

Emergent BioSolutions (EBS - \$37.18)

4Q15 As Expected, next BioThrax contract & Building 55 next

EBS reported 4Q15 last night after the close in-line with their previously released guidance in January so no real surprises on the print. What is remarkable is the yields that EBS has been able to generate from Building 12, which appears to consistently produce over the ~9M doses/yr. prior theoretical top production amount. EBS remains on-track for a 2016 filing of the sBLA for Building 55 following the submission of a final assay analysis to the FDA, and the company remains in discussion with BARDA for the next BioThrax procurement contract. Should Building 55 be approved we could begin to see ex-US sales for the first time; we estimate \$27M in 2017 and \$65M in 2018. EBS continues to look at acquisitions in the Chemical, Biological, Radiological and Explosive (CBRE) space, and will spin out the Aptevo Therapeutics (BioSciences division) in mid-2016. We continue to expect ~20% top and bottom line growth 2015-2016 ex-acquisitions, and we continue to like EBS here. We reiterate our Buy rating, \$45 price target.

- **Ex-US sales could come in 2017.** Somewhat surprisingly Building 55 will likely be approved in Germany before the US, starting the mutual recognition process for additional EU approvals. Assuming Building 55 comes on-line and there is excess capacity, EBS estimates that BioThrax could sell ~10% of their US sales ex-US in the coming years.
- **sBLA filing expected mid-2016.** EBS expects to wrap up their final assay analysis in 1H16, with FDA approval expected ~4 months after sBLA filing. We continue to anticipate a 2H16 approval and production from Building 55.
- **Additional acquisitions still likely in 2016.** EBS is still actively looking at assets and we believe an accretive acquisition is likely in 2016 in the CBRE space as the company has a way to go to get to their stated goal of \$1B in top line sales by 2020. With \$313M in cash as of year-end 2015 and the company generating ~\$100M in cash from operations EBS has plenty of dry powder.
- **Reiterate Buy rating \$45 price target.** Our PT is based on a sum-of-the-parts analysis, with a base business DCF value of \$40/share, cash (net of debt) and accounts receivable at the end of 2016 of \$4/share, and a pipeline/tech value of \$1/share.

Adj-Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
FY17E	0.21	0.61	0.89	0.93	2.65	14.0x
FY16E	(0.15)	0.30	0.82	0.97	1.95	19.1x
FY15A	(0.50)	0.36	0.83	0.78	1.60	23.2x
FY14A	(0.40)	0.25	0.54	0.75	1.19	31.2x

Source: Laidlaw & Company estimates

Healthcare / Biotechnology

Ticker: **EBS**
Rating: **Buy**
Price Target: **\$45.00**

Trading Data:

Last Price (02/25/2016)	\$37.18
52-Week High (12/0/2015)	\$40.49
52-Week Low (03/06/2015)	\$26.36
Market Cap. (MM)	\$1,450
Shares Out. (MM)	38.9

Analyst

Jim Molloy/Specialty Pharma &
Biotechnology
(857) 317-5061
jmolloy@laidlawltd.com

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Figure 1: Variance analysis

Emergent BioSolutions Quarterly Variance Analysis										
(\$000 except per share)	4Q14A	4Q15A	4Q15E	Variance	% Y/Y	FY14A	FY15A	FY15E	Variance	% Y/Y
BioThrax sales	\$87,900	\$111,900	\$101,000	\$10,900	27.3%	\$245,944	\$293,900	\$283,000	\$10,900	19.5%
RSDL sales		0	0	0	NM		0	0	0	NM
Contracts and Grants	28,525	24,930	40,000	(15,070)	-12.6%	110,849	122,905	137,975	(15,070)	10.9%
Total Revenue	\$147,975	\$168,104	\$176,325	(\$8,221)	13.6%	\$450,138	\$522,789	\$531,057	(\$8,268)	16.1%
COGS	29,185	37,070	37,057	14	27.0%	108,212	112,895	115,532	(2,637)	4.3%
Gross Profit	118,790	131,034	139,269	(8,235)	10.3%	341,926	409,894	415,526	(5,632)	19.9%
SG&A Expense	28,705	42,756	50,700	(7,944)	48.9%	107,641	141,758	147,952	(6,194)	31.7%
R&D ex-contracts & grants	10,440	7,556	5,750	1,806	-27.6%	39,980	31,092	29,286	1,806	-22.2%
R&D Expense	38,965	32,486	45,750	(13,264)	-16.6%	150,829	153,997	167,261	(13,264)	2.1%
Operating Income	51,120	55,792	42,819	12,974	9.1%	83,456	114,139	100,313	13,827	36.8%
Interest Expense	1,174	1,600	1,500	100	36.3%	10,140	6,523	6,424	99	-35.7%
Int. & Inv. Income	190	113	175	(62)	-40.5%	320	572	634	(62)	78.8%
Other Inc./(Exp)	672	(524)	500	(1,024)	NA	2,926	(319)	1,502	(1,821)	NA
Pretax Income	50,808	53,781	41,994	11,788	5.9%	76,562	107,869	96,025	11,845	40.9%
Tax exp/(benefit)	16,192	16,334	12,178	4,156	NA	22,121	32,299	28,243	4,056	NA
Adj-Net Income	34,616	37,447	29,815	7,632	8.2%	54,441	75,570	67,781	7,789	38.8%
Shares out (000)	46,391	48,143	48,135	9	3.8%	45,803	47,256	45,320	1,936	3.2%
Adj-Earnings Per Share	\$0.75	\$0.78	\$0.62	\$0.16	4.2%	\$1.19	\$1.60	\$1.50	\$0.10	34.5%
Margin Analysis										
Gross Profit Margin	75.6%	74.1%	72.8%	1.3%	-1.9%	68.1%	71.8%	70.6%	1.2%	5.4%
SG&A Expense	24.0%	29.9%	37.2%	-7.3%	24.3%	31.7%	35.4%	37.6%	-2.2%	11.7%
R&D Expense	32.6%	22.7%	33.6%	-10.9%	-30.4%	44.5%	38.5%	42.6%	-4.0%	-13.4%
Operating Income	42.8%	39.0%	31.4%	7.6%	-8.9%	24.6%	28.5%	25.5%	3.0%	16.0%
Tax Rate	31.9%	29.0%	29.0%	0.0%	-9.0%	28.9%	29.9%	29.4%	0.5%	3.6%
Adj-Net Income	23.4%	22.3%	16.9%	5.4%	-4.8%	12.1%	14.5%	12.8%	1.7%	19.5%

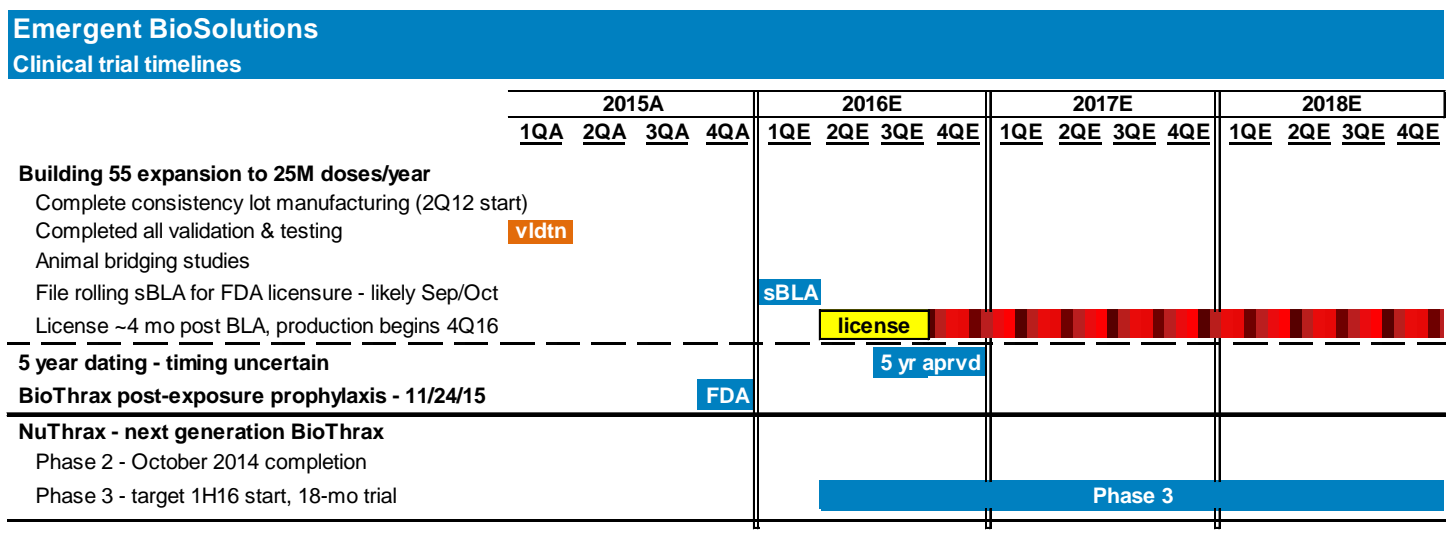
Source: Company reports; Laidlaw & Company estimates

Figure 2: Valuation

Sum-of-the-parts valuation: EBS		
Segment	Valuation (000's)	Per share value
DCF of base business	\$1,929,085	\$40
Net Cash, end '16E	\$207,951	\$4
Technology value	\$50,000	\$1
SUM	\$2,187,036	\$45
Fully diluted shares out '16E (000)		49,018

Source: Company reports; Laidlaw & Company estimates

Figure 3: Clinical Trials Timeline



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

Quarterly Income Statement

Emergent BioSolutions
Quarterly income statement

(\$000 except per share)	2014A				2014A Year	2015A				2015A Year
	1QA	2QA	3QA	4QA		1QA	2QA	3QA	4QA	
BioThrax - US sales	\$24,544	\$67,500	\$66,000	\$87,900	\$245,944	\$0	\$72,200	\$109,800	\$111,900	\$293,900
BioThrax - OUS sales										
Other Biodefense	2,500	7,275	11,675	10,911	32,350	11,945	2,800	7,700	12,549	34,994
Total Biodefense	27,044	74,775	77,675	98,811	278,305	11,945	75,000	117,500	124,449	328,894
Total Biosciences	8,723	3,494	6,782	11,050	30,060	6,345	7,023	6,500	8,200	28,068
Contract manufacturing	2,726	9,187	9,433	9,589	30,935	12,243	8,859	11,341	10,525	42,968
Contracts & grants	15,391	22,869	44,064	28,525	110,849	33,099	35,230	29,646	24,930	122,905
Total revenues	\$53,884	\$110,325	\$137,954	\$147,975	\$450,138	\$63,633	\$126,112	\$164,987	\$168,104	\$522,789
Expenses										
COGS	16,997	31,607	30,423	29,185	108,212	16,048	26,266	36,161	37,070	112,895
Gross margin	36,887	78,718	107,531	118,790	341,926	47,585	99,846	128,826	131,034	409,894
% product sales	56%	64%	68%	76%	68%	47%	71%	73%	74%	72%
R&D	30,256	37,401	44,207	38,965	150,829	38,702	40,941	41,868	32,486	153,997
SG&A	24,089	27,155	27,692	28,705	107,641	33,393	34,053	29,806	42,756	141,758
Operating income	(17,458)	14,162	35,632	51,120	83,456	(24,510)	24,852	57,152	55,792	114,139
Interest expense	3,535	3,621	1,810	1,174	10,140	1,661	1,628	1,635	1,600	6,523
Interest income, net	40	31	59	190	320	82	273	104	113	572
Other income/(expense)	512	1,322	420	672	2,926	100	300	602	(524)	(319)
Pretax income (loss)	(20,441)	11,894	34,301	50,808	76,562	(25,989)	23,797	56,223	53,781	107,869
Tax exp/(benefit)	(5,805)	2,465	9,269	16,192	22,121	(7,169)	6,800	16,434	16,334	32,299
Loss to non-ctrl interest					-					
Adjusted Net Income	(14,636)	9,429	25,032	34,616	54,441	(18,820)	16,997	39,789	37,447	75,570
Non-cash charges	(5,600)	(4,400)	(3,200)	(4,500)	(17,700)	(2,700)	(2,900)	(1,847)	(4,100)	(12,700)
GAAP net income	(20,236)	5,029	21,832	30,116	36,741	(21,520)	14,097	37,942	33,347	62,870
EPS ex non-cash items	(\$0.40)	\$0.25	\$0.54	\$0.75	\$1.19	(\$0.50)	\$0.36	\$0.83	\$0.78	\$1.60
EPS as reported	(\$0.55)	\$0.13	\$0.47	\$0.65	\$0.80	(\$0.57)	\$0.30	\$0.79	\$0.69	\$1.33
Fully diluted shares (000)	36,854	38,333	46,557	46,391	45,803	37,949	47,410	47,785	48,143	47,256
Margin & expense analysis										
Gross Margin (% prod. sales)	56%	64%	68%	76%	68%	47%	71%	73%	74%	72%
Op margin (% prod. sales)	-45%	16%	38%	43%	25%	-80%	27%	42%	39%	29%
Taxes	28%	21%	27%	32%	29%	28%	29%	29%	30%	30%
Net margin	-27%	9%	18%	23%	12%	-30%	13%	24%	22%	14%
Year-over-year change										
Net revenue	25%	34%	55%	51%	44%	18%	14%	20%	14%	16%
R&D	5%	27%	53%	30%	26%	28%	9%	-5%	-17%	2%
SG&A	20%	36%	26%	59%	34%	39%	25%	8%	49%	32%
Operating income	54%	-12%	96%	83%	65%	40%	75%	60%	9%	37%
Net income	120%	-17%	86%	90%	50%	29%	80%	59%	8%	39%

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

Annual Income Statement

Emergent BioSolutions						
Annual income statement						
(\$000 except per share)	2014A	2015A	2016E	2017E	2018E	Comments
BioThrax - US sales	\$245,944	\$293,900	\$340,000	\$355,000	\$350,000	2015E guide: \$270M-\$285M
BioThrax - OUS sales				27,000	65,500	Excess Bldg 55 production sold OUS
Other Biodefense	<u>32,350</u>	<u>34,994</u>	<u>38,000</u>	<u>40,000</u>	<u>40,000</u>	RSDL, BAT, other Biodefense here
Total Biodefense	278,305	328,894	378,000	422,000	455,500	
Total biosciences	30,060	28,068	30,450	0	0	To be spun out mid-2016
Contract manufacturing	30,935	42,968	60,000	60,000	60,000	Acquired with Cangene 3Q13
Contracts & grants	110,849	122,905	150,000	170,000	180,000	Offset in R&D
Total revenues	\$450,138	\$522,789	\$618,450	\$652,000	\$695,500	15E: \$520M-\$525M; 16E: \$600M-\$630M
Expenses						
COGS	108,212	112,895	146,353	141,100	134,425	
Gross margin	341,926	409,894	472,098	510,900	561,075	
% product sales	68%	72%	69%	71%	74%	Cangene impacts margins
R&D	150,829	153,997	206,000	218,000	235,500	
SG&A	107,641	141,758	127,000	100,250	105,500	
Operating income	83,456	114,139	139,098	192,650	220,075	
Interest expense	10,140	6,523	7,250	7,250	7,250	
Interest income, net	320	572	825	1,100	1,500	15E yr end cash ~\$310M
Other inc/(exp)	2,926	(319)	2,000	2,000	2,000	
Pretax income	76,562	107,869	134,673	188,500	216,325	
Tax expense	22,121	32,299	39,055	54,665	62,734	
Loss to non-cont. int	0	0	0	0	0	
Adj-Net income	54,441	75,570	95,617	133,835	153,591	15E adj-NI: \$73M-\$77M; 16E adj-NI: \$90M-\$100M
Non-cash charges	(17,700)	(12,700)				
GAAP net income	36,741	62,870				15E GAAP: \$60M-\$64M; 16E GAAP: \$75M-\$85M
EPS ex non-cash items	\$1.19	\$1.60	\$1.95	\$2.65	\$2.95	30% adj-EPS CAGR 2014-2018E
EPS as reported	\$0.80	\$1.33				
Fully diluted shares (000)	45,803	47,256	49,018	50,543	52,143	
Margin & expense analysis						
Gross Margin	68%	72%	69%	71%	74%	
Operating margin	25%	29%	30%	40%	43%	
Taxes	29%	30%	29%	29%	29%	Guide: high 20% range
Net margin	12%	14%	15%	21%	22%	
Year-over-year change						
Net revenue	44%	16%	18%	5%	7%	
R&D	26%	2%	34%	6%	8%	
SG&A	34%	32%	-10%	-21%	5%	
Operating income	65%	37%	22%	38%	14%	
Net income	50%	39%	27%	40%	15%	
EPS	21%	35%	22%	36%	11%	

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

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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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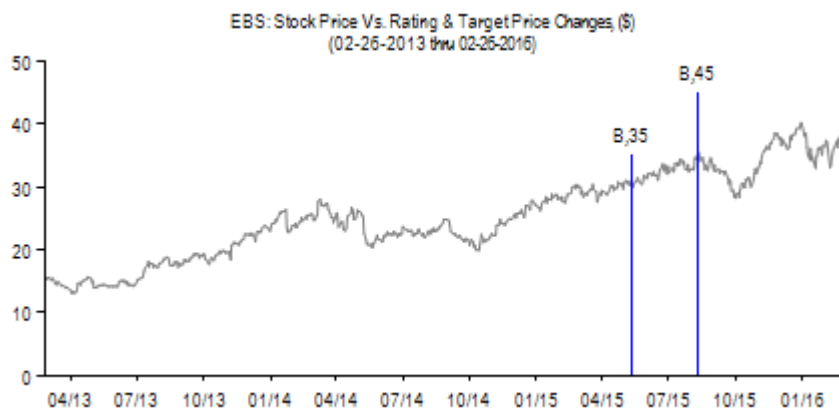
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Rating and Price Target Change History



Date	Rating	Closing Price (\$)
05/11/2015	Buy (B)	31.11

Date	Target Price (\$)	Closing Price, (\$)
05/11/2015	35.00	31.11
08/10/2015	45.00	35.29

Source: Laidlaw & Company

Created by: Blue-Compass.net

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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.	65.71%	25.71%	2.86%
Hold (H)	Expected returns to be in line with the sector average over 12 months.	0.00%	0.00%	0.00%
Sell (S)	Returns expected to significantly underperform the sector average over 12 months.	0.00%	0.00%	0.00%

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