EDISON

AFT Pharmaceuticals

A strong start to FY20

Financial update and outlook

Pharma & biotech

AFT Pharmaceuticals is a New Zealand-based specialty pharmaceutical company that currently sells over 130 prescription specialty generics and OTC products through its own salesforce in New Zealand, Australia and South-East Asia. The company recently reported its H120 results. Operating revenue grew by a strong 22.1% year-on-year as there was growth across all regional segments, notably South-East Asia and Rest of World, which grew by 111.9% and 64.4%, respectively. Importantly, the company reported an operating profit of NZ$13.7m (with all regions contributing profit), up from a loss of NZ$0.1m in the first half of FY19.

Year end	Revenue (NZ$m)	PBT* (NZ$m)	EPS* (NZ$)	DPS (NZ$)	P/E (x)	Yield (%)
03/18	81.2	(12.9)	(0.13)	0.0	N/A	N/A
03/19	85.1	(2.5)	(0.03)	0.0	N/A	N/A
03/20e	100.9	3.7	0.04	0.0	77.5	N/A
03/21e	120.8	16.4	0.17	0.0	18.2	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

Australia growth continues

Revenue in Australia was up 19.0% in H120 compared to the same period a year ago. The over-the-counter (OTC) channel, which represents 60.3% of revenue for Australia, grew by 18% thanks to Maxigesic as well as AFT's eye care products. The hospital channel grew by 25% and was helped by the launch of new products, specifically injectables. Operating profits rose to a profit of NZ$1.9m in the first half of FY20 compared to a loss of NZ$0.1m in the first half of FY19.

New Zealand accelerating

AFT's home market of New Zealand grew by 9.0% in the first half of FY20. This compares very favourably to the 11.0% decline in H119 and 1.1% full year decline. The OTC channel was the main driver, which grew by 17% thanks to new products in the natural medicines and digestive health arenas. Operating profit more than doubled to NZ$1.7m from NZ$0.8m in the same period a year ago.

Maxigesic launched in 24 countries

Maxigesic is now sold and launched in 24 countries, up from 15 in the prior year. Importantly, the company expects the launch of Maxigesic tablets in 12 additional markets by the end of FY20. It is currently licensed in more than 125 countries and registered in 44 countries. Maxigesic's success is key for the company to continue to diversify geographically, as well as to continue its growth trajectory.

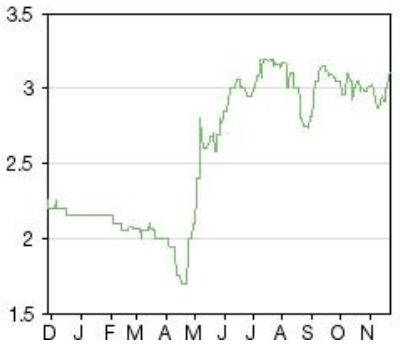
Valuation: NZ$539m or NZ$5.53 per share

We are increasing our valuation from NZ$495m or NZ$5.09 per share to NZ$539m or NZ$5.53 per share, mainly due to rolling forward our NPV and increased revenue estimates, particularly in South-East Asia, as they were stronger compared to our expectations. This increase was offset in part by slightly higher net debt.

25 November 2019

Price	**NZ$3.10**
Market cap	**NZ$302m**
	NZ$0.65/US$
Net debt (NZ$m) at 30 September 2019	38.5
Shares in issue	97.3m
Free float	21.6%
Code	AFT
Primary exchange	NZX
Secondary exchange	ASX

Share price performance



%	1m	3m	12m
Abs	4.0	10.7	35.4
Rel (local)	5.5	10.0	11.4
52-week high/low	NZ$3.19		NZ$1.70

Business description

AFT Pharmaceuticals is a specialty pharmaceutical company that operates primarily in Australasia but has product distribution agreements across the globe. The company's product portfolio includes prescription and over-the-counter drugs to treat a range of conditions and a proprietary nebuliser.

Next events

Additional Maxigesic launches	2019/20

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Edison profile page

Investment summary

Company description: Successfully expanding geographically

Founded in 1997 in a spare room in New Zealand, AFT Pharmaceuticals has grown to a large, regional, specialty pharmaceutical company selling more than 130 proprietary and in-licensed products, covering a wide range of therapeutic categories in the hospital, prescription and OTC markets. The company is currently in the process of regional diversification, mainly through distribution partnerships to sell Maxigesic and its line extensions. 83.9% of its H120 sales came from Australia and New Zealand, down from 97.4% in FY16. Rest of World (RoW) and South-East Asia now account for 11.1% and 5.0% of sales, respectively.

Valuation: NZ$539m or NZ$5.53 per share

Our DCF-based valuation of AFT is NZ$5.53 a share, based on a WACC of 10%. We assume a 18.5% CAGR for revenues over the next five years, from FY20 to FY24, fading to 2% terminal growth and a terminal EBIT margin of 36%. The growth rate and margin expansion are highly dependent on high growth in royalties from distribution relationships in the RoW segment, driven in large part by Maxigesic.

Financials: Back to profitability

The company had been profitable in the past but had operating losses from FY15 through FY18. This changed, specifically in the second half of FY19, thanks to the company investing in new products and new markets, which led to improved revenue growth and gross margins. AFT reported an operating profit of NZ$13.7m (with all regions contributing profit), up from a loss of NZ$0.1m in the first half of FY19. Included in reported operating profit is a non-cash NZ$9.8m gain on the acquisition of Pascomer intellectual property. The company has increased its operating profit forecast for FY20 to NZ$18.8–21.8m from NZ$9–12m. AFT currently has NZ$7.3m in cash and NZ$45.8m in debt, which matures at the end of FY20. It is currently is in advanced discussions to refinance with local banks, which will likely also allow it to reduce interest expenses.

Sensitivities: Much depends on Maxigesic

The magnitude and duration of AFT's growth trajectory hinges on its ability to successfully establish its products, especially Maxigesic, in new geographies (Maxigesic is currently marketed in 24 geographies but is partnered in more than 125 in total). Without growth outside Australia and New Zealand, AFT's forecast FY20–24 revenue CAGR would fall from 18.5% to 8.3%, based on our estimates. AFT will depend on sales and distribution partners to grow this segment, with the quality of the partners determining how successful the company is in any given region. Also, the magnitude of receiving regulatory clearance in more than 100 additional countries should not be underestimated as this had previously led to delays, although an additional 12 launches are expected by the end of FY20. Additionally, Maxigesic would be sold in an extremely competitive market, so it is very easy for a product launch to be overlooked. It also faces various regulatory challenges, with different requirements in different countries. The most challenging will likely be the US, where AFT is currently pursuing an NDA for the intravenous (IV) version of Maxigesic and is developing the NasoSURF Nebuliser. The FDA may require AFT to spend more on R&D than it is currently planning and may also push back expected approval timelines. The agency recently required the company to run an additional 225-patient trial to determine the tolerability of repeat doses of Maxigesic IV over an extended period of exposure.

A diversified healthcare products company

Over the past decade, AFT has built a well-diversified portfolio of products, customers and geographies by focusing on identifying and developing differentiated products that meet a specific market need. AFT's salesforce of c 40 sells into the majority of hospitals in Australia and New Zealand, nearly all pharmacies including key local chains such as Chemist Warehouse and Green Cross Health, and all major supermarkets in New Zealand. AFT has in-market sales teams in Malaysia and Singapore and works with local distributors and marketers in the rest of South-East Asia. 83.9% of its H120 sales came from Australia and New Zealand, though revenues outside these areas continue to become a greater part of AFT's business due to their faster growth rates.

Exhibit 1: AFT geographic and product type diversification

Region	Number of products launched	% of operating revenue (in H120)	% growth from H119 to H120	Sales channel mix
Australia	70	54.7%	19.0%	OTC: 60.3%, hospital: 29.5%, prescription: 10.2%
New Zealand	115	29.2%	9.0%	OTC: 53.9%, hospital: 14.2%, prescription: 31.9%
South-East Asia	9	5.0%	111.9%	OTC: 1.4%, hospital: 88.4%, prescription: 10.2%
Rest of World	5	11.1%	64.4%	OTC: 69.1%, hospital: 1.4%, prescription: 29.5%
Total	>130	100%	22.1%	OTC: 56.4%, hospital: 24.9%, prescription: 18.7%

Source: AFT Pharmaceuticals. Note: Number of products launched as of 31 March 2019.

As of the end of FY19, AFT sold 115 products in New Zealand, 70 in Australia, nine in South-East Asia and five in the rest of the world, split between OTC products that do not require a prescription, hospital products and prescription products.

Australia has been driven by the OTC channel and grew 19.0% in H120 compared to the same period a year ago. The OTC channel, which represents 60.3% of revenue for Australia, grew by 18% thanks to Maxigesic as well as AFT's eye care products. The hospital channel grew by 25% and was helped by the launch of new products, specifically injectables. The prescription channel grew by 9%, thanks to new products.

New Zealand grew by 9.0% in the first half of FY20, thanks to 17% growth in the OTC segment, (53.9% of sales in New Zealand) which had new products in the natural medicines and digestive health arenas. The hospital channel (14.2% of sales in New Zealand) declined by 10% due to tender price reductions and a temporary loss of product due to a change in suppliers. The prescription channel grew by 7%.

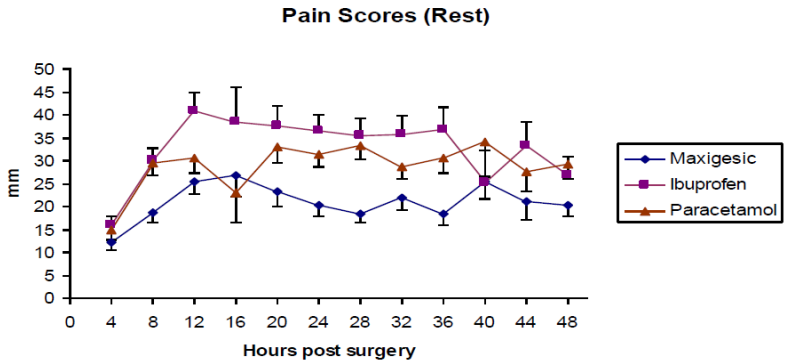
South-East Asia revenue grew by 111.9% due to 240% growth in the hospital channel following the launch of two new products in Singapore and Malaysia. RoW grew 64.4%, mainly due to Maxigesic and Pascomer license/milestone income. The company stated that it expects sales orders to be back-end loaded into the second half of the year for Maxigesic.

Maxigesic: The key driver

While AFT has dozens of products, the key to its success is Maxigesic, an OTC product in most markets. Maxigesic comprises a unique 3.3 to 1 acetaminophen to ibuprofen ratio formulation (500mg acetaminophen/150mg ibuprofen) for the purpose of pain relief. Maxigesic demonstrated approximately 33% lower average pain scores over 48 hours after oral surgery in adults compared with an equivalent dosage of either acetaminophen or ibuprofen alone in a 135-patient, randomised clinical trial.[1] Results were highly statistically significant (p=0.007 at rest and p=0.006 on activity vs acetaminophen and p=0.003 at rest and p=0.007 on activity vs ibuprofen).

[1] Merry A et al., *British Journal of Anaesthesia* 104(1):80-8(2010)

Exhibit 2: Maxigesic vs ibuprofen and paracetamol (acetaminophen) post dental surgery



Source: New Zealand Medicines and Medical Devices Safety Authority

The strength of a paracetamol (acetaminophen) and ibuprofen combination was recently confirmed in an independent (non-company) sponsored study that was published in the very prestigious Journal of the American Medical Association (JAMA)[2]. The efficacy of a single dosing of four different oral combination regimens (three that contained opioids, including Vicodin and Percocet) was studied in 416 patients with moderate to severe acute extremity pain. Importantly, no significant difference was seen between the efficacy of the Maxigesic-like regimen and those containing opioids, demonstrating its efficacy and potential for opioid sparing.

Exhibit 3: Comparing paracetamol (acetaminophen) and ibuprofen to opioid-containing regimens

Regimen	Number of patients	Baseline pain score	Score 2 hours post-dose	Decline in score after 2 hours (primary endpoint)	% receiving rescue opioid
1,000mg acetaminophen + 400mg ibuprofen (similar to two tablets of Maxigesic)	101	8.9	4.6	4.3	18%
5mg oxycodone + 325mg acetaminophen (aka Percocet)	104	8.7	4.3	4.4	14%
5mg hydrocodone + 300mg acetaminophen (aka Vicodin)	103	8.6	5.1	3.5	18%
30mg codeine + 300mg acetaminophen (aka Tylenol 3)	103	8.6	4.7	3.9	23%

Source: Chang et al., Effect of a Single Dose of Oral Opioid and Nonopioid Analgesics on Acute Extremity Pain in the Emergency Department A Randomized Clinical Trial. *JAMA*. 2017;318(17): 1,661-1,667. Note: In the pain scale that was used, 0 indicated no pain while 10 indicated the worst possible pain. Also, two tablets of Maxigesic equals 1,000mg acetaminophen + 300mg ibuprofen, a slightly lower ibuprofen dose than the one used in this study.

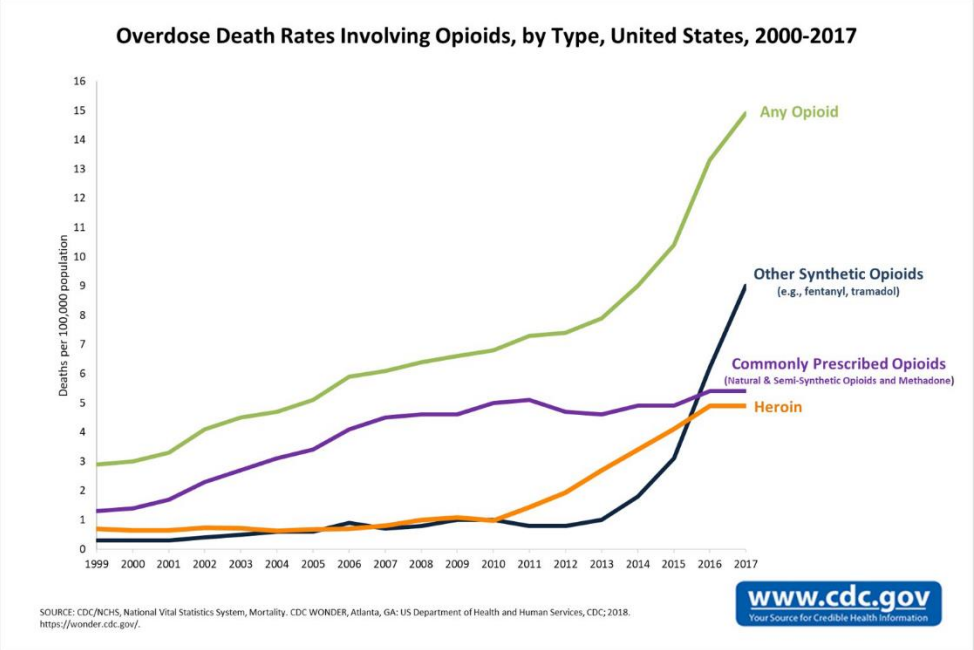
The need to find alternatives to opioids is clear. The rate at which people are dying from opioids is skyrocketing (see Exhibit 4). In 2017, there were over 70,000 drug overdose deaths in the US and 67.8% of them involved an opioid, according to the Centers for Disease Control (CDC). The use of opioids is a major driver of a significant increase in all-cause mortality in white non-Hispanic men and women in the US.[3] Also, while some of these deaths occur because the drug was obtained illegally, part of the problem is that doctors have simply been prescribing opioids more, increasing the opportunity for addiction. Between 2001 and 2010, the percentage of total emergency department visits that resulted in an opioid prescription increased from 20.8% to 31%.[4]

[2] Chang et al., Effect of a Single Dose of Oral Opioid and Nonopioid Analgesics on Acute Extremity Pain in the Emergency Department A Randomized Clinical Trial. *JAMA*. 2017;318(17):1661–1667.

[3] Case et al., Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *PNAS*. vol. 112 no. 49 15078-15083

[4] Kyriacou et al., Opioid vs Nonopioid Acute Pain Management in the Emergency Department. *JAMA*. 2017;318(17):1655–1656.

Exhibit 4: Opioid overdose deaths in the US



Source: CDC

Additionally, Maxigesic would reduce the risk of an accidental paracetamol (acetaminophen) overdose due to inadequate pain relief. According to the FDA, 48% of cases of acute liver failure are caused by acetaminophen overdose. Most alarmingly, liver injury can occur at doses just slightly higher than the current recommended maximum daily dose of four grams. Depending on the study, the median daily dose that led to injury was just 5.0–7.5 grams per day (something that can easily happen if a pain sufferer feels the need for a little extra pain relief).

The market for Maxigesic

According to IMS, the worldwide market size for ibuprofen and acetaminophen tablets alone is over US$10bn, most of it concentrated in the US and Europe. With a differentiated combination product, there is no reason why AFT could not achieve meaningful market share with the right partners.

Across the globe, Maxigesic is now sold and launched in 24 countries. Recent launches this calendar year include Spain, Portugal and the Nordics, with launches pending in several key geographies such as France, Belgium and Eastern Europe. There are distribution agreements in place in more than 125 countries (Germany, Chile, Columbia and Peru are recent additions) with a key focus on signing distribution agreements in the US, Canada and Brazil, and discussions beginning or already underway in those countries.

Exhibit 5: Maxigesic product country totals by status

	Maxigesic tablets		Maxigesic IV		Maxigesic oral solution	
	2020	2019	2020	2019	2020	2019
Licensed	125+	125+	70	68	122	118
Registered	44	42	2			
Sold in	24	20				

Source: AFT. Note: 2019 totals are as of end FY19, while 2020 totals are as of end H120.

Launch timing is heavily dependent on multi-step regulatory processes in each country and delays are relatively common, so AFT is behind its original plan. We continue to expect the company to launch in the bulk of its licensed countries in the next two to three years. While the exact economics vary by agreement, we believe that between the transfer price and the net royalty to the company, AFT will book 8–20% of the product sales as revenue.

Additional Maxigesic formulations

AFT intends to add a number of different formulations to its Maxigesic product line as a way of growing Maxigesic sales in both existing and new markets. Planned line extensions in these geographies could alone increase its addressable market by US$4.3bn (US$3.7bn OTC and US$622m for the hospital-based IV version) or over 40%. Regulatory filings for Maxigesic hot drink sachets are expected to commence in December of 2019. Maxigesic Rapid (a fast-dissolving version) has completed formulation development, with the first filing in calendar year 2020. Maxigesic Cold & Flu is expected to have its first filing in early 2020.

Exhibit 6: Maxigesic planned/potential line extensions

Product	Target market/description	Global market size
Maxigesic oral liquid	Suspension oral liquid for paediatric use	US$1.8bn
Maxigesic powder sachets	Powder sachets for preparation of a lemon-flavoured hot drink for adult use	US$677m
Maxigesic PE tablets	Tablet for treatment of pains associated with cold and flu for adult use	US$886m
Maxigesic PE sachets	Powder sachets for treatment of pains associated with cold and flu for adult use	US$324m
Maxigesic IV	Injectable for post-operative use in adults either alone or to reduce the use of opioid analgesics	US$622m
Extension market size		US$4.3bn

Source: AFT Pharmaceuticals, IMS World Review Pack (August 2015), Newport 2017

Maxigesic IV is particularly interesting as it is a hospital-based product, which would have more attractive pricing and less competition than the OTC line extensions. Maxigesic IV is progressing with licensing agreements in 70 countries and has received regulatory approvals in Australia and New Zealand. In the US, Maxigesic IV is moving closer to filing. Following a pre-NDA meeting with the FDA, the company initiated an additional 225-patient trial to determine the tolerability of repeat doses of Maxigesic IV over an extended period of exposure. According to clinicaltrials.gov, the study is expected to be completed in January 2020. We expect a filing later in calendar year 2020. The company has also submitted the data from the Maxigesic IV pivotal study to a major journal for publication, which should help increase its profile. As a reminder, AFT ran a Phase III trial in the US comparing Maxigesic IV to IV paracetamol (acetaminophen), IV ibuprofen and placebo in 276 patients following bunion surgery. The primary endpoint was improvement in the sum of pain intensity differences (SPID) scores, which Maxigesic IV achieved with a p-value of $p<0.001$.

We continue to view Maxigesic IV as a big opportunity as Mallinckrodt sells an IV formulation of paracetamol/acetaminophen (containing just one component of the paracetamol/acetaminophen and ibuprofen dual medicine combination that is Maxigesic) in the US, which had US$341.9m in sales in 2018. The company that originally developed Mallinckrodt's product, Cadence Pharmaceuticals, was acquired for US$1.4bn in 2014. Hence there is potential for meaningful upfront payments from a licensing agreement for Maxigesic IV with a US partner.

Pascomer licensed

AFT announced in July it had out-licensed Pascomer, which is being developed for facial angiofibromas in tuberous sclerosis complex (TSC) patients, to Timber Pharmaceuticals for more than US$10m in upfront, development and regulatory milestones, as well as over US$10m in sales milestone payments and royalties.

TSC is a multisystem, autosomal dominant genetic disorder resulting from a mutation in one of two tumour suppressor genes, TSC1 (encoding hamartin) or TSC2 (tuberin). TSC is characterised by benign tumours, known as hamartomas, in various organs, most commonly the skin, brain, kidneys, heart and lungs. A hamartoma is composed of an overgrowth of mature cells and tissues, which normally occurs in the affected tissue. TSC affects both sexes and all ethnic groups, affecting as many as 25,000–40,000 individuals in the US and one to two million individuals worldwide, with an estimated prevalence of one in 6,000 newborns, according to the US National Institute of

Neurological Disorders and Stroke. Angiofibromas, which can be highly disfiguring, affect around 80% of patients with TSC.

Pascomer is a topical version of rapamycin (marketed as Rapamune by Pfizer), an immunosuppressant used for prophylaxis of organ rejection in patients receiving kidney transplants. It is also approved for the treatment of lymphangioleiomyomatosis, a progressive disease often associated with TSC that results in lung destruction. Rapamycin is an inhibitor of mammalian target of rapamycin (mTOR), which has many functions in protein synthesis and cell growth, and is aberrantly activated in patients with TSC, making it a logical target for development in the treatment of this disease.

Initial evidence of rapamycin's potential efficacy in angiofibromas occurred in a patient who initiated oral rapamycin because of renal transplantation and her facial angiofibromas improved markedly.[5] As rapamycin is a potent immunosuppressive, systemic exposure for the sake of improving facial angiofibromas is not ideal and there have been several small studies of topical rapamycin in this indication.

According to one review, 94% of the 84 patients treated with a topical rapamycin in various studies showed improvement in their lesions.[6] In the one randomised, double-blind, placebo-controlled study (with 23 subjects) in the review, 73% of the subjects who received treatment reported a subjective improvement in their angiofibromas compared to 38% in placebo, although the p value was not significant (p=0.18), likely because of the limited size of the study.[7] Importantly, although a variety of different topical formulations was used, rapamycin was detected in only three patients out of the 74 tested for serum rapamycin levels, indicating a lack of systemic exposure. However, one of the issues with the various topical formulations used in these studies is that stability is limited. AFT believes it has developed a formulation using a proprietary dermal delivery technology that would be stable and hence commercially viable.

For intellectual property, there are no unexpired patents related to Rapamune in the FDA Orange Book, so AFT appears to be free to operate. We do not know the extent of the patent estate for Pascomer, but at the very least it will be eligible for orphan drug exclusivity, which is seven years in the US and 10 years' worth of data exclusivity in the EU (although we would expect patent coverage to go well beyond that due to the proprietary nature of the formulation).

As part of the agreement, Timber will cover the clinical trial costs associated with development. An Investigational New Drug Application has already been approved by the FDA, with 120-patient Phase IIb clinical study having commenced in sites in New Zealand, Australia and the US, and further sites in the UK, Spain and Eastern Europe expected to come on line by the end of 2019. Results are expected in 2020.

The NasoSURF opportunity

The NasoSURF Nebuliser is a hand-held ultrasonic nasal mesh nebuliser for the intranasal delivery of medication. AFT believes the NasoSURF Nebuliser has a unique combination of advantages over existing nebulisers including portability, a high delivery rate (reducing treatment time), control of particle size, control of dosage amount and breath activation to ensure medication is only delivered to the nose and not to the throat or lungs.

5 Hofbauer et al. The mTOR inhibitor rapamycin significantly improves facial angiofibroma lesions in a patient with tuberous sclerosis. *British Journal of Dermatology* 2008 159, pp. 473–475

6 Balestri et al., Analysis of current data on the use of topical rapamycin in the treatment of facial angiofibroma in Tuberous Sclerosis Complex. *Journal of the European Academy of Dermatology and Venereology.* 2015, 29, 14–20

7 Koenig et al. Topical rapamycin therapy to alleviate the cutaneous manifestations of tuberous sclerosis complex. *Drugs in R&D* 2012 Sep: 12(3): 121–126

Exhibit 7: NasoSURF Nebuliser

Source: AFT Pharmaceuticals

AFT is seeking approval for NasoSURF in the US as a Class II medical device to deliver midazolam for conscious sedation in the dental and ambulatory surgery markets (midazolam, in its IV form, is already used for procedural sedation). The manufacture of engineering batches is underway following a re-design after human factor studies. A Class II filing is expected in calendar year 2020. Regulatory pharmaceutical filings are expected to begin in late FY21.

Intranasal conscious sedation is an effective alternative to intravenous conscious sedation and is faster acting than currently available oral medications. If approved, AFT expects the NasoSURF Nebuliser to be the only intranasal method of conscious sedation in major markets. In the US, approximately 125 million dental procedures suitable for conscious sedation were performed in 2009 and approximately 25.7 million ambulatory surgical procedures suitable for conscious sedation were performed in 2006. Using IMS data, the US addressable market for conscious sedation in dental and ambulatory surgeries is c US$3bn at US$20 per treatment. Market research conducted by AFT suggests that dentists would use the product in 45% of cases.

In the longer term, AFT may seek approval for NasoSURF Nebuliser to deliver drugs for a number of conditions such as seizure, pain, agitation, opiate overdose, hypoglycaemia, vaccines and sexual dysfunction.

NasoSURF will be targeted at physicians and hospitals, and revenues will come in three forms: the sale of the NasoSURF Nebuliser device to physicians/hospitals (approximately US$300 each); a per-use charge through the sale of radio frequency identifier (RFID) cards, which programme the device for use with particular drugs; and consumables, such as mouthpieces and nasal prongs. We are not currently including the NasoSURF device in our valuation, because the product is still in development.

Sensitivities

The magnitude and duration of AFT's growth trajectory hinges on its ability to successfully establish AFT's products, especially Maxigesic, in new geographies (Maxigesic is currently marketed in 24 geographies but is partnered in more than 125 in total). Without growth outside Australia and New Zealand, AFT's forecast FY20–24 revenue CAGR would fall from 18.5% to 8.3%. AFT depends on sales and distribution partners to grow this segment, with the quality of the partners determining how successful the company is in any given region. Also, the magnitude of receiving regulatory clearance in over 100 additional countries should not be underestimated, as this had previously led to delays, although an additional 12 launches are expected by the end of the year. Additionally, Maxigesic would be sold in an extremely competitive market, so it is very easy for a product launch to be overlooked. It also faces various regulatory challenges, with different requirements in different countries. The most challenging will likely be the US, where AFT is currently pursuing an NDA for the intravenous (IV) version of Maxigesic and is developing the NasoSURF Nebuliser. The FDA may require AFT to spend more on R&D than it is currently planning and may also push back expected approval timelines. The agency recently required the company to run an additional 225-patient trial to determine the tolerability of repeat doses of Maxigesic IV over an extended period of exposure.

Valuation

We are increasing our valuation from NZ$495m or NZ$5.09 per share to NZ$539m or NZ$5.53 per share, mainly due to rolling forward our NPV and increased revenue estimates, particularly in South-East Asia, as they were stronger compared to our expectations. Our DCF-based valuation of AFT is based on a WACC of 10%. We assume an 18.5% CAGR for revenues over the next five years, from FY20 through to FY24, fading to 2% terminal growth and a terminal EBIT margin of 36%. The growth rate and margin expansion is highly dependent on high growth in royalties from distribution relationships in the RoW segment, driven in large part by Maxigesic.

Exhibit 8: DCF sensitivity table (NZ$/share)

	Terminal EBIT margin				
Terminal revenue growth	**30%**	**34%**	**36%**	**40%**	**45%**
-2%	3.76	4.07	4.22	4.53	4.91
-1%	3.96	4.29	4.46	4.80	5.22
0%	4.20	4.56	4.75	5.12	5.58
1%	4.48	4.89	5.10	5.51	6.02
2%	4.84	5.30	**5.53**	5.99	6.57
3%	5.31	5.83	6.10	6.62	7.28
4%	5.92	6.54	6.84	7.45	8.22
5%	6.78	7.52	7.89	8.62	9.54

Source: Edison Investment Research

Financials

We have increased our revenue estimates from NZ$99.9m to NZ$100.9m for FY20 and from NZ$119.5m to $120.8m for FY21, driven mainly by higher than anticipated South-East Asia revenues. We have also increased our SG&A expense estimates for FY20 by NZ$1.0m due to one-off legal fees in Australia, but lowered FY21 SG&A by NZ$0.5m due to slightly lower than anticipated sales and marketing expenses. Additionally, we have reduced our R&D expense estimates by NZ$1.5m for FY20 and by NZ$1.6m for FY21 as only NZ$0.2m was booked in the first half of FY20. Our FY20 operating profit estimate is up NZ$9.0m, mainly due to booking the non-cash gain on the acquisition of Pascomer intellectual property. For FY21, we increased our

operating profit estimate by NZ$1.6m. Our normalised profit before tax was lowered by NZ$2.7m in FY20 and NZ$1.2m in FY21, mainly due to higher than expected interest expense.

Exhibit 9: Edison forecast changes

NZ$m	2020e		2021e	
	Old	New	Old	New
Revenue	99.9	100.9	119.5	120.8
PBT, normalised	6.4	3.7	17.6	16.4
EPS, normalised (NZ$)	0.07	0.04	0.18	0.17

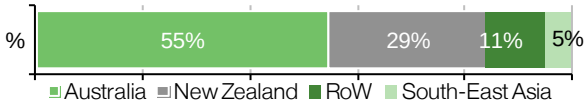
Source: Edison Investment Research

The company reported a cash position of NZ$7.3m and NZ$45.8m in debt (due on 31 March 2020) at the end of H120. NZ$30.8m of this debt is owed to Capital Royalty Group (CRG) with an interest rate of 13.5% and is US-denominated (which has increased the debt level because of a strong dollar). The company has established an NZ$15m interim banking facility with the Bank of New Zealand, which enabled it to repay CRG NZ$14.5m of the principal owed. Although the interim facility also expires on 31 March 2020, it carries a lower interest rate compared to the 13.5% for the CRG facility, so should help AFT save some financing costs as it negotiates a longer-term financing deal, which should also have a lower interest rate.

Exhibit 10: Financial summary

NZ$000	2018	2019	2020e	2021e
March	NZ GAAP	NZ GAAP	NZ GAAP	NZ GAAP
PROFIT & LOSS				
Revenue	81,176	85,127	100,911	120,758
Cost of Sales	(45,880)	(44,397)	(52,999)	(58,115)
Gross Profit	35,296	40,730	47,912	62,643
EBITDA	(10,479)	5,797	9,623	22,353
Operating Profit (before amort. and except.)	(10,353)	5,912	10,443	23,173
Intangible Amortisation	214	204	218	218
Exceptionals	0	0	9,785	0
Other	(364)	1,716	1,002	1,892
Operating Profit	(10,503)	7,832	21,448	25,282
Net Interest	(2,527)	(8,375)	(6,763)	(6,800)
Profit Before Tax (norm)	(12,880)	(2,463)	3,679	16,373
Profit Before Tax (reported)	(12,666)	(2,259)	14,684	18,482
Tax	(58)	(168)	(13)	0
Profit After Tax (norm)	(12,938)	(2,631)	3,667	16,373
Profit After Tax (reported)	(12,724)	(2,427)	14,671	18,482
Average Number of Shares Outstanding (m)	97.2	97.3	97.3	97.3
EPS - normalised (c)	(13.30)	(2.70)	3.77	16.83
EPS - (reported) (NZ$)	(0.14)	(0.03)	0.15	0.19
Dividend per share (c)	0.00	0.00	0.00	0.00
Gross Margin (%)	43.5	47.8	47.5	51.9
EBITDA Margin (%)	N/A	6.8	9.5	18.5
Operating Margin (before GW and except.) (%)	N/A	6.9	10.3	19.2
BALANCE SHEET				
Fixed Assets	8,291	12,334	28,424	32,014
Intangible Assets	5,118	8,239	23,410	27,578
Tangible Assets	330	357	4,304	3,726
Investments	2,843	3,738	710	710
Current Assets	48,312	51,261	49,008	61,435
Stocks	24,412	25,158	26,835	30,995
Debtors	16,954	19,187	19,998	19,372
Cash	6,946	6,916	2,175	11,069
Other	0	0	0	0
Current Liabilities	(18,607)	(58,504)	(64,481)	(18,099)
Creditors	(18,489)	(16,368)	(18,673)	(18,099)
Short term borrowings	0	(41,750)	(45,808)	0
Long Term Liabilities	(30,654)	0	0	(45,808)
Long term borrowings	(30,654)	0	0	(45,808)
Other long term liabilities	0	0	0	0
Net Assets	7,342	5,091	12,951	29,541
CASH FLOW				
Operating Cash Flow	(6,582)	9,610	9,807	20,322
Net Interest	(4,264)	(8,375)	(6,763)	(6,800)
Tax	(58)	(168)	(13)	0
Capex	(2,853)	(3,465)	(4,487)	(4,628)
Acquisitions/disposals	(3,002)	(1,419)	0	0
Financing	877	0	0	0
Dividends	(412)	(134)	(237)	0
Net Cash Flow	(16,294)	(3,951)	(1,693)	8,894
Opening net debt/(cash)	7,446	23,708	34,834	43,633
HP finance leases initiated	0	0	0	0
Other	32	(7,175)	(7,106)	(0)
Closing net debt/(cash)	23,708	34,834	43,633	34,739

Source: Edison Investment Research, company reports

Contact details	Revenue by geography
Level 1, 129 Hurstmere Road, Takapuna, Auckland, 0622 New Zealand +64 (0)9 488 0232 www.aftpharm.com	

Management team

Chief Executive Officer: Dr Hartley Atkinson

Hartley has a Master's of Pharmaceutical Chemistry with distinction (1983) and a Doctorate in Pharmacology from Otago University (1989). He published 17 research papers and two book chapters before entering industry. Before establishing AFT Pharmaceuticals, Hartley had eight years in multinational pharmaceutical companies in various positions, including medical director and sales and marketing director.

Chairman: David Flacks

David is chair of the NZ Markets Disciplinary Tribunal and a member of the Takeovers Panel. Directorships include Vero Insurance, Asteron Life, Harmoney Corp and NZ Venture Investment Fund. David is a director of specialist corporate law firm Flacks & Wong, having recently retired from Bell Gully after many years as a senior corporate partner.

Chief Financial Officer: Malcolm Tubby

Malcolm is a qualified chartered accountant in the UK and New Zealand with a wealth of senior corporate governance expertise in the commerce sector, including roles in significant public companies as chief financial officer. He has experience in senior positions in public and private companies in pharmaceuticals, beverages, insurance and aged care facilities in Australia and New Zealand. Malcolm has been involved in the AFT board since its foundation.

Director, International Business Development: Louise Clayton

Louise has over 20 years' functional experience with international business, key accounts, sales and marketing teams, with a core focus on brand growth and development in local and international markets such as Australia, the US, Asia, and the UK. Having worked with brands in the supplement, OTC, health and beauty channels, her experience has given her the opportunity to drive international brands through a variety of management roles encompassing sales, brand marketing, product sourcing/new product development and new market expansion.

Principal shareholders	(%)
Atkinson Family Trust	75.0%
Capital Royalty Partners	13.4%
National Nominees New Zealand Limited	3.6%
HSBC	1.0%

Companies named in this report

Mallinckrodt (MNK)

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