

# *Falling Behind*

*Life sciences venture capital funding slips, falling behind overall venture funding growth rate*

*December 2013*



**US venture capital funding for the life sciences sector,<sup>1</sup> which includes biotechnology and medical devices, declined by 15% during the third quarter of 2013, according to the MoneyTree™ Report from PricewaterhouseCoopers (PwC) LLP and the National Venture Capital Association (NVCA). The report is based on data provided by Thomson Reuters. Venture capitalists invested \$1.4 billion in 188 life sciences deals.**

**While a slowdown in funding occurred in life sciences, venture funding for all industries increased sharply, with 1,005 deals driving revenues of \$7.8 billion in the third quarter, an increase of 17% in value and 7% in the number of deals year over year. In addition, the quarter-over-quarter trend was positive, with amount invested increasing by 12% and number of deals increasing by 5%. The average deal size was 9% higher when compared with the second quarter and grew by 6%, to \$7.7 million, when compared with the same quarter last year.**

**For life sciences, investment decreased by 15% year over year, while deal volume declined by 2% over the same period. Compared with the previous quarter, investment declined by 26%, while deal volume improved by 3%.**

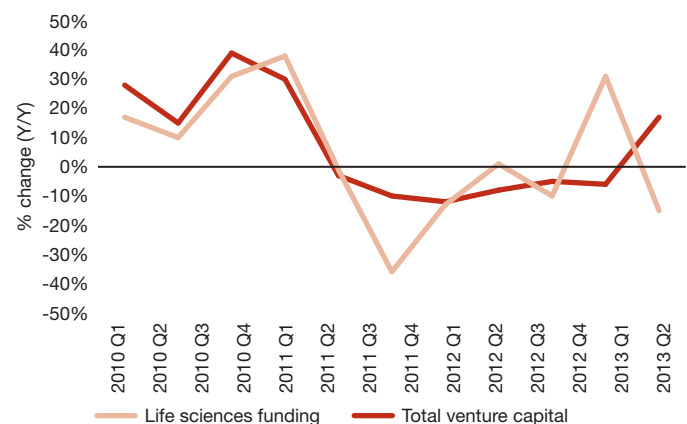
The life sciences share of total venture funding declined significantly, to 18% in the third quarter of 2013, compared with 27% in the previous quarter.

The biotechnology industry ranked second among all industries in the third quarter of 2013, in terms of share of dollars invested, behind the software industry, which received \$3.6 billion from 420 deals.

On a year-over-year basis, biotechnology funding decreased in value by 31% but was relatively flat in deal volume, with an increase of 1%, with \$852 million going into 123 deals. On a quarter-over-quarter basis, biotechnology investment fell 39% in investments but rose 10% in the number of deals.

The medical device industry experienced a 26% increase in investment and a 6% decline in the number of deals, compared with the same quarter last year. For the third quarter of 2013, medical devices received \$566 million in 65 deals. When compared with the second quarter of this year, medical devices investment improved 12% in value while declining 8% in volume.

**Figure 1:** Life sciences funding compared with total venture funding



<sup>1</sup> The MoneyTree life sciences sector includes the biotechnology and medical device and equipment industries. *Biotechnology* is defined as “developers of technology promoting drug development, disease treatment, and a deeper understanding of living organisms; includes human, animal, and industrial biotechnology products and services. Also included are biosensors, biotechnology equipment, and pharmaceuticals.”

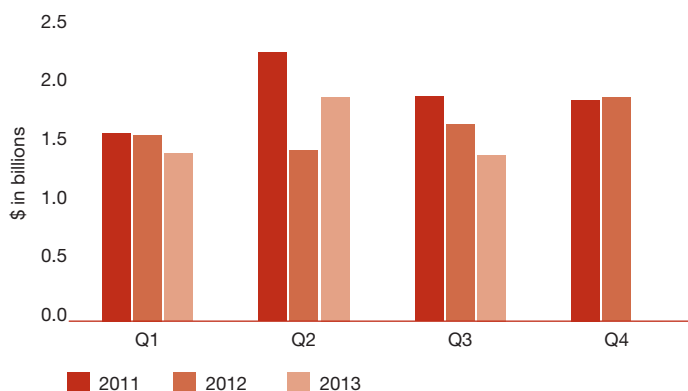
*Medical devices and equipment industries* are defined as those that “manufacture and/or sell medical instruments and devices including medical diagnostic equipment (X-ray, CAT scan, MRI), medical therapeutic devices (drug delivery, surgical instruments, pacemakers, artificial organs), and other health-related products such as medical monitoring equipment, handicap aids, reading glasses, and contact lenses.”

### Life sciences funding by quarter

Life sciences investment fell to \$1.4 billion in the third quarter, a decrease of 15%, when compared with the same quarter in 2012.

“Life sciences venture funding witnessed a slowdown in the quarter as venture funding, specifically capital-light industries, saw large funding increases,” said Greg Vlahos, Life Sciences Partner at PwC. “Despite the slowdown, the pace of life sciences investment for the first three quarters of 2013 is outpacing the previous year, showing VCs are still looking at the sector for future investments.”

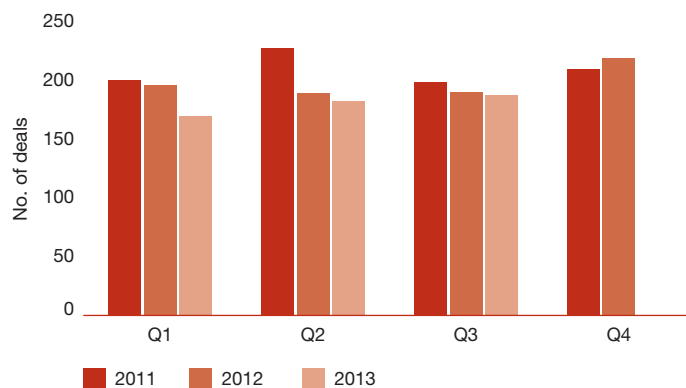
Figure 2: Life sciences funding trends by quarter 2011–2013



### Life sciences deal volume by quarter

The number of deals for the third quarter of 2013 was 188. This number represents a decrease of 2% year over year but an increase of 3% over the last quarter.

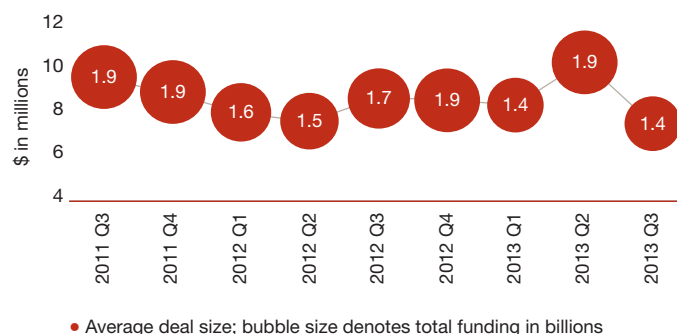
Figure 3: Life sciences deal volume by quarter 2011–2013



### Life sciences average deal size by quarter

Average deal size decreased by 14% year over year to reach \$7.5 million. When compared with the last quarter, average deal size fell by 28%.

Figure 4: Life sciences average deal size by quarter 2011–2013

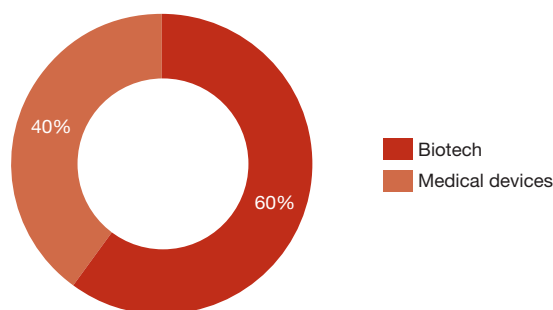


• Average deal size; bubble size denotes total funding in billions

## Funding for biotechnology and medical devices

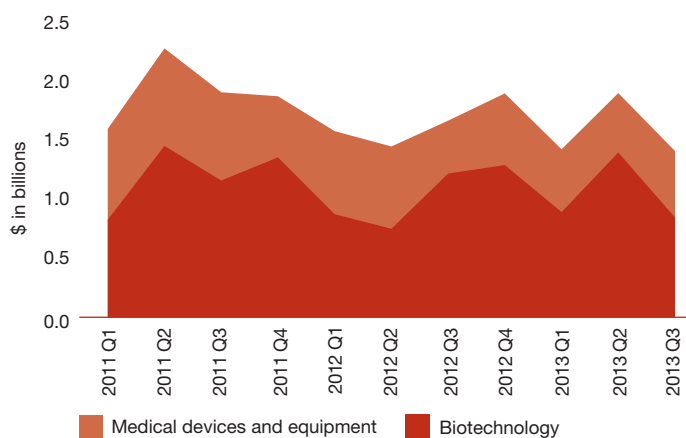
Medical device funding was \$566 million during the third quarter of 2013, a 26% increase compared with the same quarter the previous year. The number of deals fell by 6%, to 65, during this quarter.

Figure 5: Life sciences investment split for the third quarter of 2013



During the third quarter of 2013, biotechnology funding declined by 31%, to \$852 million, from the same quarter of 2012. Deal volume also increased by 1%, to 123, compared with the third quarter of 2012.

Figure 6: Biotechnology and medical devices funding trends 2011–2013



## Biotechnology funding by subsegments

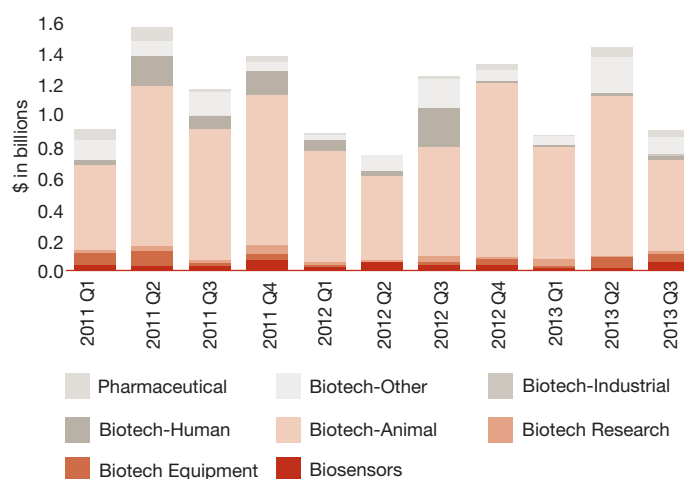
Biotechnology subsectors receiving increased funding in the third quarter compared with the prior-year period were:

- Biotech research, +175% to \$50 million
- Biotech equipment, +72% to \$55 million

Biotechnology subsectors receiving less funding in the third quarter compared with the prior-year period were:

- Biotech industrial, -88% to \$29 million
- Biotech animal, -61% to \$15 million
- Pharmaceutical, -43% to \$107 million
- Biosensors, -16% to \$3 million
- Biotech human, -16% to \$581 million

Figure 7: Biotechnology funding by subsegments 2011–2013



## Medical device funding by subsegments

“The medical device segment saw strong funding levels in the quarter. The growth in the largest segment, medical therapeutics, is particularly impressive, as early-stage funding in the subsegment grew by 83% over last year,” Vlahos said. “While hurdles remain for life science funding compared with other sectors, VCs will continue to invest in early-stage companies that show promising results in the health space.”

Funding for all medical device subsegments increased during the third quarter of 2013 when compared with the same quarter of 2012.

- Medical therapeutics, +39% to \$380 million
- Medical diagnostics, +6% to \$84 million
- Medical/health products, +4% to \$102 million

Figure 8: Medical devices and equipment funding by subsegments 2011–2013

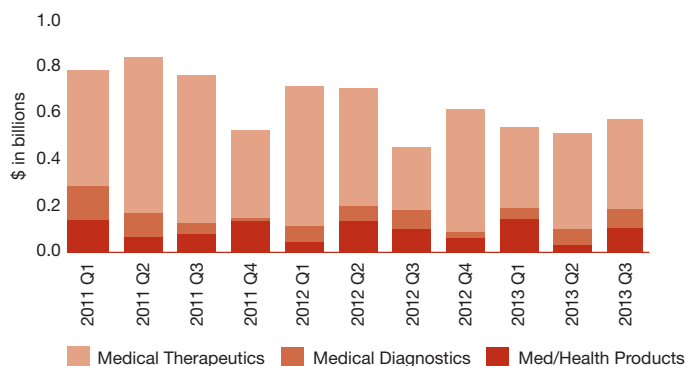
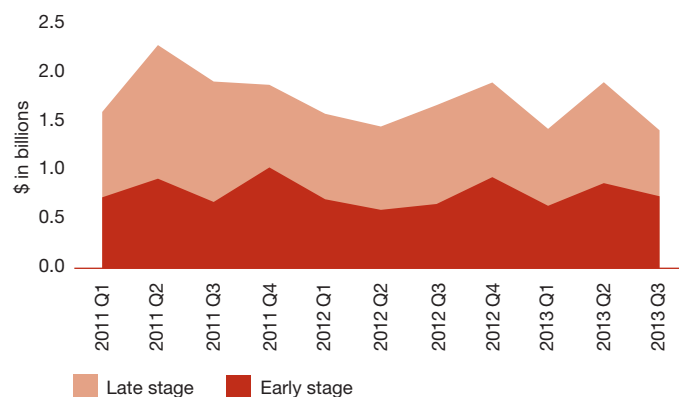


Figure 9: Life sciences funding by stages 2011–2013



### Life sciences funding by stages

On a year-over-year basis, life sciences early-stage funding increased by 12% to \$741 million during the third quarter in 2013. Quarter over quarter, early-stage funding fell by 15%.<sup>2</sup>

Early-stage deal volume increased by 3% compared with the same quarter last year and increased 5% to 107 when compared with the first quarter of 2013. Average deal size grew 9% year over year but fell 19% quarter over quarter, to \$6.9 million.

Late-stage funding declined by 33% year over year and by 35% from the last quarter, to \$678 million.<sup>3</sup>

Late-stage deal volume recorded a 7% decline year over year and was flat from the previous quarter, to 81 deals. Average deal size decreased 28% year over year and 35% quarter over quarter, to \$8.4 million.

### Biotechnology funding by stages

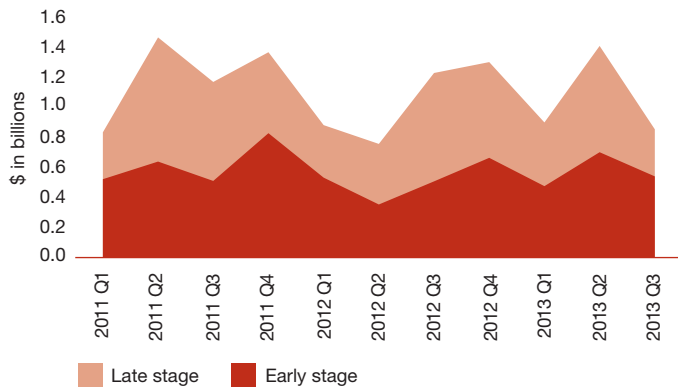
For the biotechnology sector, early-stage funding increased by 7% from the third quarter of 2012, to \$539 million, while late-stage funding declined sharply by 57% over the same period, to \$313 million.

Compared with the first quarter of 2013, early-stage funding decreased by 23%, and later-stage funding declined by 56%.

“Early-stage biotech funding remained strong in the quarter, even as overall funding levels declined,” Greg Vlahos said. “The continued interest in early-stage biotech companies shows that, for the right opportunities, VC funding will remain committed to the sector.”



Figure 10: Biotechnology funding by stages 2011–2013

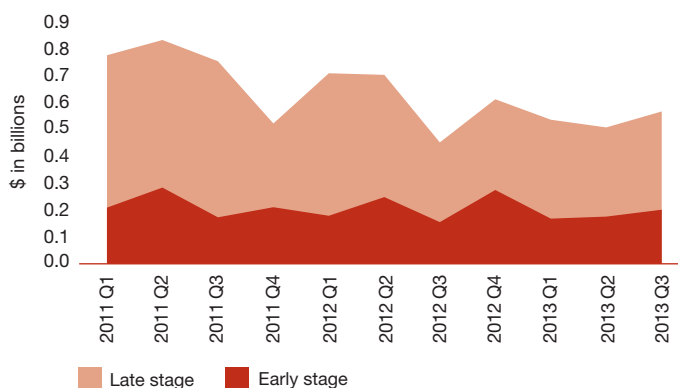


### Medical device funding by stages

For the medical device industry, early-stage funding increased 30% to \$201 million during the third quarter of 2013 compared with the previous year. Late-stage funding also rose 23%, to \$365 million, over the same period.

Compared with the previous quarter, early-stage funding improved by 15% and late-stage funding increased by 10%.

Figure 11: Medical device funding by stages 2011–2013



### First-time funding compared with follow-on funding

A total of \$150 million went into initial investments, representing a 9% drop from the same quarter last year. Follow-on funding also decreased from the same period of last year by 16% to \$1.3 billion.

Quarter over quarter, both initial investments and follow-on funding registered a decrease of 56% and 19%, respectively.

First-time deals in the life sciences sector averaged \$3.2 million, and follow-on funding averaged \$9 million in the third quarter of 2013.

Figure 12: Life sciences follow-on compared with initial investments 2011–2013

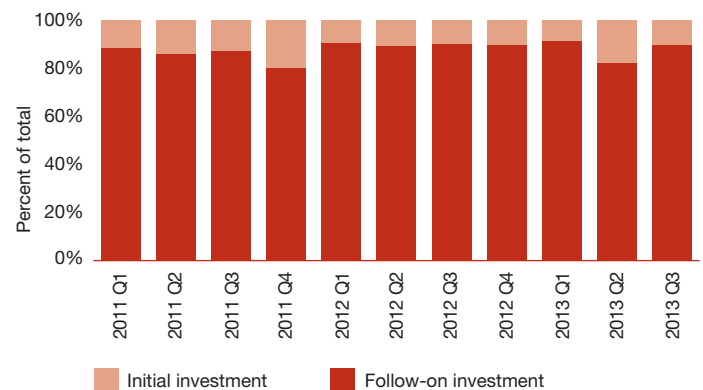


Table 1: 2013 life sciences third quarter growth factors (Y/Y growth)

	% Change in Deal Volume	% Change in Avg Deal Size	% Change in Investments
First-time	+31%	-67%	-56%
Follow-on	-4%	-16%	-19%

### Regional funding trends

Boston, San Francisco Bay<sup>2</sup>, San Diego Metro, New York Metro, and the Twin Cities received the most life sciences venture capital dollars during the third quarter of 2013. The leader, Boston, received \$381 million, with \$234 million going into biotechnology and the remaining \$147 million going into medical devices.

<sup>2</sup> San Francisco Bay area includes SF/Berkeley and San Jose.

Figure 13: Top five metropolitan regions third quarter 2013

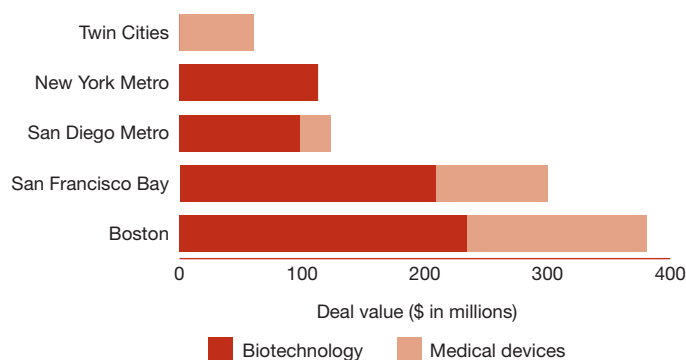
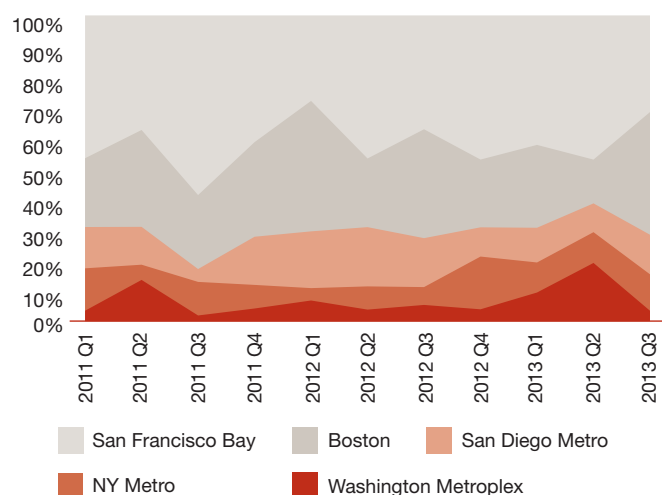


Figure 14: Life sciences funding trends in top five regions 2011–2013



## Venture capital outlook

Life sciences venture funding is experiencing intense competition for venture capital compared to other sectors. Its share of total venture funding dollars has dropped from a peak of 32% in 2009 to 23% so far in 2013. An often discussed reason for this is the movement of VC dollars from capital intensive industries like biotechnology and medical devices into capital light industries like software. However, this only partially explains the drop in overall funding. Also an increasingly complicated regulatory environment is a contributing factor alongside a change in behaviour by both start-ups and their acquirors.

As equity funding has become less available, Life Science start-ups are increasingly looking to the debt markets to fulfil their

growth needs. Start-ups are also looking for funding from less traditional sources. On the acquiror side, traditional buyers like larger biotech firms and established medical device companies are taking on more risk by involving themselves earlier in the lifecycle of the start-ups they find most promising. Corporate venture capital groups are increasingly common investors in the Life Sciences space moving from under 5% of funding in 1995 to almost 11% so far in 2013.<sup>3</sup>

These trends are altering the traditional relationships and are impacting where Life Science firms are searching for funding. Life sciences funding will continue to be one of the pillars of venture funding, but the question of whether it will regain its former status remains to be seen. Innovative companies will always attract capital, but these funds are increasingly coming from outside the traditional VC arena.

## Fundraising

Venture capitalists invested \$7.8 billion in 1,005 deals during the third quarter of 2013. Quarterly venture capital investment activity increased 12% in terms of dollars and 5% in the number of deals, compared with the second quarter of 2013, when \$7 billion was invested in 956 deals. When compared with the first three quarters of 2012, both the dollar and deal totals for the first three quarters of 2013 track slightly higher. However, the dollar and deal totals for the first three quarters of 2011 exceed those of 2013.

According to Mark McCaffrey, global technology partner and software leader at PwC US, “More venture capital dollars are going into more software deals than we’ve seen in the past decade. The continued increase in valuations for innovative and disruptive technologies in software-related companies, coupled with the increase in exit activity, is driving venture capitalists to make more investments in this space. And at the current pace of investing, we should see total venture capital investments in 2013 exceed the annual total from 2012.”

“With more than half of this quarter’s deals coming from early and seed-stage deals, there’s credible reason to be optimistic about the future of innovation and the vibrancy of the start-up ecosystem,” John Taylor, head of research at the NVCA, said. “Software is a natural increased area of focus, given that many tech deals are less capital-intensive to get to proof of concept,” he added. “We are balancing this optimism, however, against the recognition that VCs are still trying to gain exits for the previous generation of companies. There is some improvement on that front, but we would like to see it strengthen even further.”<sup>4</sup>

<sup>3</sup> NVCA, “Corporate VC Stats thru Q3 2013, November 8, 2013

<sup>4</sup> Thomson Reuters and NVCA news release, “Dollars Invested by Venture Capitalists Rise 12 percent in Q3 2013” October 18, 2013.

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