



September 2019

# 2019 SRS Acquiom Life Sciences M&A Study

Discussing

Deal terms, milestone achievements, and other data from private-target Life Sciences M&A transactions from 2008 to 2019

Please direct inquiries to: [lifescistudy@srsacquiom.com](mailto:lifescistudy@srsacquiom.com)

## An Experienced Partner to Reduce Deal Complexity

More deal parties trust SRS Acquiom to manage escrows, payments, risk, documents, and claims with one intuitive platform.

We pair tailored, expert service with game-changing technology and access to proprietary data, making complex deals as simple as possible.

**2,750+**

deals engaged  
on to date

**\$390** BILLION+

aggregate deal  
value

**240K+**

shareholders  
represented in  
over 120 countries

**\$155** BILLION+

in payments

# Comprehensive M&A Platform

SRS Acquiom offers a robust platform of M&A solutions designed to work together or independently to meet the unique needs of each deal.

## Mergers & Acquisitions



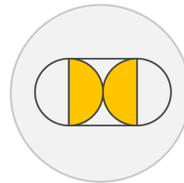
### Pre-Closing Solicitation

Secure, flexible, online document distribution to securityholders for review or action, plus tabulation and reporting back to deal parties.



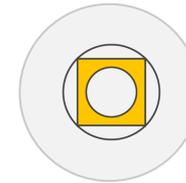
### Payments

Our online payments process enables fast and efficient payment of parties to an M&A transaction, including parties receiving compensation-based payments. Most shareholders are paid in one day.



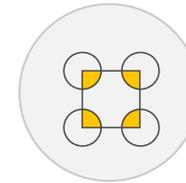
### Escrows

Simple, fast engagement, online Deal Dashboard, and a dedicated team. A better M&A escrow experience.



### Reps & Warranties Insurance

Procure a buy- or sell-side policy and leverage our proprietary data and claims management experience for a policy that fits your deal.



### Shareholder Representation

Protect shareholder interests with professional representation.

*Securities products and payments services offered through Acquiom Financial LLC, an affiliate broker-dealer of SRS Acquiom Inc. and member FINRA/SIPC. Visit [www.finra.org](http://www.finra.org) for information about FINRA membership. Acquiom Financial does not make recommendations, provide investment advice, or determine the suitability of any security for any particular person or entity. Transactional risk insurance products or services may not be available in all states, and coverage is subject to actual policy language. Non-insurance products and services may be provided by affiliated companies or unaffiliated third parties. Insurance products placed by Acquiom Insurance LLC, an affiliate of SRS Acquiom Inc.*

# Table of Contents

<b>About This Study</b> .....	<b>5</b>
About This Study and the Data .....	6
Representative Sellers.....	7
Representative Buyers.....	8
Key Findings .....	9
<b>Deal Terms</b> .....	<b>11</b>
Deal Set Overview .....	12
Up-Front Values.....	13
Buyer Types.....	14
Escrows/Holdbacks and Expense Fund Sizes.....	15
<b>Earnout Terms</b> .....	<b>16</b>
Frequency of Earnouts.....	17
Earnout Potential–Up-Front Ratio.....	18
Aggregate Transaction Values.....	19
Negotiated Milestone Dollars by Development Phase...	21
<b>Earnout Achievement</b> .....	<b>22</b>
Earnout Achievement Overview.....	23
Maturation of Earnouts & Paid Milestones.....	26
By Development Stage: Bio/Pharma .....	29
By Product Stage: Devices/Dx/Research .....	30
Earnout Disputes and Renegotiations .....	31
<b>Contact Us</b> .....	<b>32</b>

# About This Study

# About This Study and the Data

SRS Acquiom has provided professional and financial services as a post-closing shareholder representative for sellers on **227** M&A transactions since 2008 involving private-target Life Sciences companies in **three sectors**.

- **Biotech/Pharmaceuticals (“Bio/Pharma”)**
- **Medical Devices (“Devices”)**
- **Diagnostics and Research Technologies (“Dx/Research”)**

Very few of these agreements are available publicly, nor is information on post-closing outcomes. Based on our experience, this study analyzes the following topics:

- Deal terms from **227** deals, including **163** deals with an earnout (aggregate \$39.6B up-front plus \$37.5B earnout potential).
- Earnout achievement data and other post-closing experience from **131** deals that have been closed more than one year and have an earnout with significant data available (“**Maturing Earnout Deals**”).
  - This includes **112** deals that have at least one milestone “**due by mid-2019.**” This reflects the SRS Acquiom estimate of whether the milestone would have been expected at closing to be hit or missed by mid-2019, rather than still pending. The milestones due by mid-2019 in these 112 deals represent earnout potential of \$13B.
- Data by industry sector, up-front value, closing year, and product stage.

## *Study Development Parameters:*

*The general term “earnout” is used in this study for sales-based payments and for milestone-based payments that are common in Life Science deals. Percentages may not add up to 100% due to rounding. Earnout dollar calculations generally exclude variable or formula-driven payments having no defined dollar amount or cap, such as royalties. SRS Acquiom has updated our databases from inception, and presentation parameters in this study, to provide the most comprehensive and accurate data possible. The 2019 study data may differ slightly from data reported in earlier studies.*

# Representative Sellers\*

## Biotech/Pharmaceuticals



## Medical Devices



## Diagnostics & Research Technologies



\* Data presented in this study may not include all companies shown above and does include other companies not shown here.

# Representative Buyers\*

## Biotech/Pharmaceuticals



## Medical Devices



## Diagnostics & Research Technologies



\* Data presented in this study may not include all companies shown above and does include other companies not shown here. Data are from our work as shareholder representative for sellers on deals with these and other buyers. SRS Acquiom may provide other professional services to buyers not reflected in this study.

# Key Findings

## Deal Terms:

**Up-front values are similar in Life Sciences** to other industries, but there is usually a substantial earnout in addition, especially in bio/pharma. Buyer types are similar but with more non-U.S. Buyers and fewer PE Buyers. [slides 13-14]

**Earnouts have appeared in a consistent percentage of deals in each sector over the last decade**, despite major changes in market conditions over time. In our experience, earnouts have been the norm in bio/pharma (around 80% of deals), frequent in medical devices (70%), common in diagnostics and research technologies (50%), but only occasional in other industries (15-20%). [slide 17]

**Earnout Dollars: Up-front ratio has been high** in all Life Sciences sectors compared to other industries, especially in recent years in bio/pharma. This is mostly due to more milestone events per deal, especially post-phase 3 milestones (e.g., product/indication approvals) or high-dollar sales milestones. Of \$17.4B in earnout potential that SRS Acquiom estimates is not yet due as of mid-2019, \$12.2B is pending and tied to these late-stage milestones, and \$2.5B will be missed because buyers have stopped certain programs. [slides 18 and 23]

**Average dollar amounts are often significantly higher than median dollar amounts** in Life Sciences M&A, with a few big deals or payments driving up averages substantially. [slides 19-21]

**Negotiated milestone dollar values vary widely** in bio/pharma even during the same phase of development. In each phase (preclinical, phase 1, 2 or 3), the most commonly negotiated milestone dollar value appears in fewer than 25% of deals. Other values span two orders of magnitude. [slide 21]

# Key Findings

## Earnout Achievement:

**Milestone events** SRS Acquiom estimates to be due by mid-2019 have been **achieved on average 33%** of the time in bio/pharma (paying 33% of earnout potential dollars), and **achieved on average 38%** of the time in devices, diagnostics, and research technologies (paying 29% of earnout potential dollars). [slides 23-24]

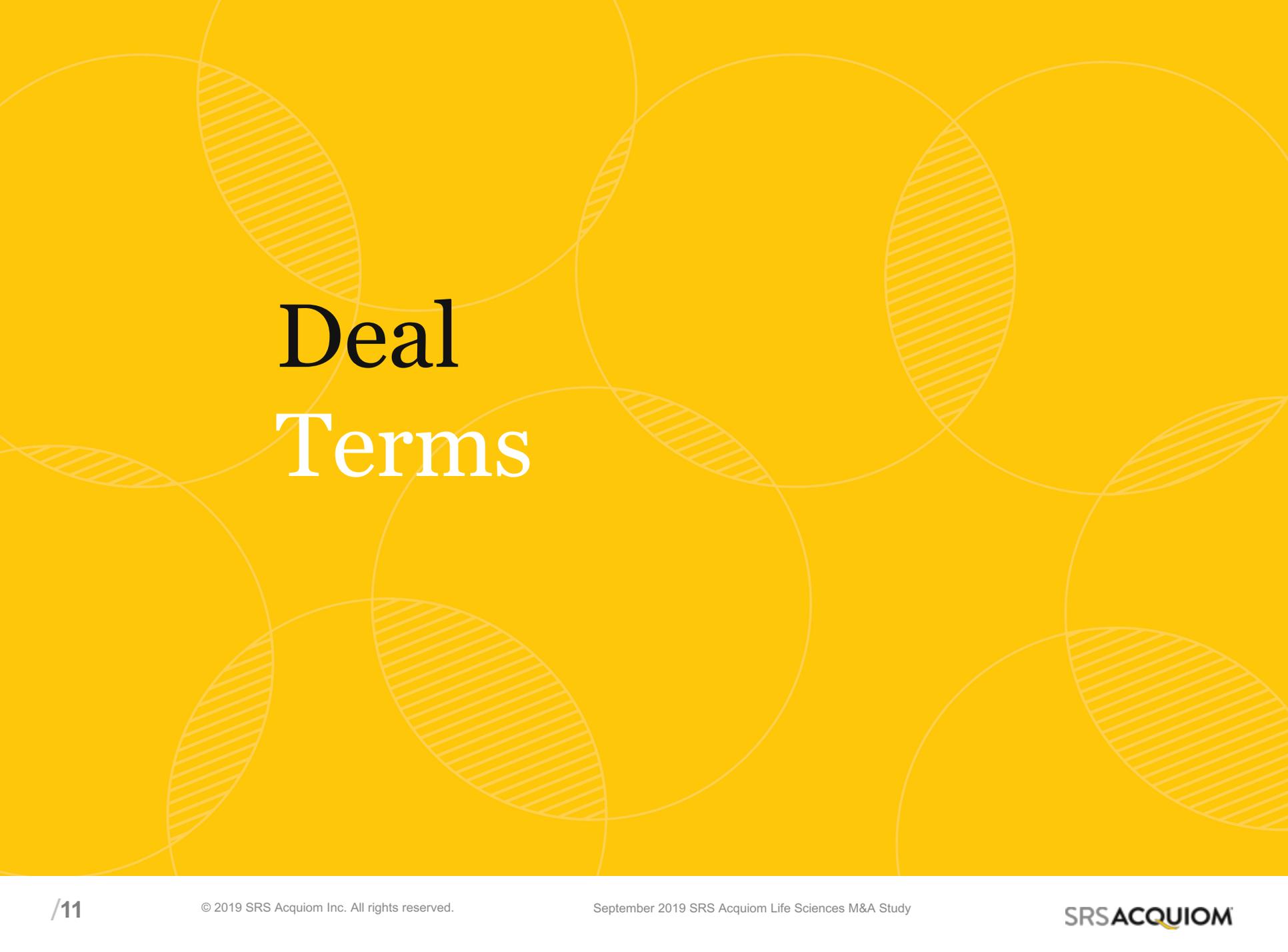
- **Early achievement rates** tend to be higher than average at 49-52% for deals closed 2017 or later. [slides 26-28]
- **Later achievement rates** tend to be lower than average at 26% for deals closed 2011 or earlier. [slide 27]
- **Rates for deals** closed three to seven years ago are trending slightly higher than average in bio/pharma (36-37%) and slightly lower than average in devices, diagnostics, and research technologies (20-29%). [slide 28]

**More than 50% of earnout deals in each sector have had at least \$1 million in paid milestones.** [slide 25]

**When milestones were paid:** Across sectors, 70% of paid milestone events were paid by the third anniversary of closing, and 93% by the fifth anniversary. In bio/pharma, 13% of paid milestones have been paid after the fifth anniversary of closing. [slides 26-28]

**Milestones achieved at every product stage:** At each phase of product development across sectors, milestones have been achieved at a rate of at least 29% and as high as 64%. [slides 29-30]

**Earnout disputes remain common; some pay in the end:** 31% of earnout deals have had a dispute. So far, half of those deals have been renegotiated and 23% of disputed earnout potential has been paid on average a year later than undisputed milestones. [slide 31]



# Deal Terms

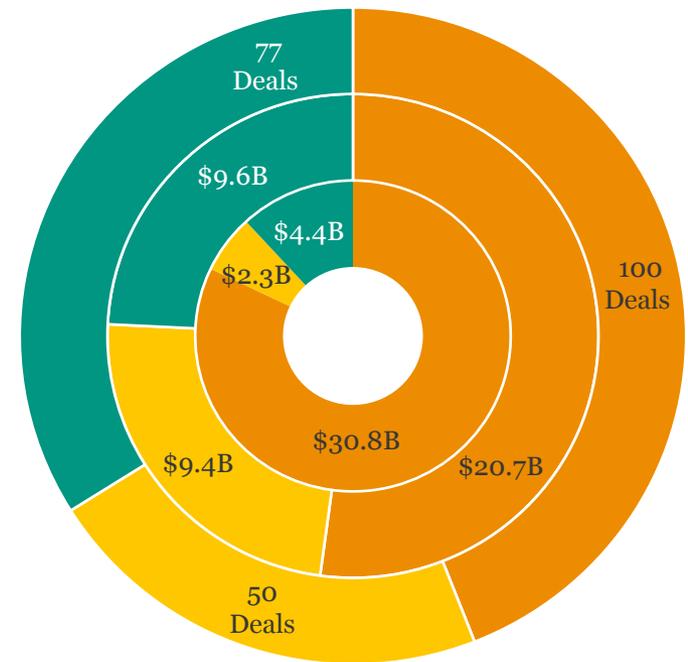
# Deal Set Overview

## Totals

<b>Total Life Sciences Deals</b>	<b>227</b>
Up-Front Payment	\$39.6B
Potential Earnout	\$37.5B
<b>Earnout Deals</b>	<b>163</b>

## Subtotals by sector

Outer Circle: Number of Deals  
 Middle Circle: Up-Front Payments (\$B)  
 Inner Circle: Potential Earnouts (\$B)



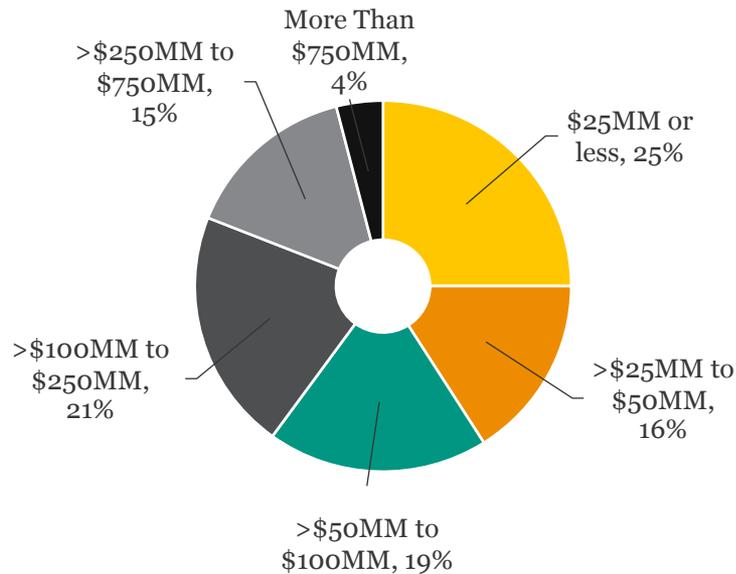
- Biotech/Pharmaceuticals
- Diagnostics & Research Technologies
- Medical Devices

# Up-Front Values\*: All Industries vs Life Sciences

Subset: 2015–2018 deals (975 in all industries, 135 in Life Sciences)

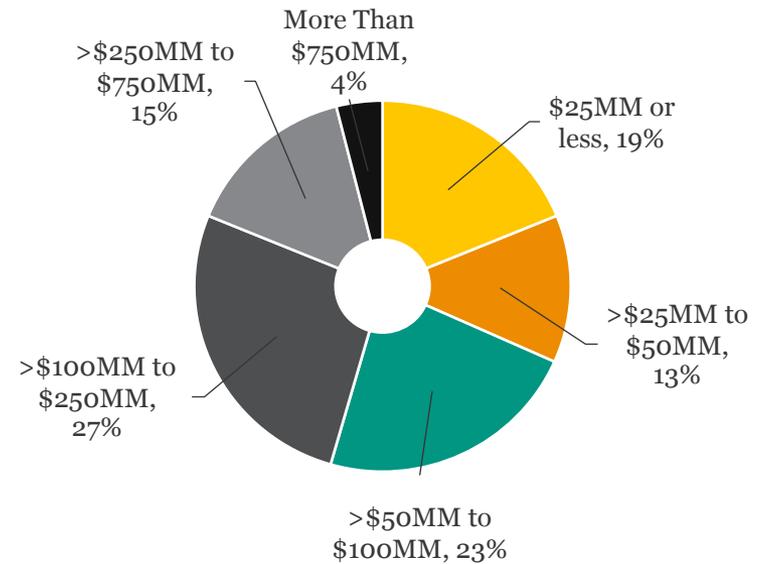
## Up-front values—all industries

\$, % of Total Up-Front Value



## Up-front values—Life Sciences

\$, % of Total Up-Front Value



## Earnouts—Life Sciences

- 70% of Life Sciences deals also have an earnout
- Average earnout potential \$/deal = \$325MM (median = \$130MM)

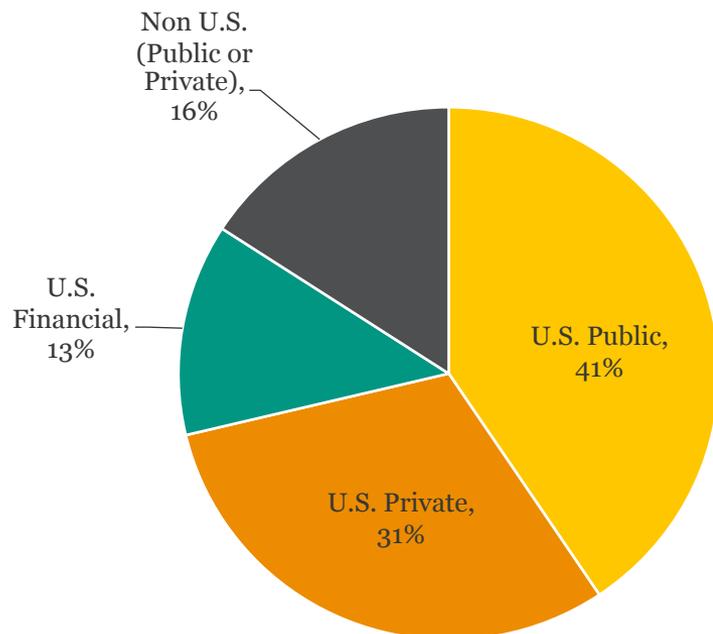
► **All industry data source: MarketStandard**—the industry’s most comprehensive, online, interactive database of private M&A deal points

\* The term “up-front values” includes escrowed amounts but does not include potential earnout payments.

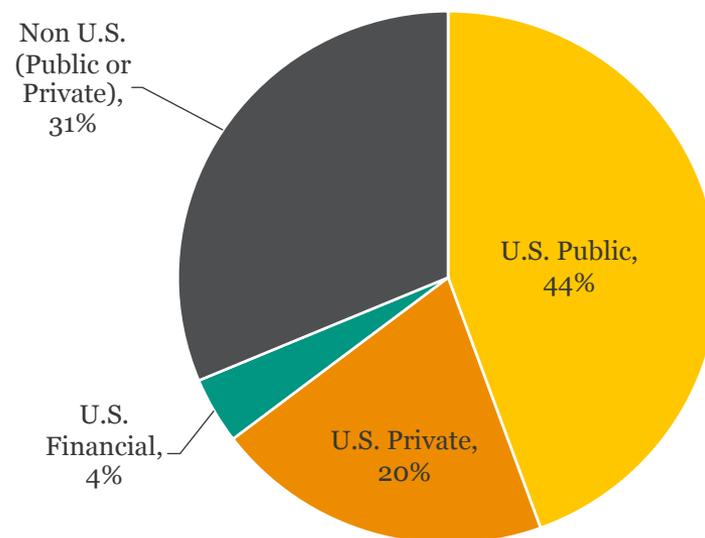
# Buyer Types: All Industries vs Life Sciences

Subset: 2015–2018 Deals

Buyer types—all industries



Buyer types—Life Sciences



► All industry data source: MarketStandard—the industry’s most comprehensive, online, interactive database of private M&A deal points

# Escrows/Holdbacks and Expense Fund Sizes: All Industries vs Life Sciences

Subset: 2015–2018 deals with escrows/holdbacks and/or expense funds

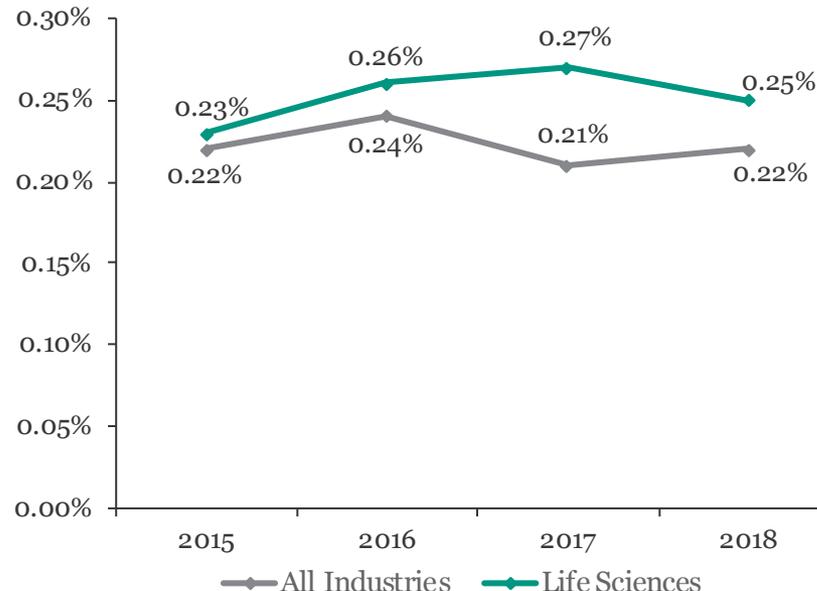
## Median indemnification escrow/holdback size

% of Up-Front Value, including escrow but not earnout potential



## Median post-closing expense fund size\*

% of Up-Front Value, including escrow but not earnout potential



▶ **For the most current data, visit MarketStandard**—the industry’s most comprehensive, online, interactive database of private M&A deal points is the source of “All Industries” data above and can also be used to filter and explore current life science deal points. For example:

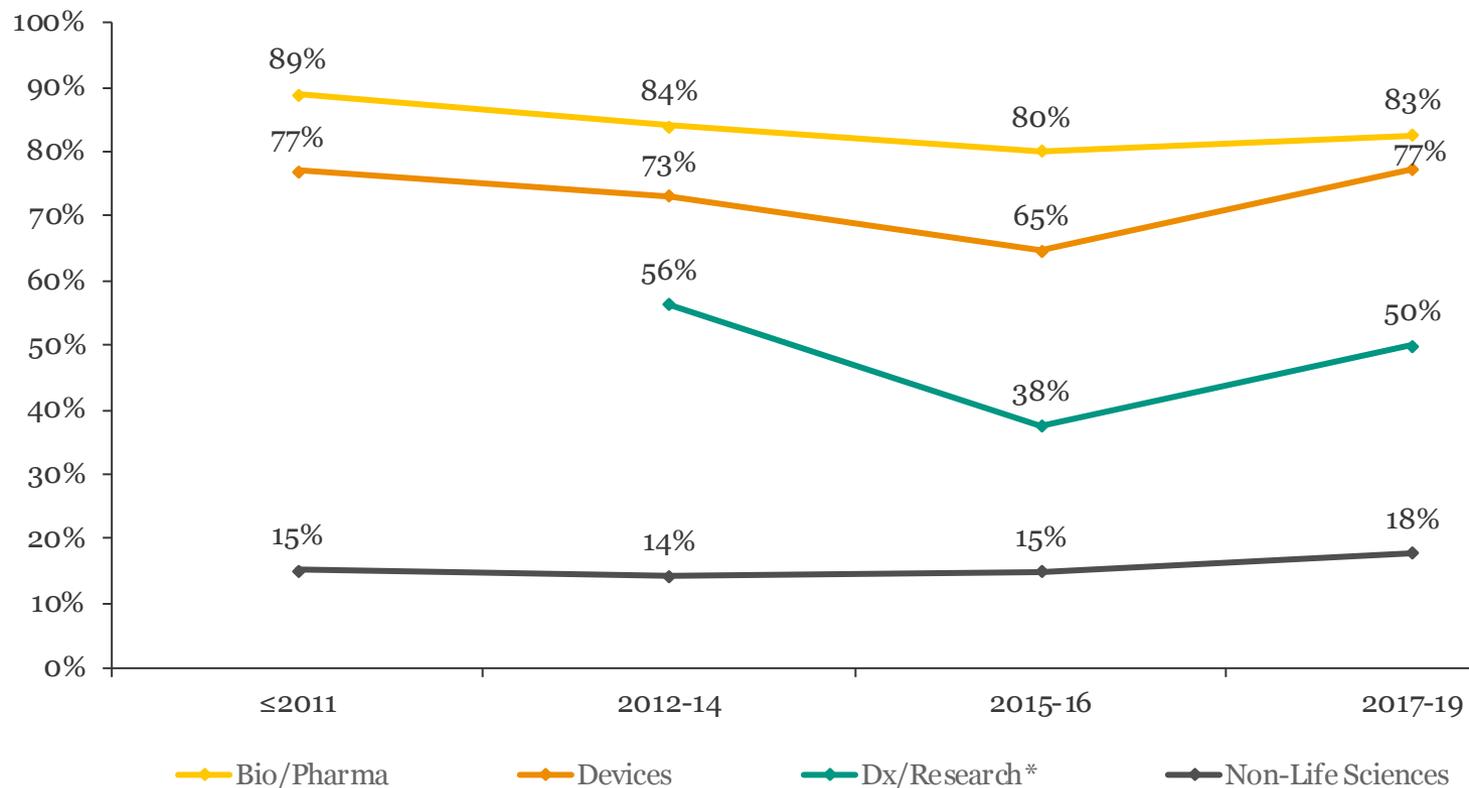
- For the last 36 months, Life Sciences deals with  $\geq$  \$250MM up-front value have an average escrow of 5.2% (4.0% median)
- Life Sciences deals from 2007-present with  $\geq$  \$100MM up-front value have an average \$588K expense fund (\$400K median)

\* Funds established at closing to fund post-closing expenses.

# Earnout Terms

## Frequency of Earnouts: By Sector

### Percent of deals with an earnout—Life Sciences sectors and other industries

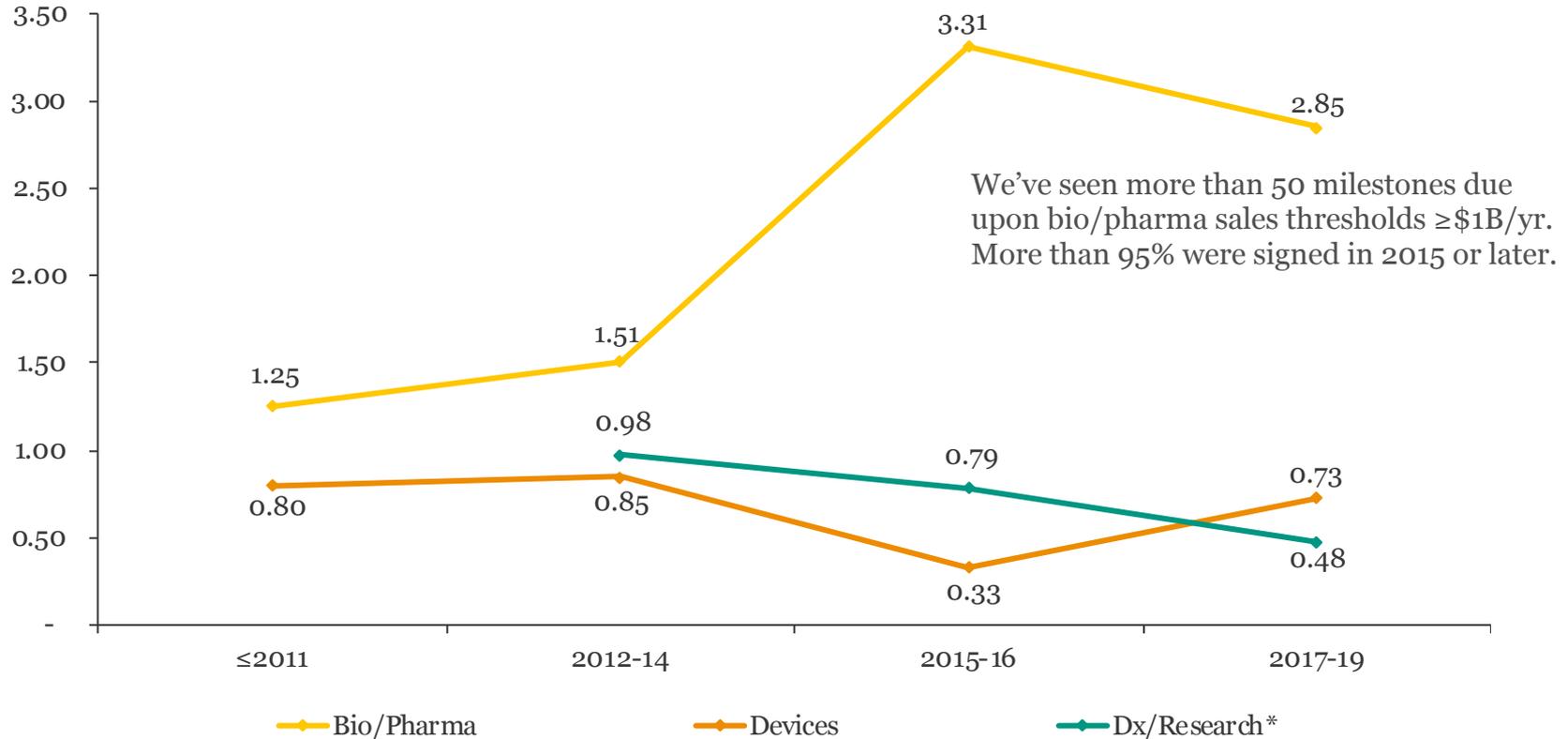


\* Too few diagnostics and research technologies transactions prior to 2012 to calculate meaningful percent with earnout consideration.

# Earnout Potential–Up-Front Ratio

Subset: Deals with an earnout

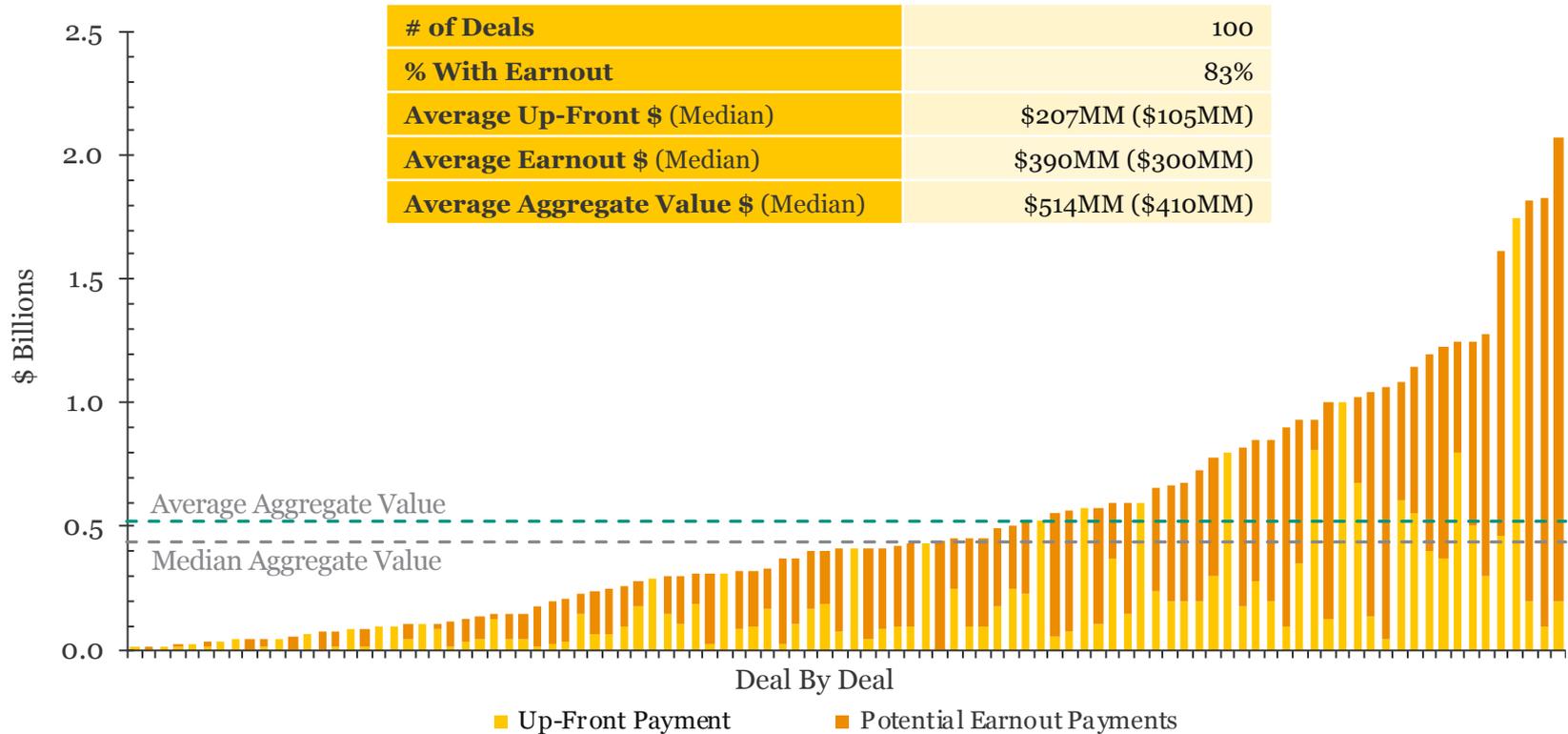
Ratio of earnout potential \$ to up-front value \$—by sector



\* Too few diagnostics and research technologies transactions prior to 2012 to calculate meaningful earnout potential: up-front ratio.

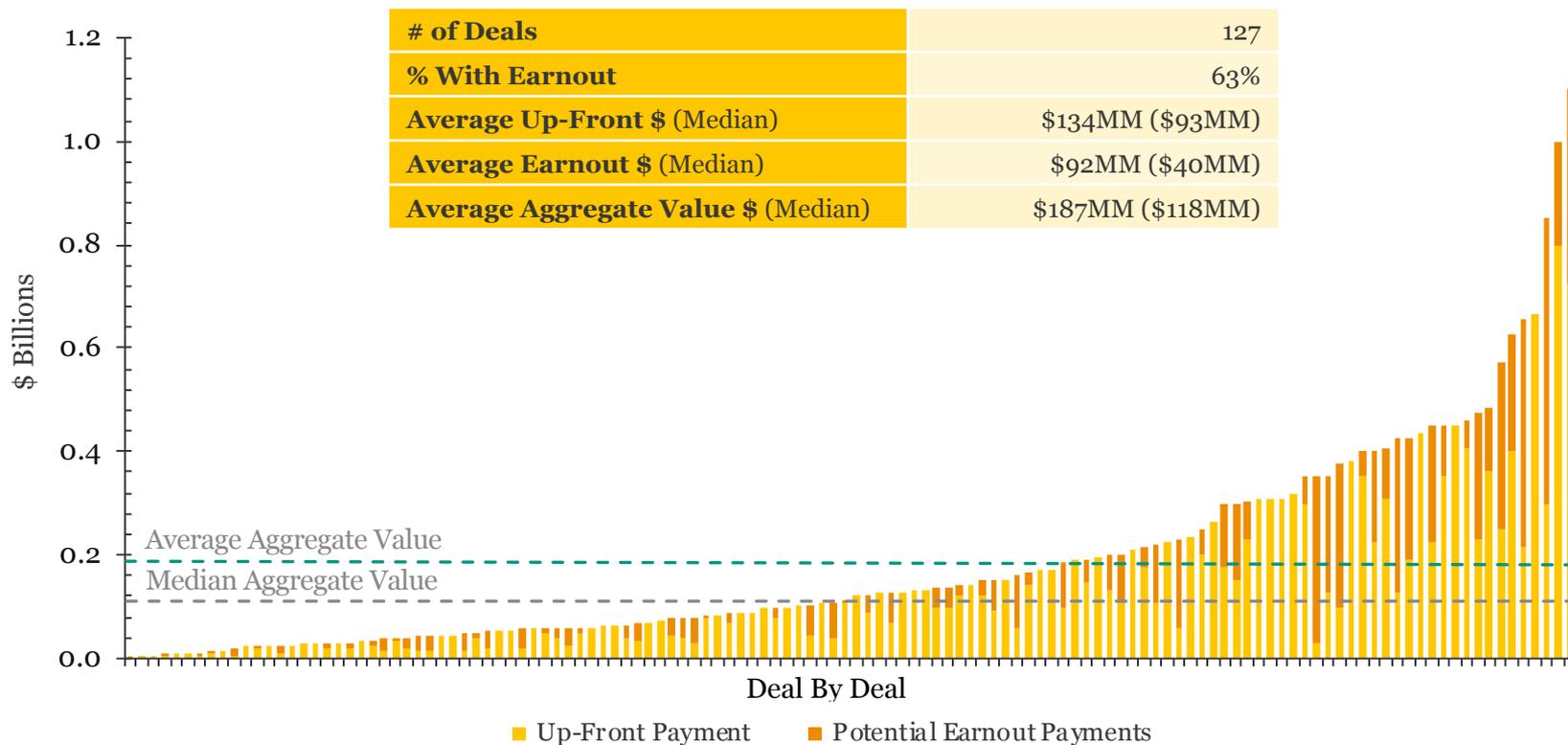
# Aggregate Transaction Values: Bio/Pharma

## Aggregate transaction value (up-front + earnout potential)–by deal



# Aggregate Transaction Values: Devices and Dx/Research\*

## Aggregate transaction value (up-front + earnout potential)–by deal

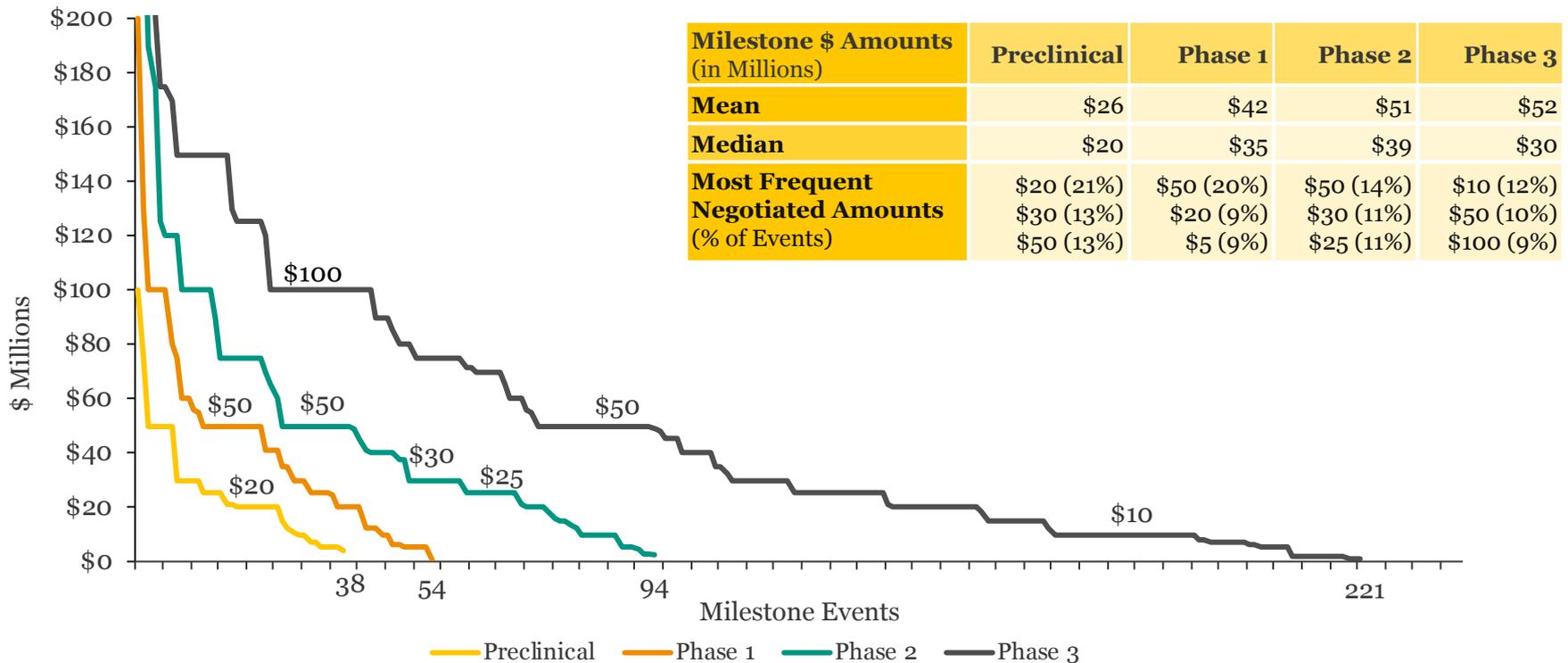


\* Devices combined with Dx/Research where necessary to have sufficient numbers of deals and milestones to produce meaningful analyses, and where broad similarities in deal terms and post-closing experiences were observed. Excludes a small number of deals with exceptionally large up-front payment(s). If included, average up-front \$ would be \$149MM.

# Negotiated Milestone Dollars by Development Phase: Bio/Pharma

Each line on the graph shows the distribution of different dollar amounts parties have agreed to pay upon achievement of milestones at the end of a given phase of development. For example, good phase 1 data (orange line) may trigger a milestone payment upon start of phase 2. A payment of \$50MM appears in more deals than any other amount; a plateau on the orange line.

## Milestone \$ amounts\* at each development phase, by milestone event



\* For presentation purposes, this graph excludes a few large milestones above \$200MM. The table is calculated with all milestones included.

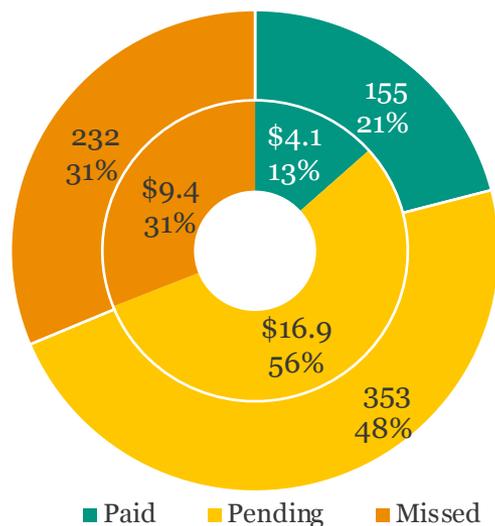
# Earnout Achievement

# Earnout Achievement Overview: All Sectors

Subset: All milestones in maturing earnout deals

## Milestone status, by event and by \$ potential

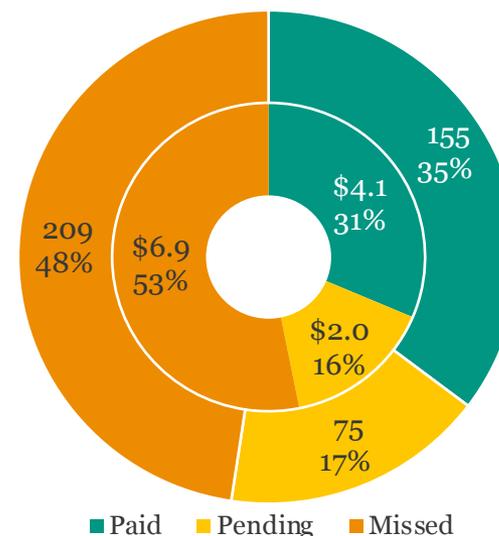
Outer Circle: Total Events, #/%  
Inner Circle: Earnout Potential, \$B/%



Subset: All milestones due by mid-2019\*

## Milestone status, by event and by \$ potential

Outer Circle: Total Events, #/%  
Inner Circle: Earnout Potential, \$B/%



- 131 maturing earnout deals
- 740 milestone events (outer circle)
- \$30.4B earnout potential (inner circle)
- All pending milestones are \$14.9B higher than milestones due by mid-2019, of which \$12.2B are triggered after phase 3 data (e.g., FDA approvals) or upon hitting commercial sales milestones.
- All missed milestones are \$2.5B higher than missed milestones due by mid-2019 due to future milestones that will be missed because buyers have stopped certain programs.

- 112 deals with at least one milestone due by mid-2019
- 439 milestone events (outer circle)
- \$13B earnout potential (inner circle)

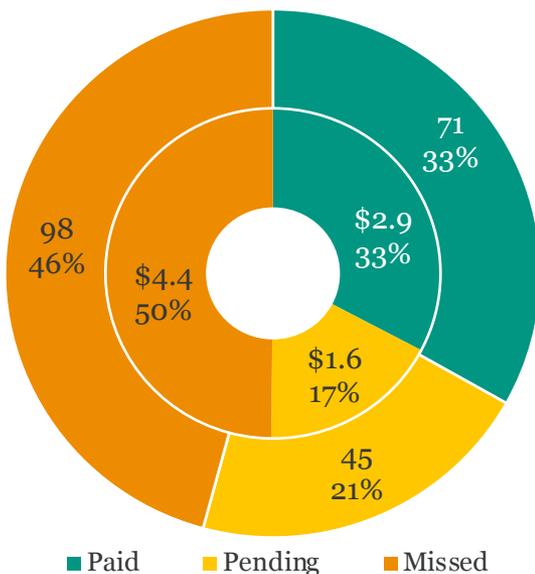
\* Due by mid-2019 reflects the SRS Acquiom estimate of whether the milestone would have been expected at closing to be hit or missed by mid-2019, rather than still pending.

# Earnout Achievement Overview: By Sector

Subset: Milestones due by mid-2019\*

## Bio/Pharma

Outer Circle: Total Events #/%  
Inner Circle: Earnout Potential \$B/%

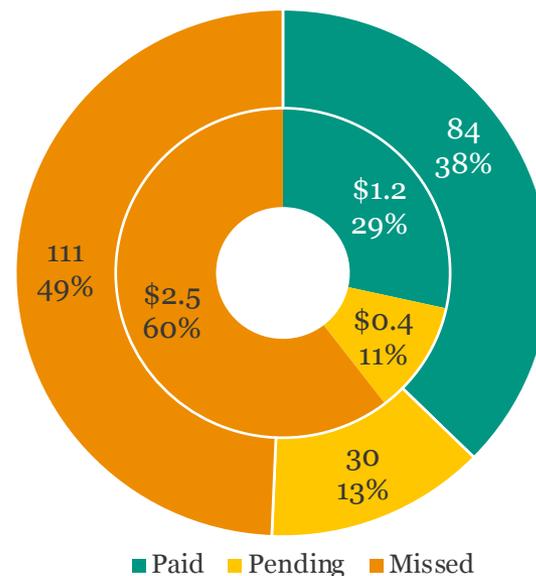


- 56 deals
- 214 milestone events (outer circle)
- \$8.9B earnout potential (inner circle)

Subset: Milestones due by mid-2019\*

## Devices and Dx/Research

Outer Circle: Total Events #/%  
Inner Circle: Earnout Potential \$B/%



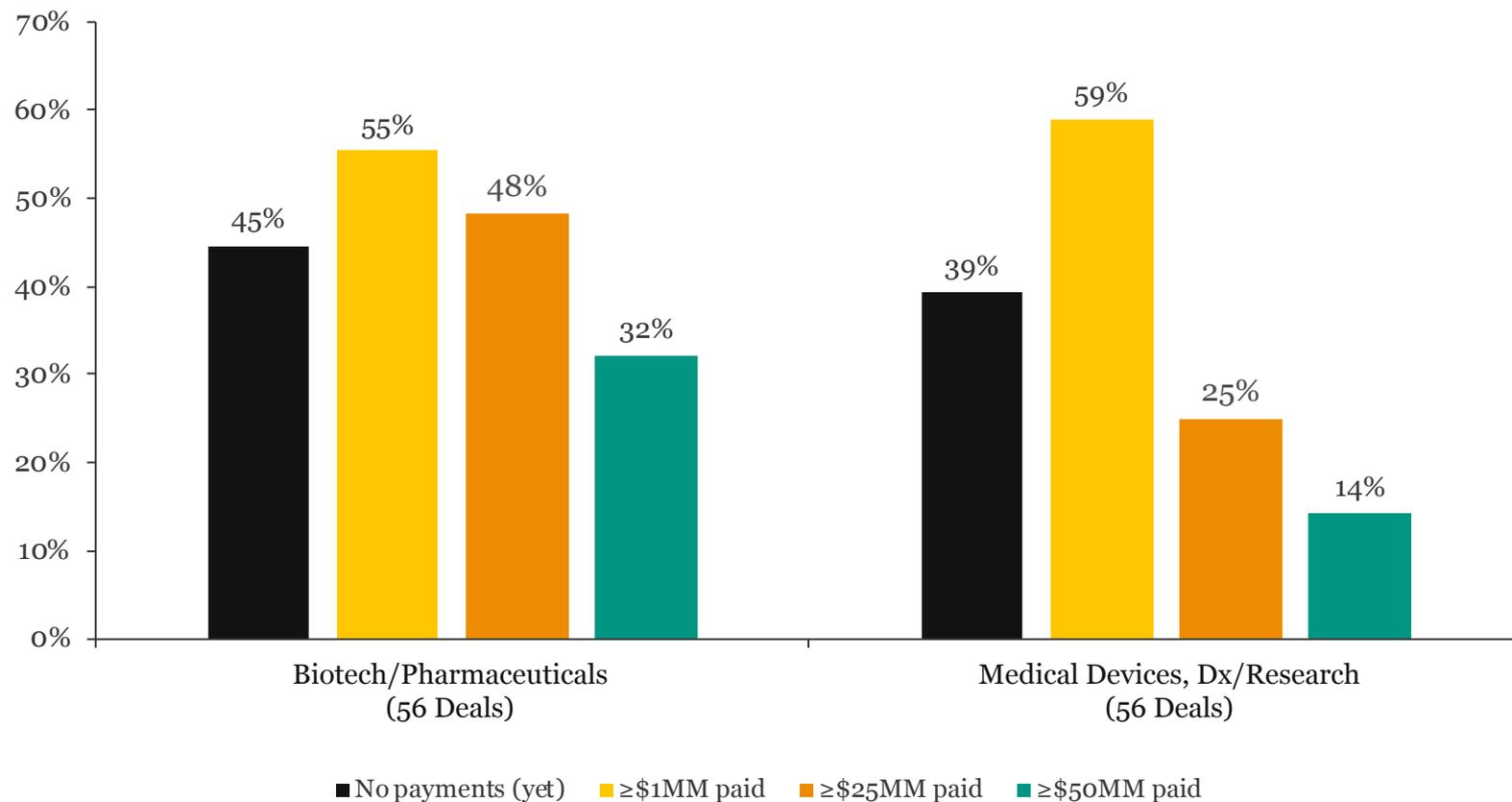
- 56 deals
- 225 milestone events (outer circle)
- \$4.1B earnout potential (inner circle)

\* Due by mid-2019 reflects the SRS Acquiom estimate of whether the milestone would have been expected at closing to be hit or missed by mid-2019, rather than still pending.

## Earnout Achievement Overview: By Deal

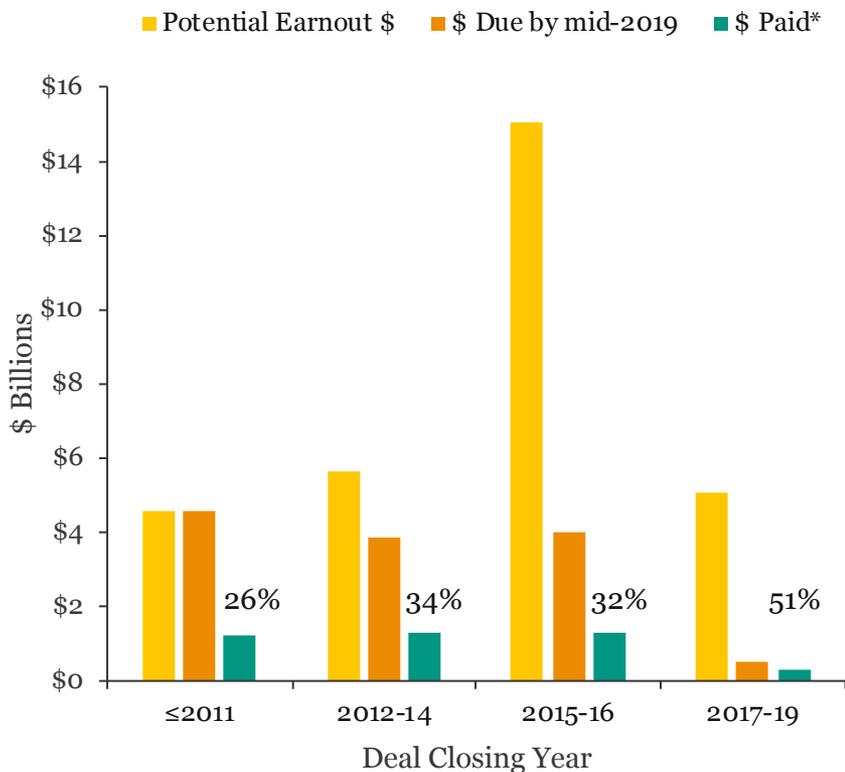
Subset: Deals with at least one milestone due by mid-2019

Percent of deals with paid milestones, by amount paid

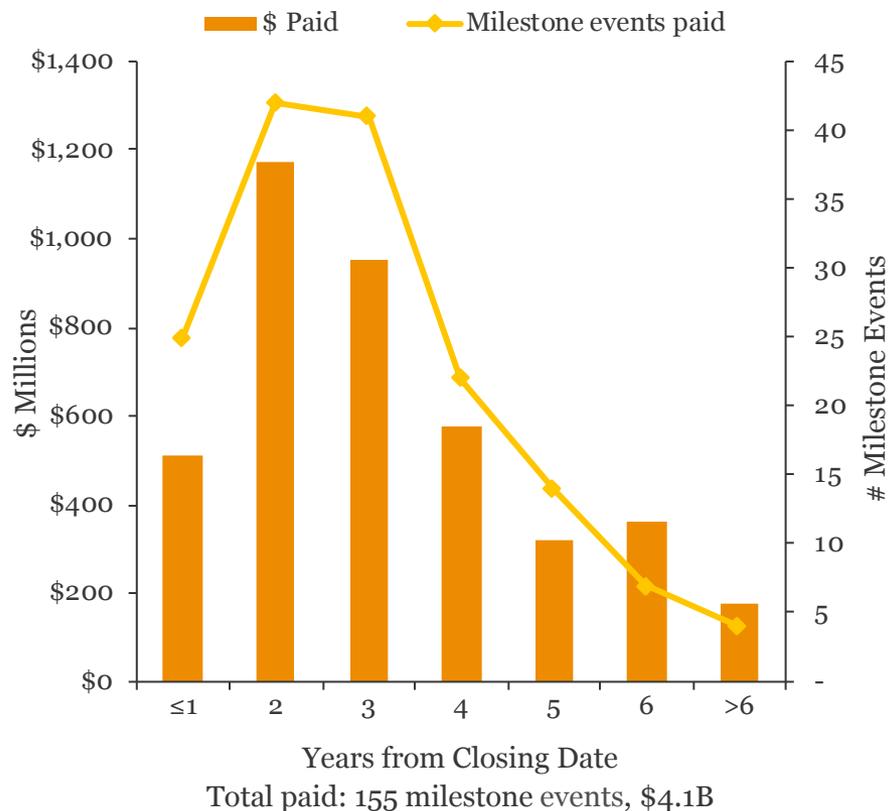


# Maturation of Earnouts & Paid Milestones: All Sectors

## Earnout achievement by closing year\*



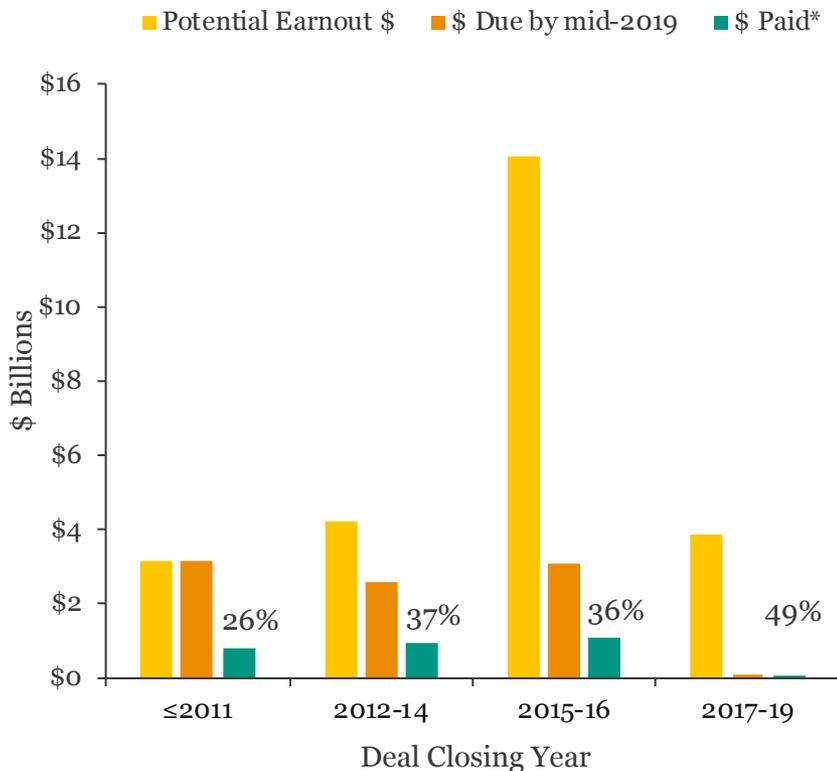
## Timeline of paid milestones, from closing date



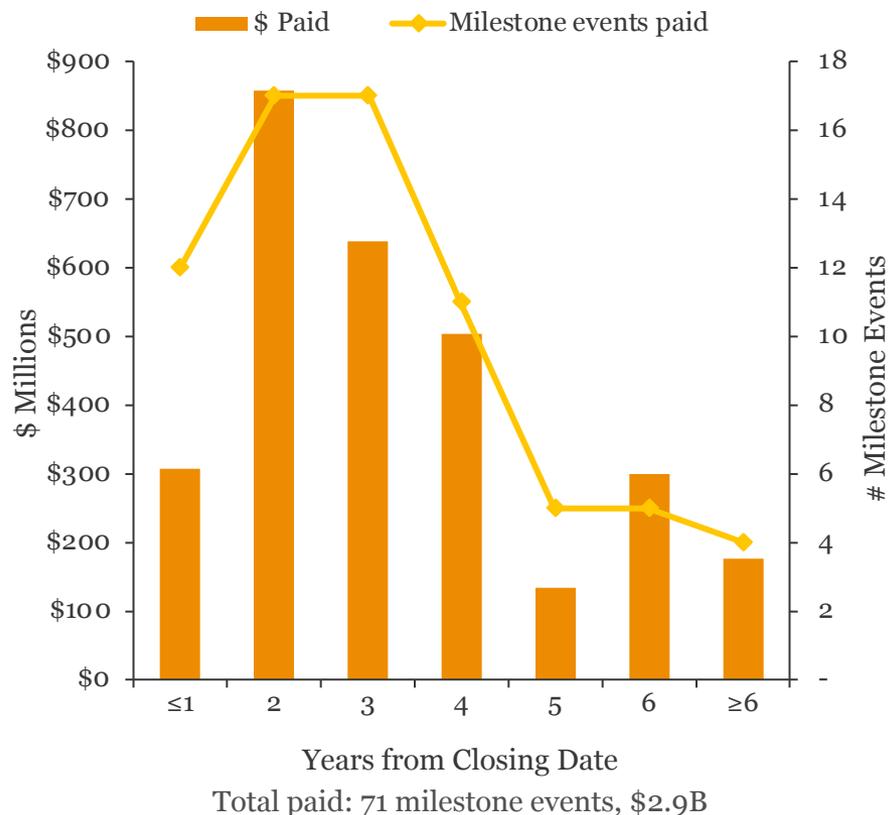
\* Percent number shown is for \$ Paid out as a percentage of \$ Due by mid-2019.

# Maturation of Earnouts & Paid Milestones: Bio/Pharma

## Earnout achievement by closing year\*



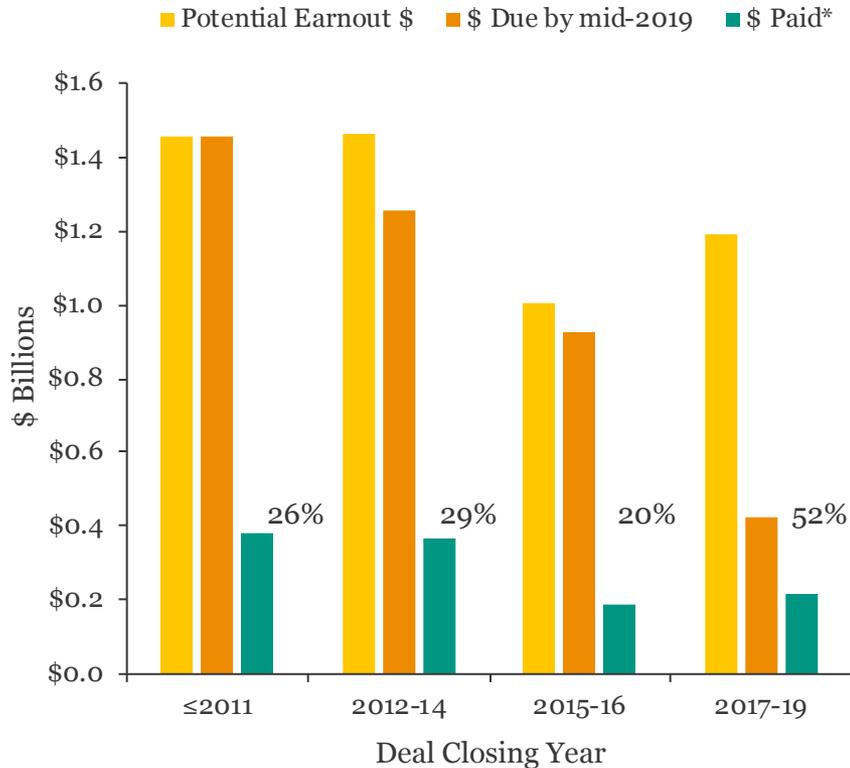
## Timeline of paid milestones, from closing date



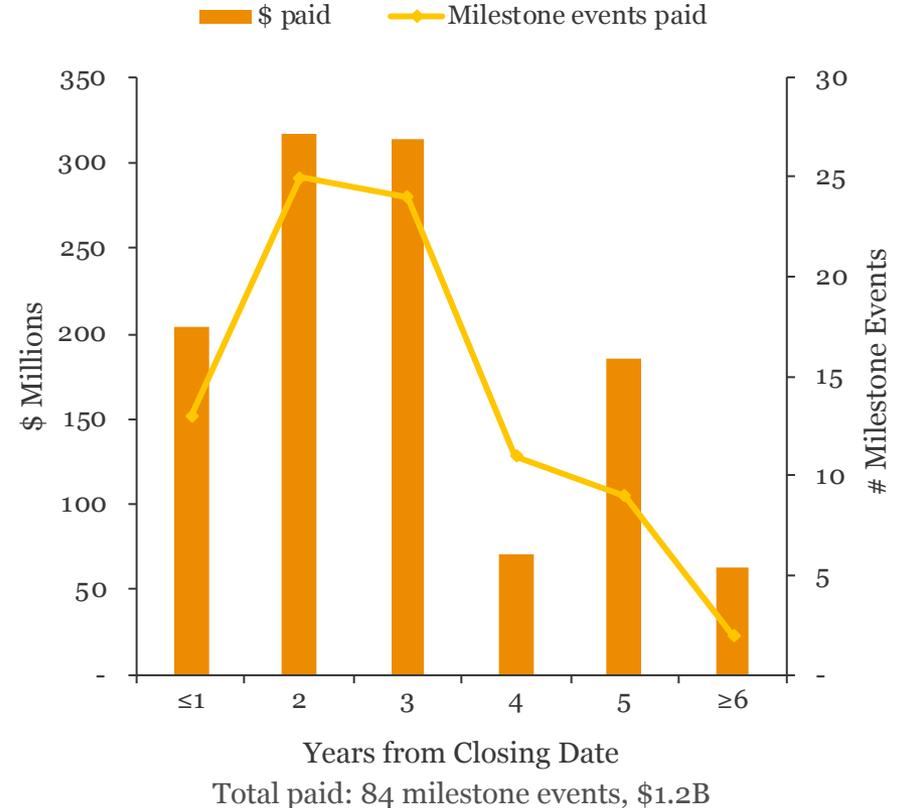
\* Percent number shown is for \$ Paid out as a percentage of \$ Due by mid-2019.

# Maturation of Earnouts & Paid Milestones: Devices and Dx/Research

## Earnout achievement by closing year\*



## Timeline of paid milestones, from closing date



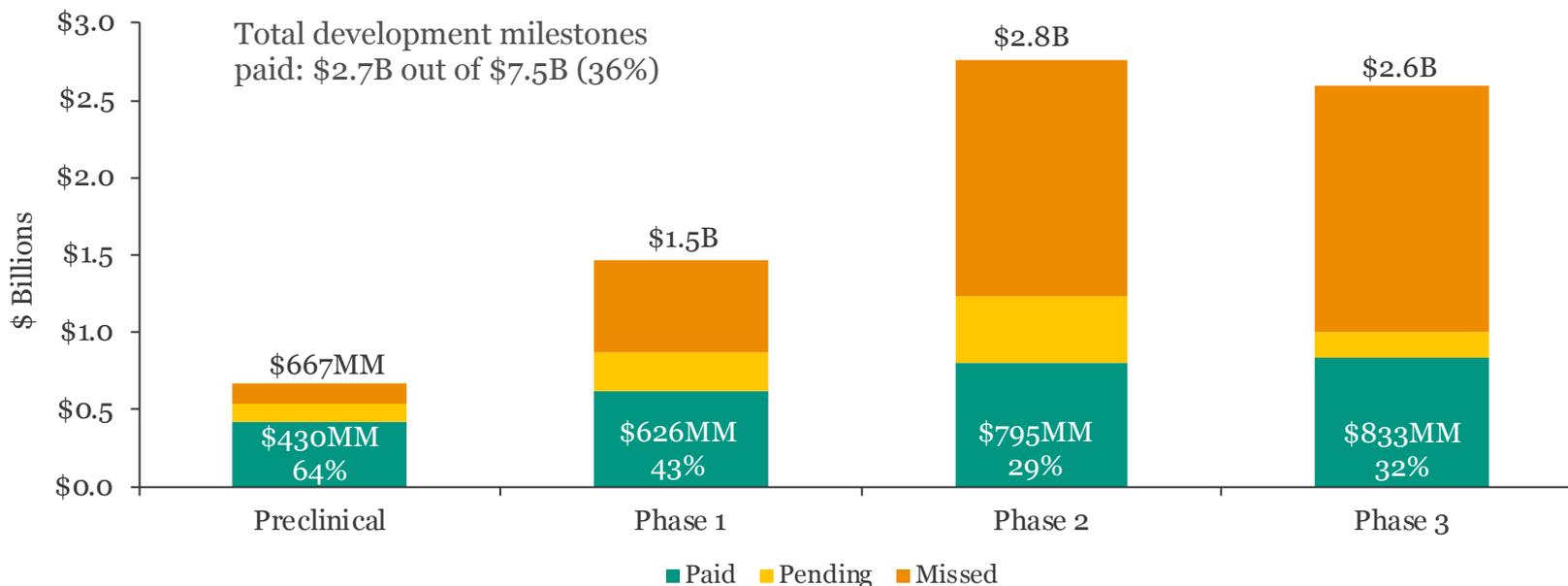
\* Percent number shown is for \$ Paid out as a percentage of \$ Due by mid-2019.

# Milestone Achievement by Development Phase: Bio/Pharma

Subset: Milestones due by mid-2019

Each bar in the chart shows the aggregate earnout potential and amounts paid to date upon achievement of milestones at the end of a given development phase. For example, good preclinical data (left bar) has triggered \$430MM in payments upon events such as IND filing (start of human clinical trials).

Earnout potential (\$) and status (missed, pending, \$ paid/% of potential), by development phase



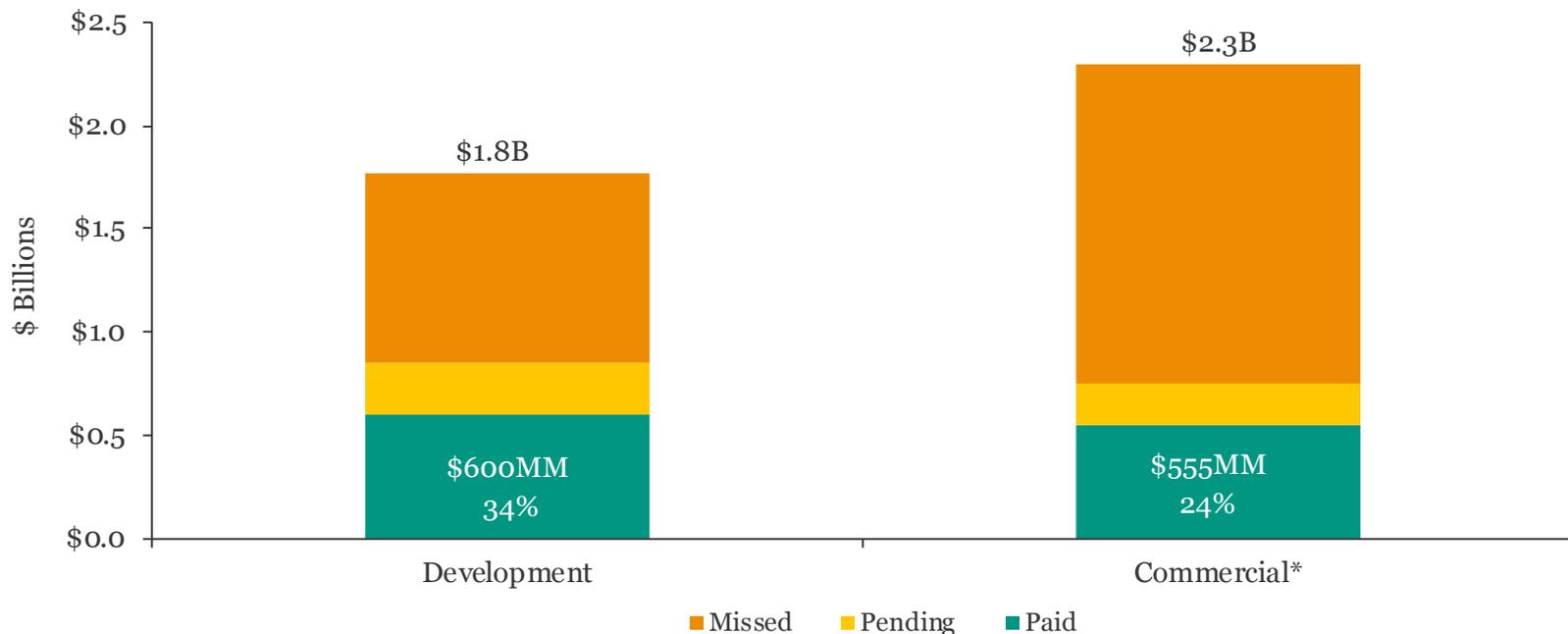
Achievement by Events	Preclinical	Phase 1	Phase 2	Phase 3	Total Development
# Paid Events/# Total Events	15/25	16/36	15/50	17/59	63/170
% Events Paid/Total	60%	44%	30%	29%	37%

Note: Insufficient data available on bio/pharma commercial milestone achievement to produce meaningful analyses.

# Milestone Achievement by Product Stage: Devices and Diagnostic/Research

Subset: Milestones due by mid-2019

Earnout potential (\$) and status (missed, pending, \$ paid/% of potential), by development phase



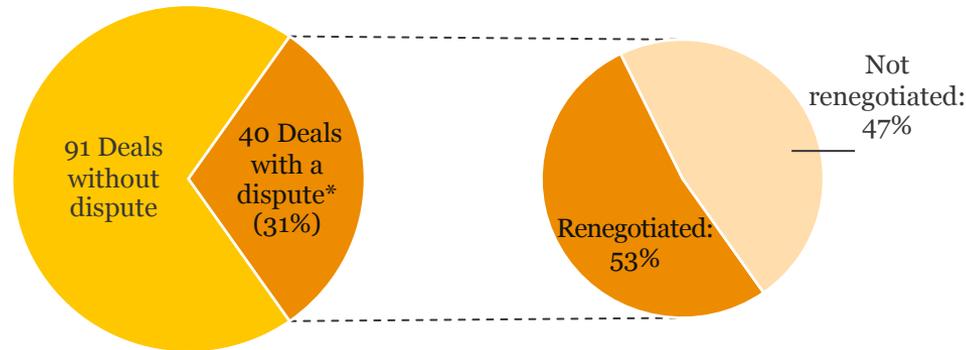
Achievement by Events	Development	Commercial	Total
# Paid Events/# Total Events	50/113	34/112	84/225
% Events Paid	44%	30%	37%

\* Total earnout potential \$ for commercial milestones includes not only defined \$ payments but also defined \$ caps for variable or formula-driven payments.

# Earnout Disputes and Renegotiations

Subset: 131 maturing earnout deals

## Percent of deals with a dispute and percent renegotiated

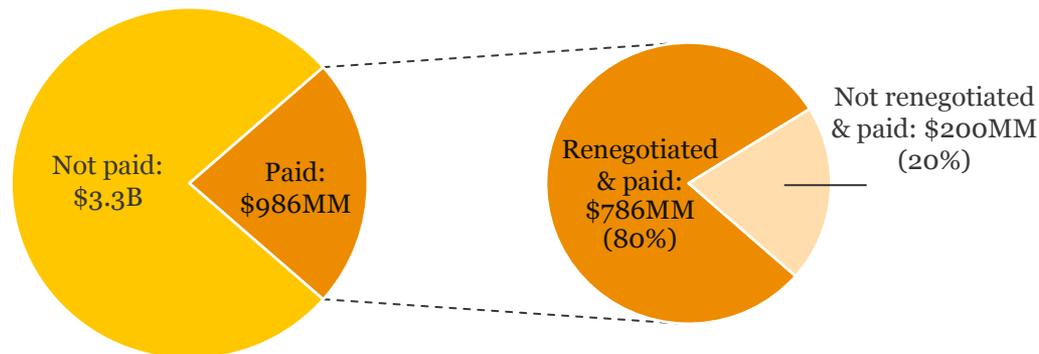


\* Includes informal business disputes as well as formal legal proceedings.

## Disputed earnout potential and status (\$) and percent renegotiated

Of \$4.3B earnout potential from disputed milestones, \$986MM (23%) has been paid.

If paid, disputed milestones were paid one year later on average than undisputed milestones (3.2 vs 2.2 years).



## Contact Us

### Phone

303.648.4085

### Web

[srsacquiom.com](http://srsacquiom.com)

### Data Inquiries/Custom Presentations

[lifescistudy@srsacquiom.com](mailto:lifescistudy@srsacquiom.com)

### Prospective Clients

[sales@srsacquiom.com](mailto:sales@srsacquiom.com)

### Existing Clients

[support@srsacquiom.com](mailto:support@srsacquiom.com)



Please note that we cannot provide data that can be used to ascertain confidential information about deals or clients.

The information herein may not be stripped of any copyright or trademark information or copied, published, or used, in whole or in part, for any other purpose than as expressly authorized by SRS Acquiom. In preparing this study, we have relied upon and assumed, without independent verification, the accuracy and completeness of all information available from public sources or that was provided to us by or on behalf of our clients or that was otherwise reviewed by us. The terms of the agreements surveyed for this Study vary widely and are subject to competing interpretations; therefore the conclusions presented in this Study are subject to important qualifications that are not expressly articulated. SRS Acquiom makes no representations as to, and no party shall be entitled to rely upon, the legal, regulatory, or tax implications of the matters referred to herein, and neither SRS Acquiom nor any of its directors, officers, employees, or agents shall incur any responsibility or liability whatsoever to any party in respect of the contents of this study or any matters referred to in, or discussed as a result of, this document.

---

### Additional Resources

- To schedule a presentation on this topic or to learn more about our solutions, please contact us: [lifescistudy@srsacquiom.com](mailto:lifescistudy@srsacquiom.com)
- Parts of this study were created using SRS Acquiom MarketStandard®—the industry’s most comprehensive, interactive database of private-target M&A deal terms. To gain access, visit: <https://www.srsacquiom.com/marketstandard/>
- 2019 SRS Acquiom M&A Deal Terms Study: <https://info.srsacquiom.com/2019-Deal-Terms-Study>
- 2019 Buy-Side Reps and Warranties Insurance Deal Terms Study: <https://www.srsacquiom.com/resources/2019-buy-side-reps-warranties-insurance-deal-terms-study/>

SRSACQUIOM<sup>®</sup> ELEVATE  
YOUR GAIN