

2020 Q3 Strategic Healthcare M&A Report

At a glance ...

- Healthcare Industry Landscape
- Experience of Key Medtech Companies
- Notable M&A Transactions
- Top Deals > \$50m in Transaction Value Announced or Closed in Q3 2020
- Performance of Leading Healthcare Companies
- Analysis of More Than 60 M&A Transactions Announced or Closed in Q3 2020

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for

The Healthcare Industry

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The Strategic Healthcare M&A Report analyzes important merger, acquisition and strategic transactions taking place in the healthcare industry. A complimentary copy of the Report can be obtained by subscribing at www.waldenmed.com. With 30 years of experience and a lengthy track record, The Walden Group is a strategic merger & acquisition advisory firm focused on the healthcare industry.

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Healthcare Industry Landscape

As the world adjusted to managing the pandemic and its human toll, patients began returning to doctors' offices and undergoing treatment and surgical procedures for non-covid medical conditions, such as cancer management, and cardiovascular, diabetes, orthopedic, and ophthalmic care.

Thus, the start of Q3 was largely defined by a resumption of healthcare operations until covid cases began to spike again to unprecedented levels in late October, early November. The lack of uniform safety standards, premature re-openings, intentional and inadvertent lapses with regard to "tried and true" safety precautions (i.e. wearing of face coverings, social distancing) and the onset of colder weather have backtracked much progress.

While *Medtronic* and *Foxconn* have partnered to build 10,000 ventilators by mid-2021 and *GM* and *Ford* have already fulfilled their contracts with the U.S. Department of Health and Human Services to produce a total of 80,000 critical care ventilators for the Strategic National Stockpile, PPE shortages have reemerged. *3M* is producing 100 million N95's monthly and *Honeywell* is contributing 20 million yet some hospitals in Michigan have reported to have less than sevenday supplies vs. the 90-day standard.

Telehealth and virtual care continued to thrive, with **Teladoc** reporting 2.8 million visits in the quarter, a 206%+ over 2019 Q3. Total telehealth visits YTD 9/30 in 2020 is an estimated 7.6 million vs. 2.9 million visits last year – a 163% jump.

Experience of Key Medtech Companies

Becton, Dickinson

- Revenues declined 9.4% to \$3.85b in Q3 2020 compared to Q3 2019.
- Chris Reidy, CFO "... Continued adherence to COVID-related stay-at-home measures resulted in a decline in elective procedures and lower hospital admissions and procedure volumes as well as fewer routine lab tests and related specimen collections. In addition, we saw reduced demand from research labs due to closures. There are also some delays in capital instrument installations as facilities and staff were not easily accessible due to COVID ... In terms of recovery, we are pleased to see sequential monthly improvement from May to June across our businesses and in some cases like elective procedures, we saw sequential improvement throughout the quarter ... Recovery rates across elective procedures, hospital admissions and routine testing range from 80% to 85% versus our pre-COVID expectations in the month of July."

Carl Zeiss

- First nine months of 2020 revenue were €967.9m, a decline of 5.8% YOY.
- Dr. Ludwin Monz, President & CEO: "the Covid-19 pandemic impacted us significantly, particularly in Q3 2020 ...
 The measures to contain the COVID-19 pandemic in Europe and North America had a marked effect on our customers and thus demand of our products."



Conmed

- Q3 sales increased by 1.8% YOY to \$237.8m.
- Total worldwide general surgery revenue grew 9.8% in the quarter. U.S. general surgery revenue grew 11.3%. AirSeal and Buffalo Filter growth remained strong as hospitals around the world focused on improving operating rooms safety.
- Orthopedics business represented 43% of sales and sports procedure volumes continued to improve. Curt Hartman, CEO:" Our sports procedure volumes continued to improve. However, capital sales in these markets remained slow as expected. While there is no way to clearly tell if the entire deferred procedure backlog has cleared, we think the majority of that volume is behind us at this point."

Danaher Corporation

- Q3 sales of \$5.9b with 14% core revenue growth.
- Life Sciences' core revenue was up 18.5%; Instrument-oriented life science businesses declines moderated as academic and research labs continued to reopen, driving increased installations and better order trends.
- Diagnostics' revenue was up 18%, led by 100%+ core growth at Cepheid as a result of COVID-19 testing volumes and record GeneXpert system placements.
- Rainer M. Blair, President & CEO: "Academic and research labs around the world are continuing to reopen at reduced capacity as social distancing measures limit the number of people allowed in the lab at any one time, and we estimate that approximately 60% to 70% of academic research labs are now open. In China, that number is closer to pre-pandemic level ... Across hospital and reference labs, patient

volumes increased through the quarter as elective procedures and wellness checks resumed across much of the developed markets. We estimate that global patient volumes are currently 90% to 95% of pre-pandemic levels ... Consumables remain solid as customers sustained essential business operations like testing and treating water and safely packaging food, medicine and consumer products. Previously delayed equipment installations are starting to resume and we're seeing our equipment order books improving as customers start to initiate new project and capital investment."

Henry Schein

- Q3 sales grew 13.2% YOY to \$2.8b. PPE and COVID-19 related product sales accounted for nearly all of the growth in our sales this quarter.
- Stanley M. Bergman, Chair & CEO: "The latest survey data published by the American Dental Association for the U.S. shows that dental practices are approximately 77% of pre-COVID-19 patient volume ... Henry Schein's e-claims data also show that patients continue to return for a broad set of procedures... ... The recovery seems quite stable as dental practices are open."

Integra LifeSciences

- Q3 revenues were \$370m, a decline of 2.3% compared with Q3 2019, a 43% sequential compared with Q2 2020.
- Specialty Surgical declined 5.3% YOY to \$239m.
- Orthopedics and Tissue Technologies sales increased by 3.8% YOY to \$131m.
- Peter Arduini, President & CEO: "... In the second quarter, there was a lot more paranoia about going out and moving



around. Obviously, third quarter improved and even fourth quarter ... And we still believe, even with surges that will happen in Q4, all of our hospital partners have just gotten significantly better about managing the pandemic, either changing their workflows, the use of different protocols, the utilization of different pharmaceuticals."

Intuitive Surgical

- Q3 revenue was \$1.078b, a 4.5% decrease from Q3 2019 and a 26% increase from Q2 2020.
- Q3 placements of 195 systems decreased 29%, compared with 275 systems last year and increased 10%, compared with 178 systems Q2 2020.
- Installed base of da Vinci systems was expanded by 8% to 5,865 systems. Gary Guthart, CEO: "... Many hospitals will seek to absorb existing capacity before installing new capital. In regions in which da Vinci systems are more common, hospitals may delay adding new systems until utilization recovers."
- Marshall Mohr, CFO: " ... Overall, procedures recovered gradually during the quarter to around 90% of pre-COVID levels by the end of the quarter ... However, the extent and pace of recovery varied by market."

Quest Diagnostics

- Total revenue grew by 42%+ YOY to \$2.79b due to continued demand for COVID-19 testing and continued recovery in base testing volumes as healthcare systems resume non-urgent care and elective surgeries.
- Diagnostic Information Services revenues grew 44%, reflecting significant demand for COVID-19 testing services

- and continued recovery as healthcare systems resume nonurgent care and elective surgeries.
- Mark J. Guinan, CFO: "... Demand for COVID-19 testing is likely to persist well into 2021. We believe that molecular PCR testing will continue to play a very important role in diagnosing, tracking and tracing active COVID-19 infections and that there will eventually be a growing need for serological testing as vaccines and additional therapies coming to the market."

STAAR Surgical

- STAAR operates in a growth ophthalmic area. It designs, develops, manufactures, and sells implantable corrective (refractory) and intraocular cataract lenses and delivery systems used to deliver the lenses into the eye.
- Q3 net sales increased 21% YOY to \$47.1m, driven by 25% global ICL unit growth as markets more fully reopened following COVID-19 related shutdowns.
- ICL sales represented 88% of total Q3 revenue, and other products represented 12%.
- caren Mason, President &CEO: "... Several factors contributed to our growth during the third quarter. First, we benefited from our strong presence and growing share in the Asia-Pacific market. Second, we are observing an EVO patient in Asia and Europe that seems more motivated to reach a quick decision regarding refractive surgery... Third, COVID-19 related closures and delays, such as in the national college entrance exam in China, which was pushed back a month to July may have shifted some of our normal demand cycle from the second quarter into the third quarter..."



Stryker

- Q3 net sales increased 4.3% YOY to \$3.73b.
- Orthopedics net sales of \$1.3b, increased 3.8% YOY, driven by growth across knees, hips, trauma, extremities, and Mako.
- Installation base of Mako robotic system reached 1,000 in Q3, grew 30.2%. Preston Wells, VP of Investor Relations: The interest in robotics is increasing every day ... hospitals are adopting robotics. And they're feeling the pressure to have robotics as part of their programs."
- Preston Wells, VP of Investor Relations: "... Procedural areas that were deferred or soft during the second quarter showed significant improvements in the quarter, our knee, spine, trauma and extremities and sports medicine businesses all achieved year-over-year growth ... With the continued variability of infection rate, we believe that hospitals are better prepared to ensure that these types of elective procedures can still be performed at some level, unlike the dramatic drop that we saw in April."

Thermo Fisher

- Q3 revenue increased 36% YOY to \$8.52b.
- COVID-19 response revenue was ~\$2b and contributed 31% to growth, which includes revenue from providing both proprietary COVID-19 diagnostic test kits and reagents used for laboratory-developed tests, along with sample collection products and instrumentation.
- Life Sciences Solutions revenue increased 101% YOY due to COVID-related business.
- Analytical Instruments revenue decreased 2% YOY.

- Specialty Diagnostics revenue increased 63% YOY.
- Marc Casper, President & CEO: "... While we continue to see the impact of a lower level of routine doctor visits and related testing, demand did improve from Q2 levels and our COVID-related testing revenue grew significantly during the quarter."



Notable M&A Transactions

Market dislocations create opportunity for well-capitalized acquirors to strengthen their businesses and pick up targets at lower valuations. The following are selected deals announced since March 2020, when covid started its rampage on patients and markets.

Acquiror	Target	Target Business	Deal Value if Disclosed (\$millions)
Bristol Myers Squibb	MyoKardia	clinical stage biopharmaceutical company targeting car- diovascular diseases	13,200.0
Bristol-Myers Squibb	Formation Biologics Inc. d/b/a Forbius	clinical-stage developer of biotherapeutics to treat fibrosis and cancer	-
Dr. Reddy's Laboratories Ltd.	Select business divisions of Wock- hardt Limited	\$40b India-based pharmaceutical and biotechnology company	195.0
Eli Lilly and Company (Lilly)	Dermira, Inc.	\$82.9m biopharmaceutical company focused on dermatologic diseases	1,100.0
Endo International plc	BioSpecifics Technologies Corporation	developer of injectable collagenase indicated for Dupuytren's contracture, a hand deformity, and Peyronie's disease, a men's urologic disease	658.0
Exact Sciences	Paradigm Diagnostics Inc.	cancer diagnostics company	-
Exact Sciences	Base Genomics	developer of DNA methylation cancer blood test	410.0
Exact Sciences	Viomics	cancer diagnostics	-
Grifols S.A.	The remaining stock of Alkahest, Inc.	clinical stage biopharmaceutical company focused on treatments for neurodegenerative and age-related diseases	146.0
Grifols, S. A.	GC Pharma Group	\$1.14b South Korea-based provider of protein therapeutics and vaccines	460.0
Grifols, S. A.	10% stake in BloodSolutions, LLC (BloodBuy)	cloud-based marketplace that facilitates buying and selling of blood components in the U.S.	-
Illumina, Inc.	Bluebee Holding BV	Netherlands-based software company focused on genomics analysis	-



Acquiror	Target	Target Business	Deal Value if Disclosed (\$millions)
Illumina, Inc.	GRAIL	maker of next-generation sequencing technologies for early cancer detection	8,000.0
Masimo Corporation	TNI Medical AG	Germany-based medical ventilation company	-
Masimo Corporation	The connected care business of NantHealth, Inc	\$94.6m healthcare technology company focused on converging science and integrated clinical platforms	47.3
Medtronic	Stimgenics	spinal cord stimulation company to manage pain	-
Medtronic plc	Avenu Medical	developer of endovascular arteriovenous (AV) fistulae systems for end-stage renal disease (ESRD) dialysis patients	-
Medtronic plc	Companion Medical, Inc.	developer of a smart insulin pen and accompanying mobile app for personalized diabetes management	-
Medtronic plc	Medicrea International SA	\$36.7m France-based developer of patient-specific, 3D-printed titanium spinal implants and related workflow software	134.6
Medtronic plc	Digital Surgery Ltd	UK-based provider of data analytics, artificial intelligence(AI) and training programs for the operating room	-
Medtronic plc	Ai Biomed Corp	developer of parathyroid tissue detection technologies for use in real time during thyroidectomy and parathyroidectomy	-
Montagu Private Equity	The OEM business of RTI Surgical Holdings	biologics and surgical implant business	490.0
Novartis AG	The Medicines Company	\$6m biopharmaceutical company focused on theroscle- rotic cardiovascular disease	9,700.0
Novartis AG	Vedere Bio	a developer of next generation ocular gene therapies	150.0
Novartis AG	Amblyotech LLC	digital therapeutics company focused on treatments and diagnostics for amblyopia (lazy eye) and other ocular disorders	-



Acquiror	Target	Target Business	Deal Value if Disclosed (\$millions)
Novo Nordisk A/S	Corvidia Therapeutics, Inc	clinical stage company focused on cardio-renal diseases and a portfolio company of Sofinnova Partners	725.0
Novo Nordisk A/S	Emisphere Technologies	developer of a once-daily oral non-prescription medical food to normalize B12 levels	1,800.0
Siemens Healthineers AG	Varian Medical Systems Inc	\$3.33b developer of radiotherapy, radiosurgery, proton therapy, and brachytherapy for cancer	16,400.0
Smith & Nephew plc	Tusker Medical, Inc.	development-stage medical device company focused on technology to ear, nose, and throat surgery	-
Smith+Nephew plc	The Extremity Orthopaedics business of Integra LifeSciences Holdings Corporation	\$1.5b manufacturer of surgical implants and instruments used in neurosurgery, extremity reconstruction, orthopedics, and general surgery	240.0
Steris plc	Bryton Corporation	online supplier and retailer of professional medical equipment and supplies	-
Steris plc	The Key Surgical portfolio company of Water Street Healthcare Partners, LLC	healthcare middle-market private equity firm	850.0
Teladoc Health, Inc.	InTouch Health	provider of telehealth software and devices including tablets, remote monitoring systems and portable carts	154.6
Teladoc Health, Inc.	Livongo	digital health and virtual diabetes coaching company	18,500.0
Teleflex Incorporated	The Z-Medica business of Linden Capital	healthcare-focused private equity firm	500.0
Teleflex Medical OEM	IWG High Performance Conductors (HPC)	OEM medical tubing and wire components manufacturer	-



Top Deals > \$50m in Transaction Value Announced or Closed in Q3 2020

Sector	Acquiror	Target	TransValue (millions)	Target Sales (millions)	Target EBITDA (millions)	Sales Multiple	EBITDA Multiple
Biopharmaceuticals	Gilead Sciences, Inc.	Immunomedics Inc	\$21,000.0	\$0.3	-	72413.8x	-
	Johnson & Johnson	Momenta Pharmaceuticals, Inc.	\$6,100.0	\$23.9		255.7x	_
	Sanofi SA	Principia Biopharma Inc.	\$3,360.0	\$35.2	_	95.6x	-
	Nestlé S.A.	Aimmune Therapeutics Inc.	\$2,600.0	-	-	-	-
	The Blackstone Group Inc.	The Takeda Consumer Healthcare	\$2,290.0	\$565.2	-	4.1x	-
		Ltd. ("TCHC") subsidiary of					
		Takeda Pharmaceutical Company					
		Ltd.					
	Alexion Pharmaceuticals, Inc.	Portola Pharmaceuticals, Inc.	\$1,410.0	\$120.0	-	11.8x	-
	Grifols, S. A.	GC Pharma Group	\$460.0	\$1,140.0	\$34.0	0.4x	13.5x
	Roche Holding AG	Inflazome, Ltd	\$447.0	_	_	-	-
	Ligand Pharmaceuticals Inc.	Pfenex Inc.	\$438.0	\$50.3	\$2.6	8.7x	166.5x
	Cheplapharm Arzneimittel	the One-Alpha, Locoid, Pimafucin	\$357.0	\$130.9	_	2.7x	-
	GmbH	and Zineryt assets of LEO Pharma A/S					
	ACADIA Pharmaceuticals Inc.	CerSci Therapeutics	\$52.5	-	-	-	-
Data Management/	Teladoc Health, Inc.	Livongo	\$18,500.0	\$170.2	-	108.7x	-
	Teladoc Health, Inc.	InTouch Health	\$154.6	\$80.0	-	1.9x	-
Diagnostics	Cellink AB	Scienion AG	\$95.3	-	-	-	-
Medical Devices	Siemens Healthineers AG	Varian Medical Systems Inc	\$16,400.0	\$3,330.0	\$536.3	4.9x	30.6x
	Illumina, Inc.	GRAIL	\$8,000.0	-	-	-	-
	MW Industries	The Life Sciences division of NN	\$755.0	-	-	=	-
		Inc.					
	Montagu Private Equity	The OEM business of RTI Surgical Holdings	\$490.0	-	-	-	-



Sector	Acquiror	Target	TransValue (millions)	Target Sales (millions)	Target EBITDA (millions)	Sales Multiple	EBITDA Multiple
Medical Devices	Mylan N.V.	The thrombosis business in	\$310.5	\$272.5	-	1.1x	-
		Europe from Aspen Pharmacare					
		Holdings Limited					
	Koninklijke Philips NV	Intact Vascular, Inc.	\$275.0	-	-	-	-
	Smith+Nephew plc	The Extremity Orthopaedics	\$240.0	\$90.0	-	2.7x	-
		business of Integra LifeSciences					
		Holdings Corporation					
	Nolato Group	GW Plastics, Inc.	\$240.0	\$216.0	\$15.1	1.1x	15.9x
	Grifols S.A.	The remaining stock of Alkahest,	\$146.0	-	-	-	-
		Inc.					
	Medtronic plc	Medicrea International SA	\$134.6	\$36.7	-	3.7x	-
	Sulzer Ltd.	Haselmeier GmbH	\$118.0	\$42.0	-	2.8x	-
	CryoLife, Inc.	Ascyrus Medical LLC	\$80.0	-	-	-	-
	Hologic, Inc.	Acessa Health Inc.	\$80.0	-	-	-	-
	Intersect ENT	Fiagon AG Medical Technologies	\$71.2	-	-	=	-



Performance of Leading Healthcare Companies (as of 11/16/2020)

Sector	Company	Market Cap (millions)	EV (millions)	EV/ EBITDA	EV/ SALES	52 WK Perf	Revenue (millions)	Revenue Growth	Gross Margin
Benefits	UnitedHealth	\$337,470	\$368,430	14.1x	1.5x	40.3%	\$252,570	5.4%	26.3%
Biopharm	GlaxoSmithKline	\$94,390	\$134,260	10.4x	3.0x	-14.2%	\$44,210	3.7%	68.1%
	Merck & Co.	\$205,160	\$226,620	11.9x	4.8x	-4.4%	\$47,350	3.0%	71.7%
	Novartis	\$195,310	\$222,990	12.4x	4.5x	-4.2%	\$49,580	3.6%	71.3%
	Pfizer	\$214,670	\$267,530	13.9x	5.5x	5.5%	\$48,650	-8.3%	80.1%
Devices	Becton, Dickinson and Co.	\$70,380	\$85,470	18.7x	5.0x	-1.7%	\$17,120	-1.0%	45.7%
	Boston Scientific	\$54,380	\$61,950	29.2x	6.1x	-8.3%	\$10,110	-2.7%	67.5%
	Edwards Lifesciences	\$50,970	\$50,360	35.9x	11.5x	1.2%	\$4,370	5.2%	75.5%
	Integra LifeSciences	\$4,730	\$6,060	18.7x	4.4x	-2.7%	\$1,380	-8.5%	64.3%
	Intuitive Surgical	\$88,560	\$83,810	64.8x	19.5x	36.9%	\$4,310	1.4%	66.4%
	Medtronic	\$151,250	\$167,040	24.3x	6.0x	3.2%	\$27,930	-8.9%	66.3%
	Stryker	\$87,160	\$93,540	24.3x	6.6x	15.0%	\$14,220	-2.3%	64.1%
	Zimmer Biomet	\$31,370	\$38,710	20.0x	5.5x	4.8%	\$7,060	-10.9%	70.5%
Diagnostics	Danaher Corporation	\$166,710	\$187,060	33.4x	9.2x	71.2%	\$20,390	31.0%	57.1%
	Hologic	\$18,060	\$20,400	13.3x	5.4x	48.8%	\$3,780	12.2%	66.6%
	Quest Diagnostics	\$16,380	\$20,050	10.4x	2.4x	18.8%	\$8,360	9.5%	37.0%
	Thermo Fisher	\$193,650	\$207,210	24.8x	7.3x	62.9%	\$28,500	13.0%	47.3%
Distribution	Cardinal Health	\$16,850	\$20,850	7.8x	0.1x	4.8%	\$154,650	4.7%	4.5%
	Henry Schein	\$9,370	\$11,170	14.6x	1.2x	-3.9%	\$9,620	-1.7%	28.7%
	McKesson	\$29,380	\$37,460	9.8x	0.2x	25.6%	\$234,190	5.5%	5.2%
Diversified	Abbott	\$199,570	\$213,610	27.3x	6.6x	33.7%	\$32,220	2.8%	56.9%
	Johnson & Johnson	\$394,620	\$401,600	14.7x	5.0x	14.2%	\$80,860	-1.0%	65.8%
Healthcare IT	Cerner	\$23,140	\$23,740	19.0x	4.3x	12.9%	\$5,550	-1.1%	82.4%
Services	Fresenius Medical Care	\$24,920	\$39,850	10.4x	1.9x	18.7%	\$21,150	4.9%	31.3%



M&A Deal-by-Deal Analysis—Q3 2020 (announced or closed)

The information contained in the table below was derived from publicly available sources. Transaction analysis is inferential and not intended to be relied upon as pronouncements by the transaction participants or for any other reason. Transactions are pending or closed.

Sector	Acquiring Party	Transferring Party	Comments/Rationale
Animal Health	Boehringer Ingelheim, a \$20.8b Germany-based veteri- nary and human drug devel- oper and a biopharmaceutical contract manufacturer.	Global Stem cell Technology (GST), a Belgium-based veterinary biotech company.	Accelerates the development pipeline of Boehringer Ingelheim. GST is dedicated to the research, development and production of evidence-based, regenerative medicines (stem cell therapies) used to treat orthopedic and metabolic diseases in animals. Boehringer Ingelheim already entered into a partnership with GST in 2018. in 2019, the companies launched the first stem cell product in veterinary granted marketing authorization by the European Commission. Terms not announced.
Animal Health	Merck Animal Health, a developer and provider of veterinary medicines and a division of Merck & Co., Inc.	IdentiGEN, an Ireland-based company providing DNA Based analysis and diagnostics.	IdentiGEN's technology combines each species' unique DNA and data analytics to provide an evidence-based animal traceability solution, to improve or enhance animal management. The company has operations in Ireland, UK, North America and Canada. Terms not announced.
Biopharmaceuticals	AbCellera Biologics Inc., a Canada-based developer of human antibodies to address pandemics and common dis- eases.	The OrthoMab bispecific platform of Dualogics, LLC, a developer of therapies for autoimmune diseases and immune activating antibodies.	The OrthoMab bispecific platform uses advanced computational and experimental protein engineering to create IgG-like bispecific antibodies from any two antibody sequences. The acquisition will enable Abcellera to develop biologic therapeutics to prevent and treat an expansive range of diseases. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	ACADIA Pharmaceuticals Inc. (Nasdaq: ACAD), a \$339.1m biopharmaceutical company focused on central nervous system disorders.	CerSci Therapeutics, a clinical-stage developer of novel compounds for neurological conditions, including non-opioid therapies for acute and chronic pain.	Strengthens ACADIA's clinical pipeline to include non-opioid pain therapies that may lack addictive properties and other side effects associated with marketed opioid-based pain treatments. CerSci's lead molecule, ACP-044, will enter Phase 2 clinical studies in the first half of 2021. Deal terms \$52.5m upfront with milestones of up to \$887m.
Biopharmaceuticals	Alexion Pharmaceuticals, Inc. (NASDAQ:ALXN), a \$5.3b biopharmaceutical company.	Portola Pharmaceuticals, Inc., a \$120m commercial- stage biopharmaceutical company focused on blood- related disorders.	Expands and diversifies Alexion's hematology, neurology and critical care commercial portfolio. Portola's coagulation factor Xa (recombinant), inactivated zhzo is the first and only approved Factor Xa inhibitor reversal agent. The company has also developed and commercialized two approved complement inhibitors to treat patients with paroxysmal nocturnal hemoglobinuria and atypical hemolytic uremic syndrome. Alexion also has two highly innovative enzyme replacement therapies for patients with lifethreatening and ultra-rare metabolic disorders, hypophosphatasia and lysosomal acid lipase deficiency. Deal value - \$1.41b on sales of \$120m (11.75x) and negative EBITDA.
Biopharmaceuticals	AstraZeneca (NYSE: AZN), a \$24.4b pharmaceutical company.	the preclinical oral PCSK9 inhibitor program of Dogma Therapeutics, an early-stage developer of therapies targeting lipoprotein (LDL), or 'bad' cholesterol in the blood	Provides AstraZeneca with clinical development program for dyslipidemia, or abnormal amount of lipids in the blood, and familial hypercholesterolemia, a common genetic condition that causes high cholesterol. PCSK9 inhibitors are small molecules that bind directly to a novel part of PCSK9 and have shown to block its activity and lower LDL cholesterol in preclinical models. There are currently no oral PCSK9 inhibitors available to patients or in clinical development. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Bayer AG (BAYN.DE), a \$51b Germany-based maker of healthcare and agricultural products and polymer materi- als.	KaNDy Therapeutics Ltd, a UK-based clinical-stage biotech company.	Expands Bayer's drug development pipeline in women's healthcare. KaNDy's investigational compound is a potential first in class, orally administered once-daily, neurokinin-1,3 receptor antagonist which showed positive findings for the treatment of moderate to severe vasomotor symptoms due to menopause. The company recently completed and published the Phase IIb dose range finding study results for the candidate. Deal value - \$425m plus \$450m in milestones.
Biopharmaceuticals	Bristol-Myers Squibb (NYSE: BMY), a \$26.1b biopharmaceutical company focused on hematology, oncology, cardiovascular and immunology.	Formation Biologics Inc. d/b/a Forbius, a clinicalstage developer of biotherapeutics to treat fibrosis and cancer.	Adds a portfolio of selective and potent inhibitors of TGF-beta 1 and 3 key mediators of immunosuppression and fibrosis to BMS' pipeline of new drug candidates. TGF-beta is a key cyto-kine that regulates several cell processes, including regulation of the immune system. Selective inhibition of TGF-beta 1 and 3 may enhance anti-tumor efficacy by acting synergistically with immunotherapy. Forbius' lead candidate, AVID200, has completed Phase 1a clinical trials in one fibrotic indication as well as in solid tumors. Deal terms not announced.
Biopharmaceuticals	Cancer Genetics, Inc. (Nasdaq: CGIX), a \$7.3m provider of drug discovery and preclinical oncology and immuno-oncology services.	StemoniX, Inc., a developer of at-scale human induced pluripotent stem (iPSC) cell-derived neural and cardiac screening platforms for drug discovery.	Combines expertise relating to two critical modalities of drug development - advanced animal models and relevant human high-throughput organoid platforms. The merger will enable the combined company to de-risk and accelerate the development of preclinical and clinical pipelines for its biopharma partners and for its own proprietary pipeline of candidates. Cancer Genetics shareholders will acquire 100% of the outstanding capital stock of StemoniX in exchange for a number of shares representing 78% of the outstanding stock of Cancer Genetics, with the current equity holders of Cancer Genetics retaining 22% of the common stock post-merger. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Cheplapharm Arzneimittel GmbH, a \$595.5m Germany- based acquiror and supplier of pharmaceuticals in oncology, ophthalmology, cardiology, gastroenterology and more.	The One-Alpha, Locoid, Pimafucin and Zineryt assets of LEO Pharma A/S, a \$1.7b Denmark-based dermatology-focused pharmaceutical company.	Adds a portfolio of medicines addressing bone disorders/nephrology, dermatology and gynecology areas to Cheplapharm's offerings. The divestiture helps LEO Pharma sharpen its strategic focus on dermatology. In December 2019, Cheplapharm paid \$35m upfront with additional milestones of up to \$6m for the commercial rights for Seroquel and Seroquel XR from Astrazeneca. Deal terms \$357m on sales of \$130.9m (2.7x).
Biopharmaceuticals	Gilead Sciences, Inc. (Nasdaq: GILD), a \$22.4b developer of biopharmaceuticals that treat HIV, liver diseases, infectious diseases and cancer.	Immunomedics, Inc. (Nasdaq: IMMU), an early- stage developer of antibody- drug conjugates (ADC) that combine small molecule anti- cancer drugs with an anti- body.	Adds Trodelvy, an ADC that was granted accelerated approval by the FDA for the treatment of adults with metastatic triple-negative breast cancer (mTNBC) who have received at least two prior therapies. TNBC represents approximately 15-20% of all breast cancer cases and is typically considered the most aggressive form of breast cancer. Immunomedics is on track to submit a supplemental Biologics License Application (BLA) to support full approval of Trodelvy in the US by the end of 2020 and is also filing for regulatory approval in Europe in the first half of 2021. Trodelvy is also being studied in bladder cancer and other solid tumors, The deal builds on Gilead's expansion into oncology, following its \$4.9b acquisition of Forty Seven, which developed Magrolima, a monoconal antibody in testing for myelodysplastic syndrome (MDS), acute myeloid leukemia (AML) and diffuse large B-cell lymphoma (DLBCL). Deal terms \$21b on sales of \$.3m and negative EBITDA.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Grifols, S. A. (MCE: GRF, MCE: GRF.P, NASDAQ: GRFS), a \$5.68b Spain-based developer of plasma therapies.	GC Pharma Group, a \$1.14b South Korea-based provider of protein therapeutics and vaccines.	Expands Grifols' plasma collection and fractionation capacity. GC Pharma is the largest plasma protein product manufacturer in Asia. It offers vaccines, plasma derivatives, and OTC and prescription drugs. It is also developing and supplying Covid-19 treatments. Grifols will acquire the Montreal-based plasma fractionation facility and two purification facilities, along with 11 U.Sbased plasma collection centers. Deal value - \$460m on sales of \$1.14b (0.4x) and EBITDA of \$34m (13.5x).
Biopharmaceuticals	Johnson & Johnson (NYSE: JNJ), a \$82.1b manufacturer of pharmaceuticals, medical de- vices and consumer healthcare products.	Momenta Pharmaceuticals, Inc., a biotechnology company focused on novel biologic therapies for rare immune-mediated diseases.	Broadens J&J's Janssen Pharmaceutical subsidiary in immune-mediated diseases and drives its expansion into autoantibody-driven disease. Momenta's portfolio includes nipocalimab (M281), an anti-FcRn antibody which recently received a rare pediatric disease designation from the FDA. The acquisition enables Janssen to pursue additional indications across maternal-fetal disorders, neuro-inflammatory disorders, rheumatology, dermatology and autoimmune hematology. An estimated 2.5% of the global population, or approximately 195 million people, suffer from some form of autoantibody-driven disease, many of which are orphan and rare diseases. The potential introduction of multiple launches which in some cases would be first-inclass indications each represent an opportunity to add >\$1b in peak year sales to J&J. Deal terms \$6.1b on sales of \$23.9m (255.6x) and negative EBITDA.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Ligand Pharmaceuticals Inc. (Nasdaq: LGND), a \$120.3m biopharmaceutical company focused on developing human mono- and bispecific thera- peutic antibodies.	Pfenex Inc., a biotechnology company focused on the development of next-generation and novel protein therapeutics.	Gives Ligand access to a proprietary, protein expression technology used in several commercial and development-stage biopharmaceutical programs. Pfenex's lead product is Teriparatide Injection is, a therapeutic equivalent candidate to osteoporosis injection Forteo® exclusively licensed to Alvogen. Jazz Pharmaceuticals is licensing Pfenex's Expression Technology to develop hematologic oncology products including PF743, a recombinant Erwinia asparaginase, and PF745, a half-life extended recombinant Erwinia asparaginase, an enzyme that is used as a chemotherapy treatment. Deal terms \$438m upfront plus additional milestones of up to \$78m on sales of \$50.3m (8.7x) and EBITDA of \$2.6m (166.5x).
Biopharmaceuticals	Nestlé S.A. (OTCMKTS: NSRGY), a \$102b Switzerland- based multinational processor of food, drink and nutritional therapies.	Aimmune Therapeutics Inc., a clinical-stage developer of treatments for peanut and other food allergies.	Advances the Health Science division of Nestlé in its efforts to develop food allergy preventions and treatments, adding Palforzia, a first-of-its-kind oral treatment for patients with peanut allergies, which won regulatory approval in February. Nestlé Health Science had previously invested \$145m into Aimmune in 2016 and then another \$30m as part of its IPO in 2018. Later in 2018, Nestlé invested an additional \$98m, followed by another \$200m following regulatory approval earlier this year to bring its total stake to be worth \$473m, about 25.6% of the company. In this final acquisition of the remaining stake in Aimmune, Nestle paid \$2.6b.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Rakuten Medical Inc, a clinical-stage biotechnology company focused on developing precision targeted cancer drugs for solid tumors.	Medlight SA, a Switzerland- based manufacturer of cathe- ters and diffusers for optical light delivery.	The acquisition provides Rakuten Medical with a network of subcontractors to facilitate rapid development of new optical devices in the U.S. and Europe. Medlight served as a contract manufacturer for Rakuten Medical's device finishing facility in Germany so the deal adds direct management of the supply chain vital to the development of its diagnostics and therapeutic light technologies and labeling for clinical trial materials. Medlight's technologies have been applied to treat cancer, cardiovascular diseases, Parkinson's disease, ophthalmic, dermatologic, and dental diseases. Rakuten Medical is an exclusively licensee of a technology platform called Illuminox developed by the National Cancer Institute. Rakuten Medical's first pipeline drug is ASP-1929, an antibody-drug conjugate that binds to epidermal growth factor receptors (EGFR), a cancer antigen expressed in multiple types of solid tumors, including head and neck cancer, esophageal cancer, lung cancer, colon cancer, and pancreatic cancer. Terms not announced.
Biopharmaceuticals	Reign Resources Corporation (OTC: RGNPD), a direct-to-consumer producer of custom and branded jewelry.	Sigyn Therapeutics Inc., a development-stage producer of treatments for inflammatory conditions precipitated by cytokine storm syndrome.	Shifts Reign's focus to the development of Sigyn's lead therapeutic candidate, Sigyn Therapy, designed to address sepsis, a leading cause of hospital deaths and virus-induced cytokine storm, a leading cause of COVID-19 deaths. As per the merger agreement, Reign will acquire all of the outstanding capital stock of Sigyn in exchange for shares of Reign common stock representing approximately 75% of Reign's outstanding common stock.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Roche Holding AG (OTCMKTS: RHHBY), a \$61.5b Switzerland-based maker of pharmaceuticals for treating anemia, cancer, cardiovascular, CNS, dermatology, and more.	Inflazome Ltd, an Ireland- based developer of orally available drugs to treat in- flammatory diseases.	Adds a portfolio of orally available inflammasome inhibitors. Inflammasomes are involved in several chronic inflammatory conditions including Parkinson's, Alzheimer's, asthma, inflammatory bowel disease, chronic kidney disease, cardiovascular disease, arthritis and NASH. Inflazome's portfolio includes lead molecules having successfully completed Phase I clinical trials, as well as additional earlier-stage programs. Inflazome had raised ~\$64.7m in venture capital backing from Forbion, Longitude Capital, Fountain Healthcare Partners, Novartis Venture Fund and others. Deal terms \$447m upfront plus additional milestones.
Biopharmaceuticals	Sanofi SA (Nasdaq: SNY), a \$37.6b France-based pharma- ceutical company focused on multiple sclerosis, atopic der- matitis, rhemetoid arthiritis, hemophila and other condi- tions.	Principia Biopharma Inc., a late-stage biopharmaceutical company, focused on immune-mediated diseases.	Builds on Sanofi's existing core R&D focus in autoimmune and allergic diseases, adding a clinically advanced oral Bruton tyrosine kinase (BTK) inhibitor rilzabrutinib with potential across a range of immunology and inflammation indications; a topical BTK inhibitor agent in Phase I, PRN473, for immune-mediated diseases; and full control of brain-penetrant BTK inhibitor SAR442168, which is undergoing a Phase 2b study in patients with multiple sclerosis after Prinicipia granted Sanofi its exclusive development and distribution rights in 2017. BTK is present in the signaling pathways of innate and adaptive cell types of the immune system and BTK inhibitors can help in stopping inflammation and tissue destruction related to autoimmune diseases. Deal terms \$3.36b on sales of \$35.2m (95.6x) and negative EBITDA.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Sorrento Therapeutics, Inc. (Nasdaq: SRNE), a \$31.4m clinical-stage developer of therapies for cancer, autoimmune, inflammatory and neurodegenerative diseases.	SmartPharm Therapeutics, Inc., a developer of non-viral DNA and RNA gene delivery platforms for COVID-19 and rare diseases.	The deal follows a previously announced R&D collaboration to encode and express in vivo Sorrento's SARS-CoV-2 neutralizing monoclonal antibodies utilizing SmartPharm's Gene Mab plasmid nanoparticle platform. In addition to COVID-19 applications Sorrento's fully human antibody library and SmartPharm's Gene-Encoded Therapeutics (GET) Platform synergize and will build a pipeline of novel, long-acting therapeutic proteins for a broad range of diseases, including cancer. Deal terms \$19.4m.
Biopharmaceuticals	The Blackstone Group Inc. (NYSE: BX), a \$182.4m private equity firm.	The Takeda Consumer Healthcare Ltd. ("TCHC") subsidiary of Takeda Phar- maceutical Company Ltd., a \$30.6b pharmaceutical com- pany focused on gastroenter- ology; oncology; neurosci- ence; rare diseases, and vac- cines.	Adds a portfolio of products including brands Alinamin, TCHC's top selling product and Japan's first vitamin B1 preparation, and Benza, a cold treatment. Blackstone will integrate the business into Oscar A-Co KK, a company controlled by funds it manages. For Takeda, the divestiture helps narrow its strategic focus on five clinical areas gastroenterology (GI), rare diseases, plasmaderived therapies, oncology and neuroscience and progress plans to divest \$10b of assets to pay down debt it incurred from the \$58b acquisition of Shire PLC in 2019. Deal terms \$2.3b on sales of \$565.2m (4.1x).



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Biopharmaceuticals	Yumanity Therapeutics Inc., a developer of therapeutics for Alzheimer's, Parkinson's and amyotrophic lateral sclerosis (ALS).	Proteostasis Therapeutics, Inc., a clinical stage-developer of therapeutics to treat cystic fibrosis.	Adds a pipeline of disease-modifying treatments for neurogenerative disorders to Yumanity's commercialization efforts for YTX-7739 currently in Phase 1 clinical development for the treatment and disease modification of Parkinson's disease. Yumanity shareholders will own ~67.5% of a combined new company and existing PTI shareholders will own the remaining 32.5%. Yumanity has raised more than \$100m from Alexandria Venture Investments, Biogen, Fidelity, Merck, Pfizer, Redmile Group, and Sanofi Ventures. The Company also recently entered into a strategic research collaboration with Merck for the discovery and development of novel agents for the treatment of ALS and FTLD with Yumanity eligible to receive future payments totaling approximately \$500min addition to royalties on the net sales of any marketed products. Terms not announced.
Data Management/ Healthcare IT	Change Healthcare Inc. (Nasdaq: CHNG), a \$196.8m developer of data and analytics-driven solutions to enhance clinical, financial, administrative, and patient engagement outcomes.	The PROMETHEUS Analytics® assets of Altarum, a non-profit research and consulting organization serving government health insurers, and other nonprofit clients that focus on healthcare.	PROMETHEUS Analytics is a reimbursement approach based on medical episodes of care, used by payer-provider collaborations across the U.S. to provide a fair and standard protocol for value-based payments. The platform includes more than 90 episode of care definitions outlining the entire range of treatment that include all covered services across providers that would treat a patient for a single procedure, illness or condition. The acquisition supports Change Healthcare's commitment to accelerating the industry's transition to value-based care. PROMETHEUS Analytics will be integrated into Change Healthcare's HealthQX® value-based care platform to enable health plans to optimize payment models, evaluate provider performance, identify care variations, and improve network efficiency. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Data Management/ Healthcare IT	Teladoc Health, Inc. (NYSE: TDOC), a \$553.3m provider of virtual healthcare services.	InTouch Health, a provider of telehealth software and devices including tablets, remote monitoring systems and portable carts.	InTouch offers remote presence devices that enables hospitals and physician practices to virtualize amid the seismic shift in the delivery of healthcare during the COVID pandemic. The company serves more than 1,000 hospital locations worldwide. According to 2019 JPMorgan research, 40% of hospitals surveyed reported planning to increase their budgets for telemedicine solutions. With 61% of hospital revenue forecasted to come from managed and value-based care models by 2021, (L.E.K. 2018 Hospital Study Survey), virtual care will be a crucial strategy to improve consumer engagement, ensure consistent quality and manage health care's rising costs. Deal value - \$150m in cash plus \$4.6m in Teladoc common stock on sales of ~\$80m.
Data Management/ Healthcare IT	Teladoc Health, Inc. (NYSE: TDOC), a \$553.3m provider of virtual healthcare services.	Livongo, a digital health and virtual diabetes coaching company.	Adds complementary remote health management devices and platforms to Teladoc's telehealth offerings and ushers in a new era in digital health. The merger will create a company with a combined \$1.3b in revenue in 2020, up 85% YOY. Teladoc charges subscription fees to employers and insurers so employees and members can access doctors, who are independent contractors, on its platform. 70+ million people in the U.S. have access to Teladoc's portal. Livongo, which went public in 2019 and manufactures its devices, is the product of several acquisitions: diabetes management device maker Diebeto, digital behavioral health solutions app developer myStrength, Al-based clinical lab test platform developer Prognos and provider of weight-management programs Retrofit, among others. Teladoc too grew by acquisition, buying InTouch Health, a telehealth competitor, for \$150m in January. The purchase of Livongo is Teladoc's 12th transaction. Teladoc reported a 203% increase in remote visits in Q2 '20 vs. Q2 '19 as patients, particularly the elderly, have avoided clinics and hospitals to reduce the risk of exposure to coronavirus. Deal price \$18.5b on sales of \$170.2m (109x) and negative EBITDA.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Data Management/ Healthcare IT	Vitalhub Corp. (TSXV: VHI), a \$7.7m Canada-based devel- oper of blockchain, mobile, and web-based assessment, client management and elec- tronic health records solu- tions.	Intouch with Health Inc., a UK-based developer of patient flow management solutions.	Expands Vitalhub's patient-tracking systems in the hospital and throughout virtual care an increasing priority during the COVID-19 pandemic. Deal terms \$4.5m upfront with additional milestones of nearly \$1m on sales of \$3.7m (1.2x).
Diagnostics	Best Health , a Morocco-based distributor of surgical supplies and other medical equipment has	A majority stake in Mabiotech, a Morocco-based distributor of laboratory equipment and reagents.	Consolidates Best Health's presence in North Africa and strengthens its positioning in French-speaking Africa, along with providing an entrance into diagnostics, adding analyzers produced by Beckman Coulter, Cepheid, Thermo Scientific and Ortho Clinical Diagnostics, among others, to its product portfolio. Terms not announced.
Diagnostics	Bruker Corporation (Nasdaq: BRKR), a \$2.1b manufacturer of scientific instruments, and analytical and diagnostics.	Canopy Biosciences, LLC, a developer of multiplex biomarker imaging platforms for immunology, immuno-oncology and cell therapy and an Ampersand Capital portfolio company.	Adds to Bruker's offerings in targeted multi-omics and fluorescence-based imaging and service offerings for gene editing, gene expression analysis and regulation, and bioprocessing for applications including accelerating basic immunology and immunology and clinical research, in addition to biopharma drug development. Canopy was backed by private-equity firm Ampersand Capital Partners. Terms not announced.
Diagnostics	Cellink AB (CLNK-B.ST), a \$12m Sweden-based devel- oper of bioprinting technolo- gies and bioinks.	Scienion AG, a Sweden-based developer of ultra-low volume liquid handling technologies.	Supports Cellink's penetration of the pharmaceutical industry through the addition of Scienion's compact non-contact piezo dispensing roboter used in multiplexed diagnostics and cellular screening, among other technologies. Deal terms \$95.3m.
Diagnostics	Eurobio Scientific SA , a France-based <i>in-vitro</i> medical diagnostics company.	TECOmedical AG , a Switzerland-based provider of <i>in-vitro</i> diagnostic tests.	TECO offers a range of specialty biomaker assays and proprietary products for human and veterinary diagnostics, eco toxicology and metabolic syndromes. Its 2019 consolidated revenue was \$8.25m. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Diagnostics	Eurofins Scientific SE (ERF:PA), a \$5.4b Luxembourg-based a bioanalytical testing company.	The GeneTech Inc. subsidiary of Noritsu Koki Co Ltd, a \$615m Japan-based provider of remote image, preventive medicine, prenatal diagnosis, and factoring services.	Strengthens Eurofins' non-invasive prenatal testing (NIPT) expertise and testing capabilities in preimplantation genetic testing for aneuploidy (PGT-A), the presence of abnormal number of chromosomes in a cell. GeneTech generated over \$11.8m in revenue in 2019. Deal terms not announced.
Diagnostics	LGC Clinical Diagnostics, a supplier of diagnostic quality controls, biological materials, and reagents to in vitro diagnostics developers, clinical laboratories.	The Native Antigen Company (NAC), a supplier of high- quality infectious disease an- tigens and antibodies.	Strengthens LGC's existing product offering. NAC offers a comprehensive portfolio of native and recombinant infectious disease antigens and related products including pathogen receptors, virus-like particles and antibodies. The company was one of the first companies globally to offer antigens for SARS-COV-2. Terms not announced.
Diagnostics	Olympus Corp, a \$7.1b Japanbased manufacturer of medical optical products.	Arc Medical Design Ltd, a developer of products for Adenoma Detection Rates (ADR) and improving retrieval methods.	Arc's flagship product is a device attached to the distal end of a colonoscope, designed to maintain and maximize visibility during colonoscopy. It can manipulate large folds, anchor the scope tip during loop reduction and stabilize during complex procedures, such as a polypectomy. Terms not announced.
Diagnostics	SSI Diagnostica , a Denmark-based producer of <i>in vitro</i> diagnostic products and a portfolio company of Adelis Equity Partners.	CTK Biotech Inc., a manufacturer and distributer of rapid in vitro diagnostic tests.	Expands SSI Diagnostica's international footprint and adds a Covid-19 antibody test, producing results in 15 minutes and a pipeline of additional Covid-19 tests, including antigen and PCR, to its offerings. CTK is headquartered in San Diego and has a manufacturing plant in Beijing and is focused on the Latin American, Asian and African markets. The Company generated \$26m in sales in 2019. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Abénex Capital, a France-based private equity firm.	Inlog Holdings France SAS, a developer of blood bank and hospital software products and a subsidiary of Haemonetics Corporation.	Inlog develops and sells blood bank and hospital software products, in France and in other countries outside the U.S. In May, Haemonetics announced to sell off certain blood donor management software assets to the GPI Group. In July, the company agreed to sell its Fajardo, Puerto Rico, manufacturing operations to filter manufacturer GVS. Terms not announced.
Medical Devices	Artio Medical, Inc., a medical device company focused on peripheral vascular and neuro-vascular diseases.	Flow Forward Medical, Inc., a developer of vascular ac- cess sites designed to im- prove post-surgery success rates.	Diversifies Artio's endovascular pipeline. Flow Forward is developing a novel approach to rapidly establish high-quality vascular access sites for hemodialysis. Its system uses a small, temporary, external blood pump designed to stimulate flow-mediated dilation to make more patients eligible for an arteriovenous fistula (AVF), and increase success rates after surgery. More than 2.3 million patients worldwide suffer from end-stage renal disease and require hemodialysis. Terms not announced.
Medical Devices	Boston Scientific Corporation (NYSE: BSX), a \$9.8b manufacturer of stents and other interventional devices.	Farapulse, Inc., a developer of a pulsed field ablation (PFA) system for the treatment of atrial fibrillation and other cardiac arrhythmias.	Farapulse's PFA system comprises a sheath, generator and catheters. The platform employs an ablation modality based on pulsed electric fields that generates zones of ablated cardiac tissue to interrupt the irregular electrical signals that can cause AF. This technology is designed for physicians to precisely ablate tissue and, in turn, spare nearby tissue from unintentional ablation. Atrial fibrillation (AF) affects more than 33 million people globally. Patients with AF are often treated with anti-arrhythmic drugs as well as cardiac ablation. Terms not announced.
Medical Devices	Creo Medical Group PLC, a UK-based developer of endo- scopic microwave and radiof- requency ablation technolo- gies	Albyn Medical Ltd., a Spain- based manufacturer of branded and third-party gas- troenterology, urology and endoscopy products.	Expands Creo's GI product suite and provides an entry into Urology. Albyn Medical's offerings include biopsy forceps, snares, catheters, tubes and valves. Deal value \$29.3m upfront plus an additional \$3.2m in milestones on EBITDA of \$2.8m (10.5x).



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	CryoLife, Inc. (NYSE: CRY), a \$276.2m producer of human cardiac and vascular tissues, surgical adhesives and sealants, prosthetic heart valves, cardiac lasers, and other devices.	Ascyrus Medical LLC, a developer of aortic arch remodeling stent used to treat acute Type A aortic dissections.	Deepens CryoLife's penetration of the aortic repair market. Ascyrus' stent is an implantable metal mesh used during surgical intervention for patients with aortic dissection, tearing of the large blood vessel branching off the heart, or intramural hematoma, an atypical form of aortic dissection due to hemorrhage into the wall from the vasa vasorum, a network of small blood vessels that supply the walls of large blood vessel, without an intimal tear. Deal terms \$80m upfront plus milestones of up to \$120m.
Medical Devices	Freudenberg Medical, Inc., a global developer of specialty components and finished products for the medical device industry.	The hypotube manufacturing business of Merit Medical Systems, Inc., a \$962m maker of disposable medical devices for cardiology, radiology, oncology, critical care, and endoscopy.	The acquired assets will be absorbed by Cambus Medical, an Ireland-based Freudenberg Medical company and a hypotube manufacturer in the minimally invasive industry. The acquisition includes manufacturing equipment for laser-cut hypotubes and access to additional technology. Terms not announced.
Medical Devices	Grifols S.A. (MCE: GRF, MCE: GRF.P, NASDAQ: GRFS), a \$5.68b Spain-based developer of plasma therapies.	The remaining stock of Alkahest, Inc., a clinical stage biopharmaceutical company focused on treatments for neurodegenerative and age-related diseases.	Alkahest has developed a map of the human plasma proteome facilitating the identification of plasma proteins and their recombinant analogues as potential therapeutic medicines. It currently has four candidates in six phase-2 clinical trials covering therapeutic products for neurodegenerative, cognitive decline, neuromuscular and ophthalmic indications. Grifols made its first invested in Alkahest in 2015. Deal value - \$146m.
Medical Devices	Grifols, S. A. (MCE: GRF, MCE: GRF.P, NASDAQ: GRFS), a \$5.68b Spain-based developer of plasma therapies.	10% stake in BloodSolutions, LLC (BloodBuy), a cloud- based marketplace that facili- tates buying and selling of blood components in the U.S.	BloodSolutions' proprietary cloud-based platform connects hospitals and blood centers nationwide to ensure the efficient flow of lifesaving blood products to patients in need. Bloodbuy's participants include prestigious medical institutions and ~30 independent blood collection centers. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Hologic, Inc. (Nasdaq: HOLX), a \$3.4b med tech and diagnostic company focused on women's health.	Acessa Health Inc., a developer of a minimally-invasive procedure for fibroids combining radiofrequency ablation and intra-abdominal ultrasound visualization.	Adds a safe, minimally invasive alternative to hysterectomy and myomectomy to complement Hologic's treatment offerings, which includes MyoSure® products used for hysteroscopic removal of fibroids in the uterine cavity. The Acessa ProVu system is indicated for benign uterine fibroids and clinical data has demonstrated less blood loss and faster recovery times than seen with current standards of care. Uterine fibroids, or uterine leiomyomas or myomas, are common, benign tumors that grow in or on the uterus. These growths can cause heavy menstrual bleeding, pain, frequent urination and among other bothersome symptoms. The incidence of uterine fibroids is between 50%-60%, increasing to about 70% by age 50. Acessa Health projects to generate \$13m in revenue in 2021. Deal terms \$80m upfront with additional milestones.
Medical Devices	Illumina, Inc. (NASDAQ: ILMN), a \$3.5b developer of genetic and genomic analysis platforms for applications in life sciences, oncology, reproductive health and other segments	GRAIL , a maker of next-generation sequencing technologies for early cancer detection.	Extends Illumina's portfolio to include cancer screening, diagnosis and monitoring, creating a portfolio of proprietary tests in each of the major oncology testing application areas. GRAIL's "Galleri" platform is expected to launch commercially in 2021 as a multi-cancer, laboratory-developed test for early cancer detection from blood. GRAIL was founded by Illumina in 2016 and then spun out as a standalone company. GRAIL raised ~\$2b to support its technology. An earlier version of Galleri was able to detect more than 50 cancer types, over 45 of which have no recommended screening in the U.S. Deal terms \$8b plus additional milestones.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Intersect ENT (Nasdaq: XENT), a \$109.1m developer of sinus implants and other ENT-fo- cused products.	Fiagon AG Medical Technologies, a Germany-based developer of proprietary, electromagnetic-based ENT surgical navigation systems.	Adds a surgical navigation system to Intersect's product portfolio and extends its footprint in US and European ENT physicians' offices. Fiagon's instruments, produced in Germany, are tiptracked, enabling surgeons to track the full range of instruments deployed during a functional endoscopic sinus surgery procedure, and do not require calibration. In August 2020, Fiagon also received FDA 510(k) clearance for a navigable sinuplasty balloon. Deal terms \$71.2m.
Medical Devices	Koninklijke Philips NV (NYSE: PHG), a \$19.5b Netherlands-based producer of diagnostic imaging technologies and devices.	Intact Vascular, Inc., a developer of a dissection repair device for peripheral arterial disease (PAD) optimizing balloon angioplasty.	Enhances Philips' image-guided therapy portfolio, adding a specialized implantable device to treat PAD that reinforces standard and drug-coated balloon results by restoring blood flow in small limb vessels, promoting healing and preserving limbs. Deal terms \$275m upfront plus \$85m upon transaction completion.
Medical Devices	Laborie Medical Technologies and Signet Healthcare Partners, a producer of devices, consumables and diagnostics focused on urologic, gynecologic and colorectal applications and Investor AB portfolio company, and a healthcare growth equity firm.	GI Supply, a maker of specialty endoscopy and paracentesis products for gastroenterologists, colorectal surgeons, and interventional radiologists	Enhances LABORIE's gastroenterology product offerings and expands its sales channel footprint in the U.S. and internationally. LABORIE and GI Supply will operate as separate entities while synergistically leveraging commercial capabilities to offer, collectively, a broader product portfolio to GI's. Laborie Medical is a portfolio company of Investor AB. Terms not announced.
Medical Devices	Lumibird SA (ENXTPA:LBIRD), a \$132m, France-based devel- oper of pulsed diodes, lasers and amplifiers for ophthalmic, industrial, and defense appli- cations.	EssMed AB , a Sweden-based distributor of ophthalmology products and services.	Strengthens Lumibird's commercial presence of Quantel Medical and Ellex products in Scandinavia and expands its product portfolio through the distribution of third-party products. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Magstim Inc., a developer of transcranial magnetic stimulation.	The Electrical Geodesics (EGI) Unit of Koninklijke Philips N.V. (Royal Philips), a \$22.4b Netherlands-based developer of healthcare, con- sumer, and lighting products.	EGI designs non-invasive multimodal technologies to monitor brain activity and deliver transcranial electrical stimulation in brain research. EGI's proprietary dense array electroencephalography(EEG) technology, which evaluate the electrical activity in the brain, gathers data from more electrodes than conventional EEG. Terms not announced.
Medical Devices	Medbio LLC, a device contract manufacturer of disposables and portfolio company of pri- vate equity firm Graham Part- ners.	Polymer Conversions Inc. (PCI), a device contract manufacturer focused on clean-room injection molding and assembly.	Expands Medbio's geographic presence and creates cross-selling opportunities across device customers. The deal also builds on Medbio's February 2019 acquisition of AIM Plastics Inc, focused on low-cost prototype tooling. Deal terms not announced.
Medical Devices	MedGyn Products, Inc., a maker of medical devices for women's health addressing cervical cancer, infertility, pre and postnatal care, and uterine prolapse	The Thomas Medical, Inc. subsidiary of Biomerics ATL, LLC, an OEM contract manufacturer focused on polymers, catheters, injection moldering and laser cutting.	Adds a portfolio of devices serving the OB/GYN diagnostic imaging, surgical gynecology, and fertility markets to Medgyn's existing women's health offerings. Thomas Medical is focused on single-use devices including HS catheters and procedure trays, uterine manipulators (UMI), injectors, endometrial samplers, IUI catheters and LEEP/LLETZ electrodes. Thomas manufactures its products in the U.S. and has a global distribution network spanning 140 countries. Terms not announced.
Medical Devices	Medtronic plc (NYSE: MDT), a \$29b Ireland-based maker of cardiac, vascular, diabetes, restorative therapy and minimally invasive devices.	Companion Medical, Inc., a developer of a smart insulin pen and accompanying mobile app for personalized diabetes management.	Adds an FDA-cleared, first-of-its kind "smart" insulin pen to Medtronic's diabetes offerings. Companion's InPen tracks patient insulin dose data, monitors active insulin, recommends mealtimes and remotely shares patient data to clinicians via Bluetooth. The deal also builds on Medtronic's past acquisitions of nutrition-related data services platform Nutrino and dietary behavior tracking program Klue, both built on data science and Al capabilities. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Medtronic plc (NYSE:MDT), a \$28.9b medical device maker of cardiovascular, orthopedic, spinal and other surgical devices	Medicrea International SA, a \$36.7m France-based devel- oper of patient-specific, 3D- printed titanium spinal im- plants and related workflow software.	Complements Medtronic's recent \$1.6b acquisition of robotic spinal surgery guidance system developer Mazor Robotics and purchase of spinal interbody implant maker Titan Spine. Medicrea's product offers a complete range of implants for the treatment of spinal pathologies (scoliosis, malformations, degenerative diseases, trauma and tumors). It also provides a proprietary adaptive spine intelligence platform that supports surgeon workflow in preoperative planning to create personalized implant solutions. Deal value \$134.6m on \$36.7m of sales (3.6x) and negative EBITDA.
Medical Devices	Medtronic plc (NYSE:MDT), a \$29b Ireland-based device maker focused on cardiac and vascular health, and minimally invasive, restorative and diabetes treatments.	Avenu Medical, a developer of endovascular arteriovenous (AV) fistulae systems for end-stage renal disease (ESRD) dialysis patients	Adds a single-catheter, ultrasound-guided device that inserts a catheter percutaneously into the arm to create a durable AV fistula as opposed to traditional open surgical approaches. Avenu Medical's system shortens procedure times, has significant costs reduction implications and does not require post-procedural sutures unlike open surgery. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Montagu Private Equity, A leading Europe-based private equity firm.	The OEM business of RTI Surgical Holdings, a biologics and surgical implant business.	Represents a new growth platform for Montagu, which will give the OEM business more attention and resources than RTI. RTI's OEM business develops and manufactures biologic, metal and synthetic implants used in a variety of surgical procedures including orthopedic, spine, sports medicine, general surgery and trauma. With the divestiture, RTI Surgical plans to focus on growth and innovation as a global pure-play spine business. Proceeds will be to pay down debt and increase investment in the global spine portfolio. The spine business generated revenues ~120m with gross margins of ~ 75% in 2019. The sale completes the first phase of RTI's strategic transformation to reduce complexity, drive operational excellence and accelerate the growth. This is Montagu's second carve-out transaction four months. It recently completed its acquisition of Jane's Group from IHS Markit in December 2019. Deal Value\$490m on sales of ~\$120m (4.15x).
Medical Devices	MW Industries , a provider of highly engineered springs, specialty fasteners, bellows and other precision components.	The Life Sciences division of NN Inc., a \$847.5m maker precision components and assemblies for the medical, aerospace and defense, electrical, automotive, and industrial markets.	Enables MW Industries to deeply penetrate the med tech market and broadens its existing global footprint across U.S., China, Poland and Switzerland and into other countries For NN, the divestiture frees up cash and strengthens its balance sheet after the pandemic caused volatility. MW Industries is a portfolio company of private equity group American Securities. Deal terms \$755m upfront with additional milestones of up to \$70m.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Mylan N.V. (NASDAQ: MYL), a \$10.3b provider of generic, branded generic, and specialty pharmaceuticals.	The thrombosis business in Europe from Aspen Pharmacare Holdings Limited, a South Africa-based holding company for branded and generic pharmaceutical products.	Complements and expands Mylan's complex injectables offering and presence in hospitals. The portfolio consists of well-established injectable anticoagulants sold in Europe under the brand names, and variations of the brand names, Arixtra, Fraxiparine, Mono-Embolex and Orgaran. Deal value - \$310.5m on sales of \$272.5m (1.14x), plus \$446.8 milestones.
Medical Devices	Nolato Group, a Sweden- based manufacturer of injec- tion molded products and components.	GW Plastics, Inc. , an OEM of plastics and silicones molding for healthcare, automotive and filtration industries.	Expands Nolato's manufacturing capabilities and customer base. GW Plastics performs precision injection molding, tooling, and contract manufacturing services. It has seven global manufacturing facilities and 1,100 worldwide employees. Deal value - \$240m on sales of \$216m (1.11x) and EBITDA of \$15.1m (15.9x).
Medical Devices	Nova Eye Medical Limited, an Australia-based developer of advanced ophthalmic treatment technologies and devices.	The Molteno3 glaucoma drainage device (GDD) plat-form from Molteno Ophthalmic Limited, a New Zealand-based ophthalmic company.	Molteno3 GDD platform is an aqueous shunt intended to be used during glaucoma management. It is designed to reduce intraocular pressure in neovascular glaucoma or glaucoma control the progression of disease. It consists of a flexible silicone translimbal tube attached to a polypropylene episcleral plate. It features anterior suture holes for fast suturing and promotes early apoptosis by using primary drainage area. Deal value - \$0.6m.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Siemens Healthineers AG (SHL.DE), a \$17.62b provider of medical imaging, laboratory diagnostics, and medical information systems.	Varian Medical Systems Inc, a \$3.33b developer of radio- therapy, radiosurgery, proton therapy, and brachytherapy for cancer.	The combined company will offer an integrated platform of oncology solutions to address the entire continuum of cancer care, from screening and diagnosis to care delivery and post-treatment survivorship. Varian Medical supplies informatics software for managing comprehensive cancer clinics, radiotherapy centers and medical oncology practices. It is also a premier supplier of tubes and digital detectors for X-ray imaging in medical, scientific, and industrial applications and also supplies X-ray imaging products for cargo screening and industrial inspection. Deal value - \$16.4b on sales of \$3.33b (4.9x) and EBITDA of \$536.3m (30.6x).
Medical Devices	Smith+Nephew plc (NYSE: SNN), a \$5.1b UK-based producer of trauma and extremities, sports medicine and other soft-tissue repair devices and instruments.	The Extremity Orthopaedics business of Integra LifeSciences Holdings Corporation, a \$1.5b manufacturer of surgical implants and instruments used in neurosurgery, extremity reconstruction, orthopedics, and general surgery.	Strengthens S+N's extremities business by adding a complementary shoulder replacement and upper and lower extremities portfolio and a next-generation shoulder replacement system expected to be launch commercially in 2022. The Extremity Orthopaedics business operates from facilities in Texas, including a surgeon training facility and in Lyon, France and has ~300 employees including a specialized sales force focused on the U.S., Canada and Europe. Deal terms \$240m on sales of \$90m (2.7x).
Medical Devices	Sulzer Ltd. , a \$3.91b Switzer-land-based industrial engineering and manufacturing company.	Haselmeier GmbH, a Germany-based developer and manufacturer of drug delivery devices.	Expands Sulzer's applicator division. Haselmeier develops and manufactures drug delivery devices, including self-injection pens for use in reproductive health, growth disorders, osteoporosis and diabetes. The company also provides services such as design and conception with prototype construction, engineering and product development. It has 230 employees and production facilities in Germany, Czech Republic and India. Deal value - \$118m on sales of \$42m (2.8x).



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Devices	Terumo Corporation , a \$5.59b Japan-based medical device and equipment company.	80.1% of the shares of Quirem Medical , a Netherlands-based developer of microspheres for treatment for liver tumors.	Quirem Medical has developed and manufactures the only commercially available microspheres containing the radioactive isotope Holmium-166. It also produces a low dose holmium microsphere that helps evaluate the biodistribution of microspheres prior to therapy, and a dosimetry software package. Deal value - \$20m plus \$25m in milestones.
Medical Devices	Vernacare Ltd, a UK-based infection prevention company and a portfolio company of H.I.G. Capital.	Infection Prevention business from Frontier Medical Group, a maker of infection control and harm reduction products and a portfolio company of Kester Capital.	The acquired businesses are industry-leaders in the infection prevention market providing an extensive range of sharps and clinical waste disposal solutions. Terms not announced.
Medical Devices	Wenzel Spine, Inc., a developer of minimally invasive interbody fusion devices for spinal disorders.	Statera Spine, a developer of a pre-operative diagnostics and quantitative data soft- ware that improves treat- ment decisions for spine pa- tients.	Adds spine imaging diagnostics that capture certain spine biomechanics, including sagittal alignment, that other viewing modalities do not offer to Wenzel's fusion portfolio. The Statera platform will allow physicians to consider full spine alignment data, plus motion (angulation and translation) and disc height data at each spine level to aid in the treatment decision-making process. Terms not announced.
Medical Services	BioTelemetry Inc , a remote and wireless medical technology company.	The On Demand remote patient monitoring platform from Envolve PeopleCare Inc, a provider of healthcare services and a subsidiary of Centene Corp.	The transferred platform combines real-time monitoring of biometric data with cellular- and web-based technology, proactive and reactive health coaching, population health reporting and customizable interventions. Envolve PeopleCare provides digital health, behavioral health, health and life coaching, nurse advice line, foster care management, and care gap closure services. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Services	CRH Medical Corporation (TSX: CRH) (NYSE MKT: CRHM), a \$116m Canada- based provider of gastroenter- ology products and a full-ser- vice gastroenterology anes- thesia company.	51% interest in Central Virginia Anesthesia Associates, LLC, a gastroenterology ("GI") anesthesia practice.	Central Virginia provides anesthesia services to a single GI endoscopy center. Estimated annual revenue of Central Virginia is \$2.0m. Terms not announced.
Medical Services	Liquidia Technologies Inc., a late-stage clinical biopharmaceutical company	RareGen, LLC, a consulting firm for rare disease pharmaceutical products and a portfolio company of PBM Capital.	RareGen provides strategy, investment and commercialization for rare disease pharmaceutical products and has a small, targeted sales force focused on pulmonary arterial hypertension. Concurrently, Liquidia completed a \$75m underwritten public offering of common stock. Terms not announced.
Medical Services	MetLife, Inc. (NYSE: MET), a \$68b provider of life, dental, vision, and accident and health insurance.	Versant Health, a provider of eye care management solutions.	With Versant Health's roughly 35 million members, MetLife becomes the third-largest U.S. vision insurer by membership. Versant Health offers a broad range of eye health and vision care services along with related technologies, training, and management services. The company owns the well-established market-place brands Davis Vision and Superior Vision. Terms not announced.
Medical Services	NorthStar Anesthesia, an operator of out-sourced anesthesia specialists.	Select anesthesia services businesses of Surgery Partners, Inc., an outpatient-focused network of surgical services businesses consisting of 180 ambulatory surgery centers, multi-specialty practices and urgent care facilities.	Adds a network of third-party providers of anesthesia services across 25 locations throughout select Surgery Partners facilities in Georgia, Florida, Kentucky, North Carolina and Texas. NorthStar has successfully transitioned anesthesia departments in more than 120 facilities in 19 states since inception in 2004. The acquisition expands. NorthStar's presence in its core markets including Georgia as well as areas in the Midwest, Mid-Atlantic and Southeast. Terms not announced.



Sector	Acquiring Party	Transferring Party	Comments/Rationale
Medical Services	Odyssey Investment Partners, a middle-market private eq- uity firm.	The ProPharma Group business of Linden Capital Partners, a private equity firm focused on middle-market healthcare and life science.	Represents a new platform investment for Odyssey. ProPharma Group is a provider of regulatory and compliance services to pharmaceutical, biotechnology and medical device customers with offerings including regulatory affairs, life science consulting, pharmacovigilance and medical information services. ProPharma Group partners advises from early concept development through each clinical phase, product launch, and commercialization. The company has five US-based offices and ten additional offices across Canada, UK, Netherlands, Sweden, Germany, Japan and Australia. Deal terms not announced.
Medical Services	One Equity Partners, a middle-market private equity firm focused on industrials, healthcare, and technology.	American Medical Technologies (AMT), a provider of woundcare programs for long term care facilities in the U.S.	Represents a new woundcare platform investment for One Equity Partners offering services including bedside clinical education, advanced dressings and technologies, designed to facilitate positive clinical outcomes. AMT services residents in over 6,250 facilities nationwide and more than 250,000 patients annually. One Equity co-invested with Silverfern, a global middle-market investment management firm. Terms not announced.
OTC/Consumer	CURE Pharmaceutical (OTC: CURR), an early-stage verti- cally integrated dietary sup- plement and drug delivery and development company.	Sera Labs, Inc. , a producer of health, wellness and beauty products focused on CBD formulations.	Adds a portfolio of 20 products distributed in major national drug store, grocery chains and mass retailers and direct online. The company also offers private labeling to major retailers. Deal terms \$20m upfront plus up to an additional \$20m in future milestones.



The Walden Group is a healthcare mergers & acquisition advisory firm. We represent privately-owned companies seeking to divest operations or find a home within (or relationship with) an appropriate strategic or private equity firm. We also represent operating companies and financial sponsors seeking to make corporate acquisitions and investments in the healthcare sector. Our approach is "full-immersion", with more than 30 years of healthcare experience, deep industry knowledge, a worldwide network of close relationships and a lengthy track record of completed transactions.

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