inc. (NasdaqCM) 07/27/2022
- Orgenesis Inc. (NasdaqCM) 03/30/2022
- Outlook Therapeutics, Inc. (NasdaqCM) 12/22/2022
- Palatin Technologies, Inc. (NYSE) 05/12/2022
- Precision BioSciences, Inc. (NasdaqGS) 06/15/2022
- Provention Bio, Inc. (NasdaqGS) 10/06/2022
- PTC Therapeutics, Inc. (NasdaqGS) 10/27/2022
- Puma Biotechnology, Inc. (NasdaqGS) 03/08/2022
- RAPT Therapeutics, Inc. (NasdaqGM) 05/24/2022
- Recursion Pharmaceuticals, Inc. (NasdaqGS) 10/24/2022
- Rezolute, Inc. (NasdaqCM) 05/01/2022
- Rockwell Medical, Inc. (NasdaqCM) 04/06/2022
- RVL Pharmaceuticals plc (NasdaqGS) 08/04/2022
- Sema4 Holdings Corp. (NasdaqGS) 01/14/2022
- Solid Biosciences Inc. (NasdaqGS) 09/29/2022
- Sonendo, Inc. (NYSE) 09/23/2022
- Spectrum Pharmaceuticals, Inc. (NasdaqGS) 01/04/2022
- SpringWorks Therapeutics, Inc. (NasdaqGS) 09/07/2022
- Standard BioTools Inc. (NasdaqGS) 01/23/2022
- Surgery Partners, Inc. (NasdaqGS) 11/21/2022
- Synaptogenix, Inc. (NasdaqCM) 11/17/2022
- Syros Pharmaceuticals, Inc. (NasdaqGS) 07/03/2022
- Taysha Gene Therapies, Inc. (NasdaqGS) 10/21/2022
- Tempest Therapeutics, Inc. (NasdaqCM) 04/26/2022
- The Oncology Institute, Inc. (NasdaqCM) 08/09/2022
- TherapeuticsMD, Inc. (NasdaqGS) 07/29/2022
- Tonix Pharmaceuticals Holding Corp. (NasdaqCM) 06/22/2022; 10/25/2022
- Trevi Therapeutics, Inc. (NasdaqGM) 04/06/2022
- Tscan Therapeutics, Inc. (NasdaqGM) 09/09/2022
- UpHealth, Inc. (NYSE) 08/12/2022
- Ventyx Biosciences, Inc. (NasdaqGS) 09/19/2022
- Verve Therapeutics, Inc. (NasdaqGS) 07/18/2022
- Vigil Neuroscience, Inc. (NasdaqGS) 08/12/2022
- Vir Biotechnology, Inc. (NasdaqGS) 01/13/2022
- Vor Biopharma Inc. (NasdaqGS) 12/07/2022
- vTv Therapeutics Inc. (NasdaqCM) 05/31/2022; 07/22/2022
- Xeris Biopharma Holdings, Inc. (NasdaqGS) 01/02/2022

** PIPE transactions valued below $10 million, equity lines of credit, and de-SPAC PIPEs were excluded from this report. Listed dates represent the PIPE announcement date.*

*** Indicates PIPEs that were announced in 2021 but closed in 2022.*

About Wilson Sonsini

Wilson Sonsini is the premier firm advising technology, life sciences, and other high-growth companies seeking to raise capital through the issuance of equity, equity-linked, and debt financial instruments. The firm also provides counsel to leading private equity and growth equity funds, as well as other financial sponsors, in buyout and investment transactions. Wilson Sonsini is consistently ranked by *Bloomberg*, *Thomson Reuters*, and *CapitalIQ* as a leading advisor to companies and underwriters based on the number of completed IPOs and equity and equity-linked offerings.

Visit Wilson Sonsini's website for more information about the firm's capital markets practice.

For More Information

For more information on the preceding findings or any related matters, please contact your regular Wilson Sonsini attorney or any member of the firm's capital markets practice.

Disclaimer

Wilson Sonsini has 19 offices in technology and business hubs worldwide. For more information, visit wsgr.com/offices.

WILSON SONSINI

650 Page Mill Road, Palo Alto, California 94304-1050 | Phone 650-493-9300 | Fax 650-493-6811 | www.wsgr.com