

Medtech dealmaking and financing trends in 2019

Last year saw an uptick in medtech mergers and acquisitions values, whereas financing declined. This year is bringing new opportunities and challenges for the field as it responds to the demands of the coronavirus.

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The medtech industry saw advancements and disruptions during the course of 2019. As the industry continued to grow, it also dealt with challenges such as digitization and automation—in particular, the digital health devices and digital therapeutics markets blurring the lines between pharma and medtech, making this an even more complex healthcare environment in which to participate.

On a positive note, the 2.3% medical device excise tax in the United States was fully repealed at the end of 2019, nearly 7 years after the controversial policy was put into place, and almost 5 years after it was temporarily suspended. The repeal was a major win for the industry, with that money instead now available to be invested in R&D, including innovative technologies. The Medical Device Single Audit Program was also fully implemented during the year, and will allow regulatory harmonization among the USA, Canada, Brazil, Japan and Australia with regard to recognizing quality systems auditing by one accredited third party.

Acquisition values increase

Against this backdrop, medtech companies agreed 119 acquisitions in 2019, a very similar number to 2018's 122 deals. However, significantly more money was spent: \$54 billion, a 38% increase over the \$39 billion acquirers paid for target companies in 2018. On a quarterly basis, there was minimal fluctuation in deal volume, with the start and finish of 2019 at the lower end, but Q1 was clearly an outlier in terms of deal value, boasting a total of \$30 billion, while the other quarters were in the \$7–9 billion range, which was more in line with 2018's quarter aggregates (Fig. 1).

What made the first quarter stand out in terms of value was Danaher Corporation's \$21.4 billion purchase of GE Healthcare Life Sciences' biopharma business—the biggest transaction of 2019, representing the majority (70%) of the total acquisition value in the quarter and almost 40% of the total for the year (Table 1). Complementing Danaher's life sciences unit, the assets acquired include process chromatography hardware and consumables, cell culture media, single-use technologies, development instrumentation and consumables and services—all main revenue generators. In particular, the deal provides Danaher with an end-to-end bioprocessing and manufacturing platform for cell therapy, a growing key market among many healthcare sectors. Because of the diversity of products the GE business brings, Danaher had to divest some of its own overlapping operations. Specifically, Danaher sold three life sciences businesses—ForteBio (biomolecular analysis and biologic R&D and manufacturing

products), Pall Chromatography (chromatographic purification platforms) and SoloHill Engineering (chromatography hardware and resins)—to Sartorius for \$750 million, which also made the list of top 10 acquisitions by value.

The cell bioprocessing capabilities that Danaher gained from GE are just one of many segments of the cell therapy market. Cellular imaging and analysis tools also drew dealmakers to the table during 2019. In the biggest of these mergers and acquisitions (M&As), Agilent Technologies paid \$1.2 billion for BioTek Instruments, which, after acquisition, became a stand-alone unit within Agilent's cell analysis division. BioTek's offerings in this area including cell interaction analysis, cell imaging and microscopy and 3D cell culture. In another cellular imaging and analysis sector deal, CellaVision paid \$30 million for RAL Diagnostics, a leading player in organic staining for cellular imaging that produces reagents such as dyes to identify cell and tissue morphology, parasites and bacteria. Additional transactions in this area included Nucleus Biologics' purchase of Primorigen Biosciences (gaining vitronectin XF matrix for cell growth and proliferation) and Gemini Pharmaceuticals' purchase of Orflo Technologies (gaining cell analysis instruments including flow cytometers and cell counters).

In the second-largest acquisition of 2019, 3M made a major investment in wound care, spending \$6.7 billion on Acelity plus its KCI subsidiaries, which were sold by an investor consortium led by Apax Partners. Apax and its affiliates had been considering an exit for Acelity through an initial public offering (IPO),

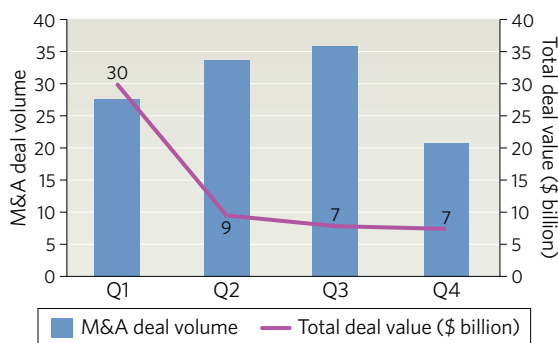


Fig. 1 | Medtech M&A deal activity in 2019 by quarter. M&A, merger and acquisition. Source: Informa's Strategic Transactions and Medtrack.

Table 1 | Top ten medtech M&As of 2019 by value

Month	Acquirer	Target	Deal value (\$ million)	Deal summary
February	Danaher	GE Life Sciences' biopharma business	21,400	Danaher purchases GE Life Sciences' biopharma business, including instruments, consumables and software supporting various workflows
May	3M	Acelity	6,725	3M acquires Acelity to build up its wound care and dressings offerings for \$6.7 billion
February	Ethicon	Auris Health	5,750	Johnson & Johnson buys Auris Health and its flexible robotic endoscope platform Monarch currently applied in the lung for diagnostic and treatment procedures
November	Stryker	Wright Medical	4,700	Stryker acquires Wright Medical, a leading player in the upper and lower extremities and biologics markets with a broad product portfolio and customer base
July	Exact Sciences	Genomic Health	2,800	Exact Sciences and Genomic Health merge and combine with Cologuard and Oncotype cancer testing lines, respectively
July	Agilent	BioTek Instruments	1,165	Agilent buys BioTek Instruments and its cell imaging and microscopy, detection, liquid handling, and software and robotics accessories, to strengthen its cell analysis capabilities
January	PHC Holdings	Thermo Fisher Scientific's anatomical pathology business	1,140	Thermo Fisher Scientific divests its anatomical pathology business (microscope slides, instruments, and consumables) to PHC
August	Siemens Healthineers	Corindus Vascular	1,100	Siemens Healthineers, via Siemens Medical Solutions USA, acquires robotic-assisted device maker Corindus Vascular
May	Perrigo	Ranir Global	750	Self-care company Perrigo purchases global oral care company Ranir for \$750 million
October	Sartorius	Danaher's ForteBio, Pall Chromatography, and SoloHill Engineering	750	Danaher sells three life sciences businesses to Sartorius' Sartorius Stedim Biotech

M&As, mergers and acquisitions. Source: Informa's Strategic Transactions and Medtrack.

estimated to be worth \$500 million, but the acquisition by 3M turned out to be the more advantageous choice. Acelity was established in 2013 through the combination of KCI, which developed the first negative pressure wound therapy, LifeCell, a regenerative medicine company later divested to Allergan, and Systagenix, a wound care product supplier. The addition of Acelity's portfolio builds up 3M's medical solutions business of advanced and acute wound care dressings; 3M has prioritized the advanced wound care market in particular as it tries to recover from a slowdown in earnings from its consumer offerings. 3M was not the only one buying into the wound care sector in 2019; another large deal saw Smith & Nephew acquire Osiris Therapeutics and its cryopreserved skin substitutes for \$656 million.

The global robotically assisted surgical systems market is forecast to reach \$9.7 billion by 2023, and robotic interventions piqued the interest of three big companies: Johnson & Johnson (J&J), Siemens and Stryker. J&J's Ethicon purchased Auris Health for \$3.4 billion up front and up to \$2.35 billion in earn-outs. Auris has developed a US Food and Drug Administration (FDA)-approved robotic endoscope called Monarch used to prevent and treat lung cancer lesions. Siemens Healthineers and Siemens Medical Solutions USA paid \$1.1 billion for Corindus Vascular Robotics and its portfolio of devices for robotic-assisted coronary, peripheral and neurovascular procedures. And Stryker acquired Cardan Robotics (which markets the Orion line of robotic areas and image guidance systems) in a two-company transaction that also included point-of-care imaging player Mobius Imaging, for a total value of \$370 million up front and up to \$130 million earn-outs.

Other therapy areas bringing in big deal values included oncology molecular diagnostics (Exact Sciences/Genomic Health

for \$2.8 billion and Bracco Imaging/Blue Earth Diagnostics for \$450 million) and ophthalmology (Avedro/Glaukos for \$500 million and Alcon/PowerVision for \$285 million).

Financing decline

During 2019, medtech financings—including debt, follow-on public offerings (FOPOs), IPOs, private investments in public equity (PIPEs) and venture capital (VC) funding—reached an aggregate \$16.6 billion from 299 transactions. This marks an 8% decrease from the number of transactions completed the previous year (326) and a 15% decline in the total money raised versus 2018's aggregate of \$19.6 billion. The year started off with financing totaling \$3.3 billion in the first quarter, and gradually increasing in dollars each subsequent quarter (\$4.6 billion in Q2 and \$5.8 billion in Q3) until Q4, the year's lowest period, during which the aggregate financing took a downturn, dipping to \$2.9 billion (Fig. 2).

Debt accounted for the largest segment of 2019's financing activity, representing 31% (or \$5.2 billion) of the annual total. This was headed up by raises by companies including the largest medtech financing of the year by Insulet, a maker of insulin management systems, which netted \$684 million in its private placement of \$700 million aggregate principal amount of convertible senior notes due in 2026. IPOs accounted for \$2.9 billion (16% of the total) in 2019, compared with \$6.3 billion (32% of the total) in 2018, when IPOs were the leading financing vehicle. However, the 2018 figure was largely due to the Siemens Healthineers' \$5.2 billion IPO, and the same number of IPOs (15) were completed in both years.

In the largest IPO of 2019, Livongo Health netted \$380 million, valuing the company at \$2.6 billion. Livongo offers a smartphone-connected meter, automatically delivered testing materials,

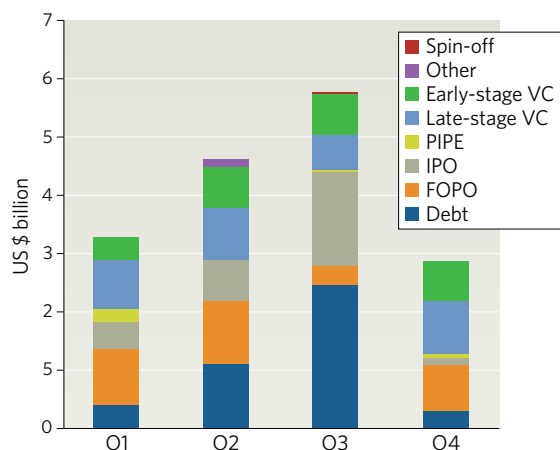


Fig. 2 | Total investment in medtech in 2019, by quarter and financing type. FOPO, follow-on public offering; IPO, initial public offering; PIPE, private investment in public equities; VC, venture capital. Source: Informa’s Strategic Transactions and Medtrack.

real-time coaching and monitoring to help people with diabetes track and manage their blood glucose levels.

Companies operating in the digital health arena overall brought in an aggregate of \$1.3 billion for 2019 (8% of the financing total). In addition to Livongo Health, one other company, German digital biomarker firm Centogene (rare disease diagnostics), brought in \$52 million through an IPO, but the rest of the money in this space was raised through venture funding.

Late-stage VC rounds (Series C and later) together totaling \$3.3 billion for the year made up 20% of 2019’s aggregate financing. Topping the group of seven medtech players raising \$100 million or more was surgical robotic system maker CMR Surgical, which brought in \$243 million through a Series C round. Early-stage rounds captured 15% of the 2019 dollars, with only three transactions reaching or surpassing the \$100 million mark. In the

largest, MGI Tech, a Chinese company that produces sequencing devices, equipment, consumables and reagents to support life science research, medicine and healthcare, raised over \$200 million in its Series A round.

FOPOs also notably contributed to medtech financing, accounting for 15% of the 2019 total. At the top of the FOPO category was precision oncology firm Guardant Health’s \$305 million offering. The company sells two liquid biopsy products, Guardant360 and GuardantOMNI—used in treatment selection and drug development settings, respectively—and is also developing assays for cancer recurrence detection and early disease screening.

Across all deal types, pure-play cardiovascular device companies were quite active during 2019, bringing in an aggregate \$1.5 billion through 40 transactions, topped by Acutus Medical (diagnostic imaging devices for arrhythmias), which brought in \$170 million through a concurrent \$100 million Series D round and \$70 million credit facility.

Outlook

Looking ahead, much uncertainty remains as the world continues to manage the coronavirus pandemic. As with other industries, the medtech sector will almost certainly be affected, potentially in supply chain disruptions in countries such as China and the US, where much device manufacturing takes place, and on the healthcare delivery side, where patients may avoid surgery, thus reducing device interventions.

Many medtech companies are now in the spotlight as the world looks to them to produce COVID-19 diagnostics, assisted by the US FDA relaxing rules to allow laboratory-developed tests to be used under emergency use authorization while awaiting approval (Hunting for antibodies to combat COVID-19, B3).

Finally, players in the device market are also continuing to adjust to the European Medical Device Regulation, which becomes fully implemented in mid-2020, amid questions about structures being in place to ensure a smooth transition for manufacturers and patients.

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Spotlight on COVID-19 and 2020 so far

The majority of 2020 for most industries has been dominated by responding to the challenges posed by COVID-19. In terms of medtech financing, the first half of 2020 saw multiple medtech companies raising money to back an initiative that enables expedient access to COVID-19 testing. Bringing in the most was digital health company Cue Health Inc., which completed a \$100 million Series C financing round in June 2020. Shortly after its financing, Cue’s rapid, portable molecular testing platform—which uses a nasal swab for detection of SARS-CoV-2 (the virus responsible for COVID-19) in 25 minutes—received FDA emergency use authorization. Overall, medtech companies with some focus on delivering COVID-19 diagnostics and other platforms brought in a total of \$290 million in financing (\$116 million through FOPOs and \$174 million through PIPEs and venture rounds) during the first 6 months of 2020. Notably, life sciences company Benchling’s \$50 million Series D round will support research for potential treatments or vaccines as well as health-care workers on the front lines of the coronavirus crisis; the firm is offering its platform pro bono to labs for COVID-19 testing. VIDA Diagnostics’ \$13 million Series C round will fuel development and commercialization of its artificial intelligence (AI)-powered lung imaging platform to affect patient care for both traditional respiratory diseases and emergent COVID-19 conditions.

Digital health

In addition to Cue Health and VIDA, numerous other medtech digital health players across therapeutic areas outside COVID-19 also engaged in fundraising during the first half of 2020. Livongo Health completed a \$534 million convertible senior notes offering in June 2020. Mindstrong Health (which monitors and tracks mental health symptoms through an AI-powered digital biomarker technology delivered through a smartphone app) secured \$100 million through its Series C round in May 2020. These companies joined several other medtech digital health players, which together raised an aggregate \$961 million across various financing vehicles for the first half of 2020, quickly closing in on the \$1.3 billion total raised for the full year 2019.