



2019 Mid-Year Technology and Life Sciences IPO Report

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Introduction



Wilson Sonsini Goodrich & Rosati's 2019 Mid-Year Technology and Life Sciences IPO Report presents analysis related to the pricing of 49 initial public offerings completed by U.S.-based technology and life sciences issuers between January 1 and June 30, 2019. The report includes IPO filing, pricing, and value statistics for both sectors; governance and board of director details; ownership and structure factors; defensive measure data; and other matters. WSGR's report shows that, at the mid-point of 2019, IPO totals were similar to those at the mid-point of 2018, despite the U.S. government shutdown that substantially slowed IPOs in early 2019. IPO totals during the second quarters of both 2018 and 2019 were significantly higher than the first quarter totals for each year.

Technology

Sixteen technology companies priced IPOs during the first half of 2019. Interactive media and services, and internet and e-commerce issuers led other technology sub-sectors, with six IPOs during Q1 and Q2. Application software and transportation technology issuers followed with two in each sub-sector during the same period.

Of the 16 tech IPOs, 10 had a total deal value exceeding \$250 million. IPOs for Lyft, Pinterest, and Uber were the three largest technology IPOs.

Life Sciences

Thirty-three life sciences companies priced IPOs during the first half of 2019—twice the total number of technology issuers during the same period. Of the 33 life sciences IPOs, 20 were by biotech companies, which was more than twice the number of medical device company issuers during the period.

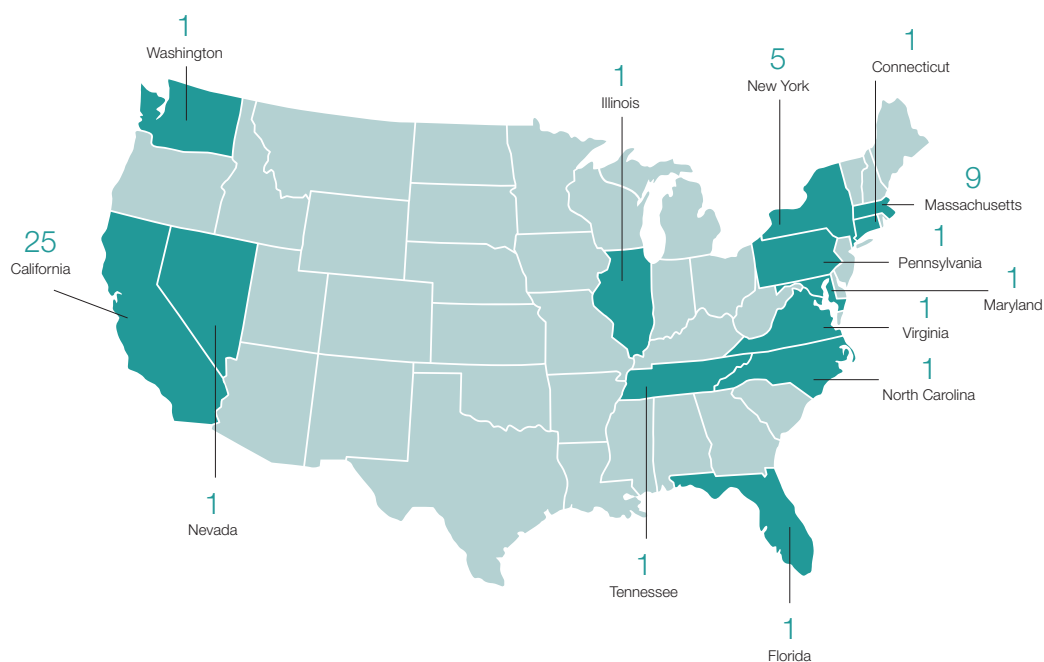
Consistent with prior periods, despite having a larger number of IPOs, deal value sizes for life sciences companies were generally much lower than for tech issuers. Although five life sciences deals totaled more than \$250 million, 19 life sciences IPOs had total deal sizes below \$100 million.

We would like to thank WSGR Partner Lauren Lichtblau and Associates Andrew Gillman and Brianna Murray for their research and editorial input for this edition of the firm's IPO Report.

Please feel free to share your comments or questions about IPOs by contacting Michael Nordtvedt (mnordtvedt@wsgr.com), Allison Spinner (aspinner@wsgr.com), or any Wilson Sonsini Goodrich & Rosati corporate securities partner.

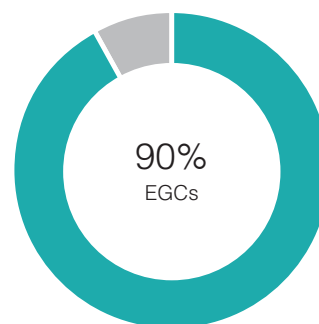
Headquarters

The map below shows the headquarters location for the 49 companies reviewed in this report.



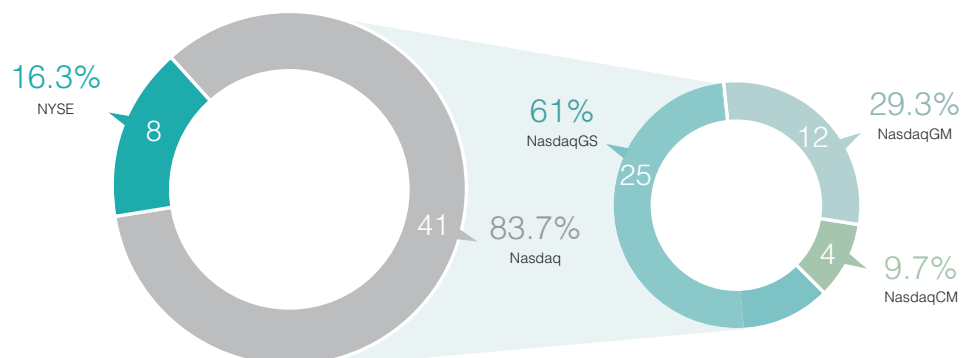
Company Type

Out of the 49 companies surveyed, 44 were emerging growth companies (EGCs).

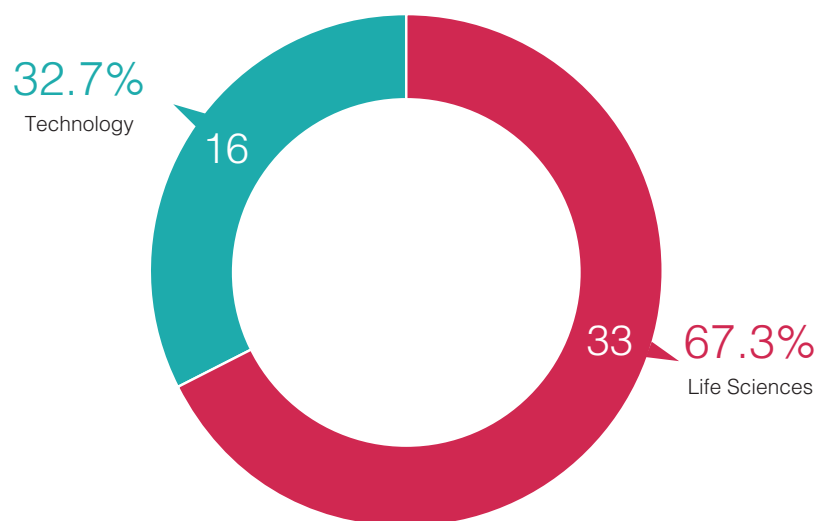


Exchange

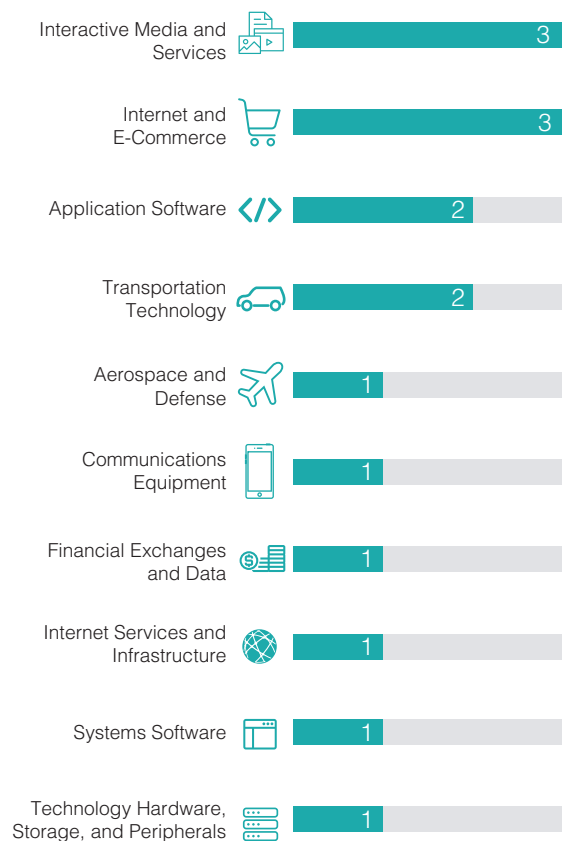
Out of the 49 companies surveyed, 41 listed on Nasdaq, representing 83.7% of companies, while eight listed on the NYSE, representing 16.3% of companies surveyed.



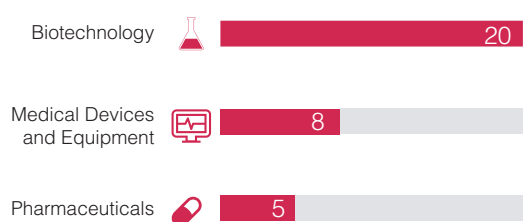
Technology vs. Life Sciences



Technology Sector Breakdown

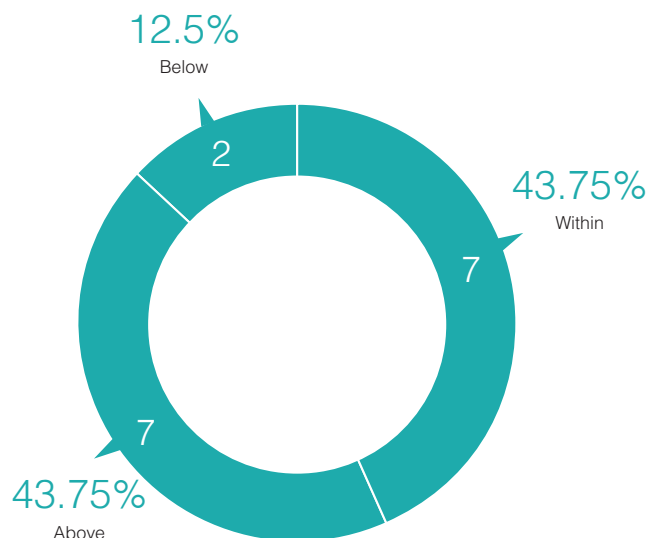


Life Sciences Sector Breakdown

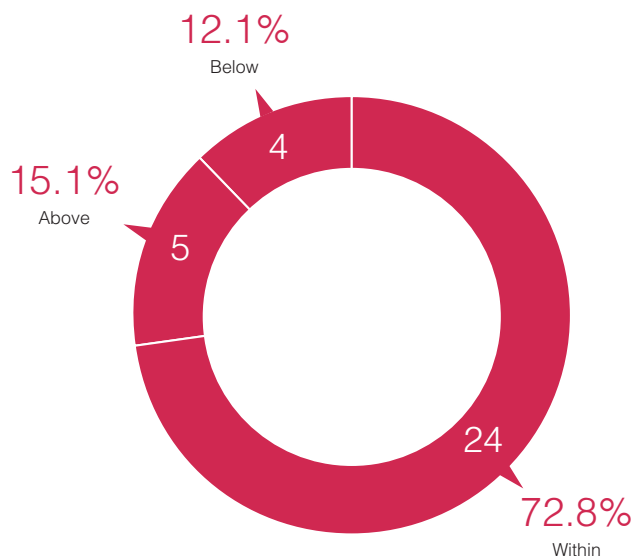


Offer Price and First Day Close Comparison – Technology vs. Life Sciences

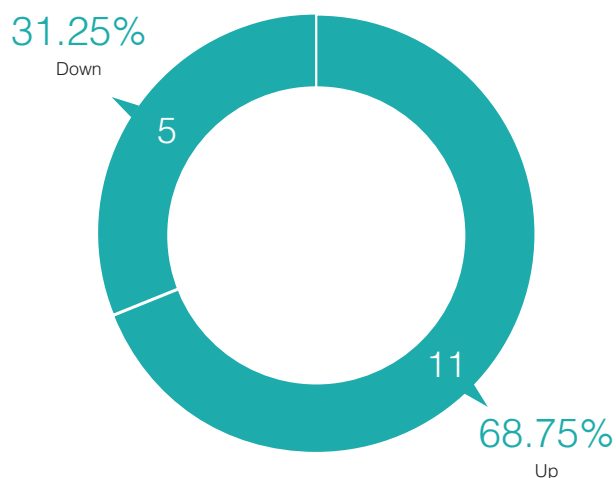
Technology Offer Price vs. Initial Price Range



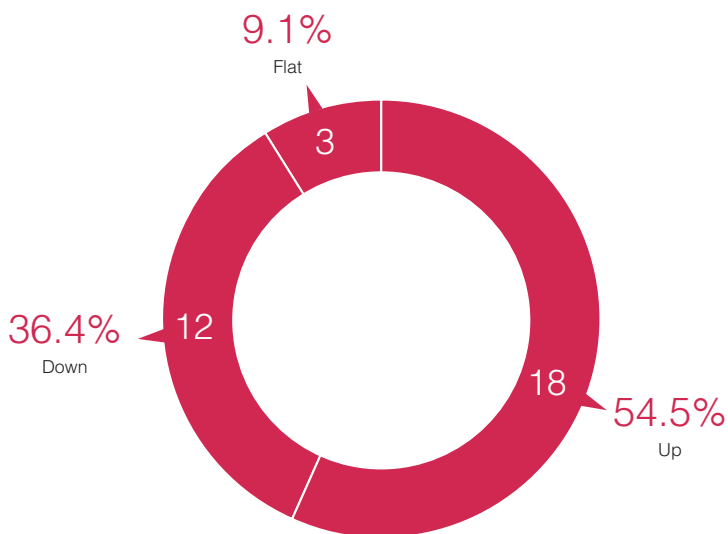
Life Sciences Offer Price vs. Initial Price Range



Technology First Day Close vs. Offer Price

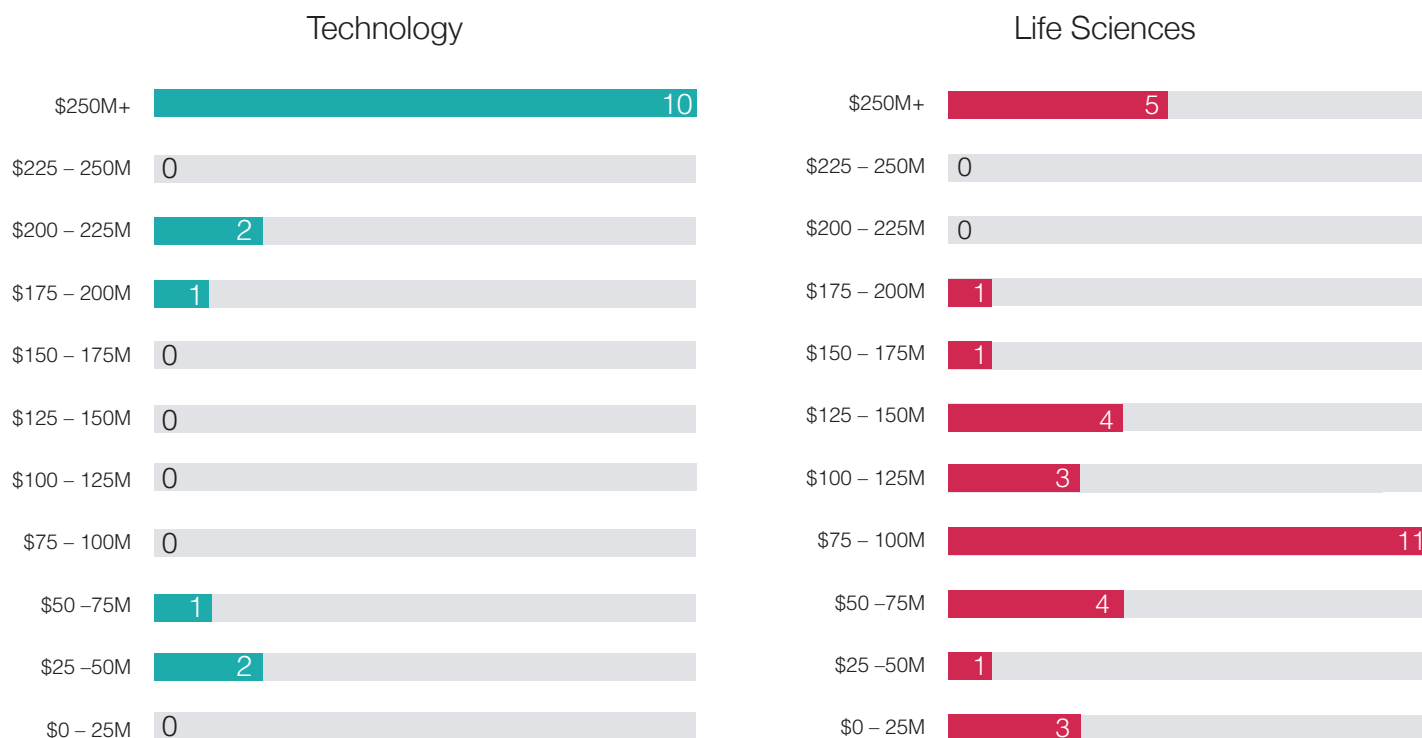


Life Sciences First Day Close vs. Offer Price

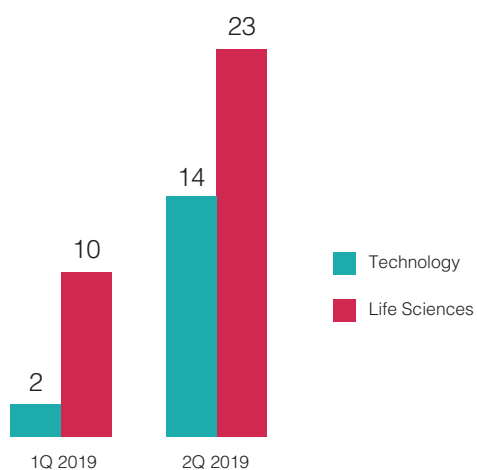


Deal Size

Size Distribution



IPO Distribution by Quarter



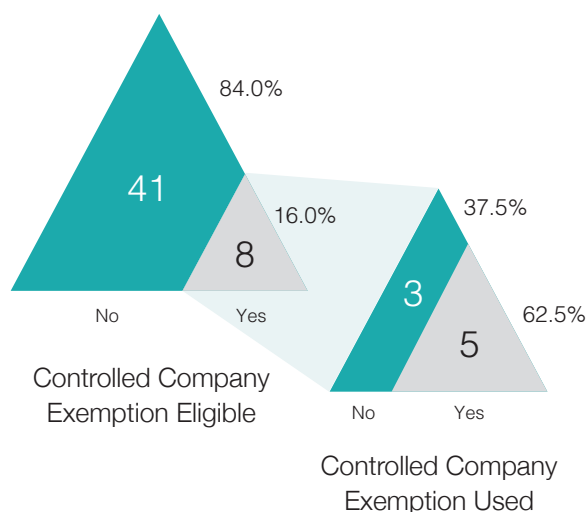
Direct Listing

A direct listing is an alternative to a traditional IPO in which outstanding shares are listed on a stock exchange without an underwritten offering. Existing stockholders may sell their shares immediately, but are not obligated to do so. Direct listing is still a relatively new concept. Slack Technologies, Inc. completed a direct listing in June 2019.

Board of Directors

Directors and Independence

Using data obtained from final IPO prospectuses, we examined information regarding the size of the board of directors, director independence, whether the CEO and board chairperson roles were combined, the existence of lead independent directors in companies where the CEO and board chairperson roles were combined, and the number of companies relying on exemptions from compliance with corporate governance requirements.



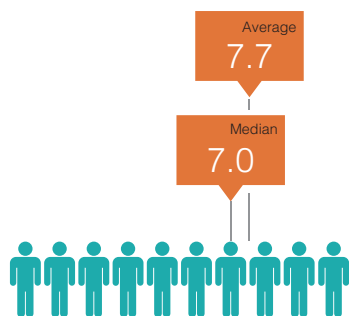
Controlled Company Exemption

The listing standards of both the NYSE and Nasdaq exempt a controlled company from certain corporate governance requirements, including those relating to the independence of the board of directors. Both the NYSE and Nasdaq define a controlled company as “a company of which more than 50% of the voting power for the election of directors is held by an individual, a group, or another company.”

Eight (16%) of the companies were controlled company exemption eligible. Of those companies, five (62.5%) used the controlled company exemption, while three (37.5%) did not.

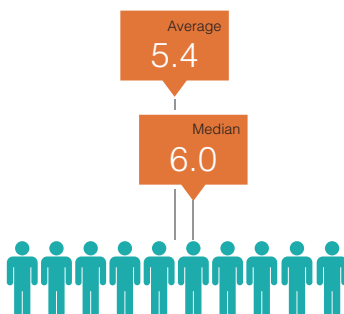
Board Size and Director Independence

Of the 49 companies considered, the average number of directors on the board at pricing was 7.7, while the median was 7.



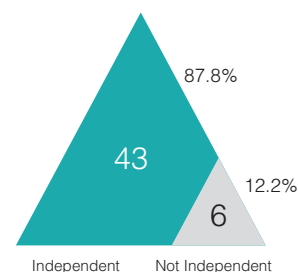
Total Number of Board Members

Of the 49 companies considered, the average number of independent directors was 5.4, and the median was 6.



Number of Independent Board Members

Of the 49 companies considered, 43 (88%) issuers had a majority of independent directors on the board at pricing.



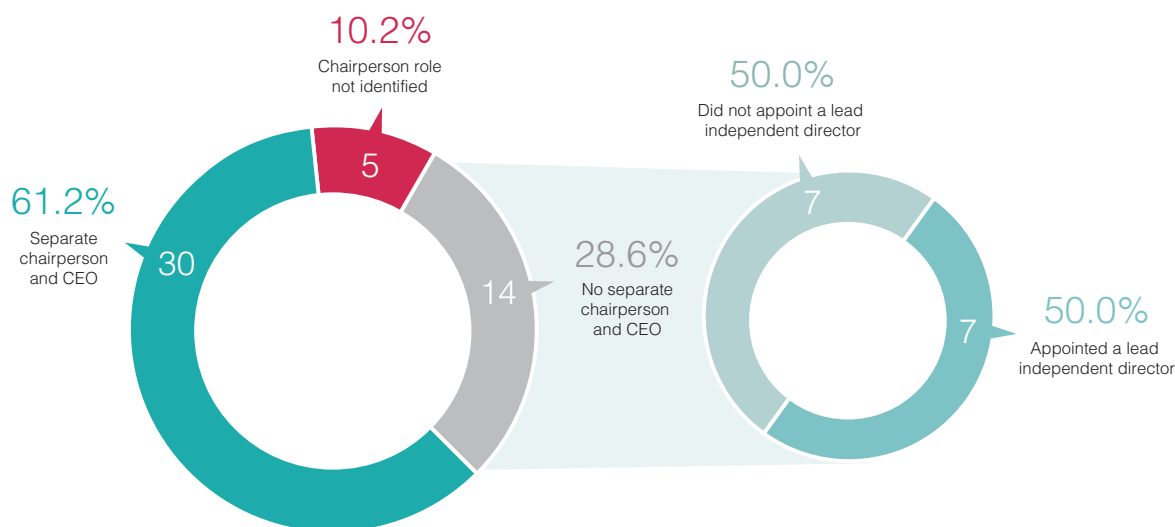
Majority of Board of Directors/Independence

Board Chairpersons and Lead Directors

Securities and Exchange Commission rules do not require companies to have separate board chairperson and CEO positions. As such, companies are not required to disclose in their IPO prospectus whether or not the board chairperson and CEO positions are separated, although many choose to do so. As an alternative to separating the board chairperson and CEO positions, some companies with a board chairperson who is also CEO appoint a lead independent director to, among other things, act as the principal liaison between independent directors and the CEO.

Separation of Chairperson and CEO; Lead Independent Director

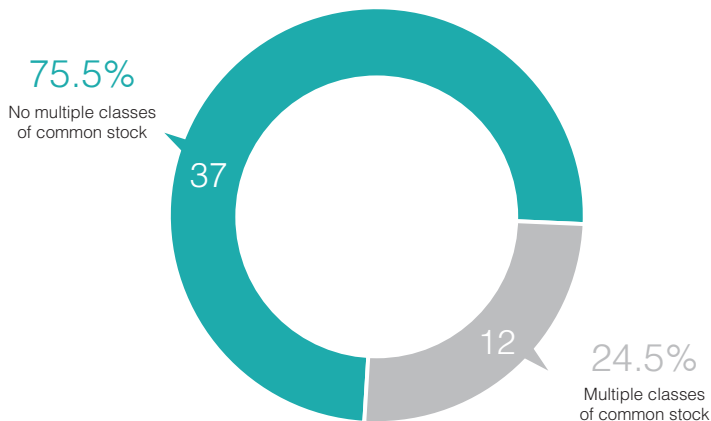
Of the 49 companies considered, 30 companies (61.2%) had a separate chairperson and CEO, while 14 (28.6%) combined the chairperson and CEO role. Five issuers (10.2%) did not identify a chairperson role. Of the 14 companies that combined the chairperson and CEO role, seven companies (50%) appointed a lead independent director, while seven (50%) did not.



Ownership and Structure Factors

Classes of Common Stock

Of the 49 companies considered, 12 companies (24.5%) had multiple classes of common stock. Of those 12, 9 were technology companies. Eleven of the 12 companies implemented dual-class common stock. One implemented multi-class common stock.









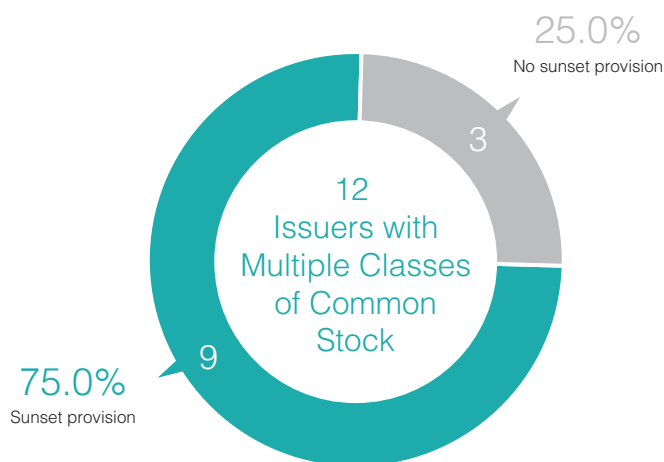
Sunset Provisions

Many companies that implement a dual or multi-class structure include a sunset provision in the charter where the high-vote shares fall away upon the occurrence of a specified condition, such as the date on which all high-vote shares represent less than a certain percentage of all shares outstanding, after a specified time period, or upon the occurrence of a specific event, such as the death of a founder. The most common approach is that all high-vote shares automatically convert to low-vote shares at such time that they represent less than a certain percentage of all shares outstanding. A time-based fall away is also a possibility, though less common.

Of the 12 companies that had multiple classes of common stock, nine companies (75%) had a sunset provision.

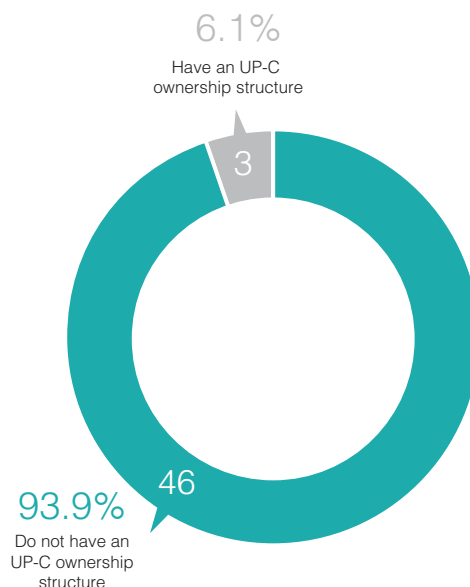
Of the nine companies that had a sunset provision:

-  3 were determined by percentage
-  2 were determined by event or percentage
-  1 was determined by time, event, or percentage
-  1 was determined by time or percentage
-  1 was determined by event or time
-  1 was determined by event only



UP-C Structure

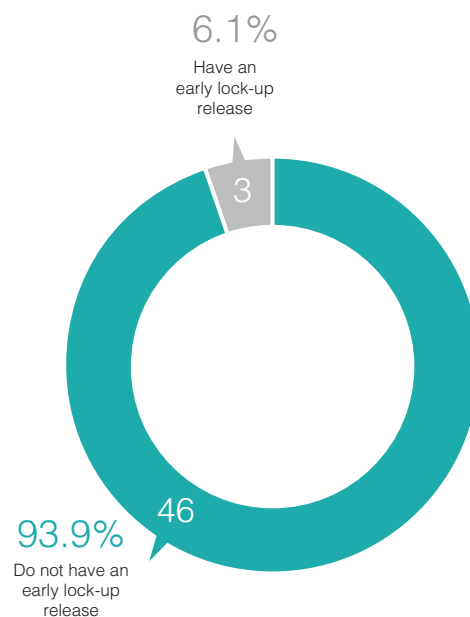
An “UP-C” structure is an ownership structure in which investors hold stock in a publicly traded corporation that in turn owns interests in a partnership or LLC in which pre-IPO owners have a direct interest. This structure permits owners of private businesses taxed on a pass-through basis to continue to retain this treatment after an IPO. It is increasingly common in private equity-backed companies because it maintains many of the tax benefits while giving the pre-IPO holders liquidity by exchanging partnership or LLC interests for shares of common stock of the publicly traded company.



Early Lock-Up Release

The vast majority of lock-up agreements limit sales by pre-IPO stockholders for 180 days after an IPO. However, the banks and companies involved frequently discuss permitting early sales, which are often allowed. Some companies have successfully negotiated for more transparent early release provisions in the lock-up agreement itself, though that is a rare occurrence.

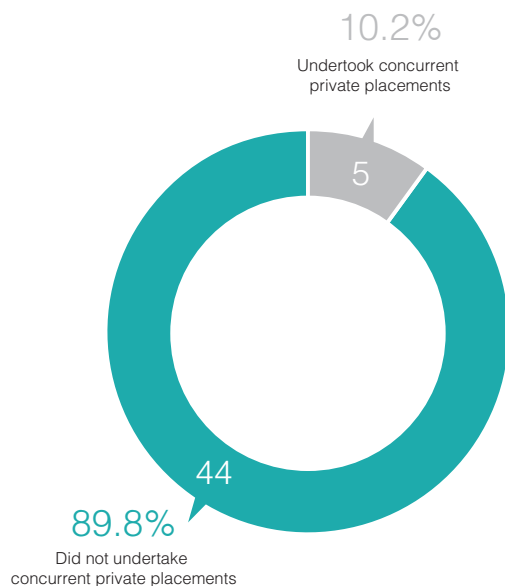
One type of early release provision is tied to stock price performance. That is, after a certain period of time, stockholders may sell a certain percentage of shares if the stock price meets a specified performance target. Some companies assert that this type of staggered release provision relieves the pressure of a “straight cliff” after the 180-day lock-up period. Another type of early release provision is an “anti-front running provision.” Under this type, if the lock-up is set to expire during a quarterly blackout period, the expiration date is accelerated so that all parties can sell during an open window. Otherwise, non-insider stockholders are able to sell at a time when affiliates and employees are still prohibited from doing so under the company’s insider-trading policy.



Concurrent Private Placements and Indications of Interest

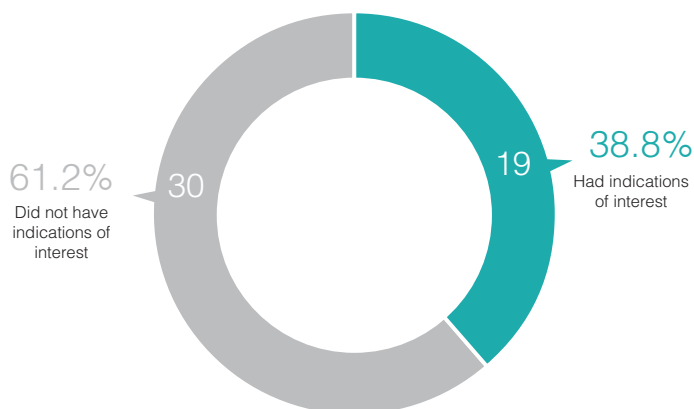
Concurrent Private Placements

Because the IPO process can take many months, a company may opt to pursue a private offering (which does not require registration with the SEC) on the same schedule as the IPO. In addition to raising capital, a company can use a concurrent private placement structure to enhance its relationships with strategic partners. However, concurrent private placements must be structured carefully to comply with the SEC's integration and general solicitation guidance.



Indications of Interest

Before an IPO, a current investor may express an indication of interest in participating in the offering. It demonstrates a conditional, non-binding interest in buying shares in the offering directly from the underwriters and is typically reflected on the cover page of the red herring. This is often seen as a marketing tool to demonstrate to the investing public that existing stockholders already have indicated an interest in purchasing shares in advance of the roadshow.



Total IPO Deal Size (Gross)

	Low	High	Median	Average
Technology	\$24,999,997.00	\$8,100,000,000.00	\$425,999,750.00	\$1,076,664,641.50
Life Sciences	\$5,000,000.00	\$2,898,000,000.00	\$91,040,000.00	\$206,856,925.52
All Values	\$5,000,000.00	\$8,100,000,000.00	\$124,950,000.00	\$490,875,771.55

Total Deal Size (Including Private Placement)

	Low	High	Median	Average
Technology	\$24,999,997.00	\$8,600,000,040.00	\$425,999,750.00	\$1,114,164,642.25
Life Sciences	\$5,000,000.00	\$2,898,000,000.00	\$91,040,000.00	\$209,612,893.03
All Values	\$5,000,000.00	\$8,600,000,040.00	\$125,001,000.00	\$504,976,729.51

Amount of Private Placement

	Low	High	Median	Average
Technology	\$99,999,972.00	\$500,000,040.00	\$300,000,006.00	\$300,000,006.00
Life Sciences	\$10,000,000.00	\$65,946,928.00	\$15,000,000.00	\$30,315,642.67
All Values	\$10,000,000.00	\$500,000,040.00	\$65,946,928.00	\$138,189,388.00

% of Private Placement of Total Deal Size

	Low	High	Median	Average
Technology	5.8%	11.7%	8.8%	8.8%
Life Sciences	9.4%	38.2%	21.4%	23.0%
All Values	5.8%	38.2%	11.7%	17.3%

Amount of Indication of Interest

	Low	High	Median	Average
Technology	\$18,000,000.00	\$18,000,000.00	\$18,000,000.00	\$18,000,000.00
Life Sciences	\$20,000,000.00	\$100,000,000.00	\$31,000,000.00	\$43,028,610.17
All Values	\$18,000,000.00	\$100,000,000.00	\$30,000,000.00	\$41,711,314.89

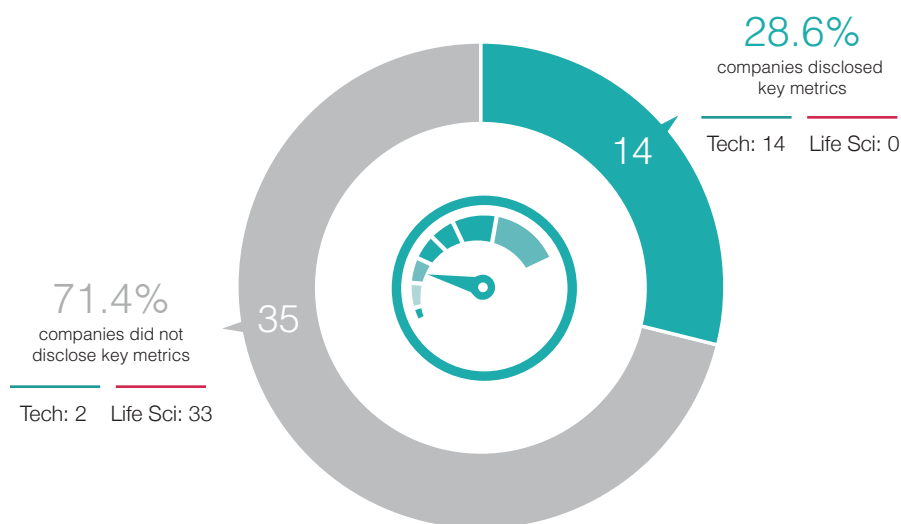
% of Indication of Interest of Total Deal Size

	Low	High	Median	Average
Technology	25.9%	25.9%	25.9%	25.9%
Life Sciences	2.4%	65.5%	40.3%	39.9%
All Values	2.4%	65.5%	40.0%	39.2%

Key Metrics/Non-GAAP Financial Measures






In addition to presenting financial results in accordance with generally accepted accounting principles (GAAP), many companies track and disclose certain key metrics and non-GAAP financial measures, such as EBITDA, adjusted EBITDA, and free cash flow.

Key Metrics



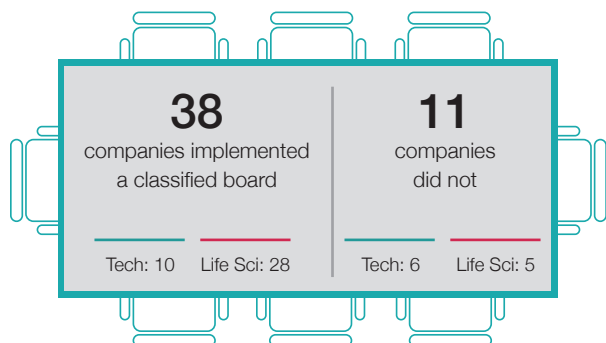
Non-GAAP Financial Measures

Of the 49 companies considered:

- 
 14 issuers (28.8%) disclosed EBITDA and/or adjusted EBITDA
 Tech: 11 Life Sci: 3
- 
 4 issuers (8.2%) disclosed free cash flow
 Tech: 4 Life Sci: 0
- 
 3 issuers (6.1%) disclosed adjusted net income
 Tech: 1 Life Sci: 2
- 
 2 issuers (4.1%) disclosed net revenue
 Tech: 2 Life Sci: 0
- 
 1 issuer (2.0%) disclosed non-GAAP gross margin
 Tech: 1 Life Sci: 0

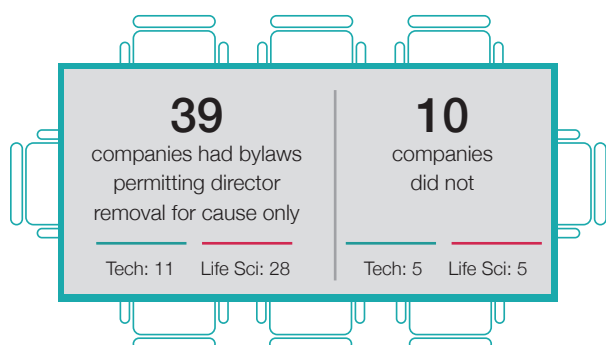
Defensive Measures

Based on data obtained from final IPO prospectuses, bylaws, certificates of incorporation, and other documents filed with the SEC at the time of the IPO, we reviewed defensive measures adopted by newly listed companies to prevent hostile takeovers. Controlled companies are not excluded from this section. Of the 49 companies considered:



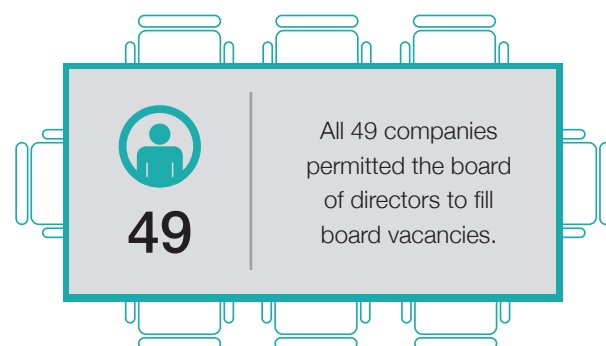
Classified Boards

For companies implementing a classified board in connection with the IPO, director elections will be staggered over a three-year period after the IPO, with approximately one-third of the directors subject to re-election each year.



Director Removal for Cause Only

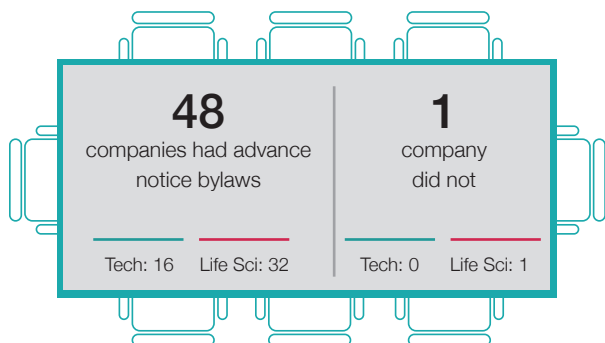
According to Delaware law, examples that constitute cause for removal of directors include: malfeasance in office, gross misconduct or neglect, false or fraudulent misrepresentation inducing the director's appointment, willful conversion of corporate funds, breach of the obligation of full disclosure, incompetency, gross inefficiency, or moral turpitude.



Board Authority to Fill Vacancies on the Board

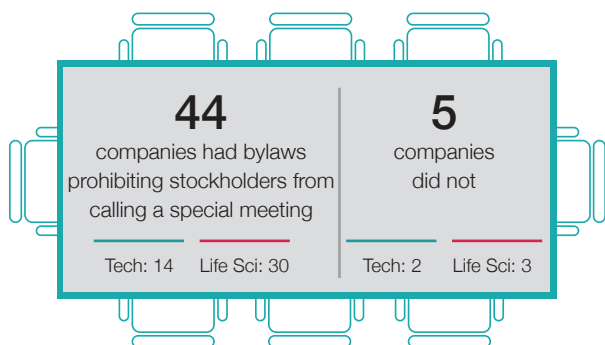
The typical provision in a company's certificate of incorporation will provide the board of directors, even if less than a quorum, with the exclusive ability to fill vacancies on the board, including new director positions created through an increase in the authorized number of directors.

Defensive Measures



Advance Notice Bylaws

Advance notice bylaws set forth certain requirements that a stockholder must meet in order to bring a matter of business before a stockholder meeting or nominate a director for election.



Stockholder Ability to Call Special Meeting

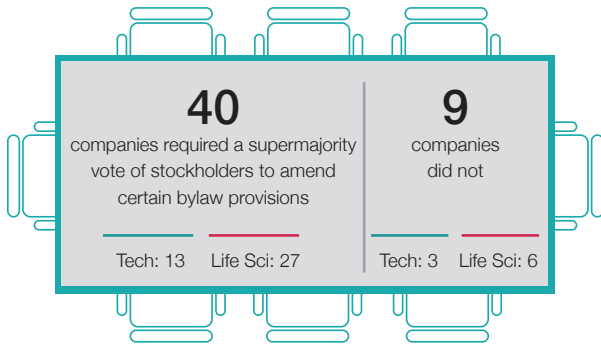
The typical provision in a company's bylaws provides that a special meeting may only be called by the chairperson of the board, the chief executive officer, or the president (in the absence of a chief executive officer).



Shareholder Rights (Poison Pills)

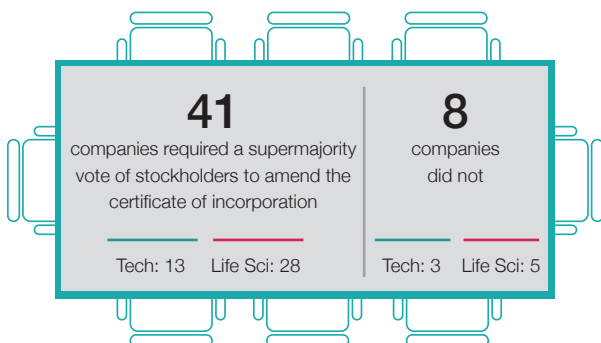
A shareholder rights plan, also known as a "poison pill," acts as a defensive measure against hostile takeovers by making a company's stock less attractive to an acquirer.

Defensive Measures



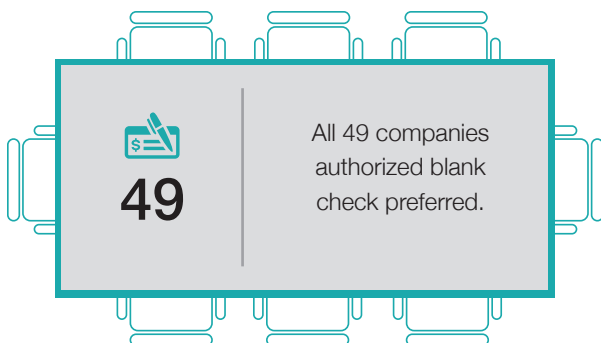
Supermajority Stockholder Vote Required to Amend Bylaws

More than a simple majority of the issuer's outstanding stock is required to amend this governing document.



Supermajority Stockholder Vote Required to Amend Certificate of Incorporation

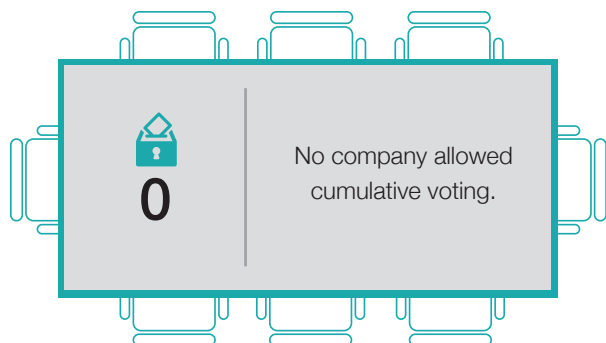
More than a simple majority of the issuer's outstanding stock is required to amend this governing document.



Blank Check Preferred

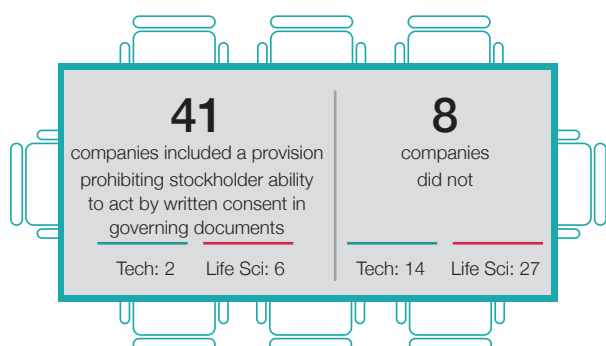
A certificate of incorporation authorizing blank check preferred allows the board of directors, without further stockholder approval, to issue preferred stock in one or more series and determine the rights, preferences, and privileges of the preferred stock issued (e.g., rights to voting, dividends, redemption, etc.).

Defensive Measures



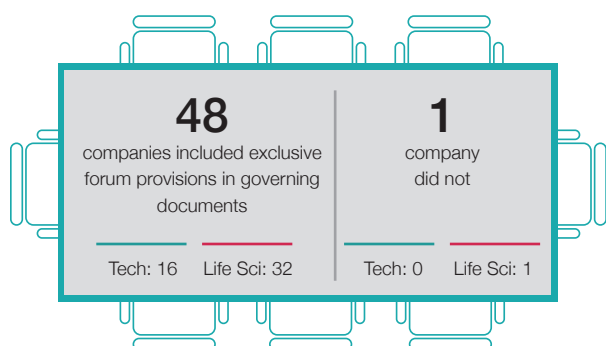
Cumulative Voting

Cumulative voting is a method of voting for a company's directors. Each stockholder holds a number of votes equal to the number of shares owned by the stockholder, multiplied by the number of directors to be elected.



Stockholder Ability to Act by Written Consent

If companies do not permit stockholders to act by written consent, any action requiring stockholder approval must occur at a stockholder meeting.



Exclusive Forum Provisions

Companies may include exclusive forum provisions in their governing documents requiring that certain types of litigation (such as derivative suits brought on behalf of the company, claims of breach of fiduciary duty, claims arising pursuant to any provision of the Delaware General Corporation Law, or claims governed by the internal affairs doctrine) be brought solely and exclusively in the Court of Chancery of the State of Delaware (or another specified forum).

Filing Information

Technology Issuers

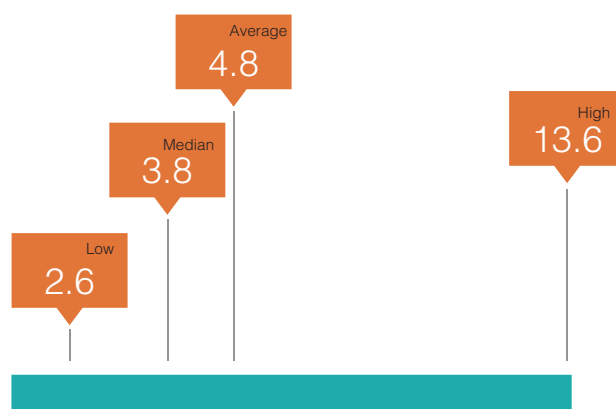
Number of Years from Inception to IPO*



*Excludes one company with a 75 year history.

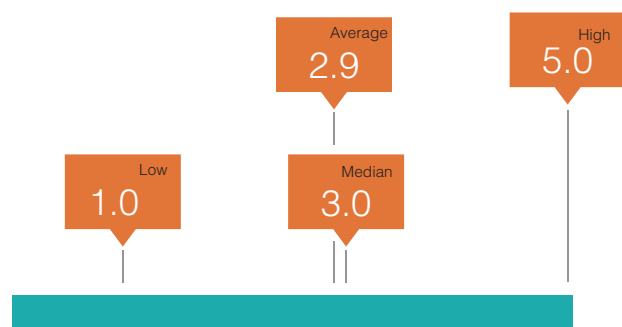
Months in Registration

Represents the number of months between the initial submission or filing of the registration statement and the effective date of the registration statement.



Number of Confidential Submissions

Represents the number of confidential draft registration statements submitted to the SEC before the public filing of the registration statement.



Days Between Public Filing and Roadshow

Represents the number of days between the public filing of the registration statement and the filing of the preliminary prospectus with the SEC containing a price range, which typically coincides with the start of the roadshow, where the company's executive management will meet with potential investors to gauge interest in the offering. SEC rules require a minimum of 15 days between these two events.



Filing Information

Life Sciences Issuers

Number of Years from Inception to IPO*



*Excludes one company with a 115 year history.

Months in Registration

Represents the number of months between the initial submission or filing of the registration statement and the effective date of the registration statement.



Number of Confidential Submissions

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Days Between Public Filing and Roadshow

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IPO Fees and Expenses

Total Legal Fees

	Low	High	Median	Average
	\$176,000	\$9,300,000	\$1,600,000	\$2,017,213
Technology	\$176,000	\$9,300,000	\$1,900,000	\$2,744,875
Life Sciences	\$200,000	\$4,000,000	\$1,550,000	\$1,641,645

Total Underwriter Compensation

	Low	High	Median	Average
	\$450,000	\$106,200,000	\$8,746,500	\$18,038,213
Technology	\$1,750,000	\$106,200,000	\$24,309,986.50	\$33,761,880
Life Sciences	\$450,000	\$79,695,000	\$6,372,800	\$10,414,617

Total Accounting Fees

	Low	High	Median	Average
	\$40,000	\$5,000,000	\$944,858	\$1,200,590
Technology	\$126,000	\$5,000,000	\$1,800,000	\$1,781,625
Life Sciences	\$40,000	\$4,100,000	\$821,550	\$910,072

Printing Fees

	Low	High	Median	Average
	\$3,000	\$1,500,000	\$310,000	\$354,062
Technology	\$175,000	\$1,500,000	\$372,500	\$454,937
Life Sciences	\$3,000	\$700,000	\$300,000	\$303,624

About Wilson Sonsini Goodrich & Rosati

Wilson Sonsini Goodrich & Rosati offers a broad range of services and legal disciplines focused on serving the principal challenges faced by the management and boards of directors of business enterprises. Consistently ranked among the top corporate law firms nationwide by *Corporate Board Member* and other trusted sources, WSGR currently represents more than 300 public and 3,000 private companies across a diverse range of industries in the U.S. and abroad. The firm is consistently ranked No. 1 by Dow Jones VentureSource for the number of issuer-side venture financing deals handled each year. The firm also is consistently ranked by Bloomberg and Thomson Reuters as a leading adviser for both issuer-side and underwriter-side U.S. IPOs. According to *IPO Vital Signs*, WSGR has represented more U.S. companies in connection with their IPOs than any other law firm since 1998. Since January 1, 2010, WSGR has also been the leading legal advisor to issuers in IPOs valued at \$50 million or higher that involve U.S. technology companies trading on major U.S. stock exchanges, according to CapitalIQ.

For More Information

For more information on the preceding findings or any related matters, please contact your regular Wilson Sonsini Goodrich & Rosati attorney, or any member of the firm's corporate securities practice.

Disclaimer

This communication is provided as a service to our clients and friends and is for informational purposes only. It is not intended to create an attorney-client relationship or constitute an advertisement, a solicitation, or professional advice as to any particular situation.

Appendix A

IT/Technology

- Cambium Networks Corp. (NasdaqGM:CMBM) 06/25/2019
- Chewy, Inc. (NYSE:CHWY) 06/13/2019
- CrowdStrike Holdings, Inc. (NasdaqGS:CRWD) 06/11/2019
- Fastly, Inc. (NYSE:FSLY) 05/16/2019
- Lyft, Inc. (NasdaqGS:LYFT) 03/28/2019
- PagerDuty, Inc. (NYSE:PD) 04/10/2019
- Parsons Corporation (NYSE:PSN) 05/07/2019
- Pinterest, Inc. (NYSE:PINS) 04/17/2019
- Revolve Group, Inc. (NYSE:RVLV) 06/06/2019
- SciPlay Corporation (NasdaqGS:SCPL) 05/02/2019
- Sonim Technologies, Inc. (NasdaqGM:SONM) 05/09/2019
- Super League Gaming, Inc. (NasdaqCM:SLGG) 02/25/2019
- The RealReal, Inc. (NasdaqGS:REAL) 06/27/2019
- Tradeweb Markets Inc. (NasdaqGS:TW) 04/03/2019
- Uber Technologies, Inc. (NYSE:UBER) 05/09/2019
- Zoom Video Communications, Inc. (NasdaqGS:ZM) 04/17/2019

Life Sciences

- Adaptive Biotechnologies Corp. (NasdaqGS:ADPT) 06/26/2019
- Akero Therapeutics, Inc. (NasdaqGS:AKRO) 06/19/2019
- Alector, Inc. (NasdaqGS:ALEC) 02/06/2019
- Applied Therapeutics, Inc. (NasdaqGM:APLT) 05/13/2019
- Atreca, Inc. (NasdaqGS:BCEL) 06/19/2019
- Avantor, Inc. (NYSE:AVTR) 05/16/2019
- Avedro, Inc. (NasdaqGM:AVDR) 02/13/2019
- Axcella Health Inc. (NasdaqGM:AXLA) 05/08/2019
- BridgeBio Pharma, Inc. (NasdaqGS:BBIO) 06/26/2019
- Change Healthcare Inc. (NasdaqGS:CHNG) 06/26/2019
- Cortexyme, Inc. (NasdaqGS:CRTX) 05/08/2019
- Gossamer Bio, Inc. (NasdaqGS:GOSS) 02/07/2019
- Guardion Health Sciences, Inc. (NasdaqCM:GHSI) 04/05/2019
- Harpoon Therapeutics, Inc. (NasdaqGS:HARP) 02/07/2019
- HOOKIPA Pharma Inc. (NasdaqGS:HOOK) 04/17/2019
- Hoth Therapeutics, Inc. (NasdaqCM:HOTH) 02/14/2019
- IDEAYA Biosciences, Inc. (NasdaqGS:IDYA) 05/22/2019
- INmune Bio Inc. (NasdaqCM:INMB) 02/01/2019
- Kaleido BioSciences, Inc. (NasdaqGS:KLDO) 02/27/2019
- Karuna Therapeutics, Inc. (NasdaqGM:KRTX) 06/27/2019
- Morphic Holding, Inc. (NasdaqGM:MORF) 06/26/2019
- NextCure, Inc. (NasdaqGS:NXTC) 05/08/2019
- NGM Biopharmaceuticals, Inc. (NasdaqGS:NGM) 04/03/2019
- Personalis, Inc. (NasdaqGM:PSNL) 06/19/2019
- Precision BioSciences, Inc. (NasdaqGS:DTIL) 03/27/2019
- Prevail Therapeutics Inc. (NasdaqGM:PRVL) 06/19/2019
- ShockWave Medical, Inc. (NasdaqGS:SWAV) 03/06/2019
- Silk Road Medical, Inc. (NasdaqGM:SILK) 04/03/2019
- Stoke Therapeutics, Inc. (NasdaqGS:STOK) 06/18/2019
- TCR2 Therapeutics Inc. (NasdaqGS:TCRR) 02/13/2019
- TransMedics Group, Inc. (NasdaqGM:TMDX) 05/01/2019
- Trevi Therapeutics, Inc. (NasdaqGM:TRVI) 05/07/2019
- Turning Point Therapeutics, Inc. (NasdaqGS:TPTX) 04/16/2019



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