

## EXECUTIVE SUMMARY (THESIS CURRENT AS OF 4/5/2021)

Elanco Animal Health (\$28.96 at close, ~\$13B market cap) develops, manufactures, and markets pet and farm animal health products including vaccines, parasiticides, antibiotics, and nutritional enzymes for commercial and retail animal markets. ELAN markets its products via a multichannel strategy through channel partners, vet/industry expert partners, and direct sales reps to individuals and corporate customers abroad (approx. 50/50 US/int'l). ELAN float approximates 90% of FDSO, and trades ~4MM share/day. **I am suggesting a long position on the stock with a \$49 price target based on 6.5x FTM sales (70% upside).** My valuation contemplates a scenario analysis that assumes:

- **BULL:** LSD-MSD% growth through C24; ~59.0% GMs by C23; ~24.0% OpMs by C23
- **BASE:** LSD-MSD% growth through C24; ~58.0% GMs by C23; ~21.0% OpMs by C23
- **BEAR:** LSD-MSD% growth through C24; ~58.0% GMs by C23; ~18.5% OpMs by C23

In sum, **I think there is long-term upside for several reasons:**

- Street is modeling 300bps of growth below ZTS Y/Y for next several years; with ZTS estimates<sup>1</sup> for TAM growth of 4-6%, ELAN certainly seems to be under-modeled here, given that they have largely the same end market composition. While this doesn't speak to linear beats-and-raises from here, LT growth should align higher, further supported by some 3<sup>rd</sup> party research platforms<sup>2</sup> that estimate growth to be MSD-DD% for certain market segments.
- Near-term, I've under-modeled Pet Health to only +20% Y/Y for C21 on an organic basis (+4%/annum from C19) while still reaching C21 rev targets from the pro-forma C20 base, only assuming 6% organic growth from Farm Animal. I think there is partial upside to Pet Health based on CHWY earnings on 3/31/21 where they guided their entire business up mid20%<sup>3</sup> for C21. While CHWY isn't a perfect proxy, I think a strong C21 outlook is supported by reduced levels of pet abandonment<sup>3</sup> that suggest at least a comparable revenue base to C20 levels for companion animals. Lastly, based on vaccine rollout I think swine revenues Y/Y should accelerate faster than expected barring further COVID disruption (I model only MSD% Y/Y growth returning in the back half of the year).
- No doubt, ELAN's P&L profile underperforms compared to ZTS today, with over 2,000bps in OpM differential as of C20. Synergies could add \$300MM to EBITDA by C23 (>800bps of OpM improvement from C20 adj. results), putting ELAN margins above Street's 23% and closing the gap with ZTS's >40% – I don't see why margin parity shouldn't converge from here given the consolidated market structure, which should drive multiple expansion. Moreover, BASE and BULL synergies suggest upside to Street OpMs; it doesn't seem like the sell-side is fully valuing ELAN execution of the synergies (my BASE case only models partial synergy realization, Street OpMs in between BULL and BASE). Notably, neither my or Street estimates contemplate >60% GMs, which could be achievable on a multi-year time frame given ZTS margins in the upper 60s (and the target model of 60% by C23/C24).

Primary **bear arguments may include:**

- Seresto product impairment could expose ~\$400MM of revenues for C21 – this is ~10% of the portfolio. Sell-side analyst notes and prior product success history makes this more of a “buy the news” event than a structural concern for the product portfolio. Said differently, I see the recent price action stemming from this news as a buying opportunity.
- You can't really get to Street estimates without baking in higher growth, which the sell-side isn't doing – EPS upside is coming from P&L leverage. I think a trade-off of higher growth for margin expansion in an estimate revision would be received positively since there is so much margin upside, so net-net you should see the multiple work higher regardless (e.g., C23/C24 GM estimates could come down modestly but an upward revision of growth should allow the stock to work).
- Valuation downside is difficult to frame here. Book value suggests ~\$20/sh downside, though this includes intangible value that some investors may disregard if the P&L deteriorates considerably. Modest projections suggest valuation upside in the BEAR scenario as illustrated by the DCF in the appendix.
- Leverage is a concern here for a conservative investor. Only in my BEAR scenario does ELAN come close to needing to draw on a revolver to pay down longer term debt. In C21, the company has ~\$750MM cash obligations coming due – I estimate based on company guidance and my own projections that the company has ample CFO to satisfy these liabilities.

**Accordingly, a \$49 price target based on ~6.5x C21 (FTM) sales is appropriate for ELAN, giving ~70% upside from here. To be clear, this is not a quarter call – I think this valuation should be realized over a year+ time frame alongside execution.**

**\$49 Price Target, 70% Upside, >2x RR**

<sup>1</sup> [ZTS investor presentation](#), slide 15

<sup>2</sup> [ResearchAndMarkets](#); [Grand View Research](#); [Fortune Business Insights](#)

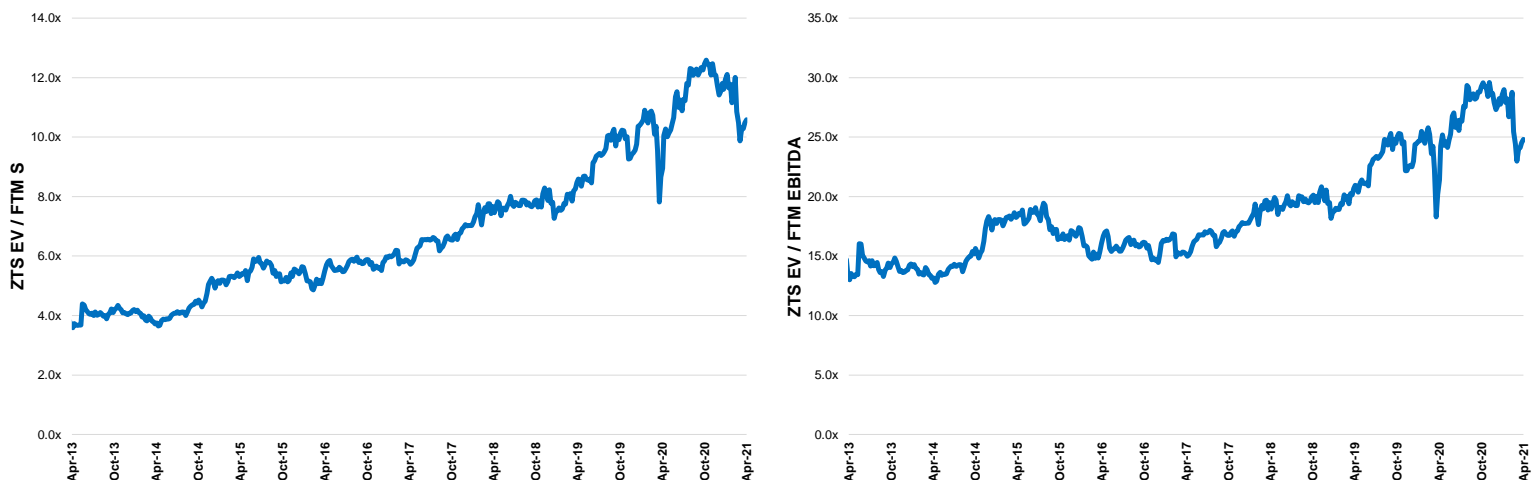
<sup>3</sup> <https://spots.com/pet-adoption-statistics/>

## Valuation

I think a cursory valuation screen obscures the intrinsic value of ELAN as the 2<sup>nd</sup> largest stand-alone vet med company in the world. For one, there is a *significant* valuation differential between ELAN and incumbent public equity ZTS. While the profitability gap between them warrants this today, I think execution and above-market growth should at least push ELAN closer to ZTS's multiple (while also potentially compressing ZTS without more due diligence). Second, it's intuitive to me that being one of the only "pure play" pet pharma stocks of institutional money-scale, ELAN should benefit from "scarcity value" in the sense that diversified long money and passive money will have to own this to some degree, hedging a whole-sale selloff of the stock. Currently, the shareholder base is a large plurality of long money with multi-year investment horizons. Finally, my estimates have a solid margin of safety versus Street and still produce valuation upside across all scenarios in a discounted cash flow analysis. **In sum, 6.5x C21 sales yielding a \$49 price target that produces 70% upside is an appropriate valuation given Street/my projections.**

- **Intrinsic value.** BULL, BASE, and BEAR estimates suggest \$55, \$49, and \$45 price targets respectively in a DCF analysis. With a limited trading history, I think that a DCF is particularly applicable here. The concluded price target fits squarely within ELAN's and ZTS's trading band, and reflects upside to valuation as ELAN re-rates on execution.
- **Versus ZTS.** ELAN is trading at slightly above 4x FTM sales, versus ZTS at over 10x. While ZTS is considerably larger, has a broader (patented) portfolio of products, and presumably commands more pricing power, the companies are largely similar in end market composition and are squarely competitors. As ELAN profitability converges with ZTS over a multi-year time period, irrespective of synergy timing, these valuations should converge.
- **Shareholdership.** About 40% of the existing institutional shareholder base has been adding over the last year, most of it being long-term long only money. Notably, Sachem Head (activist) has taken a large position after the BAH deal, so if anything, this gives me confidence in synergy execution.
- **Technically speaking.** As graphed in the following appendix, ELAN has seen significant multiple compression over the last 12mo+ time frame that brings it back in-line with not only its own historical trading band, but also in-line with its historical discount to ZTS on all metrics (sales, EBITDA, EPS). Positive sell-side estimate revisions since December, coupled with the price pullback incidental to the negative Seresto news has right-sized prevailing multiples.
- **Downside.** Downside is tough to peg, but intrinsic value via DCF still provides upside today. For the sake of argument, assuming BV/sh is the true downside of the stock, there is ~30% downside from today's ~\$29 share price. I suspect you would see price support in the mid-20s given the scarcity value.

## ZTS valuation



S&P CapiQ

## Shareholdership

% common shares	CQ1:20	CQ2:20	CQ3:20	CQ4:20	Common shares	CQ1:20	CQ2:20	CQ3:20	CQ4:20
The Vanguard Group, Inc.	9.5%	9.3%	9.9%	8.8%	The Vanguard Group, Inc.	38	37	40	42
T. Rowe Price Group, Inc. (NasdaqGS:TROW)	11.7%	11.5%	10.3%	8.8%	T. Rowe Price Group, Inc. (NasdaqGS:TROW)	47	46	41	41
Janus Henderson Group plc (NYSE:JHG)	7.7%	8.4%	9.0%	7.4%	Janus Henderson Group plc (NYSE:JHG)	31	33	36	35
PRIMECAP Management Company	8.6%	8.6%	8.4%	6.9%	PRIMECAP Management Company	34	34	34	33
Sachem Head Capital Management	0.0%	0.0%	0.9%	5.9%	Sachem Head Capital Management	-	-	4	28
BlackRock, Inc. (NYSE:BLK)	5.3%	6.4%	5.5%	5.8%	BlackRock, Inc. (NYSE:BLK)	21	26	22	27
Aristotle Capital Management, LLC	2.7%	6.0%	6.0%	5.3%	Aristotle Capital Management, LLC	11	24	24	25
Wellington Management Group LLP	7.6%	6.3%	5.3%	4.0%	Wellington Management Group LLP	30	25	21	19
Others	46.7%	43.5%	44.7%	47.1%	Others	202	186	280	241

Note: BAH deal included significant share issuance that diluted LT shareholder base

## OUTSTANDING QUESTIONS/DD

- Admittedly, I need to spend more time on TAM sizing specific to ELAN. I don't fully understand the geographical growth potential of CA vs FA in ELAN's case, which will shape the growth profile versus their stated LSD-MSD% target growth. This matters significantly given the leverage of their business model.
- I want to create a product waterfall to understand the product cycle for major product lines, esp. post BAH acquisition. This will prove to be time consuming, but if I research the patent life cycles for each of the product lines this could allow me to create a better revenue model. It sounds like nobody on the Street is doing this yet.
- Related to above, downside risk to generics is key here. They're debuting 8 more major products this year, but my question is what products are at largest risk to decline due to patent expiration?
- Further due diligence on the Seresto flea/tick collar media coverage. I suspect that the product line will still suffer some impairment regardless of whether or not it's taken off-market for X period of time.
- Do a deeper dive on GM expansion of ZTS over a multi-year time frame to determine where most of their cost has been pulled out of the model, how long it took, etc.
- Do a better job modeling interest exp based on debt paydown. I currently model it declining MSD% annually based on company commentary.

## RISKS

- Synergy execution is probably the biggest investor skepticism, and the Street is only modeling partial synergy execution through C23.
- Prolonged COVID impact could mute a return to growth consumption of porcine and other food animal products.
- Non-meat/pseudo-meat alternatives threaten about half the business. Assuming meat alternative adoption grows at a faster rate than anticipated, this could weigh negatively for a significant amount of ELAN's business.
- Deteriorating P&L could put the balance sheet at risk, which could dramatically change my downside valuation scenario.
- As with other pet/animal related equities, global weather patterns, regulatory hurdles, and FX-related headwinds will affect ELAN's quarterly/yearly performance.



Financial model (BASE case assumed)

(USDMM except /sh amounts, except where specified)

	C2019	CQ1:20	CQ2:20	CQ3:20	CQ4:20	C2020	CQ1:21	CQ2:21	CQ3:21	CQ4:21	C2021	CQ1:22	CQ2:22	CQ3:22	CQ4:22	C2022	C2023	C2024	'15-'20	'21-'24
Revenue build (BASE case assumed)																				
Pet health (formerly companion animal)	1,136	206	254	400	498	1,359	550	555	600	570	2,275	576	613	604	595	2,388	2,492	2,600	10%	5%
% total	37%	31%	43%	45%	44%	42%	48%	53%	51%	46%	49%	48%	53%	51%	48%	50%	51%	51%		
Q/Q	--	(23%)	23%	57%	24%	--	10%	1%	8%	(5%)	--	1%	6%	(2%)	(2%)	--	--	--		
Seasonality	--	--	--	--	--	--	2%	13%	(1%)	(2%)	--	2%	13%	(1%)	(2%)	--	--	--		
Y/Y	4%	(23%)	(17%)	36%	87%	20%	167%	118%	50%	15%	67%	5%	10%	1%	4%	5%	4%	4%		
Y/Y ex-BAH	--	(23%)	(17%)	(3%)	2%	(10%)	46%	18%	11%	12%	20%	--	--	--	--	--	--	--		
Farm animal (formerly food animal)	1,855	433	316	473	613	1,835	561	477	551	657	2,246	604	541	579	636	2,360	2,405	2,457	(2%)	3%
% total	60%	66%	54%	53%	54%	56%	49%	45%	47%	53%	49%	51%	47%	49%	52%	50%	49%	49%		
Q/Q	--	(15%)	(27%)	50%	29%	--	(9%)	(15%)	16%	19%	--	(8%)	(11%)	7%	10%	--	--	--		
Seasonality	--	--	--	--	--	--	(16%)	(3%)	9%	13%	--	(16%)	(3%)	9%	13%	--	--	--		
Y/Y	(2%)	(2%)	(29%)	3%	20%	(1%)	30%	51%	17%	7%	22%	8%	13%	5%	(3%)	5%	2%	2%		
Y/Y ex-BAH	--	--	--	--	--	--	(2%)	15%	5%	7%	6%	--	--	--	--	--	--	--		
Contract manufacturing (strategic exits)	80	19	16	16	29	80	30	21	15	10	76	8	7	2	2	19	-	-	(1%)	(100%)
Q/Q	--	68%	(16%)	1%	81%	--	3%	(30%)	(29%)	(33%)	--	(20%)	(13%)	(71%)	0%	--	--	--		
Y/Y	(15%)	(16%)	(42%)	(13%)	158%	1%	58%	32%	(7%)	(66%)	(5%)	(73%)	(67%)	(87%)	(80%)	(75%)	--	--		
Total Revenue	3,071	658	586	890	1,140	3,273	1,141	1,053	1,166	1,237	4,597	1,188	1,161	1,185	1,233	4,767	4,897	5,057	2%	3%
Q/Q	--	(16%)	(11%)	52%	28%	--	0%	(8%)	11%	6%	--	(4%)	(2%)	2%	4%	--	--	--		
Seasonality	--	--	--	--	--	--	(5%)	3%	3%	3%	--	(5%)	3%	3%	3%	--	--	--		
Y/Y	0%	(10%)	(25%)	15%	45%	7%	73%	80%	31%	9%	40%	4%	10%	2%	(0%)	4%	3%	3%		
Pet health	--	--	--	--	--	2,141	--	--	--	--	--	--	--	--	--	--	--	--		
Cattle	--	--	--	--	--	940	--	--	--	--	--	--	--	--	--	--	--	--		
Poultry	--	--	--	--	--	630	--	--	--	--	--	--	--	--	--	--	--	--		
Swine	--	--	--	--	--	510	--	--	--	--	--	--	--	--	--	--	--	--		
Aqua	--	--	--	--	--	120	--	--	--	--	--	--	--	--	--	--	--	--		
Contract manufacturing	--	--	--	--	--	100	--	--	--	--	--	--	--	--	--	--	--	--		
Pet health	--	--	--	--	--	48%	--	--	--	--	--	--	--	--	--	--	--	--		
Cattle	--	--	--	--	--	21%	--	--	--	--	--	--	--	--	--	--	--	--		
Poultry	--	--	--	--	--	14%	--	--	--	--	--	--	--	--	--	--	--	--		
Swine	--	--	--	--	--	11%	--	--	--	--	--	--	--	--	--	--	--	--		
Aqua	--	--	--	--	--	3%	--	--	--	--	--	--	--	--	--	--	--	--		
Contract manufacturing	--	--	--	--	--	2%	--	--	--	--	--	--	--	--	--	--	--	--		
US revenues	1,525	--	--	--	--	1,476	--	--	--	--	--	--	--	--	--	--	--	--		
Intl revenues	1,546	--	--	--	--	1,798	--	--	--	--	--	--	--	--	--	--	--	--		
US	50%	--	--	--	--	45%	--	--	--	--	--	--	--	--	--	--	--	--		
Intl	50%	--	--	--	--	55%	--	--	--	--	--	--	--	--	--	--	--	--		
P&L (BASE case assumed)																				
BS (BASE case assumed)																				
CF (BASE case assumed)																				
Debt (BASE case assumed)																				

Elanco Animal Health Incorporated

NYSE:ELAN

Sam Reiff



Financial model (BASE case assumed)

(USDMM except /sh amounts, except where specified)

	C2019	CQ1:20	CQ2:20	CQ3:20	CQ4:20	C2020	CQ1:21	CQ2:21	CQ3:21	CQ4:21	C2021	CQ1:22	CQ2:22	CQ3:22	CQ4:22	C2022	C2023	C2024	'15-'20	'21-'24
Revenue build (BASE case assumed)																				
P&L (BASE case assumed)																				
Revenue	3,071	658	586	890	1,140	3,273	1,141	1,053	1,166	1,237	4,597	1,188	1,161	1,185	1,233	4,767	4,897	5,057	2%	3%
Q/Q	--	(16%)	(11%)	52%	28%	--	0%	(8%)	11%	6%	--	(4%)	(2%)	2%	4%	--	--	--		
Seasonality	--	--	--	--	--	--	(5%)	3%	3%	3%	--	(5%)	3%	3%	3%	--	--	--		
Y/Y	0%	(10%)	(25%)	15%	45%	7%	73%	80%	31%	9%	40%	4%	10%	2%	(0%)	4%	3%	3%		
COGS	1,470	328	296	407	539	1,571	513	469	513	538	2,033	514	499	507	524	2,044	2,050	2,067		
M&Q synergies	--	--	--	--	--	--	(5)	(3)	(1)	(1)	(10)	(2)	(2)	(2)	(2)	(8)	(5)	-		
Gross profit	1,602	329	290	483	601	1,703	632	587	654	700	2,574	676	663	680	711	2,731	2,852	2,991	4%	5%
Margin, pre-synergy	52.1%	50.1%	49.5%	54.2%	52.7%	52.0%	55.0%	55.5%	56.0%	56.5%	55.8%	56.8%	57.0%	57.3%	57.5%	57.1%	58.1%	59.1%		
Margin, post-synergy	52.1%	50.1%	49.5%	54.2%	52.7%	52.0%	55.4%	55.7%	56.1%	56.6%	56.0%	56.9%	57.2%	57.4%	57.7%	57.3%	58.2%	59.1%		
ZTS non-GAAP GMs	69.8%	70.3%	71.1%	69.6%	67.7%	69.6%	--	--	--	--	--	--	--	--	--	--	--	--		
R&D	270	67	59	88	113	327	110	105	110	120	445	107	103	110	121	441	447	454	2%	1%
R&D synergies	--	--	--	--	--	--	(5)	(4)	(3)	(1)	(13)	(1)	(1)	(1)	(1)	(3)	(3)	-		
S&M, G&A	760	182	163	278	374	997	350	345	350	370	1,415	342	339	348	372	1,401	1,409	1,406	2%	(0%)
S&M, G&A synergies	--	--	--	--	--	--	(15)	(13)	(9)	(5)	(41)	(5)	(5)	(5)	(5)	(20)	(30)	-		
Total OPEX	1,030	249	222	366	487	1,324	440	434	449	484	1,806	443	437	452	488	1,820	1,824	1,860		
Operating income	571	81	68	117	114	379	192	153	206	216	768	233	227	228	223	911	1,028	1,130	18%	14%
Total synergies	--	--	--	--	--	--	(25)	(19)	(13)	(8)	(64)	(8)	(8)	(8)	(8)	(30)	(38)	-		
R&D % of sales	8.8%	10.2%	10.1%	9.9%	9.9%	10.0%	9.2%	9.6%	9.2%	9.6%	9.4%	9.0%	8.8%	9.2%	9.8%	9.2%	9.1%	9.0%		
ZTS non-GAAP R&D % of sales	7.3%	7.0%	7.1%	6.3%	7.4%	6.9%	--	--	--	--	--	--	--	--	--	--	--	--		
S&M, G&A % of sales	24.8%	27.7%	27.8%	31.2%	32.8%	30.4%	29.4%	31.6%	29.3%	29.5%	29.9%	28.3%	28.8%	28.9%	29.8%	29.0%	28.2%	27.8%		
ZTS non-GAAP S&M, G&A % of sales	25.0%	24.1%	24.0%	22.8%	28.3%	24.9%	--	--	--	--	--	--	--	--	--	--	--	--		
Margin, pre-synergy	18.6%	12.2%	11.6%	13.1%	10.0%	11.6%	15.1%	13.0%	16.7%	17.0%	15.5%	19.1%	19.0%	18.8%	17.6%	18.6%	20.3%	22.3%		
Margin, post-synergy	18.6%	12.2%	11.6%	13.1%	10.0%	11.6%	16.9%	14.6%	17.6%	17.5%	16.7%	19.6%	19.5%	19.3%	18.1%	19.1%	21.0%	22.3%		
ZTS non-GAAP OpMs	37.5%	39.3%	39.9%	40.5%	32.0%	37.8%	--	--	--	--	--	--	--	--	--	--	--	--		
Other income (expense)	(19)	(1)	0	(4)	15	10	2	2	2	2	8	2	2	2	2	8	8	8		
EBIT	552	79	68	113	128	389	194	155	208	218	776	235	229	230	225	919	1,036	1,138		
Interest expense	(79)	(16)	(25)	(46)	(60)	(147)	(65)	(61)	(58)	(55)	(239)	(62)	(58)	(55)	(53)	(228)	(218)	(208)		
EBT	473	64	44	67	68	242	129	94	150	163	537	173	170	175	173	691	818	930		
Income taxes	(79)	(10)	(8)	(7)	(11)	(35)	(28)	(20)	(32)	(35)	(115)	(37)	(37)	(38)	(37)	(149)	(176)	(200)		
Tax rate	17%	16%	17%	10%	16%	15%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%		
Net income (loss)	394	54	36	60	57	207	102	74	118	128	421	136	134	137	135	542	642	730	(0%)	20%
Margin	12.8%	8.1%	6.2%	6.8%	5.0%	6.3%	8.9%	7.0%	10.1%	10.4%	9.2%	11.4%	11.5%	11.6%	11.0%	11.4%	13.1%	14.4%		
Basic shares (non-GAAP)	369	404	413	462	486	441	489	491	494	496	492	498	501	503	506	502	512	523		
Diluted shares (non-GAAP)	370	405	414	463	486	442	489	491	494	496	492	498	501	503	506	502	512	523		
Basic EPS (non-GAAP)	1.07	0.13	0.09	0.13	0.12	0.47	0.21	0.15	0.24	0.26	0.86	0.27	0.27	0.27	0.27	1.08	1.25	1.40	(4%)	18%
Diluted EPS (non-GAAP)	1.06	0.13	0.09	0.13	0.12	0.47	0.21	0.15	0.24	0.26	0.86	0.27	0.27	0.27	0.27	1.08	1.25	1.40	(4%)	18%
Reported net income (loss)	68	(49)	(53)	(135)	(323)	(560)	(148)	(75)	(10)	1	(232)	28	26	30	28	112	304	530		
Net interest expense	79	17	25	48	60	150	65	61	58	55	239	62	58	55	53	228	218	208		
Income taxes	10	(19)	(24)	(74)	5	(112)	(99)	(55)	(18)	35	(137)	37	37	38	37	149	176	200		
D&A	314	82	81	132	222	517	225	205	185	155	770	150	150	150	150	600	520	440		
GAAP EBITDA	472	30	29	(29)	(35)	(5)	42	137	215	246	640	277	271	273	268	1,089	1,218	1,378		
Non-GAAP adj.	194	79	72	178	222	551	182	50	25	-	257	-	-	-	-	-	-	-		
Accelerated depreciation	(3)	(3)	(3)	(1)	(11)	(17)	(10)	(8)	(5)	(3)	(25)	-	-	-	-	-	-	-		
Non-GAAP EBITDA	663	107	98	148	176	529	214	179	235	243	872	277	271	273	268	1,089	1,218	1,378	6%	16%
Margin	21.6%	16.2%	16.7%	16.7%	15.4%	16.1%	18.8%	17.0%	20.2%	19.7%	19.0%	23.3%	23.4%	23.0%	21.7%	22.8%	24.9%	27.3%		
BS (BASE case assumed)																				
CF (BASE case assumed)																				
Debt (BASE case assumed)																				



Synergy analysis (BASE case assumed)

(USDMM except /sh amounts, except where specified)

	Adj./scenario		C2020 PF	Adj./scenario		(Quarterized)				C2021	Adj./scenario		(Quarterized)				C2022	Adj./scenario		(Quarterized)				C2023	Adj./scenario		(Quarterized)				C2024	Cum. scenario	% of total
	C2020	+ -		+	-	CQ1:21	CQ2:21	CQ3:21	CQ4:21		+	-	CQ1:22	CQ2:22	CQ3:22	CQ4:22		+	-	CQ1:23	CQ2:23	CQ3:23	CQ4:23		+	-	CQ1:24	CQ2:24	CQ3:24	CQ4:24			
Revenue	3,273	1,168	4,441	156	1,141	1,053	1,166	1,237	4,597	170	1,188	1,161	1,185	1,233	4,767	130	1,186	1,208	1,232	1,271	4,897	161	1,225	1,248	1,273	1,312	5,057	23	14%				
Y/Y	--		--		73%	80%	31%	9%	4%		4%	10%	2%	(0%)	4%		(0%)	4%	4%	3%	3%		3%	3%	3%	3%	3%						
COGS	1,571	450	2,021	13	513	469	513	538	2,033	10	514	499	507	524	2,044	6	501	507	514	527	2,050	17	505	512	519	531	2,067						
scenario	--		--	(10)	(5)	(3)	(1)	(1)	(10)	(8)	(2)	(2)	(2)	(2)	(8)	(5)	(1)	(1)	(1)	(1)	(5)	-	-	-	-	-	-						
Gross profit	1,703		2,420		632	587	654	700	2,574		676	663	680	711	2,731		686	702	719	745	2,852		720	736	754	781	2,991	18	11%				
COGS Y/Y, pre-synergy	--		--		1%	7%	(1%)	(2%)	1%		1%	7%	(1%)	(2%)	1%		(2%)	2%	2%	1%	1%		1%	1%	1%	1%	1%						
COGS Y/Y, post-synergy	--		--		0%	1%	7%	(1%)	(3%)		1%	7%	(1%)	(3%)	1%		(2%)	2%	2%	1%	0%		1%	1%	1%	1%	1%						
Margin, pre-synergy	--		--		55.0%	55.5%	56.0%	56.5%	55.8%		56.8%	57.0%	57.3%	57.5%	57.1%		57.8%	58.0%	58.3%	58.5%	58.1%		58.8%	59.0%	59.2%	59.5%	59.1%						
Margin, post-synergy	52.0%		54.5%		55.4%	55.7%	56.1%	56.6%	56.0%		56.9%	57.2%	57.4%	57.7%	57.3%		57.9%	58.1%	58.4%	58.6%	58.2%		58.8%	59.0%	59.2%	59.5%	59.1%	124	76%				
R&D	327	112	439	6	110	105	110	120	445	(4)	107	103	110	121	441	6	109	105	111	123	447	6	110	106	113	125	454						
R&D scenario	--		--	(13)	(5)	(4)	(3)	(1)	(13)	(3)	(1)	(1)	(1)	(1)	(3)	(3)	(1)	(1)	(1)	(1)	(3)	-	-	-	-	-	-						
S&M, G&A	997	347	1,344	71	350	345	350	370	1,415	(14)	342	339	348	372	1,401	8	343	341	350	375	1,409	(2)	343	340	349	374	1,406						
S&M, G&A scenario	--	(33)	(33)	(41)	(15)	(13)	(9)	(5)	(41)	(20)	(5)	(5)	(5)	(5)	(20)	(30)	(8)	(8)	(8)	(8)	(30)	-	-	-	-	-	-						
Total OPEX	1,324		1,750		440	434	449	484	1,806		443	437	452	488	1,820		444	437	453	489	1,824		453	446	462	499	1,860	164	100%				
Operating income	379		670		192	153	206	216	768		233	227	228	223	911		242	264	266	255	1,028		267	290	292	281	1,130						
Margin, pre-synergy	11.6%		14.4%		14.7%	12.8%	16.6%	16.9%	15.3%		19.0%	18.9%	18.6%	17.5%	18.5%		19.6%	21.1%	20.8%	19.3%	20.2%		21.8%	23.2%	22.9%	21.4%	22.3%						
Margin, post-synergy	11.6%		15.1%		16.9%	14.6%	17.6%	17.5%	16.7%		19.6%	19.5%	19.3%	18.1%	19.1%		20.4%	21.9%	21.6%	20.1%	21.0%		21.8%	23.2%	22.9%	21.4%	22.3%						
R&D % of sales, pre-synergy	10.0%		9.9%		9.6%	10.0%	9.4%	9.7%	9.7%		9.0%	8.9%	9.3%	9.8%	9.3%		9.2%	8.7%	9.0%	9.7%	9.1%		9.0%	8.5%	8.9%	9.5%	9.0%						
R&D % of sales, post-synergy	10.0%		9.9%		9.2%	9.6%	9.2%	9.6%	9.4%		9.0%	8.8%	9.2%	9.8%	9.2%		9.1%	8.6%	9.0%	9.6%	9.1%		9.0%	8.5%	8.9%	9.5%	9.0%						
R&D Y/Y pre-synergy	--		--		--	--	--	--	1%		2%	2%	2%	2%	2%		2%	2%	2%	2%	2%		2%	2%	2%	2%	2%						
R&D Y/Y post-synergy	--		--		--	--	--	--	(1%)		1%	1%	1%	1%	1%		1%	1%	1%	1%	1%		2%	2%	2%	2%	2%						
S&M, G&A % of sales, pre-synergy	30.4%		30.3%		30.7%	32.8%	30.0%	29.9%	30.8%		28.8%	29.2%	29.4%	30.2%	29.4%		29.0%	28.2%	28.4%	29.5%	28.8%		28.0%	27.2%	27.4%	28.5%	27.8%						
S&M, G&A % of sales, post-synergy	30.4%		29.5%		29.4%	31.6%	29.3%	29.5%	29.9%		28.3%	28.8%	28.9%	29.8%	29.0%		28.3%	27.6%	27.8%	28.9%	28.2%		28.0%	27.2%	27.4%	28.5%	27.8%						
S&M, G&A Y/Y pre-synergy	--		--		--	--	--	--	8%		2%	2%	2%	2%	2%		2%	2%	2%	2%	2%		2%	2%	2%	2%	2%						
S&M, G&A Y/Y post-synergy	--		--		--	--	--	--	5%		1%	0%	1%	1%	1%		(0%)	(0%)	(0%)	(0%)	(0%)		2%	2%	2%	2%	2%						
Check					-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-						

Cumulative synergy capture	33	96	126	164	164	-
Incremental	--	64	30	38	--	
High	35	170	190	300	--	
Low	30	150	230	300	--	

Synergy scenario:

	CQ1:21	CQ2:21	CQ3:21	CQ4:21	C2021	CQ1:22	CQ2:22	CQ3:22	CQ4:22	C2022	CQ1:23	CQ2:23	CQ3:23	CQ4:23	C2023	CQ1:24	CQ2:24	CQ3:24	CQ4:24	C2024
BULL	55.5%	56.0%	56.5%	57.0%	--	57.3%	57.5%	57.8%	58.0%	--	58.3%	58.5%	58.8%	59.0%	--	59.3%	59.5%	59.7%	60.0%	--
GM, pre-synergy	(10)	(5)	(3)	(3)	(20)	(4)	(4)	(4)	(4)	(15)	(3)	(3)	(3)	(3)	(10)	-	-	-	-	-
M&Q (COGS scenario)	110	105	110	120	445	102	99	107	120	428	103	100	108	121	432	104	101	109	122	435
R&D, pre-synergy	(10)	(8)	(5)	(3)	(25)	(1)	(1)	(1)	(1)	(5)	(1)	(1)	(1)	(1)	(5)	-	-	-	-	-
R&D scenario	350	345	350	370	1,415	326	326	339	367	1,359	323	323	336	364	1,346	314	314	327	356	1,311
S&M, G&A, pre-synergy	(30)	(25)	(18)	(10)	(83)	(10)	(10)	(10)	(10)	(40)	(15)	(15)	(15)	(15)	(60)	-	-	-	-	-
S&M, G&A scenario																				
BASE	55.0%	55.5%	56.0%	56.5%	--	56.8%	57.0%	57.3%	57.5%	--	57.8%	58.0%	58.3%	58.5%	--	58.8%	59.0%	59.2%	59.5%	--
GM, pre-synergy	(5)	(3)	(1)	(1)	(10)	(2)	(2)	(2)	(2)	(8)	(1)	(1)	(1)	(1)	(5)	-	-	-	-	-
M&Q (COGS scenario)	110	105	110	120	445	107	103	110	121	441	109	105	111	123	447	110	106	113	125	454
R&D, pre-synergy	(5)	(4)	(3)	(1)	(13)	(1)	(1)	(1)	(1)	(3)	(1)	(1)	(1)	(1)	(3)	-	-	-	-	-
R&D scenario	350	345	350	370	1,415	342	339	348	372	1,401	343	341	350	375	1,409	343	340	349	374	1,406
S&M, G&A, pre-synergy	(15)	(13)	(9)	(5)	(41)	(5)	(5)	(5)	(5)	(20)	(8)	(8)	(8)	(8)	(30)	-	-	-	-	-
S&M, G&A scenario																				
BEAR	55.0%	55.5%	56.0%	56.5%	--	56.8%	57.0%	57.3%	57.5%	--	57.8%	58.0%	58.3%	58.5%	--	58.8%	59.0%	59.2%	59.5%	--
GM, pre-synergy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M&Q (COGS scenario)	110	105	110	120	445	112	107	112	122	454	114	109	114	125	463	117	111	117	127	472
R&D, pre-synergy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R&D scenario	350	345	350	370	1,415	357	352	357	377	1,443	364	359	364	385	1,472	371	366	371	393	1,502
S&M, G&A, pre-synergy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S&M, G&A scenario																				



Discounted cash flow valuation (BASE case assumed)

(USDMM except /sh amounts, except where specified)

		C2021	C2022	C2023	C2024	C2025	C2026	C2027	C2028	C2029	C2030
Revenue		4,597	4,767	4,897	5,057	5,209	5,365	5,526	5,692	5,863	6,039
Y/Y	[a]	40%	4%	3%	3%	3%	3%	3%	3%	3%	3%
Gross profit		2,574	2,731	2,852	2,991	--	--	--	--	--	--
Margin		56.0%	57.3%	58.2%	59.1%	--	--	--	--	--	--
EBITDA		872	1,089	1,218	1,378	--	--	--	--	--	--
Margin		19.0%	22.8%	24.9%	27.3%	--	--	--	--	--	--
EPS		0.86	1.08	1.25	1.40	--	--	--	--	--	--
FCFF	[a]	616	781	808	922	887	914	941	970	999	1,029
Margin		13.4%	16.4%	16.5%	18.2%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
Parial period adj.		0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FCFF period allocation		455	781	808	922	887	914	941	970	999	1,029
WACC	[b]	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	Gordon
Discount period		0.37	1.37	2.37	3.37	4.37	5.37	6.37	7.37	8.37	Growth
Present value factor		0.98	0.93	0.88	0.83	0.78	0.74	0.70	0.66	0.63	Model
PV FCF		446	724	708	765	696	679	661	644	628	23,943

		Share price				
		LT growth				
WACC		2.0%	2.5%	3.0%	3.5%	4.0%
	4.2%	68.86	88.88	125.56	214.55	745.74
	4.7%	53.80	65.91	85.14	120.38	205.88
	5.2%	43.44	51.45	63.08	81.56	115.43
	5.7%	35.89	41.50	49.19	60.38	78.14
	6.2%	30.13	34.24	39.64	47.03	57.79
	6.7%	25.60	28.71	32.67	37.85	44.96
7.2%		21.94	24.36	27.35	31.16	36.14

		Enterprise value				
		LT growth				
WACC		2.0%	2.5%	3.0%	3.5%	4.0%
	4.2%	39,459	49,192	67,027	110,294	368,556
	4.7%	32,135	38,024	47,374	64,508	106,077
	5.2%	27,100	30,991	36,649	45,634	62,099
	5.7%	23,426	26,155	29,895	35,333	43,969
	6.2%	20,627	22,627	25,250	28,845	34,073
	6.7%	18,425	19,938	21,860	24,383	27,839
7.2%		16,647	17,822	19,277	21,126	23,551

		EV / C21		EV / C22		EV / C21		EV / C22		P / C21		P / C22	
		EV / C21 S	EV / C22 S	EBITDA	EBITDA	FCFF	FCFF	FCFF	FCFF	EPS	EPS	EPS	EPS
Enterprise value	29,895	6.50x	6.27x	34.3x	27.5x	48.5x	38.3x	--	--	--	--	--	--
( - ) interest-bearing debt, emp. benefi	(6,473)												
( + ) cash	495												
Equity value	23,917	--	--	--	--	--	--	--	--	--	--	--	--
( ÷ ) FDSO	486												
Implied share price	49.19	--	--	--	--	--	--	57.5x	45.6x				

[a] Assumes a long-term revenue and FCFF growth rate of 3.0%  
[b] Assumes: market risk premium of 9.0%; risk-free rate of 1.0%; beta of 1.00; cost of debt of 5.0%; tax rate of 21.5%; and a debt cap of 65.0%





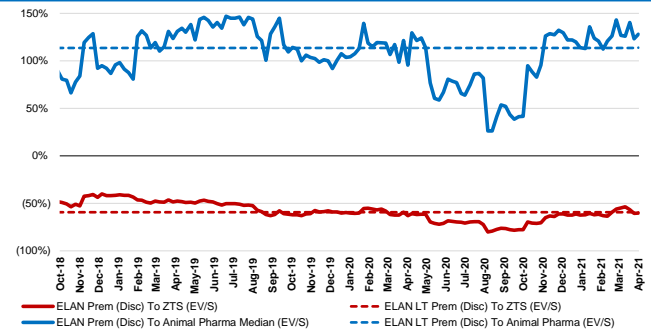
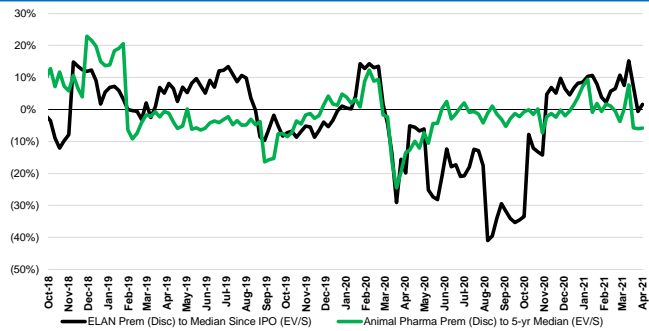
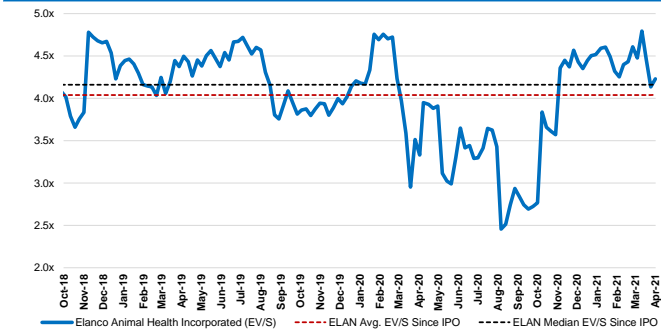
Price target (BASE case assumed)

Price target	49.00
Current price	29.00
Upside (downside)	69.0%
Price target	49.00
(x) non-GAAP FDSO	486
Equity value	23,824
(+) interest-bearing debt, emp. benefits	6,473
(-) cash	(495)
Enterprise value	29,802

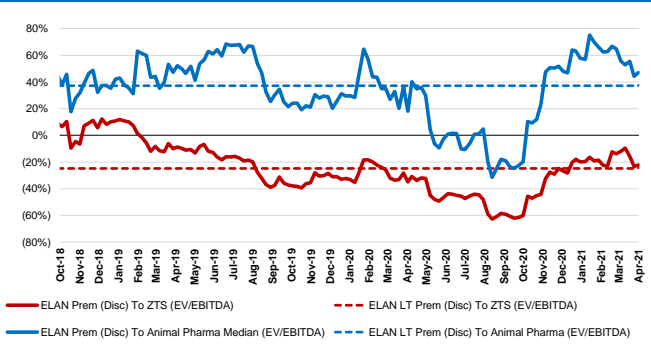
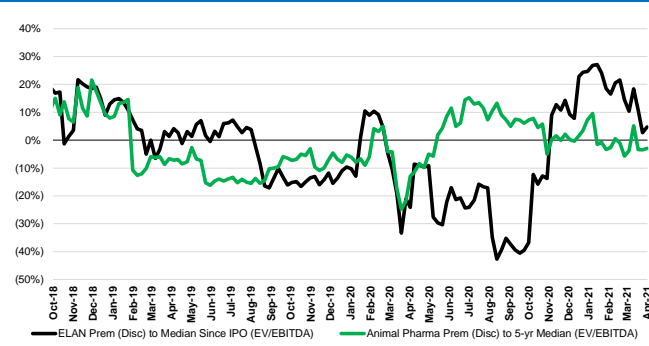
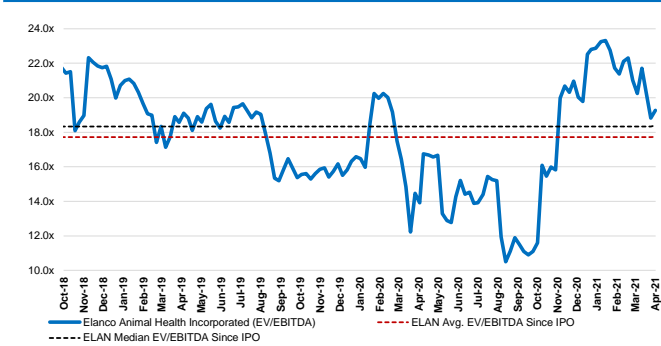
	LTM	FTM	C2021	C2022	C2023	C2024
Revenue	3,273	4,597	4,597	4,767	4,897	5,057
EBITDA	529	872	872	1,089	1,218	1,378
EBIT	389	776	776	919	1,036	1,138
FCFF	(226)	616	616	781	808	922
Net income	207	421	421	542	642	730
EPS	0.47	0.86	0.86	1.08	1.25	1.40
EV / revenue	9.10x	6.48x	6.48x	6.25x	6.09x	5.89x
EV / EBITDA	56.4x	34.2x	34.2x	27.4x	24.5x	21.6x
EV / EBIT	76.6x	38.4x	38.4x	32.4x	28.8x	26.2x
EV / FCFF	-131.8x	48.4x	48.4x	38.2x	36.9x	32.3x
Equity / net income	115.3x	56.5x	56.5x	43.9x	37.1x	32.6x
P / EPS	105.1x	57.3x	57.3x	45.4x	39.1x	35.1x



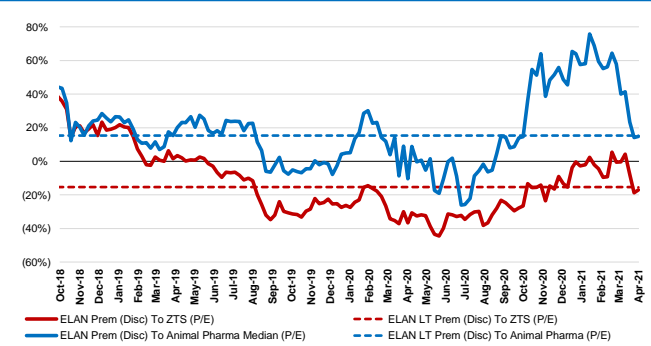
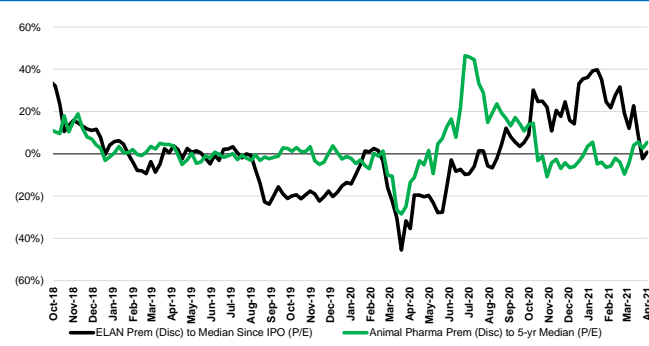
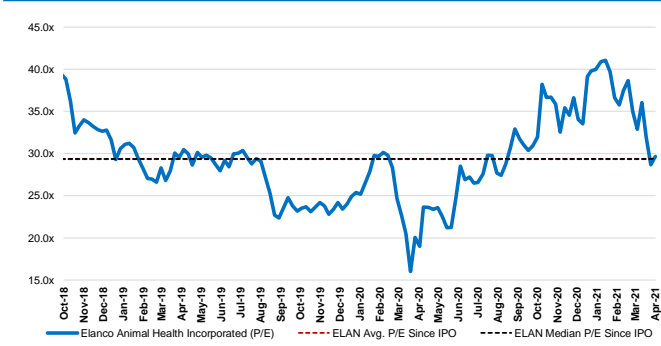
ELAN historical valuation (EV / FTM S)



ELAN historical valuation (EV / FTM EBITDA)



ELAN historical valuation (P / FTM EPS)



Note: Animal Pharma includes Zoetis, Phibro Animal Health, Virbac SA, and Sumitomo Dainippon Pharma