

Antibe Therapeutics

FQ219 Update. ATB-346 On Pace To Generate Defining Phase II Knee Osteoarthritis Pain Data By Mid-2019 – Spec BUY

ATE-TSXV: \$0.27
Speculative BUY
\$1.40 Target

Event: ON-based drug developer Antibe Therapeutics reported FQ219 financial data for the Sept-end quarter that met our expectations on most income statement metrics and on development timelines for flagship hydrogen sulfide-releasing naproxen analog ATB-346, as we will describe below.

Bottom line: We are **maintaining our Speculative BUY rating and \$1.40 PT on ATE**, with our valuation still based on NPV (40% discount rate) and multiples of our F2025 adjusted EBITDA/EPS forecasts (\$165.6M/\$0.41, respectively), with both profitability metrics driven by our expectations that ATB-346 can perform well in future Phase III knee osteoarthritis pain studies and that pending performance in the soon-to-commence 200-250-patient Phase II knee osteoarthritis will be sufficiently positive on key efficacy measures (WOMAC-based pain relief with simultaneous reduction in incidence/severity of gastroduodenal ulcers) to justify advancing into future pivotal studies and to support FDA approval/launch and “partnerability”. At current levels, our PT corresponds to a one-year return of 418%.

Income statement still dominated by regenerative medicine division, though our valuation is more focused on ATB-346 and imminent Phase II activities: On key income statement metrics, Antibe’s regenerative medicine business Citagenix generated revenue/gross margin of \$2.1M/\$0.8M/40% that actually compares favorably to FQ218 data of \$1.8M/\$0.66M/36.7% though it was down sequentially from \$2.5M/\$1.0M/38.7% in FQ119, though with seasonality that we have seen replicated in prior years impacting sequential comparison. Antibe does segment its income statement so that we can assess Citagenix’ impact on EBT specifically and we see that EBT loss for this division was actually fairly stable sequentially at (\$0.51M) vs (\$0.52M) in FQ119 and was measurably superior to FQ218 EBT loss of (\$0.68M) at least on a relative basis if not all that different in absolute terms. Geographic distribution of clients was still North America-biased, with 63%/22% of total revenue generated from Canadian/US customers during FH119.

Our model does not ascribe material value to Citagenix at least in comparison to ATB-346 or notionally to other hydrogen sulfide-releasing pain therapies in Antibe’s portfolio (preclinical-stage ketoprofen analog ATB-352 & acetylsalicylic acid analog ATB-340, specifically). But we are encouraged to see y/y top-line growth in combination with compression of EBT loss, the combination of which could be attractive to future acquirers of this business, assuming Antibe might in time see regenerative medicine as non-core to its drug development operations once Phase II activities gather momentum.

Operating cash loss from ATB-346 R&D activities was modest during a transitional quarter between Phase I trials now completed and PK/Phase II studies now commencing: Drug development operations specifically for ATB-346 are still clinical-stage and thus pre-revenue, and we know from segmented data in the FQ219 filing that ATB-346-related R&D/G&A costs were \$1.8M in the quarter, down sequentially from \$2.1M in FQ119 though up y/y from \$1.2M in FQ218 before patient enrollment in the now-completed 244-patient GI ulceration rate study would have accelerated. Operating cash loss was (\$1.7M) excluding working capital deficit of (\$0.9M) in the quarter, mostly on payables and deferred contract costs in the period. And we calculate that EBITDA loss was incrementally less negative at (\$1.4M).

Projected Return: 418%
Valuation: NPV, 20x EPS, 12.5x EV/EBITDA
(F2025 estimates, 40% discount rate)

Market Data

Basic Shares O/S (M)	212.7
FD Shares O/S (M)	259.8
Market capitalization (\$M)	57.4
Enterprise Value (\$M)	55.0
Adj pro forma cash (\$M, most rec Q)	4.5
LT debt (\$M, most rec Q)	2.0
52 Week Range	\$0.10-\$0.79
Avg. Weekly Volume (M)	2.93
Fiscal Year End	Mar-31

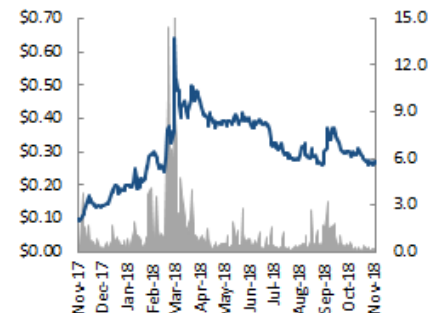
Key Milestone

Phase II data, ATB-346 knee OA trial	CQ219
Commence ATB-346 knee OA pain trial	CQ418
Phase II, ATB-346, GI ulceration rate data (completed Mar/18)	CQ118
Phase II, open-label knee osteoarthritis data (completed Aug/16)	CQ316

Financial Metrics

In C\$	2018A	2019E	2020E
Total Revenue (\$000)	8,510	9,222	9,683
EBITDA (\$000)	(5,594)	(7,357)	(8,405)
Adj net inc (\$000)	(7,430)	(8,834)	(9,882)
EPS (basic)	(\$0.05)	(\$0.04)	(\$0.04)
EPS (FD)	(\$0.03)	(\$0.03)	(\$0.04)
P/E	NA	NA	NA
EV/EBITDA	NA	NA	NA

Antibe is a clinical stage drug developer, with lead clinical asset - hydrogen sulfide-releasing naproxen analog ATB-346 - focused on knee osteoarthritis as initial pain market. Ketoprofen-based ATB-352 & aspirin-based ATB-340 are in preclinical testing



Source: Consensus Data - Capital IQ, Forecasts/Estimates - Echelon Wealth Partners

Exhibit 1 – Income Statement & Financial Forecast Data for Antibe

Year-end March 31 (C\$, except per share data)	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
ATB-346, US										
Current Population, US (M)	329.9	332.2	334.6	336.9	339.3	341.6	344.0	346.4	348.9	351.3
Proportion, Doctor-diagnosed arthritis (M)	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%
Proportion, with Osteoarthritis (M)	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%
Proportion, high risk of failing on NSAID regimen (M)	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Target patient population, US (M)	37.3	37.6	37.9	38.1	38.4	38.7	38.9	39.2	39.5	39.8
Price per treatment, annually (US\$)	\$1,656	\$1,656	\$1,656	\$1,656	\$1,656	\$1,656	\$1,656	\$1,656	\$1,656	\$1,656
Target medical market (US\$M)	\$61,847	\$62,280	\$62,716	\$63,155	\$63,597	\$64,043	\$64,491	\$64,942	\$65,397	\$65,855
% Market Share	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.7%	1.0%	1.2%	1.4%
Gross revenue, ATB-346 (US\$M)	0.0	0.0	0.0	0.0	0.0	192.1	451.4	649.4	784.8	922.0
Gross revenue, ATB-346 (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$236.3	\$555.3	\$798.8	\$965.3	\$1,134.0
Royalty rate on gross sales (%)	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
ATB-346, royalty revenue, US (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70.9	\$166.6	\$239.6	\$289.6	\$340.2
ATB-346, Select EU/Middle Eastern Countries (EME)										
Current population, blended (M)	103.4	104.5	105.5	106.6	107.6	108.7	109.8	110.9	112.0	113.1
Proportion, Doctor-diagnosed arthritis (M)	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%
Proportion, with Osteoarthritis (M)	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%
Proportion, high risk of failing on NSAID regimen (M)	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Target patient population, select EME countries (M)	11.7	11.8	11.9	12.1	12.2	12.3	12.4	12.6	12.7	12.8
Price per treatment, annually (€)	€ 1,325	€ 1,325	€ 1,325	€ 1,325	€ 1,325	€ 1,325	€ 1,325	€ 1,325	€ 1,325	€ 1,325
Target medical markets (€, M)	€ 15,512	€ 15,667	€ 15,824	€ 15,982	€ 16,142	€ 16,304	€ 16,467	€ 16,631	€ 16,798	€ 16,966
% Market Share	0%	0%	0%	0.0%	0.0%	0.0%	0.5%	0.8%	1.1%	1.2%
Gross revenue, ATB-346 (€, M)	0.0	0.0	0.0	0.0	0.0	0.0	82.3	133.1	184.8	203.6
Gross revenue, ATB-346 (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$126.0	\$203.6	\$282.7	\$311.5
Royalty rate from Laboratoires Acbel on gross sales (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
ATB-346, royalty revenue, select EME (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.3	\$10.2	\$14.1	\$15.6
ATB-346 royalty revenue (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70.9	\$172.9	\$249.8	\$303.7	\$355.8
(C\$000, except EPS)										
Product Sales, Citagenix	9,222	9,683	10,167	10,676	11,210	11,770	12,359	12,976	13,625	14,307
Royalty revenue, ATB-346	0	0	0	0	0	70,895	172,879	249,816	303,713	355,780
Total revenue	\$9,222	\$9,683	\$10,167	\$10,676	\$11,210	\$82,665	\$185,237	\$262,792	\$317,338	\$370,087
Revenue growth (%)	8%	5%	5%	5%	5%	637%	124%	42%	21%	17%
EBITDA	(\$7,357)	(\$8,405)	(\$5,347)	(\$4,635)	(\$2,242)	\$66,351	\$165,492	\$240,977	\$294,377	\$346,524
EBITDA growth (%)	32%	14%	(36%)	(13%)	(52%)	(3060%)	149%	46%	22%	18%
EBITDA margin (%)	(80%)	(87%)	(53%)	(43%)	(20%)	80%	89%	92%	93%	94%
Net income, fully-taxed	(\$8,834)	(\$9,882)	(\$6,824)	(\$6,112)	(\$3,719)	\$45,412	\$114,810	\$167,650	\$205,030	\$241,533
Fully-taxed EPS (basic)	(\$0.04)	(\$0.04)	(\$0.03)	(\$0.03)	(\$0.02)	\$0.20	\$0.49	\$0.72	\$0.88	\$1.04
Fully-taxed EPS (fd)	(\$0.03)	(\$0.04)	(\$0.02)	(\$0.02)	(\$0.01)	\$0.16	\$0.41	\$0.60	\$0.73	\$0.86
P/E (basic)	NA	NA	NA	NA	NA	1.4x	0.5x	0.4x	0.3x	0.3x
EV/EBITDA	NA	NA	NA	NA	NA	0.9x	0.3x	0.2x	0.2x	0.2x
S/O, basic (M)	212.7	222.7	232.7	232.7	232.7	232.7	232.7	232.7	232.7	232.7
S/O, fd (M)	259.8	269.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8

Source: Historical data - Company filings, forecasts/estimates - Echelon Wealth Partners

New ATB-346 clinical activities are likely to intensify R&D expense impact on cash as early as this quarter, but we obviously endorse accelerating '346 development activities as a core value driver: We do not know what proportion of EBT loss is cash-based, though cash impact is undoubtedly lower with non-cash expenses of \$0.8M allocated in

some proportion across ATB-346-based and Citagenix-based operations. With ATB-346 clinical activities transitioning from Phase I GI ulceration rate studies completed earlier in FQ418-FQ119 and with new PK/metabolite characterization studies just starting in Oct/18, R&D expense in the quarter was modest at \$0.5M and so on its own was not overly impactful on cash.

We expect R&D expense to accelerate as early as this quarter (FQ319), during which the firm commenced enrollment in its 25-patient PK/metabolism characterization trial (data could be available by end-of-FQ419) and then more substantively during FQ419 when we expect patient enrollment to commence on the aforementioned 200-250-patient two-week Phase II knee osteoarthritis pain trial, for which it will be integral to our investment thesis to assess ATB-346's ability to confer naproxen-like pain relief at the same dose at which it showed dramatically reduced GI ulceration rate/severity. The fact that ATB-346 was tested at a substantially lower dose than naproxen was, even though both were tested at doses indicated (or for ATB-346, predicted to be effective) for reducing WOMAC-determined knee osteoarthritis pain relief. We have limited (but still positive) data on '346's analgesic properties at the lower dose (250 mg once-daily vs 550 mg twice-daily for naproxen) and new Phase II testing directly addresses that limitation.

Exhibit 2 – Valuation Scenarios for Antibe

NPV, discount rate	20%	30%	40%	50%	60%	70%
Implied value per share	\$3.52	\$2.05	\$1.17	\$0.76	\$0.47	\$0.30
Price/earnings multiple, F2025	10x	15x	20x	25x	30x	35x
Implied share price ¹	\$0.76	\$1.14	\$1.53	\$1.91	\$2.29	\$2.67
EV/EBITDA multiple, F2025	5x	10x	12.5x	15x	17.5x	20x
Implied share price ^{1,2}	\$0.55	\$1.10	\$1.37	\$1.65	\$1.92	\$2.20
One-year Antibe target price (C\$)¹	\$1.36					

¹ Based on F2025 fd fully-taxed EPS of \$0.41; EBITDA of \$165.6M, discounted at 40%, FD S/O of 259.8M, but with notional fd S/O of 279.8M embedded in our model

² Proforma cash of \$4.5M includes US\$1.0M in upfront cash from South Korean partner Kwangdong Pharmaceuticals; total debt of \$2.0M

Source: Forecasts/estimates - Echelon Wealth Partners

Duration of forthcoming Phase II knee osteoarthritis trial will clearly impact our timeline-to-data expectations, and we expect more comprehensive description of study design in coming weeks: While we are on the topic of Phase II ATB-346 testing, Antibe states in its MD&A that the pending trial will be multi-arm – presumably testing ATB-346 at a few doses near 250-mg once-daily as in the 244-patient GI ulceration rate trial completed in Mar/18, perhaps with a naproxen arm to allow for randomized comparisons to naproxen-dependent WOMAC scores and not to published literature expectations of same and perhaps with a placebo arm. We suspect that WOMAC scores will be reported both on changes from baseline and on comparison to placebo. Antibe disclosed in prior press releases that the pending Phase II knee osteoarthritis trial will test ATB-346 over the same duration as the GI ulceration rate trial (two weeks) and so it seems reasonable to us to assume that if patient enrollment does indeed commence in Jan/19 and is fully-enrolled by Apr/18 or so, that two-week WOMAC pain data could indeed be available by end of FQ120.

We believe it is prudent to test ATB'346 pain-relieving activity over the same duration at which it demonstrated reduced GI ulceration rate/severity, but that said, we are mindful that future Phase II/III pain studies will require demonstration of longer-term duration of benefit, as Centrexion (Private) and Regeneron (REGN-Q, NR) are demonstrating with their ongoing Phase II/III knee osteoarthritis pain trials. We ourselves would include a 550-mg twice-daily naproxen arm just to allow for direct comparison to ATB'346's parent drug within the same randomized study, but Antibe has not indicated if naproxen itself will be one of the variables to be assessed. We remain optimistic about study outcome – recall that ATB-346 did show measurable pain relief at 250-mg daily dosing in a small (and admittedly open-label) ten-day twelve-patient 250-mg daily dosing knee osteoarthritis pain trial back in Aug/16.

Sufficient cash to fund ATB-346 to data inflection point next year, though not with an over-abundance of wiggle room on timelines to data: Shifting to cash, Antibe exited the quarter with \$3.2M in cash, but with our model

assuming that the US\$1.0M upfront payment from South Korean ATB-346 development partner Kwang Dong Pharmaceuticals (which Antibe records as deferred revenue) lifts pro forma cash to \$4.5M, down only modestly from about \$6.6M last quarter (\$4.2M as reported in FQ119 data, plus the aforementioned US\$1.0M payment from Kwang Dong and another €0.8M in upfront cash from eastern European/Middle East partner Acbel originally recorded back in FQ417). We are comfortable in assuming that deferred revenue is cash in our assessment of Antibe's financial risk profile.

Importantly, Antibe exited the quarter with 7.3M warrants with exercise price of \$0.22 that expire during Dec/18, and when considering current share value and pending ATB-346 Phase II milestones that our model assumes could be favorable, we believe it is plausible to assume that a sizable proportion of expiring warrants could be simultaneously converted to ATE shares and thus into balance sheet cash of up to \$1.6M. If we notionally assume that expiring warrants will become cash imminently, Antibe's pro forma cash at end-of-year after assuming that FQ319 operating cash burn will be incrementally above FQ219 cash burn, year-end cash could be at or near current pro forma cash level of \$4.5M, possibly sufficient to fund ATB-346 to Phase II data if data are indeed generated by end-of-FQ120 as Antibe predicts, but with limited financial flexibility thereafter unless new cash-contributing partners are identified or perhaps if Citagenix is divested on attractive terms and/or if Antibe out-licenses development rights to ATB-352 or ATB-340 or both. Warrant exercise to this magnitude represents about one quarter of operating cash burn on a FQ219 run-rate basis.

Competitive knee osteoarthritis therapies advancing through Phase II/III testing still includes Centrexion's CNTX-4975 and Regeneron's fasinumab: On competitive landscape, we have flagged Centrexion's transient potential vanilloid 1 receptor-targeted synthetic trans-capsaicin formulation CNTX-4975 as a pain medication that could overlap with ATB-346 (and naproxen) in the knee osteoarthritis market in time, and since our last research update, the firm reported early PK/Phase I data on this drug at the American College of Rheumatology meeting in Chicago in Oct/18, showing that '4975 exhibited buprenorphine-like pain relief in a post-surgical rat pain model and with intra-articular injection into a rat knee pain model. But of course, the firm already has reported Phase II human data at the same conference last year, showing in a 172-patient trial that WOMAC A1 scores improved significantly at both three and six months in comparison to placebo at the higher of two doses tested (1.0 mg). The firm is funding two Phase III knee osteoarthritis trials (650 patients in total) that will assess one-year impact on WOMAC A1-quantified pain intensity at one-year; data should be available during F2020.

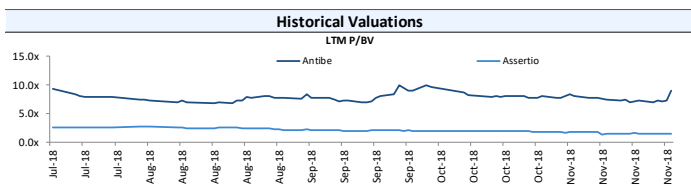
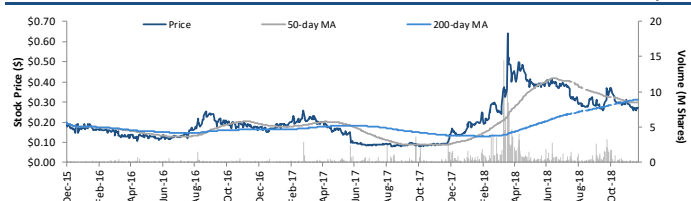
And we are separately tracking Regeneron Pharmaceuticals' (partnered with Teva [TEVA-NY, NR] & Mitsubishi Tanabe Pharma [4508-JP, NR]) nerve growth factor-targeted mAb fasinumab, for which Phase III testing in the 2,845-patient FACT OA1 (data in Q221), the 1,620-patient FACT OA2 trial (data in Q220) and the 3,565-patient FACT LTS & OA1 trial (data in Q120) is ongoing, and for which interim positive 16-week WOMAC data were reported at two distinct fasinumab dosing regimens (1 mg monthly or bimonthly) in a 646-patient Phase II study back in Aug/18. Our ATE model and valuation drives ATB-346 royalty revenue economics from Bayer's (BAYN-SW, NR) current naproxen market share with branded formulation Aleve and not from any comparative pharmacology from other Phase II/III-stage osteoarthritis pain assets, including but not limited to CNTX-4975 or fasinumab. Moreover, we do not see GI ulceration rate as being as meaningful to achievable market share as could ATB-346's activity by this measure as compared to naproxen specifically.

Summary & valuation: So as stated, we are **maintaining our Speculative BUY rating and PT of \$1.40 on ATE**, with our valuation still based on NPV (40% discount rate that could already be conservative but most assuredly will be if ATB-346 generates positive Phase II knee osteoarthritis pain data next year) and multiples of our F2025 adjusted EBITDA/EPS forecasts of \$165.5M/\$0.41, with our share-based forecasts assuming notional fd S/O of 279.8M (currently 259.8M) that assumes the firm could raise equity capital before or during F2020/21 to partially fund downstream Phase III ATB-346 testing.

Our revenue model assumes ATB-346 will be partnered and generate royalty revenue for Antibe (our projected royalty rate of 30% is reasonably aggressive and thus assumes that '346 could be partnered either during Phase III testing or once pivotal data are already generated). We project '346 FDA approval/launch by FH224, during which we project royalty revenue from the US and partnered geographies of \$70.9M, increasing to \$172.9M in F2025 (the reference year in our valuation, as described above) and to \$249.8M by F2026. Pending Phase II knee osteoarthritis pain data

will be key to determining if ATB-346 confers naproxen-like analgesia at a dosage strength at which it demonstrated impressively low GI ulceration rate/severity; data from two independent Phase I/II studies suggest that it could, but a confirmatory Phase II study if positive would substantially reduce ATB-346 development risk in our investment thesis and model. Accordingly, we see substantial value creation just on ATB-346 alone over a 2-4 quarter time horizon over which our one-year PT is clearly relevant. At current levels, our Pt corresponds to a one-year return of 418%.

TEARSHEET - Antibe Therapeutics (ATE-V, \$0.27, SPEC BUY, PT: \$1.40)



Financial Summary/Key Metrics	2018A	2019E	2020E	2021E	2022E	2023E	2024E
C\$000s except per share data							
Product sales, Citagenix	8,510	9,222	9,683	10,167	10,676	11,210	11,770
Royalty revenue, ATB-346	0	0	0	0	0	0	70,895
Total product revenue	8,510	9,222	9,683	10,167	10,676	11,210	82,665
Growth (%)	NA	8.4%	5.0%	5.0%	5.0%	5.0%	637.5%
Cons.	0.0	0.0	0.0	0.0	10.3	10.9	82.3
Cons. 3 Mts. Ago	0.0	0.0	0.0	0.0	10.2	10.7	82.2
EBITDA	(\$5,594)	(\$7,357)	(\$8,405)	(\$5,347)	(\$4,635)	(\$2,242)	\$66,351
Margin	NA	NA	NA	NA	NA	NA	80.3%
Cons.	(5.2)	(5.7)	(8.3)	(5.3)	(4.6)	(2.2)	66.4
Cons. 3 Mts. Ago	(5.2)	(5.6)	(8.3)	(5.2)	(4.5)	(2.1)	66.5
Net income, fully-taxed	(7,430)	(8,834)	(9,882)	(6,824)	(6,112)	(3,719)	\$45,412
EPS (Fully taxed)	(\$0.03)	(\$0.03)	(\$0.04)	(\$0.02)	(\$0.02)	(\$0.01)	\$0.16
Cons.	(\$0.04)	(\$0.04)	(\$0.02)	NA	NA	NA	NA
Cons. 3 Mts. Ago	(\$0.04)	(\$0.03)	(\$0.02)	(\$0.02)	NA	NA	NA
P/E	NA	NA	NA	NA	NA	NA	1.4x
EV/EBITDA	NA	NA	NA	NA	NA	NA	0.9x

Valuation		30%	40%	50%
NPV				
Implied value/share ¹		\$2.05	\$1.17	\$0.76
Price/earnings multiple, F2025		15.0x	20.0x	25.0x
Implied value/share ¹		\$1.14	\$1.53	\$1.91
EV/EBITDA multiple, F2025		10.0x	12.5x	15.0x
Implied value/share ¹		\$1.10	\$1.37	\$1.65

One Year Antibe Therapeutics Target Price **\$1.40**

¹ Based on F2025 fd fully-taxed EPS of \$0.41; EBITDA of \$165.6M, discounted at 40%, FD S/O of 259.8M, but with notional fd S/O of 279.8M embedded in our model

² Proforma cash of \$4.5M includes US\$1.0M in upfront cash from South Korean partner Kwangdong Pharmaceuticals; total debt of \$2.0M

Comparables and Peer Analysis										% Return				Consensus Valuations							
Ticker	Trading CCY	Current Price	Target Price	Dividend Yield	% Return	Market Cap	Ent. Value	1-Week	1-Month	3-Month	1-Year	T12M	2018E	2019E	T12M	2018E	2019E	T12M	2018E	2019E	
Antibe Therapeutics Inc.	ATE	CAD	\$0.27	\$1.40	0.0%	418.5%	57.4	55.0	3.8%	(10.0%)	(16.9%)	184.2%	(7.6)	(5.2)	(5.7)	(\$0.05)	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.04)
Anika Therapeutics, Inc.	ANIK	USD	\$34.87	\$48.67	0.0%	39.6%	495.6	346.5	(0.0%)	(1.9%)	(15.9%)	(36.4%)	33.4	36.5	42.5	\$1.31	\$1.27	\$1.43	\$1.31	\$1.27	\$1.43
Camurus AB (publ)	CAMX	SEK	SEK 96	SEK 110	0.0%	14.7%	3,650.1	3,433.7	14.2%	10.2%	0.2%	(19.4%)	-\$EK 246.7	-\$EK 255.8	SEK 131.4	-\$EK 5.32	-\$EK 5.57	SEK 2.53	-\$EK 5.32	-\$EK 5.57	SEK 2.53
Collegium Pharmaceutical, Inc.	COLL	USD	\$18.32	\$31.33	0.0%	71.0%	609.1	480.8	7.8%	12.3%	7.8%	9.0%	47.8	(4.7)	20.2	(\$2.00)	(\$0.85)	\$0.50	(\$2.00)	(\$0.85)	\$0.50
Asserpio Therapeutics, Inc.	ASRT	USD	\$5.40	\$7.42	0.0%	37.3%	345.3	808.9	0.2%	(0.4%)	(26.2%)	(13.7%)	183.4	147.7	116.1	\$0.44	\$1.00	\$0.73	\$0.44	\$1.00	\$0.73
DURECT Corporation	DRRX	USD	\$0.84	\$3.38	0.0%	302.8%	135.8	114.4	(1.5%)	(15.1%)	(34.5%)	(25.2%)	(7.9)	0.0	0.0	(\$0.06)	(\$0.16)	(\$0.21)	(\$0.06)	(\$0.16)	(\$0.21)
Nicox S.A.	COX	EUR	\$4.70	\$18.90	0.0%	301.8%	141.1	108.5	0.1%	0.1%	(40.5%)	(53.9%)	(16.2)	(12.8)	(26.0)	(\$0.13)	(\$0.41)	(\$0.89)	(\$0.13)	(\$0.41)	(\$0.89)
Novan, Inc.	NOVN	USD	\$1.91	\$7.33	0.0%	283.9%	49.8	45.6	(18.7%)	(19.1%)	(33.6%)	(64.5%)	(30.5)	(31.7)	(37.5)	(\$1.22)	(\$1.09)	(\$1.50)	(\$1.22)	(\$1.09)	(\$1.50)
Vertex Pharmaceuticals Incorporated	VRTX	USD	\$160.39	\$195.04	0.0%	21.6%	40,989.0	38,549.5	(0.4%)	(5.4%)	(11.3%)	9.4%	863.4	1,116.4	1,230.5	\$2.55	\$3.82	\$4.30	\$2.55	\$3.82	\$4.30
Ampio Pharmaceuticals, Inc.	AMPE	USD	\$0.58	NA	0.0%	NA	61.9	53.2	0.8%	28.0%	(7.7%)	(70.8%)	(12.1)	0.0	0.0	(\$0.12)	\$0.00	\$0.00	(\$0.12)	\$0.00	\$0.00
Nektar Therapeutics	NKTR	USD	\$37.16	\$74.20	0.0%	99.7%	6,431.8	5,258.0	(2.2%)	1.0%	(43.8%)	(29.3%)	795.3	685.2	254.9	\$4.50	\$3.77	(\$2.20)	\$4.50	\$3.77	(\$2.20)
Average					0.0%	159.1%			168.3%	19.0%	(20.2%)	(10.1%)									

Comparables - Multiples Analysis										FCF Yield		Current - EV/EBITDA			Target - EV/EBITDA			EV/REV			P/E			P/BV		
	T12M	2018E	2019E	T12	2018E	2019E	T12M	2018E	2019E	2018E	2019E	2020E	T12M	2018E	2019E	T12M	2018E	2019E	T12M	2017E	2018E					
Antibe Therapeutics Inc.	0.0%	0.0%	0.0%	-7.2x	NA	NA	NA	NA	NA	0.0x	6.3x	5.8x	-5.5x	NA	NA	9.0x	0.0x	0.0x	0.0x	0.0x	0.0x					
Anika Therapeutics, Inc.	4.7%	3.7%	0.0%	10.4x	9.5x	8.2x	10.4x	9.5x	NA	3.3x	3.0x	3.0x	26.6x	27.5x	24.4x	NA	NA	NA	NA	NA	NA					
Camurus AB (publ)	(5.6%)	(5.0%)	0.0%	-13.9x	-13.4x	26.1x	NA	NA	NA	38.4x	5.8x	10.8x	NA	NA	37.9x	NA	NA	NA	NA	NA	NA					
Collegium Pharmaceutical, Inc.	(3.9%)	6.9%	11.9%	10.1x	-103.4x	23.8x	10.1x	NA	NA	1.7x	1.4x	1.3x	NA	NA	36.6x	NA	NA	NA	NA	NA	NA					
Asserpio Therapeutics, Inc.	32.8%	23.8%	21.6%	4.4x	5.5x	7.0x	4.4x	5.5x	NA	3.0x	3.4x	3.2x	12.3x	5.4x	7.4x	NA	NA	NA	NA	NA	NA					
DURECT Corporation	0.0%	0.0%	0.0%	-14.5x	NA	NA	NA	NA	NA	6.1x	7.4x	7.0x	NA	NA	NA	NA	NA	NA	NA	NA	NA					
Nicox S.A.	(12.1%)	(18.6%)	0.0%	-6.7x	-8.5x	-4.2x	NA	NA	NA	10.2x	24.1x	6.6x	NA	NA	NA	NA	NA	NA	NA	NA	NA					
Novan, Inc.	(68.3%)	(88.4%)	(84.4%)	-1.5x	NA	NA	NA	NA	NA	17.4x	11.5x	11.5x	NA	NA	NA	NA	NA	NA	NA	NA	NA					
Vertex Pharmaceuticals Incorporated	3.4%	5.0%	6.9%	44.6x	34.5x	31.3x	NA	NA	NA	12.9x	10.9x	8.8x	62.9x	42.0x	37.3x	14.1x	13.7x	10.4x	14.1x	13.7x	10.4x					
Ampio Pharmaceuticals, Inc.	0.0%	0.0%	0.0%	-4.4x	NA	NA	NA	NA	NA	0.0x	0.0x	0.0x	NA	NA	NA	NA	NA	NA	NA	NA	NA					
Nektar Therapeutics	10.9%	(2.7%)	4.2%	6.6x	7.7x	20.6x	6.6x	7.7x	NA	4.5x	18.3x	18.6x	8.3x	9.9x	NA	NA	NA	NA	NA	3.9x	3.6x					
Average				2.5x	-9.7x	16.1x	7.9x	7.6x	NA	8.9x	8.4x	7.0x	NA	NA	NA	11.6x	3.6x	2.7x	11.6x	3.6x	2.7x					

¹ Targets, forecasts and valuations reflect consensus estimates derived from Capital IQ

Company Description

Antibe is a clinical stage drug developer, whose lead clinical asset is gastro-protective hydrogen sulfide-releasing analog of naproxen called ATB-346, for which positive Phase I/II pain and GI ulceration rate data are already available & future Phase II/III testing is being contemplated, with knee osteoarthritis as the initial focus market.

Consensus

Rating:	Outperform	Return
Target:	\$1.60	492.6%
Median:	\$1.60	492.6%
High:	\$1.80	566.7%
Low:	\$1.40	418.5%
# Est:	2	

Consensus Distribution

Sector Outperform/Buy	1
Sector Perform/Hold	0
Sector UnderPerform/Sell	0

Key Statistics

Key Statistics	Value
52-Wk High:	\$0.79
52-Wk Low:	\$0.10
Avg Vol (3-Mo)	0.39
Shares O/S:	212.8
Market Cap:	\$7.4
Adj. Proforma Cash (\$M):	4.5
Ent. Value (\$M):	55.0
Div Yield:	0.0%
Website:	www.antibetherapeutics.com
FYE:	Mar 31
Employees:	37

Top Institutional Ownership

Top Institutional Ownership	M Shares	% Held
NFQ Ventures	1,600	0.8%
NFQ Ventures	1,600	0.8%
Next Edge Capital Corp.	0,3350	0.2%
AlphaNorth Asset Management	0,2500	0.1%
Goodman & Company, Investment Counsel Inc.	NA	NA
NA	NA	NA

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ANALYST CERTIFICATION

Company: Antibe Therapeutics | ATE:TSXV

I, Douglas Loe, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities or issuers. I also certify that I have not, am not, and will not receive, directly or indirectly, compensation in exchange for expressing the specific recommendations or views in this report.

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Is this an issuer related or industry related publication?	Issuer
Does the Analyst or any member of the Analyst's household have a financial interest in the securities of the subject issuer? If Yes: 1) Is it a long or short position? Long Position; and, 2) What type of security is it? Common Shares & Share Purchase Warrants.	Yes
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Has the Analyst had an onsite visit with the Issuer within the last 12 months? Toronto, Company Head Quarters, March 22 nd 2018	Yes
Has the Analyst or any Partner, Director or Officer been compensated for travel expenses incurred as a result of an onsite visit with the Issuer within the last 12 months?	No
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Is Echelon Wealth Partners Inc. a market maker in the issuer's securities at the date of this report?	No

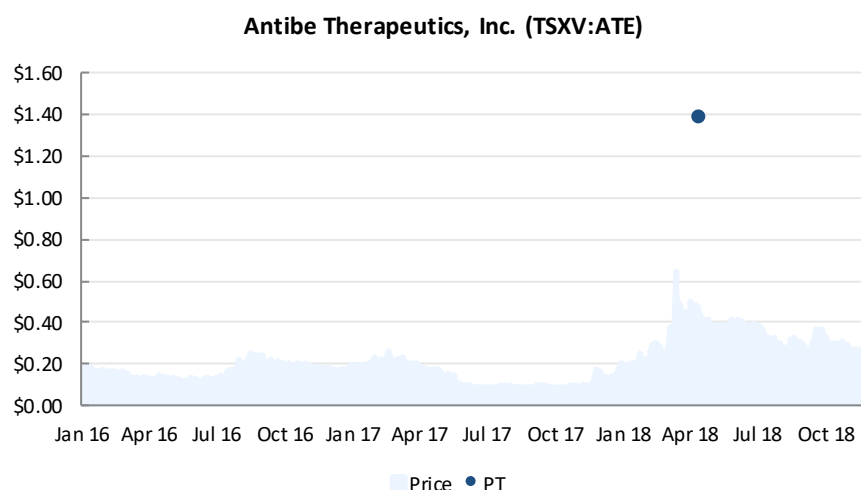
RATING DEFINITIONS

Buy	The security represents attractive relative value and is expected to appreciate significantly from the current price over the next 12 month time horizon.
Speculative Buy	The security is considered a BUY but in the analyst's opinion possesses certain operational and/or financial risks that are higher than average.
Hold	The security represents fair value and no material appreciation is expected over the next 12-18 month time horizon.
Sell	The security represents poor value and is expected to depreciate over the next 12 month time horizon.
Under Review	While not a rating, this designates the existing rating and/or forecasts are subject to specific review usually due to a material event or share price move.
Tender	Echelon Wealth Partners recommends that investors tender to an existing public offer for the securities in the absence of a superior competing offer.
-Dropped Coverage	Applies to former coverage names where a current analyst has dropped coverage. Echelon Wealth Partners will provide notice to investors whenever coverage of an issuer is dropped.

RATINGS DISTRIBUTION

Recommendation Hierarchy	Buy	Speculative Buy	Hold	Sell	Under Review	Restricted	Tender
Number of recommendations	51	42	12	0	25	0	0
% of Total (excluding Restricted)	39%	32%	9%	0%	19%		
Number of investment banking relationships	10	14	1	0	11	0	0
% of Total (excluding Restricted)	28%	39%	3%	0%	31%		

PRICE CHART, RATING & PRICE TARGET HISTORY



Date **Target (C\$)** **Rating**
 19 Apr 2018 \$1.40 Spec Buy

Coverage Initiated: Apr 19, 2018
Data sourced from: FactSet

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