

Emergent BioSolutions (EBS - \$34.50)

ACAM2000 Acquisition, Right up EBS's Alley

Recently, EBS announced that it had entered into an agreement to acquire the ACAM2000 (Smallpox Vaccine) business from Sanofi (SNY) in all cash transaction valued up to \$125M (\$97.5M upfront and up to \$27.5M in near-term contingent regulatory and manufacturing-related milestones). We expect this acquisition to close in 2H17 allowing EBS to acquire ACAM2000 (the only vaccine smallpox infection). With it comes an existing 10-year contract with the CDC (valued at \$425M) with a remaining ~\$160M for deliveries to the SNS; as well as a cGMP bulk manufacturing facility, and a lease to a cGMP full/finish facility (US based) with 100 employees. While we don't expect this deal to enable EBS to achieve their \$1B top-line 2020 goal, we are encouraged by EBS's portfolio diversification and still expect significant M&A activity in the near-term. This acquisition, in our view, makes a lot of sense as it represents a revenue-generating product associated with manufacturing and government contracting. In terms of timeline, we expect SNY to file their sBLA (completion of tech transfer from Austria to US), followed by closing of the transaction in 2H17. Between building manufacturing licensing and follow-on contract negotiations, we don't see anyone as well-suited as EBS to take on these challenges. We reiterate our Buy rating and \$50 price target.

- **ACAM2000 acquisition from SNY, who better to deal with manufacturing facility licensing and follow-on negotiations with government agencies.** Although complications could cause time slippage, EBS's experiences with Building 55 and Biothrax/ Nuthrax negotiations make them the ideal acquirer of ACAM2000, in our opinion.
- **2020 \$1B goal reiterated, more acquisitions to come.** While 2020 is approaching quickly, we were encouraged to see EBS reiterate their \$1B total revenue 2020 goal. We expect additional acquisitions in the near terms as this 10 year \$425M contract doesn't seem to have the run rate strength to get EBS to the \$1B level.
- **Reiterate Buy rating \$50 price target.** Our price target is based on a sum-of-the-parts analysis, with a base business DCF value of \$42/share, cash (net of debt) and tech value of \$8/share.

Adj-Earnings Estimates: (per share)

| (Dec) | 1Q | 2Q | 3Q | 4Q | FY | P/E |
|--------------|--------|--------|------|------|------|-------|
| FY18E | 0.46 | 0.54 | 0.62 | 0.64 | 2.26 | 15.3x |
| FY17E | 0.29A | 0.25 | 0.45 | 0.67 | 1.65 | 20.9x |
| FY16A | 0.16 | (0.18) | 0.64 | 0.74 | 1.39 | 24.8x |
| FY15A | (0.50) | 0.36 | 0.83 | 0.78 | 1.60 | 21.6x |

Source: Laidlaw & Company estimates

Healthcare / Biotechnology

| | |
|---------------|-------------|
| Ticker: | EBS |
| Rating: | Buy |
| Price Target: | \$50 |

Trading Data:

| | |
|---------------------------|-----------|
| Last Price (07/14/2017) | \$34.50 |
| 52-Week High (12/06/2016) | \$36.64 |
| 52-Week Low (11/03/2016) | \$24.47 |
| Market Cap. (MM) | \$1,414.0 |
| Shares Out. (MM) | 41.0 |

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Figure 1: Valuation

| Sum-of-the-parts valuation | | |
|-------------------------------------|----------------------|--------------------|
| Segment | Valuation (000's) | Per share value |
| DCF of base business | \$2,115,840 | \$42 |
| Net Cash, end '17E | \$152,530 | \$3 |
| Technology value | \$250,000 | \$5 |
| SUM | \$2,518,371 | \$50 |
| Fully diluted shares out '17E (000) | | 50,318 |

Source: Company reports; Laidlaw & Company estimates

Figure 2: Quarterly Income Statement

| Emergent BioSolutions Quarterly income statement | | | | | | | | | | |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| (\$000 except per share) | 2016A | | | | 2016A Year | 2017E | | | | 2017E Year |
| | 1QA | 2QA | 3QA | 4QA | | 1QA | 2QE | 3QE | 4QE | |
| BioThrax - US sales | \$59,100 | \$40,000 | \$94,100 | \$43,800 | \$237,000 | \$43,800 | \$55,000 | \$75,000 | \$92,500 | \$266,300 |
| NuThrax - US sales | | | | | | | | | | |
| OUS Biodefense sales | | | | | | 0 | 0 | 2,500 | 5,000 | 7,500 |
| Other Biodefense | 4,658 | 8,300 | 2,598 | 43,693 | 59,249 | 38,169 | 17,500 | 17,500 | 16,000 | 89,169 |
| Total Biodefense | 63,758 | 48,300 | 96,698 | 87,493 | 296,249 | 81,969 | 72,500 | 95,000 | 113,500 | 362,969 |
| Total Biosciences | 7,948 | 10,200 | 3,109 | | 21,257 | | | | | |
| Contract manufacturing | 7,587 | 10,200 | 14,712 | 16,683 | 49,182 | 17,628 | 17,500 | 17,500 | 17,500 | 70,128 |
| Contracts & grants | 31,709 | 32,787 | 31,504 | 47,487 | 143,487 | 17,261 | 15,000 | 15,000 | 17,500 | 64,761 |
| Total revenues | \$111,002 | \$101,487 | \$146,023 | \$151,663 | \$510,175 | \$116,858 | \$105,000 | \$127,500 | \$148,500 | \$497,858 |
| Expenses | | | | | | | | | | |
| COGS | 25,803 | 35,612 | 38,460 | 36,159 | 136,034 | 43,922 | 37,250 | 42,100 | 46,300 | 169,572 |
| Gross margin | 85,199 | 65,875 | 107,563 | 115,504 | 374,141 | 72,936 | 67,750 | 85,400 | 102,200 | 328,286 |
| % product sales | 67% | 48% | 66% | 65% | 63% | 56% | 59% | 63% | 65% | 61% |
| R&D | 34,154 | 33,947 | 27,188 | 27,117 | 122,406 | 20,476 | 20,000 | 20,000 | 20,000 | 80,476 |
| SG&A | 37,484 | 40,148 | 27,388 | 30,858 | 135,878 | 31,850 | 27,500 | 30,000 | 30,000 | 119,350 |
| Operating income | 13,561 | (8,220) | 52,987 | 57,529 | 115,857 | 20,610 | 20,250 | 35,400 | 52,200 | 128,460 |
| Interest expense | 1,524 | 1,509 | 2,049 | 2,535 | 7,617 | 1,938 | 2,250 | 2,500 | 2,500 | 9,188 |
| Interest income, net | 186 | 220 | 358 | 289 | 1,053 | 373 | 200 | 200 | 250 | 1,023 |
| Other income/(expense) | 116 | 17 | (134) | 439 | 438 | 300 | 100 | 100 | 100 | 600 |
| Pretax income (loss) | 12,339 | (9,492) | 51,162 | 55,722 | 109,731 | 19,345 | 18,300 | 33,200 | 50,050 | 120,895 |
| Tax exp/(benefit) | 4,818 | (2,345) | 19,565 | 19,136 | 41,174 | 5,160 | 5,856 | 10,624 | 16,016 | 37,656 |
| Loss to non-ctrl interest | | | | | | | | | | |
| Adjusted Net Income | 7,521 | (7,147) | 31,597 | 36,586 | 68,557 | 14,185 | 12,444 | 22,576 | 34,034 | 83,239 |
| Non-cash charges | (3,530) | (3,800) | (8,100) | (4,300) | (19,730) | (3,800) | | | | |
| GAAP net income | 3,991 | (10,947) | 23,497 | 32,286 | 48,827 | 10,385 | | | | |
| EPS ex non-cash items | \$0.16 | (\$0.18) | \$0.64 | \$0.74 | \$1.39 | \$0.29 | \$0.25 | \$0.45 | \$0.67 | \$1.65 |
| EPS as reported | \$0.08 | (\$0.27) | \$0.48 | \$0.65 | \$0.99 | \$0.21 | | | | |

Source: Bloomberg LP; Company reports; Laidlaw & Company estimates

Figure 3: Annual Income Statement

| Emergent BioSolutions Annual income statement | | | | | | | |
|--|------------------|------------------|------------------|------------------|------------------|------------------|--|
| (\$000 except per share) | 2015A | 2016A | 2017E | 2018E | 2019E | 2020E | Comments |
| BioThrax - US sales | \$293,900 | \$237,000 | \$266,300 | \$309,000 | \$310,000 | \$25,500 | '17E guide: \$265M-\$280M |
| NuThrax - US sales | | | | | 25,000 | 318,500 | Launch 2019 |
| OUS Biodefense sales | | | 7,500 | 24,000 | 25,000 | 26,000 | OUS sales ~10% of US sales |
| Other Biodefense | 34,994 | 59,249 | 89,169 | 70,000 | 75,000 | 85,000 | RSDL, BAT, other Biodefense here |
| Total Biodefense | 328,894 | 296,249 | 362,969 | 403,000 | 435,000 | 455,000 | |
| Total biosciences | 28,068 | 21,257 | | | | | Spun out mid-2016 |
| Contract manufacturing | 42,968 | 49,182 | 70,128 | 85,000 | 100,000 | 111,000 | Acquired with Cangene 3Q13 |
| Contracts & grants | 122,905 | 143,487 | 64,761 | 92,000 | 90,000 | 85,000 | Offset in R&D |
| Total revenues | \$522,789 | \$510,175 | \$497,858 | \$580,000 | \$625,000 | \$651,000 | '17E guide: \$500M-\$530M 2020 guide: \$1B in revenue |
| Expenses | | | | | | | |
| COGS | 112,895 | 136,034 | 169,572 | 193,020 | 215,015 | 221,990 | |
| Gross margin | 409,894 | 374,141 | 328,286 | 386,980 | 409,985 | 429,010 | |
| % product sales | 72% | 63% | 61% | 60% | 60% | 61% | Cangene impacts margins |
| R&D | 153,997 | 122,406 | 80,476 | 90,000 | 100,000 | 110,000 | ex-Biosciences R&D in 2017 |
| SG&A | 141,758 | 135,878 | 119,350 | 124,000 | 130,000 | 132,000 | |
| Operating income | 114,139 | 115,857 | 128,460 | 172,980 | 179,985 | 187,010 | '17E EBITDA: \$135M-\$145M |
| Interest expense | 6,523 | 7,617 | 9,188 | 7,475 | 7,900 | 8,400 | |
| Interest income, net | 572 | 1,053 | 1,023 | 1,500 | 2,750 | 3,350 | |
| Other inc/(exp) | (319) | 438 | 600 | 400 | 400 | 400 | |
| Pretax income | 107,869 | 109,731 | 120,895 | 167,405 | 175,235 | 182,360 | |
| Tax expense | 32,299 | 41,174 | 37,656 | 50,222 | 52,571 | 54,708 | |
| Loss to non-cont. int | 0 | 0 | 0 | 0 | 0 | 0 | |
| Adj-Net income | 75,570 | 68,557 | 83,239 | 117,184 | 122,665 | 127,652 | '17E adj-NI: \$70M-\$80M |
| Non-cash charges | (12,700) | (19,730) | | | | | |
| GAAP net income | 62,870 | 48,827 | | | | | '17E GAAP NI: \$60M-\$70M |
| EPS ex non-cash items | \$1.60 | \$1.39 | \$1.65 | \$2.26 | \$2.30 | \$2.30 | +10% CAGR 2016-2020E |
| EPS as reported | \$1.33 | \$0.99 | | | | | |
| Fully diluted shares (000) | 47,256 | 49,335 | 50,318 | 51,918 | 53,368 | 55,493 | |

Source: Bloomberg LP; Company reports; Laidlaw & Company estimates

Major Risks

Exogenous events could impact our outlook. We believe pharmaceutical companies have the least control over competitive, political, and regulatory risks. Although we have incorporated competitive assumptions into our forecasts, there may be other risks beyond the scope of our analysis. Changes in the drug reimbursement system, as well as any political or regulatory amendments, may significantly influence the earnings power of these companies.

Actual clinical results and the FDA's conclusions may deviate from expectations. Many of our assumptions are based on a review of incomplete clinical trial data available in the public domain. Often, our conclusions are drawn from early stage data, which may not be reflected by pivotal studies. Furthermore, the FDA's conclusions may not coincide with our own, materially changing our revenue and earnings assumptions.

Compliance issues, product recalls, and other mandates by regulatory authorities could materially change our expectations. Regulatory compliance issues, ranging from accounting irregularities to defective manufacturing practices, could materially change our assumptions and earnings outlook. Unanticipated product recalls and labeling changes could also have adverse consequences on our earnings assumptions.

Legal risks could lead to additional liabilities and revenue loss. In addition to the expenses incurred by patent challenges, product liability and other legal suits could occur and lead to additional liabilities and revenue loss, which could substantially change our financial assumptions.

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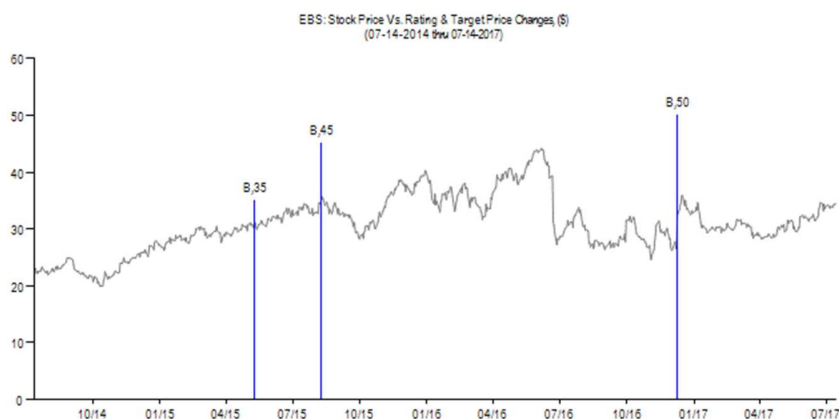
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Rating and Price Target Change History



3 Year Rating Change History

| Date | Rating | Closing Price (\$) |
|------------|---------|--------------------|
| 05/11/2... | Buy (B) | 31.11 |

3 Year Price Change History

| Date | Target Price (\$) | Closing Price (\$) |
|------------|-------------------|--------------------|
| 05/11/2... | 35.00 | 31.11 |
| 08/10/2... | 45.00 | 35.29 |
| 12/09/2... | 50.00 | 32.37 |

Source: Laidlaw & Company

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|----------------------------------|---|--|---|-----------|
| | | | Investment Banking | Brokerage |
| Strong Buy (SB) | Expected to significantly outperform the sector over 12 months. | 0.00% | 0.00% | 0.00% |
| Buy (B) | Expected to outperform the sector average over 12 months. | 64.44% | 31.11% | 2.22% |
| Hold (H) | Expected returns to be in line with the sector average over 12 months. | 2.22% | 0.00% | 0.00% |
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ADDITIONAL COMPANIES MENTIONED

Sanofi (SNY – Not Rated)

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