



2017 TECHNOLOGY AND LIFE SCIENCES IPO REPORT

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Introduction



Wilson Sonsini Goodrich & Rosati's *2017 Technology and Life Sciences IPO Report* sets forth data related to 61 U.S.-based technology and life sciences initial public offerings that priced between January 1 and December 15, 2017. The report reflects what eventually proved to be a moderately active year for tech and life sciences issuers. However, it took all four quarters to reach a higher number of IPOs than the 49 offerings that were included in WSGR's 2016 IPO Report. Like the previous year, technology and life sciences IPOs were off to a slow start in 2017, with only six such offerings completed in the first quarter. Activity accelerated in Q2 with 20 IPOs before dropping off sharply in Q3, even though there were still 10 IPOs during the quarter, nine of which were in the life sciences sector. The year ended with a flurry, with 25 tech and life sciences IPOs pricing during Q4, compared to only eight such offerings during the last quarter of 2016.

Based on market cap, Snap's IPO in March was the largest technology-side IPO in 2017. Meanwhile, as reported in several news articles, Denali Therapeutics' \$250 million IPO was the largest biotech IPO of the year based on market cap, rounding out an active year for life sciences issuers.

Technology

Twenty-eight technology companies priced IPOs as of December 15, 2017—nearly twice the number of offerings in that sector compared to 2016. Internet software and services companies led other technology sub-sectors by a wide margin with 11 IPOs, although there were a steady stream of IPOs from Internet retailers, application software, and systems software concerns. Collectively, the four sub-sectors accounted for more than 70 percent of the technology IPOs, with the balance of offerings coming from the semiconductor, equipment, and consumer electronics sectors. Technology IPOs generated more total value than life sciences offerings during 2017, and comparing totals from this year's report to totals from WSGR's 2016 IPO Report, there were a greater number of tech offerings raising larger dollar amounts. In 2016, there was only one tech-side IPO that generated more than \$200 million. In 2017, there were nine that did so, with three eclipsing the \$250 million mark.

With a cluster of IPO filings from both tech and life sciences companies springing forth during the last quarter of 2017, combined with a sizeable pipeline of IPOs that were filed earlier in the year, many expect to see sustained capital markets activity in early 2018.

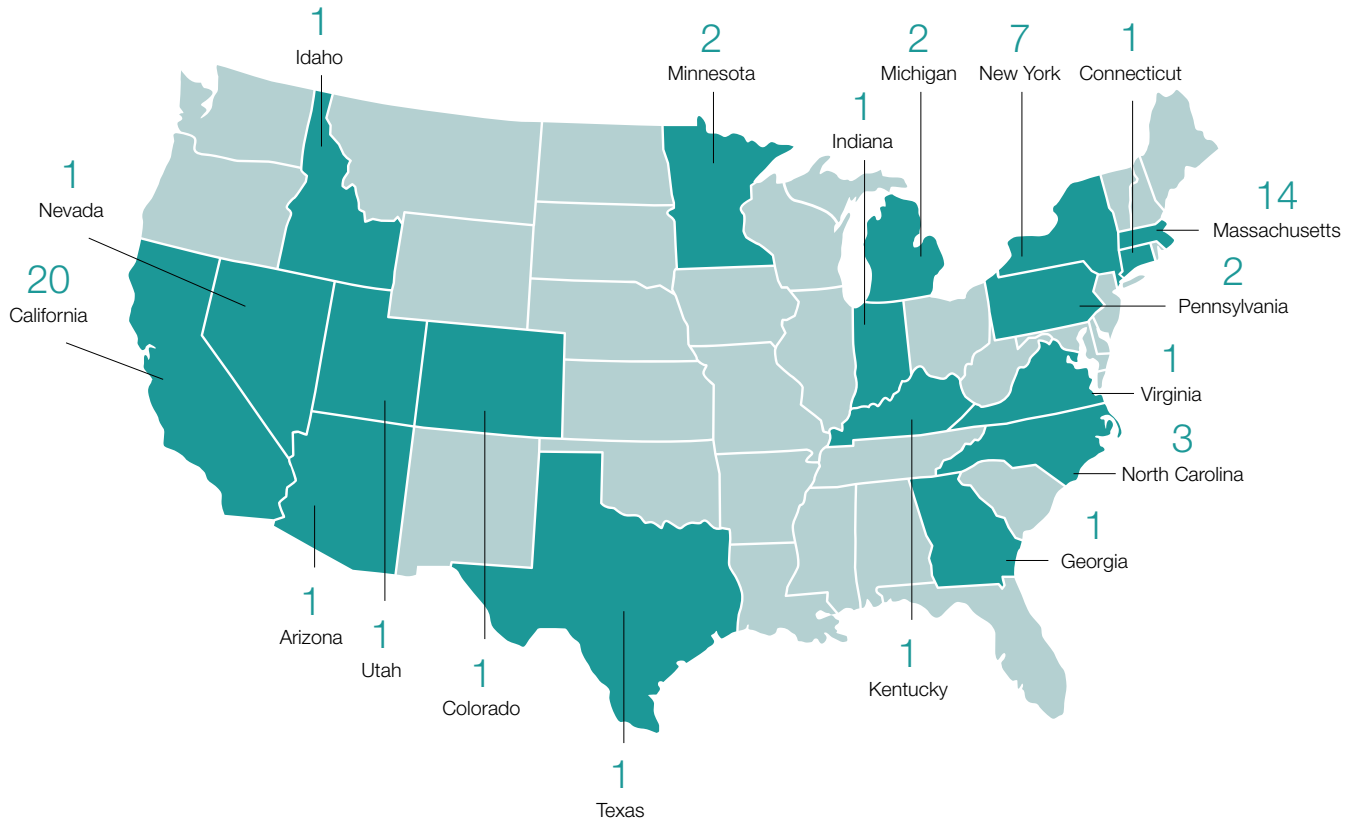
Please feel free to share your comments or questions about IPOs by contacting IPOResult@wsgr.com or any Wilson Sonsini Goodrich & Rosati corporate securities partner.

Life Sciences

Thirty-three life sciences companies priced IPOs as of December 15, 2017, slightly outpacing technology issuers over the same period during the year. Of the 33 life sciences IPOs, a commanding 26 were by biotech and pharmaceutical companies, while the remainder were initial offerings by medical device, healthcare equipment, service-related, or distribution companies. While life sciences IPOs were comparatively smaller in total value than technology IPOs in 2017, total IPO value among life sciences issuers increased moderately, comparing 2017 to the previous year. In 2016, there were 29 deals that generated below \$100 million and only four deals that generated between \$100 million and \$200 million. By contrast, in 2017, 23 IPOs generated less than \$100 million, while nine landed between \$100 million and \$200 million in total IPO value.

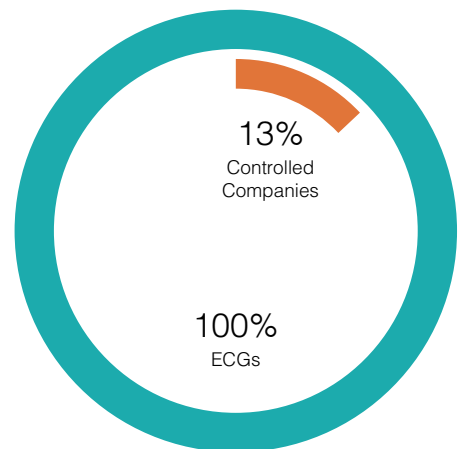
Headquarters

The map below shows the headquarters location for the 61 companies reviewed in this report.

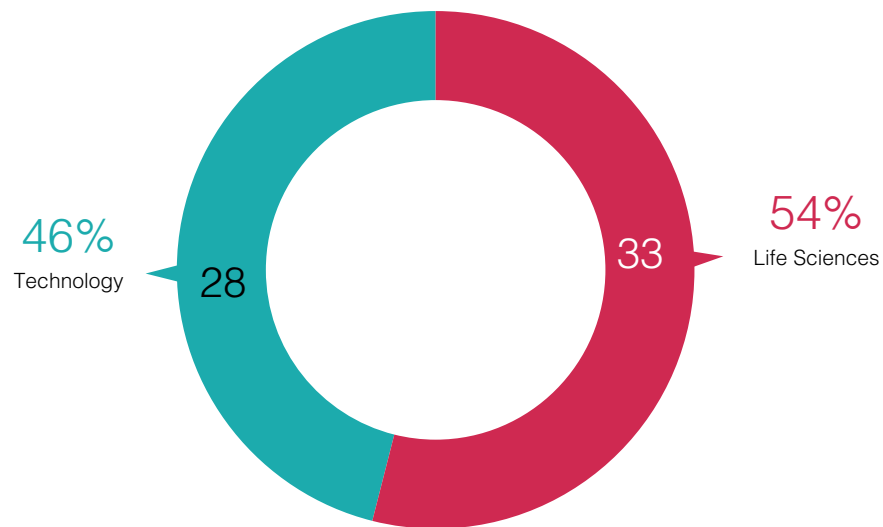


Company Type

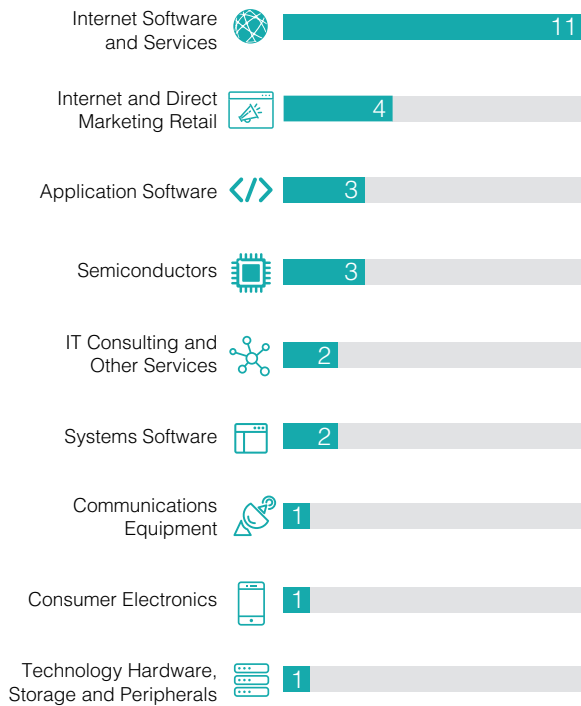
Out of the 61 companies surveyed, all were emerging growth companies (EGCs) and eight (13%) EGCs were also controlled companies.



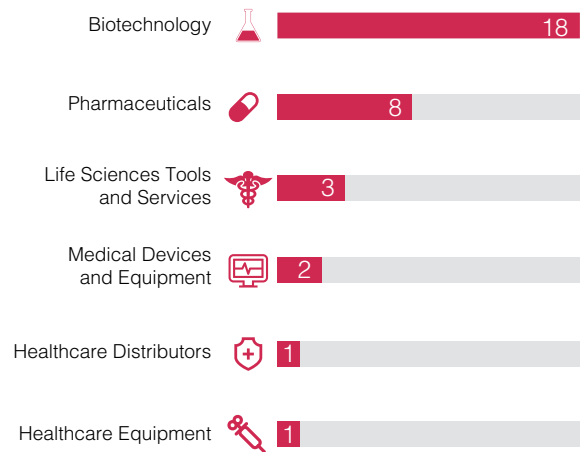
Technology vs. Life Sciences



Technology Sector Breakdown

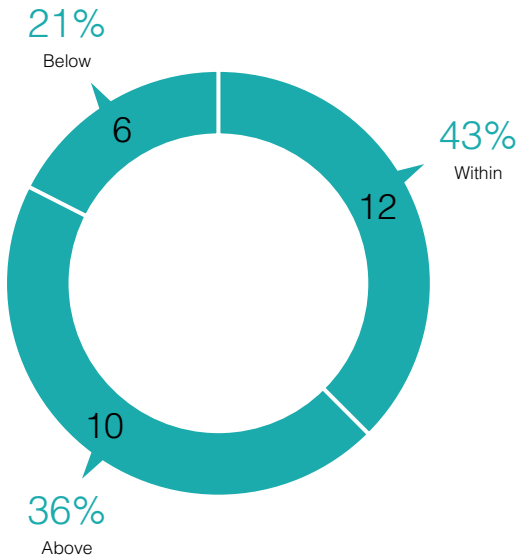


Life Sciences Sector Breakdown

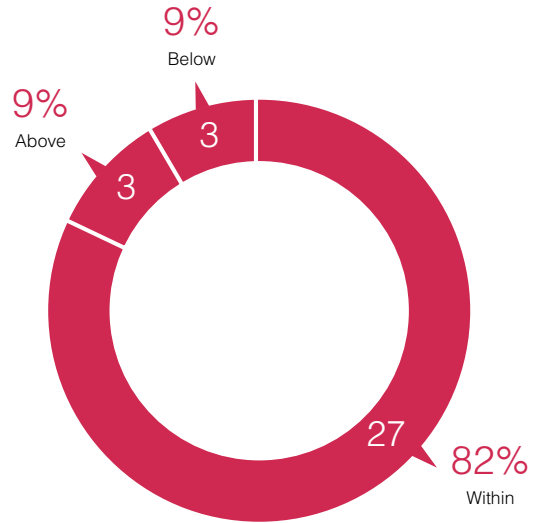


Offer Price and First Day Close Comparison – Technology vs. Life Sciences

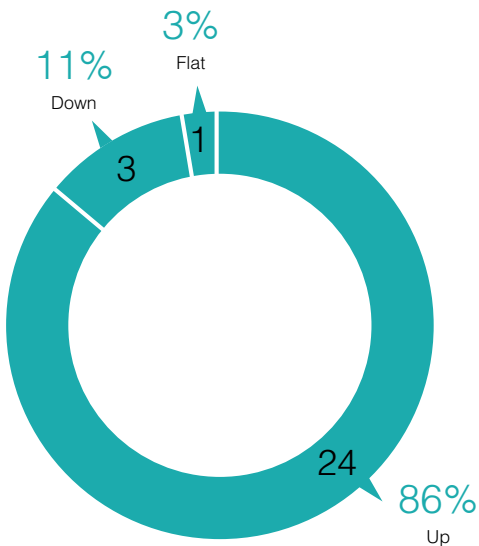
Technology Offer Price vs. Initial Price Range



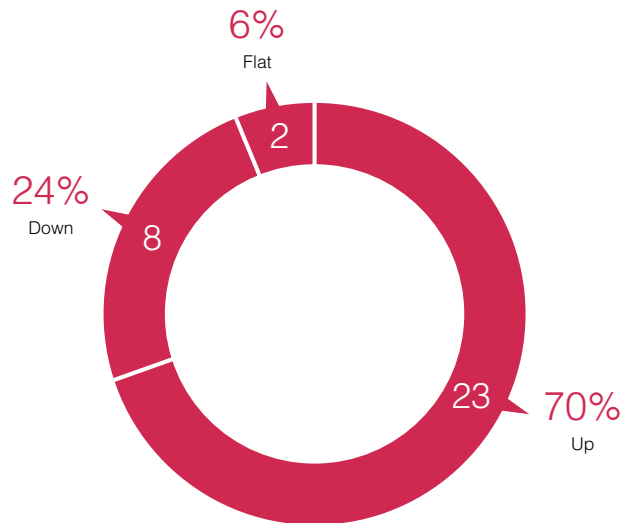
Life Sciences Offer Price vs. Initial Price Range



Technology First Day Close vs. Offer Price

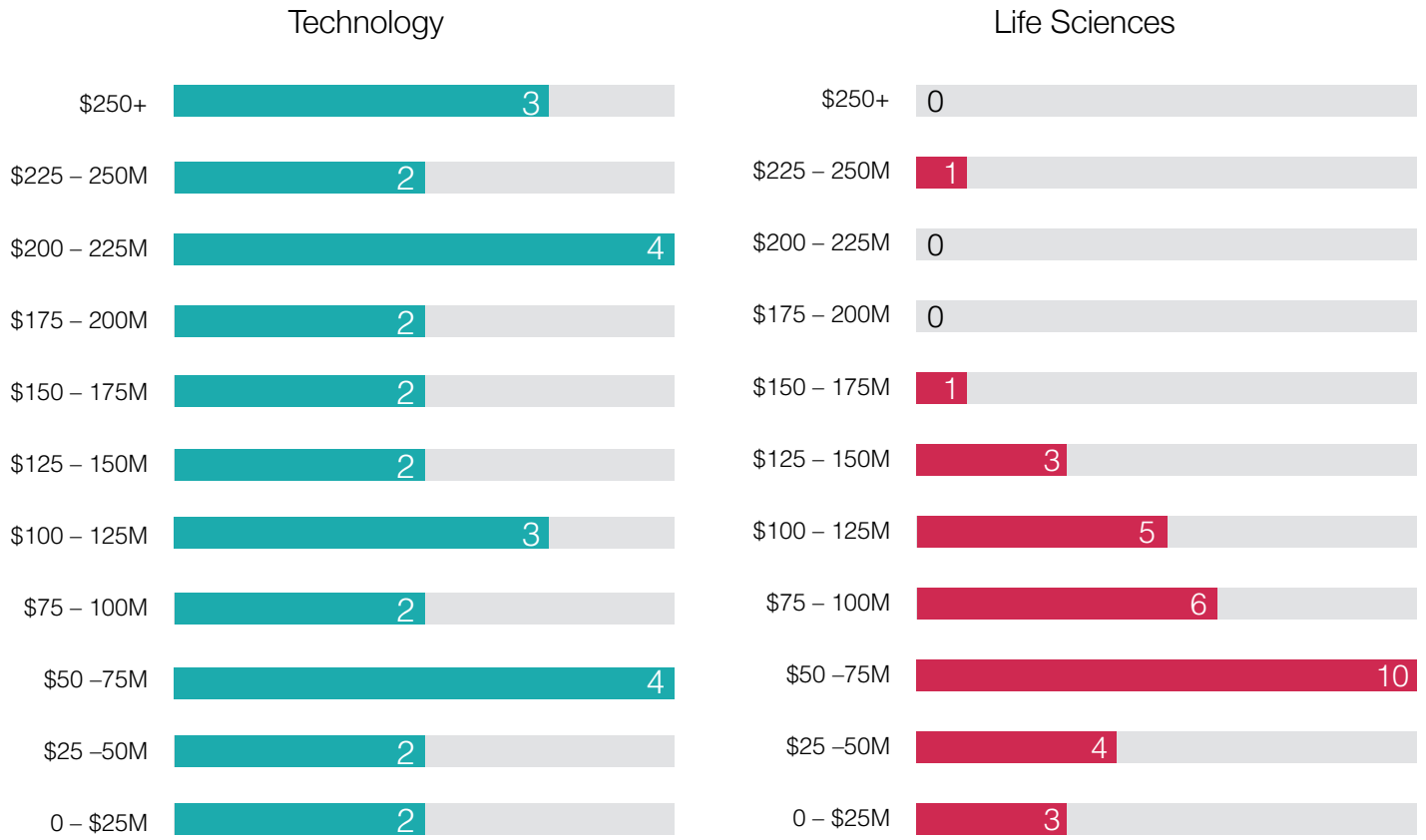


Life Sciences First Day Close vs. Offer Price

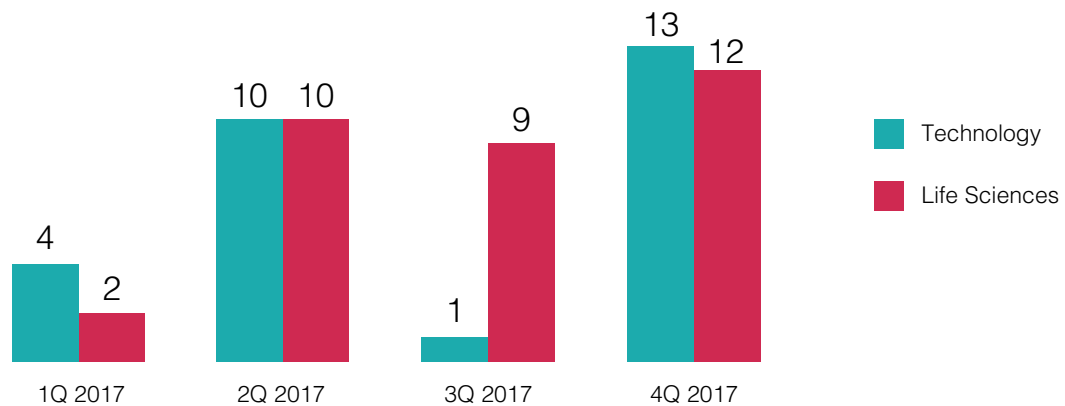


Deal Size

Size Distribution



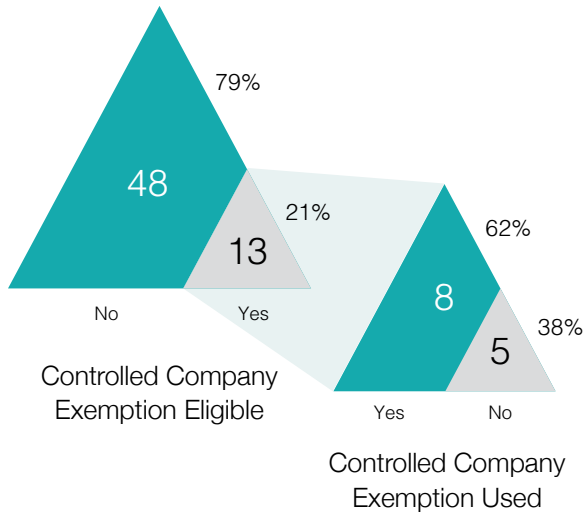
IPO Distribution by Quarter



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 chair roles were combined, the existence of lead independent directors in companies where the CEO and board chair roles were combined, and the number of companies relying on exemptions from compliance with corporate governance requirements.

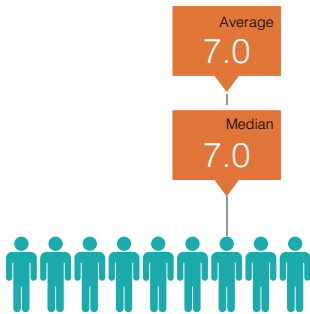


Controlled Company Exemption

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.”

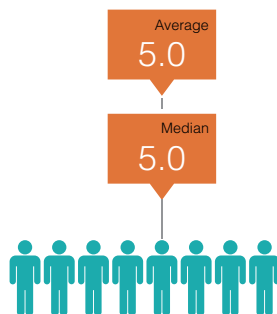
Board Size and Director Independence

Of the 61 companies considered, the average number of directors on the board at pricing was 7, as was the median.



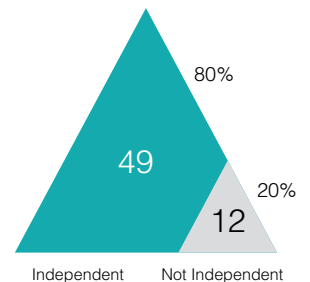
Total Number of Board Members

Of the 61 companies considered, the average number of independent directors was 5, as was the median.



Number of Independent Board Members

Of the 61 companies considered, 49 (80%) issuers had a majority of independent directors on the board at pricing.



Majority of Board of Directors/Independence

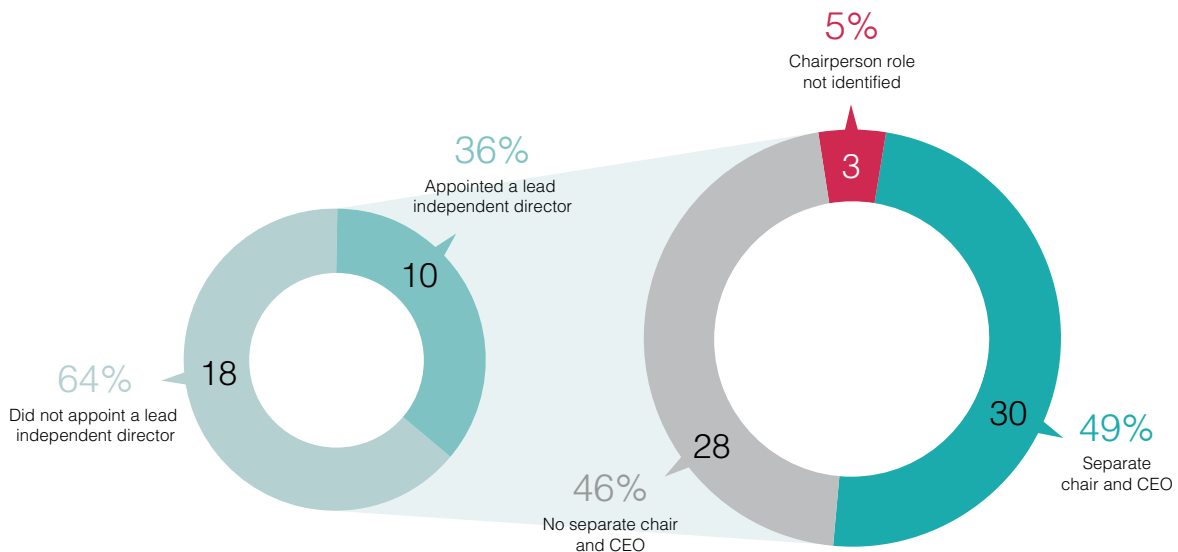
Board Chairs and Lead Directors

Securities and Exchange Commission rules do not require companies to have separate board chair and CEO positions. As such, companies are not required to disclose in their IPO prospectus whether or not the board chair and CEO positions are separated, although many choose to do so. As an alternative to separating the board chair and CEO positions, some companies with a board chair 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 Chair and CEO; Lead Independent Director

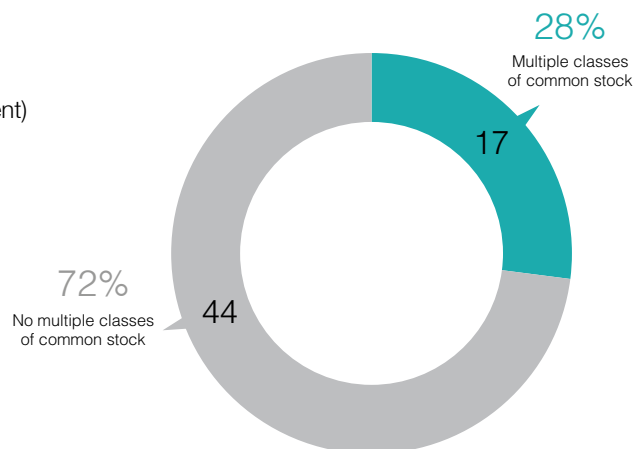
Of the 61 companies considered, 30 companies (49%) had a separate chair and CEO. Three issuers did not identify a chairperson role.

Of the 28 companies that combined the chair and CEO role, 10 (36%) appointed a lead independent director, while 18 (64%) did not.



Classes of Common Stock

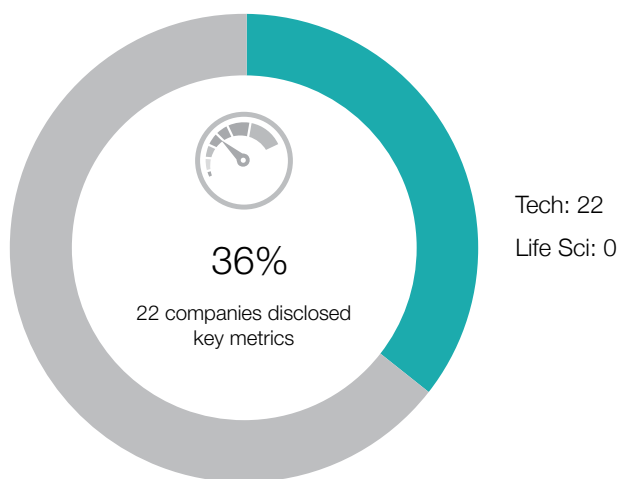
Of the 61 companies considered, 17 companies (28 percent) had multiple classes of common stock.



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.

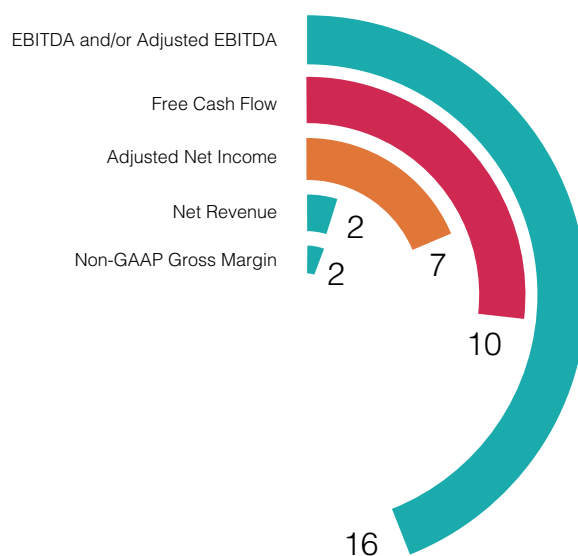
Key Metrics



Non-GAAP Financial Measures

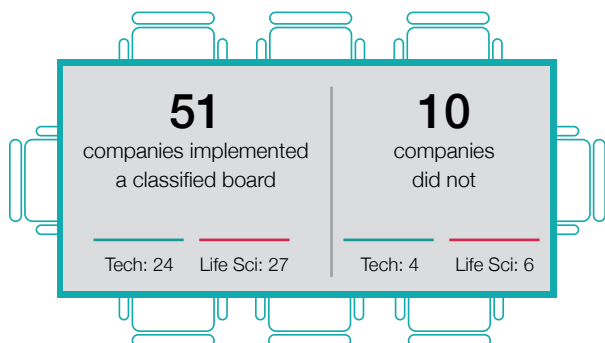
Of the 61 companies considered:

- 
 16 issuers (26.23%) disclosed EBITDA and/or adjusted EBITDA
 Tech: 15 Life Sci: 1
- 
 10 issuers (16.39%) disclosed free cash flow
 Tech: 10 Life Sci: 0
- 
 7 issuers (11.47%) disclosed adjusted net income
 Tech: 7 Life Sci: 0
- 
 2 issuers (3.27%) disclosed net revenue
 Tech: 2 Life Sci: 0
- 
 2 issuers (3.27%) disclosed non-GAAP gross margin
 Tech: 2 Life Sci: 0



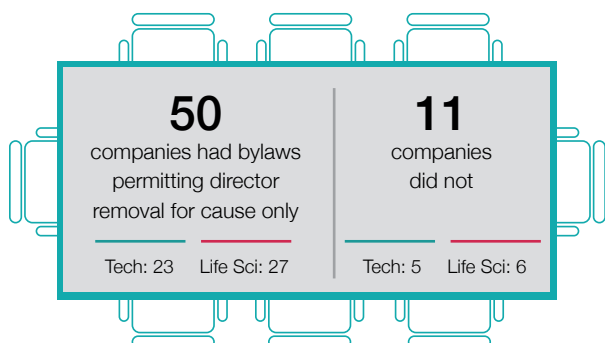
Defensive Measures

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 61 companies considered:



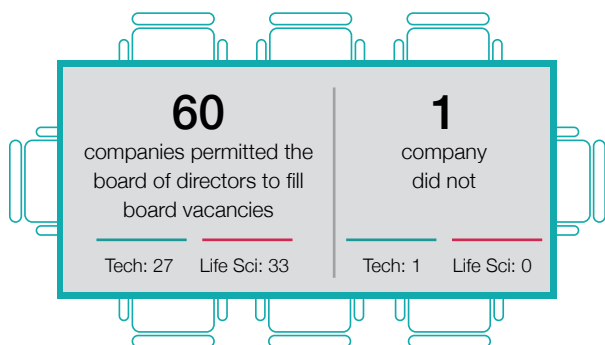
Classified Boards

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

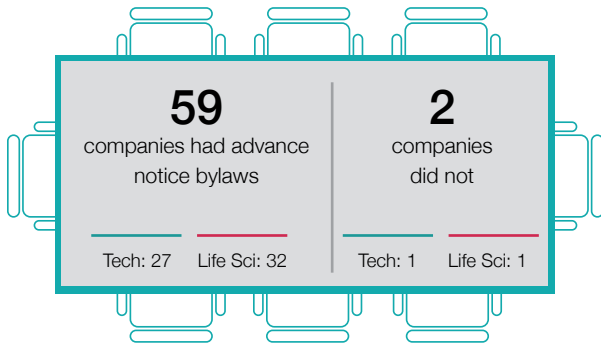
According to Delaware law, examples that constitute cause for removal of directors include: malfeasance in office, gross misconduct or neglect, false or fraudulent misrepresentation inducing the director's appointment, willful conversion of corporate funds, breach of the obligation of full disclosure,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



Board Authority to Fill Vacancies on the Board

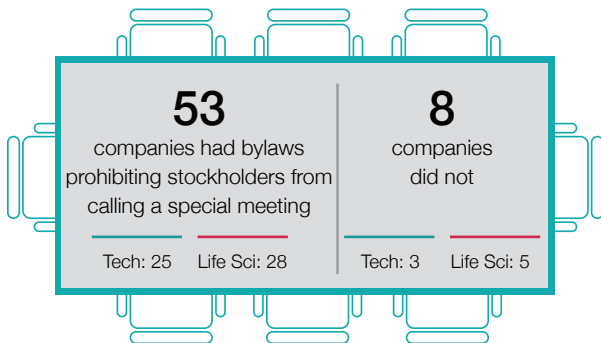
The typical provision in a company's certificate of incorporation will provide the board of directors, even if less than a quorum, with the exclusive ability to fill vacancies on the board, including new director positions created through an increase in the authorized number of directors.

Defensive Measures



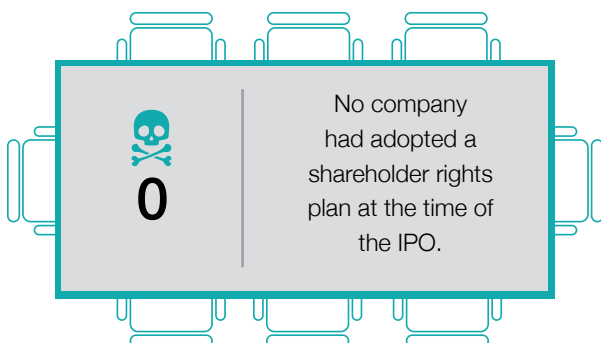
Advance Notice Bylaws

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

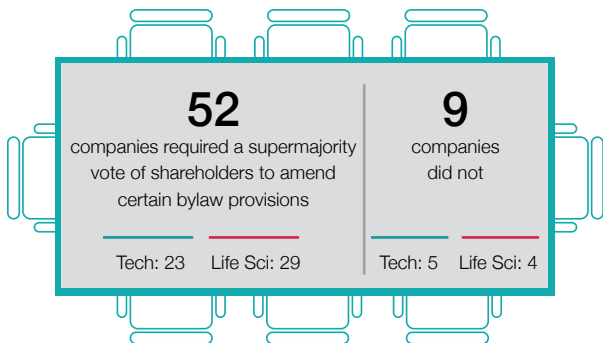
The typical provision in a company’s bylaws provides that a special meeting may only be called by the chairperson of the board, the chief executive officer, or the president (in the absence of a chief executive officer).



Shareholder Rights (Poison Pills)

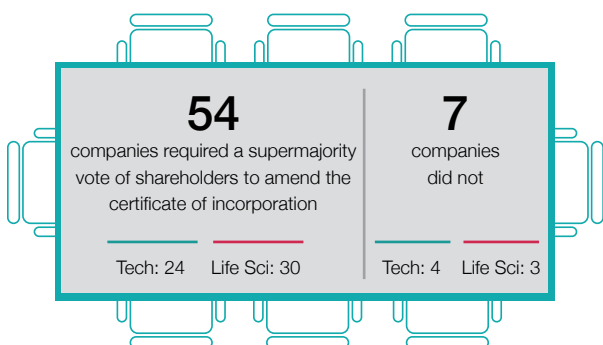
A shareholder rights plan, also known as a “poison pill,” acts as a defensive measure against hostile takeovers by making a company’s stock less attractive to an acquirer.

Defensive Measures



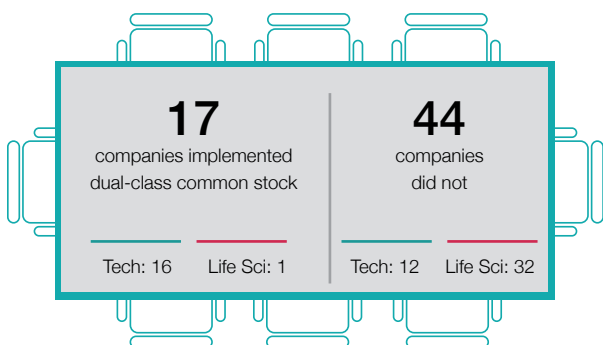
Supermajority Stockholder Vote Required to Amend Bylaws

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

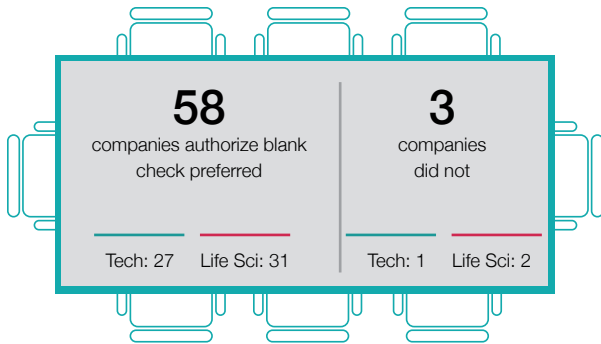
More than a simple majority of the issuer's outstanding stock is required to amend this governing document.



Dual-Class Common Stock

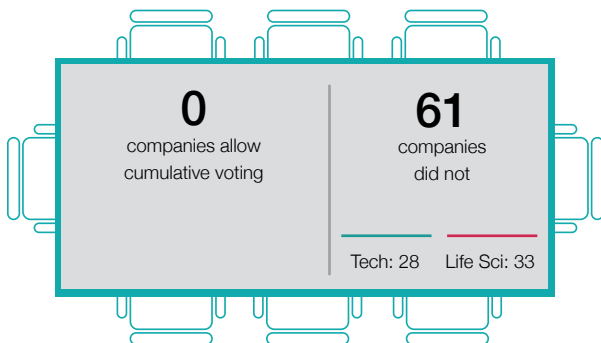
NYSE and Nasdaq listing standards allow an issuer, before or at the time of the IPO, to implement a dual-class stock structure that consists of different classes of shares that carry different voting rights and dividend payments. Generally, in most cases, there are two classes of shares issued: one class offered to the general public, with shares that provide limited voting rights, and one class offered to company founders, executives, and family that provides more voting power and, often, a majority control of the company. Dual-class stock is intended to give specific shareholders voting control.

Defensive Measures



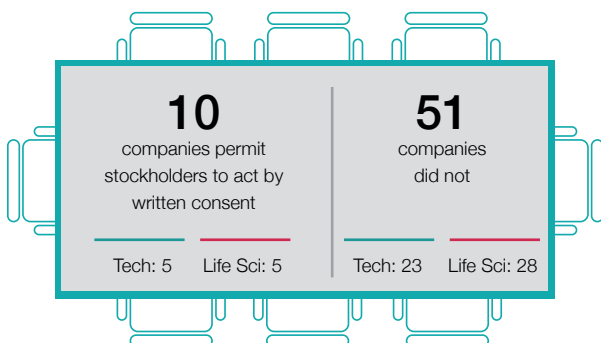
Blank Check Preferred

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.).



Cumulative Voting

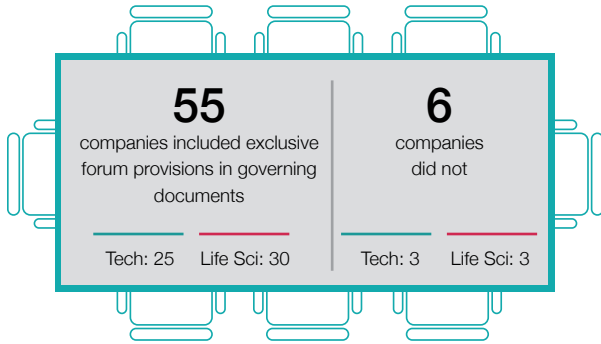
Cumulative voting is a method of voting for a company's directors. Each shareholder holds a number of votes equal to the number of shares owned by the shareholder, multiplied by the number of directors to be elected.



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.

Defensive Measures



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

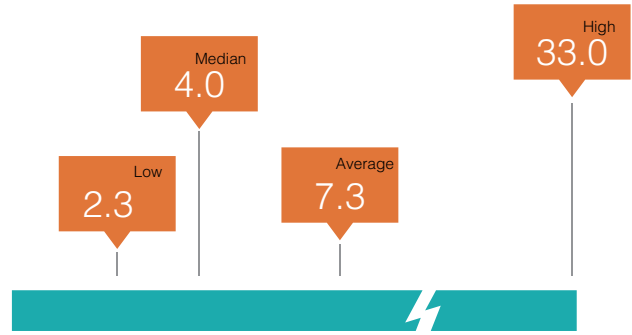
Technology Issuers

Number of Years from Inception to IPO



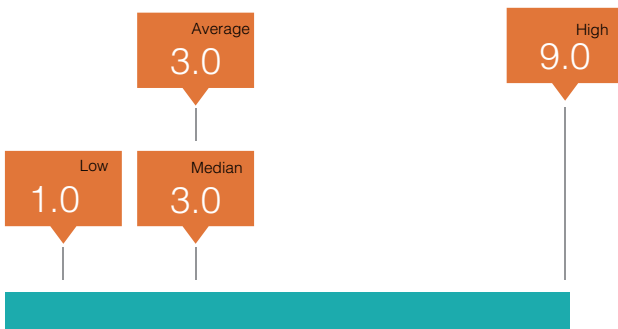
Months in Registration

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 formerly required a minimum of 21 days between these two events; however, in 2015, the FAST Act revised the rule to reduce the time period from 21 days to 15 days.



Filing Information

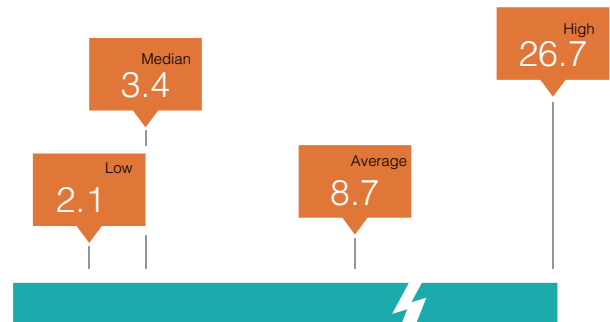
Life Sciences Issuers

Number of Years from Inception to IPO



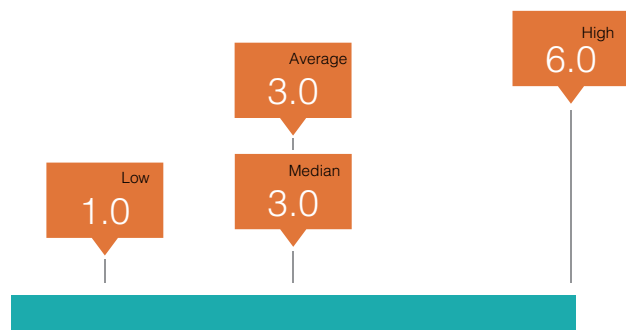
Months in Registration

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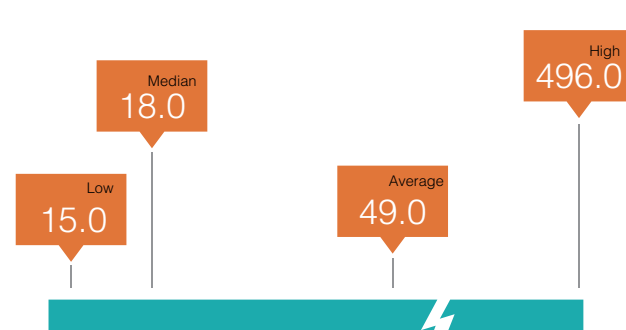
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IPO Fees and Expenses

Total Legal Fees

	Low	High	Median	Average
	\$150,000	\$2,700,000	\$1,490,000	\$1,397,741
Technology	\$158,593	\$2,500,000	\$1,600,000	\$1,525,555
Life Sciences	\$150,000	\$2,700,000	\$1,400,000	\$1,293,167

Total Underwriter Compensation

	Low	High	Median	Average
	\$490,000	\$85,000,000	\$6,241,200	\$8,966,943
Technology	\$490,000	\$85,000,000	\$9,002,000	\$12,397,052
Life Sciences	\$636,407	\$17,499,999	\$5,266,925	\$5,965,599

Total Accounting Fees

	Low	High	Median	Average
	\$40,000	\$6,882,000	\$895,000	\$1,058,644
Technology	\$125,000	\$6,882,000	\$1,200,000	\$1,441,175
Life Sciences	\$40,000	\$1,500,000	\$800,000	\$745,664

Printing Fees

	Low	High	Median	Average
	\$5,000	\$1,500,000	\$300,000	\$349,819
Technology	\$15,000	\$1,500,000	\$350,000	\$433,827
Life Sciences	\$5,000	\$675,000	\$250,000	\$276,313

For More Information

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

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.

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

- Snap Inc. (NYSE:SNAP) 03/01/2017
- Presidio, Inc. (NasdaqGS:PSDO) 03/09/2017
- MuleSoft, Inc. (NYSE:MULE) 03/16/2017
- Alteryx, Inc. (NYSE:AYX) 03/23/2017
- Okta, Inc. (NasdaqGS:OKTA) 04/06/2017
- Yext, Inc. (NYSE:YEXT) 04/12/2017
- Carvana Co. (NYSE:CVNA) 04/27/2017
- Cloudera, Inc. (NYSE:CLDR) 04/27/2017
- Veritone, Inc. (NasdaqGM:VERI) 05/11/2017
- SMART Global Holdings, Inc. (NasdaqGS:SGH) 05/23/2017
- Appian Corporation (NasdaqGM:APPN) 05/24/2017
- ShotSpotter, Inc. (NasdaqCM:SSTI) 06/07/2017
- Blue Apron Holdings, Inc. (NYSE:APRN) 06/28/2017
- Tintri, Inc. (NasdaqGM:TNTR) 06/29/2017
- Roku, Inc. (NasdaqGS:ROKU) 09/27/2017
- Switch, Inc. (NYSE:SWCH) 10/06/2017
- CarGurus, Inc. (NasdaqGS:CARG) 10/11/2017
- MongoDB, Inc. (NasdaqGM:MDB) 10/18/2017
- ForeScout Technologies, Inc. (NasdaqGM:FSCT) 10/26/2017
- Altair Engineering Inc. (NasdaqGS:ALTR) 10/31/2017
- ACM Research, Inc. (NasdaqGM:ACMR) 11/02/2017
- Aquantia Corp. (NYSE:AQ) 11/02/2017
- Bandwidth Inc. (NasdaqGS:BAND) 11/09/2017
- SendGrid, Inc. (NYSE:SEND) 11/14/2017
- SailPoint Technologies Holdings, Inc. (NYSE:SAIL) 11/16/2017
- Stitch Fix, Inc. (NasdaqGS:SFIX) 11/16/2017
- Boxlight Corporation (NasdaqCM:BOXL) 11/28/2017
- Casa Systems, Inc. (NasdaqGS: CASA) 12/14/2017

Life Sciences

- AnaptysBio, Inc. (NasdaqGS:ANAB) 01/25/2017
- Jounce Therapeutics, Inc. (NasdaqGS:JNCE) 01/26/2017
- Tocagen Inc. (NasdaqGS:TOCA) 04/12/2017
- Biohaven Pharmaceutical Holding Company Ltd. (NYSE:BHVN) 05/03/2017
- Ovid Therapeutics Inc. (NasdaqGS:OVID) 05/04/2017
- ENDRA Life Sciences Inc. (NasdaqCM:NDRA) 05/08/2017
- G1 Therapeutics, Inc. (NasdaqGS:GTHX) 05/16/2017
- Athenex, Inc. (NasdaqGS:ATNX) 06/14/2017
- Avenue Therapeutics, Inc. (NasdaqCM:ATXI) 06/26/2017
- Mersana Therapeutics, Inc. (NasdaqGS:MRSN) 06/27/2017
- Aileron Therapeutics, Inc. (NasdaqGM:ALRN) 06/28/2017
- Dova Pharmaceuticals, Inc. (NasdaqGM:DOVA) 06/28/2017
- Co-Diagnostics, Inc. (NasdaqCM:CODX) 07/12/2017
- Akcea Therapeutics, Inc. (NasdaqGS:AKCA) 07/13/2017
- Calyxt, Inc. (NasdaqGM:CLXT) 07/19/2017
- Kala Pharmaceuticals, Inc. (NasdaqGS:KALA) 07/19/2017
- PetIQ, Inc. (NasdaqGS:PETQ) 07/20/2017
- Sienna Biopharmaceuticals, Inc. (NasdaqGS:SNNA) 07/26/2017
- Krystal Biotech, Inc. (NasdaqCM:KRYB) 09/19/2017
- Celcuity Inc. (NasdaqCM:CELC) 09/20/2017
- Deciphera Pharmaceuticals, Inc. (NasdaqGS:DCPH) 09/27/2017
- Rhythm Pharmaceuticals, Inc. (NasdaqGM:RYTM) 10/04/2017
- OrthoPediatrics Corp. (NasdaqGM:KIDS) 10/11/2017
- Restoration Robotics, Inc. (NasdaqGM:HAIR) 10/11/2017
- OptiNose, Inc. (NasdaqGS:OPTN) 10/12/2017
- Allena Pharmaceuticals, Inc. (NasdaqGS:ALNA) 11/01/2017
- Spero Therapeutics, Inc. (NasdaqGS:SPRO) 11/01/2017
- Apellis Pharmaceuticals, Inc. (NasdaqGS:APLS) 11/08/2017
- Arsanis, Inc. (NasdaqGM:ASNS) 11/15/2017
- scPharmaceuticals Inc. (NasdaqGS:SCPH) 11/16/2017
- Odonate Therapeutics, Inc. (NasdaqGS:ODT) 12/06/2017
- Quanterix Corporation (NasdaqGM:QTRX) 12/06/2017
- Denali Therapeutics (NasdaqGS:DNLI) 12/07/2017



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