

McEvoy & FARMER DIAGNOSTIC INDUSTRY SPECIALISTS SINCE 1986

Infectious Disease Testing Markets in the US

Fifth Edition

November 2019

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| Unranked - T-2 | 98 |
| Unranked - Accelerate | 100 |

| EXECUTIVE SUMMARY | | | |
|-------------------|--|--|------|
| | | | |

EXECUTIVE SUMMARY

FIVE MARKET SEGMENTS OF THREE DISTINCT TYPES – 2019 REVENUES

• Apologies for redacting the numbers – actual figures available to subscribers, updated twice a year

| | Lab | Manufacturer | The | Barbarians |
|--|-------------|--------------|----------------------|----------------|
| | Revenues | Revenues | Establishment | at the Gates |
| The Small Scale/Small Menu Market | \$X.Xb | \$X.Xb | 1. Cepheid | 1. Roche |
| • aka Rapid/POC | | | 2. Abbott | 2. GenMark |
| - | | | 3. bioMérieux | 3. Curetis |
| | | | 4. Quidel | 4. Qiagen |
| | | | 5. Luminex | 5. Siemens |
| The Two Large Scale/Large Menu Mar | <u>kets</u> | | | |
| • Immunoassays in the clinical lab | \$X.Xb | \$X.Xb | 1. Abbott | Difficult to |
| | | | 2. Roche | break into |
| | | | 3. Siemens | this segment. |
| | | | 4. Beckman | |
| | | | 5. Ortho | |
| Bacteriology in the microbiology lab | \$X.xb | \$X.xb | 1. BD | 1. Accelerate |
| | | | 2. bioMérieux | 2. T-2 |
| | | | 3. Thermo | 3. MetaSystems |
| | | | 4. Beckman | 4. Q-Linea |
| | | | 5. Bruker | 5. Qvella |
| The Two Large Scale/Small Menu Mar | <u>kets</u> | | | |
| • Molecular lab routine testing | \$X.xb | \$X.xb | 1. Hologic | 1. NeuMoDx |
| | | | 2. Roche | |
| | | | 3. BD | No one |
| | | | 4. Qiagen | else on the |
| | | | 5. Abbott | horizon. |
| • Transfusion screening in blood banks | \$X.xb | \$X.xb | 1. Grifols | You'd have |
| | | | 2. Abbott | to be crazy |
| | | | 3. Roche | at this point |
| | | | 4. Ortho | in history. |
| All US Infectious Disease | | | | |
| Testing 2019 Forecast | \$13.63b | \$6.95b | | |

EXECUTIVE SUMMARY

THE TOP 24 SUPPLIERS OF US INFECTIOUS DISEASE TESTING LABS IN 2019 (US\$m)

• Apologies for redacting the numbers – actual figures available to subscribers, updated twice a year

| US\$ millions Manufacturer | Total Inf. Dis Revenues | Rapid/POC Viral/Bacterial Testing | Molecular Lab Routine | Microbiology Lab Bacteriology | Clinical Lab Immunoassay | Blood Bank Screening |
|-----------------------------|-------------------------------|---|-----------------------------|-------------------------------------|--------------------------------|----------------------------|
| | \$6,950 | \$X,XXX | \$X,XXX | \$X,XXX | \$X,XXX | \$XXX |
| 1. bioMérieux | x,xxx | XXX | | XXX | XX | |
| 2. Abbott | XXX | xxx | XX | | XXX | XXX |
| 3. BD | XXX | XX | XXX | xxx | | |
| 4. Roche | XXX | XX | XXX | | XXX | xx |
| 5. Cepheid | XXX | xxx | | | | |
| 6. Hologic | XXX | | XXX | | | XX |
| 7. Grifols | XXX | | | | | xxx |
| 8. Thermo | XXX | XX | | XXX | | |
| 9. Beckman | XXX | | | XX | XXX | |
| 10. Quidel | XXX | xxx | | | XX | |
| 11. Qiagen | XXX | | XX | | XX | |
| 12. Ortho | XXX | | | | XX | xx |
| 13. Siemens | XXX | | | | XXX | |
| 14. DiaSorin | XX | XX | | | XX | |
| 15. Luminex | XX | XX | | | | |
| 16. Meridian | XX | XX | | | XX | |
| 17. Genmark | XX | xx | | | | |
| 18. Bio-Rad | XX | xx | XX | | XX | x |
| 19. Hardy | XX | | | XX | | |
| 20. Bruker | XX | | | XX | | |
| 21. Copan | XX | | | XX | | |
| 22. Oxford | XX | | | | XX | |
| 23. T-2 | X | | | X | | |
| 24. Accelerate | X | | | X | | |
| others | | XXX | XXX | XXX | XX | X |

EXECUTIVE SUMMARY

BIGGEST NEWS SINCE OUR 4TH EDITION REPORT of MARCH 2019

Our 4th edition report on infectious disease testing in the US was published in March of this year, covering the market in 2018. This 5th edition reports on events of the first three quarters of 2019, during which...

BioMérieux surpassed Abbott. After BioFire sales that were up 25% over last year's first three quarters, there's a new #1. At the end of September there were 9,800 *Film Array* instruments working worldwide, of which 8,000-8,200 were in the US. BioFire should install the 10,000th before the end of the year. In addition their *Virtuo* culture systems gained a bit of ground in 2019 against BD in US blood culture markets. The *Vidas* immunoassay business was down slightly in the US, and flat elsewhere. During the first nine months of 2019 two new E-test assays were approved and one new drug on Vitek systems.

#2 Abbott got their CE mark for *Alinity m* in March; approval by the FDA should come in 2020. *Alinity s* was FDA-approved for transfusion screening in July. The *Alere i* instrument was rechristened *ID Now* late in 2018, and offers flu/strep results in less than 15 minutes, so it has become one of the most popular POC respiratory instruments. The Alere GI product line benefitted from this year's struggles at Meridian. Abbott got a CE mark for a 15-minute HBsAg in February, which we'll be seeing in the US next year. These reinforcements arrived none too soon; Alere was down 1.7% and Abbott Molecular was down 9.5% for the first nine months of the year.

#3 BD is still ahead of bioMérieux in big bacteriology, but not by much. BD claims double-digit growth for the *BD Max* molecular systems during the first three quarters, which sounds plausible given their decision to develop small panels, now that there's a big-panel revolt brewing in the US. We can believe 10-12% growth during the first three quarters in their domestic *Max* business.

The new high-volume *Cor* system earned its CE mark in June, so we should see

We have pages like this one covering the top twenty manufacturers of microbiology products (see list on page 2 above).

| MANUFACTURER PROFILE | HOLOGIC | | | | |
|------------------------------------|-------------------------------------|-------------|--------------------|------------|--|
| | #6 IN US INFECTIOUS DISEASE TESTING | | | | |
| Company | Hologic | | | | |
| | Bedford, Massachusetts | | | | |
| | www.hologic.com | | | | |
| Importance | #1 in US central lab STI testing | | | | |
| Who's Who | | | | Since | |
| | Mr. Stephen MacMillan | - CEO | | 12/13 | |
| | Ms. Karleen Oberton – | 5/06 | | | |
| | Dr. Jay Stein - Co-Four | 10/85 | | | |
| | Mr. Patrick Brady – SV | 10/18 | | | |
| | Mr. Kevin Thornal – Pr | 6/14 | | | |
| | Mr. Mike Shih – Senior | 6/13 | | | |
| 2018 Big Picture Revenues | | | | | |
| All of Hologic - Global | \$3.2b | | | | |
| Diagnostics - Global | \$1.1-1.2b | | | | |
| Diagnostics – US | \$800-850m | | | | |
| Infectious disease testing – US | \$410-420m | minus cytol | logy and perinatal | | |
| 2019 US Segment Revenues | Platforms | Rank | Share | Revenues | |
| • Molecular lab, routine testing | Panther•PantherFusion | #1 | 36-38% | \$430-450m | |
| • Blood bank, small menu screening | Panther Procleix | N/A | N/A | \$30-40m | |
| Infectious disease totals | | #6 | 6-7% | \$450-470m | |

We have pages like this one covering the top twenty manufacturers of microbiology products (see list on page 2 above).

| MANUFACTURER PROFILE | HOLOGIC | | | | | | |
|--|--|-------------|---------|--------------|--------|--|--|
| | #6 IN US INFECTIOUS DISEASE TESTING | | | | | | |
| Stock performance | 1-1-15: \$26.76 | | | | | | |
| • HOLX | 1-1-16: \$36.55 | | | | | | |
| | 1-1-17: \$39.88 | | | | | | |
| | 1-1-18: \$43.98 | | | | | | |
| | 1-1-19: \$41.10 | | | | | | |
| | 11-21-19: \$49.50 | | | | | | |
| Recent publicly reported results (\$m) | | <u>NoAm</u> | ROW | <u>Total</u> | Growth | | |
| • First nine months of 2019 | Diagnostics | 685 | 213 | 898 | +4.8% | | |
| | Molecular Diagnostics | 409 | 93 | 503 | +10.2% | | |
| | Blood Screening | 42 | <-incl. | 41 | -1.5% | | |
| | Cytology & Perinatal | 234 | 120 | 354 | -2.9% | | |
| | Breast Health | 767 | 204 | 971 | +9.1% | | |
| | Medical Aesthetics | 116 | 122 | 238 | -11.5% | | |
| | • Gyn/Surg | 268 | 54 | 322 | +2.3% | | |
| | • Skeletal Health | 43 | 27 | 70 | +4.1% | | |
| | Totals: | 1,880 | 622 | 2,501 | +4.2% | | |
| Other financial reporting | | | | | | | |
| • November 21, 2019 | Market Capitalization \$13.23b | | | | | | |
| | Enterprise Value | \$15.681 |) | | | | |
| | Last 12 Months Sales | \$3.37b | | | | | |
| | EBITDA | \$1.04b | | | | | |
| | Cash | \$0.60b | | | | | |
| | Debt | \$3.06b | | | | | |
| | Price Sales | 3.98 | | | | | |
| | Debt Equity 134.04 | | | | | | |
| Otherwise notable | • Panther has been the apex predator of CT/NG markets since 2012. | | | | | | |
| | • Panther is both fastest among its competitors, and also has the best me | | | | | | |
| | • 1,700 Panther systems worldwide, of which 1,000-1,100 are in the US. | | | | | | |
| | • Since early 2017, Panther has also been hard to beat in viral load marke | | | | | | |
| | • In 2018, new <i>Fusion</i> module made Panther a fierce respiratory competit | | | | | | |
| | • Expect to see more Seegene multiplex panels on Panther Fusion. | | | | | | |
| | • Small panel Fusion menu looks smart post Palmetto coverage decision. | | | | | | |
| | The state of the s | | | | | | |