

Althea Group (AGH)

Medicinal Cannabis Marketer and Industry Educator - Initiation

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Summary

Althea Group (AGH) was founded in Melbourne in 2017 and has successfully acquired licences to import, cultivate, produce and supply medicinal cannabis (MC) for eligible patients across Australia. At 31 January 2020 it had supplied 4,590 patients (v 310 pcp up 15-fold) through 459 doctors and healthcare professionals (HCPs).

MC was legalised in Australia from October 2016. Estimated cumulative market share to Jan 2020 for AGH was ~33% based on our adjusted schedule B patient application data.

Currently AGH imports most of its MC from 5.25% shareholder Aphria Inc. of Canada (APHO.TO) under a long-term supply agreement. AGH has an approved 40,000 sq m site in Skye near Frankston for a 4,080 square metre greenhouse cultivation, extraction and pharmaceutical manufacturing facility, but with over-supply in Canada and new countries such as Portugal opening up new sources of supply, AGH sensibly deferred this capital intensive project.

Patient and doctor education is a key part of AGH's business strategy, with "Althea Concierge" website and mobile app, and "MEDIC" educational portal for doctors / HCPs.

AGH has also entered the UK market where it has opened 2 specialist prescribing clinics. It has applied for an import licence in Germany. In October AGH acquired Peak Processing Solutions in Canada, an early stage business that plans to become a contract manufacturer for cannabis infused recreational and wellness products (e.g. edibles & beverages).

AGH has established a number of partnerships and alliances to reduce risk, and secure a sustainable market share. However AGH is still an early stage company, incurring establishment losses, and negative cash flows. It should be considered a very high risk investment.

Recommendation – 12mth Price Target \$0.29

In just 3 years, AGH has secured key regulatory licences in Australia and the UK, and has established itself as one of the leaders in the Australian MC market, under-pinned by a number of important partnerships. We like the education-based strategy, and the potential to replicate the early Australian success in the UK and Germany. The Canadian edibles / beverages segment is also a new and potentially large opportunity following legalisation in October 2019.

Revenue growth is very large, coming off a low base as AGH, and its markets are still in early establishment phase, so a wide range of outcomes are possible.

Our valuation range is \$0.29 to \$0.52 per share, with the performance of the new Peak business in Canada the key swing factor. We initiate coverage with a HOLD recommendation, and set our 12-month price target at the lower end of our valuation range.

Recommendation

Hold PT \$0.29

Risk Rating	High
12-mth Target Price (AUD)	\$0.29
Share Price (AUD)	\$0.285
12-mth Price Range	\$0.295 - \$1.445
Forecast 12-mth Capital Growth	1.8%
Forecast 12-mth Dividend Yield	0.0%
12-mth Total Shareholder Return	1.8%
Market cap (\$m)	66.5
Net debt (net cash) (\$m)(June 20e)	(4.6)
Enterprise Value (\$m)	61.9
Gearing (Net Debt/ Equity)	N/a – Net Cash
Shares on Issue (m)	233.3
Sector	Healthcare - Biotechnology
Average Daily Value Traded (\$)	\$713,000
ASX 300 Weight	n/a

Financial Forecasts & Valuation Metrics

Years ending June \$m	18(A)	19(e)	20(e)	21(e)	22(e)
Sales revenue	0.0	0.8	5.5	23.4	69.4
Sales growth	n/a	6873%	622%	323%	196%
Operating costs	-1.9	-7.9	-16.0	-19.4	-28.1
EBITDA	-1.9	-7.3	-12.5	-6.9	7.5
NPAT (reported)	-1.9	-8.7	-15.5	-8.8	5.5
NPAT (adjusted)	-1.9	-7.3	-14.3	-8.8	5.5
EPS (adjusted)	-0.9	-3.6	-6.2	-3.7	1.8
EPS growth	nm	292%	72%	-40%	-149%
DPS	0.0	0.0	0.0	0.0	0.0
P/E	-31.0	-7.9	-4.6	-7.6	15.5
EV / Ebitda	-34.3	-7.1	-4.9	-7.7	6.6
EV / Sales	nm	67.3	11.2	2.3	0.7

Source: Phillip Capital estimates; FY18 & FY19 eps use post IPO share count

AGH SHARE PRICE PERFORMANCE



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Company Description – A leader in Australian Medicinal Cannabis

Althea Group Holdings Limited (AGH) is a Melbourne-based producer, supplier and exporter of pharmaceutical grade medicinal cannabis (MC) founded in 2017. AGH listed on the ASX in September 2018 raising \$19.65m under a prospectus offer at \$0.20 per share valuing the company at \$40.7m at the offer price.

AGH’s MC products are mostly manufactured by Aphria Inc. (APHO.TO, market cap A\$7.4bn) a licensed Canadian producer of MC and part owner of Althea (5.25% stake under a long-term supply agreement). AGH commenced importing and supplying MC to Australian patients in May 2018. AGH has a third party warehousing and distribution agreement with a Melbourne based pharmaceutical company.

AGH is focussed on the medicinal cannabis market In Australia and the UK, not the recreational cannabis market. However its recent investment in Peak in Canada will take it into the cannabis infused food and beverages market, as a contract producer, which will be in the non-medical / recreational segment.

Products

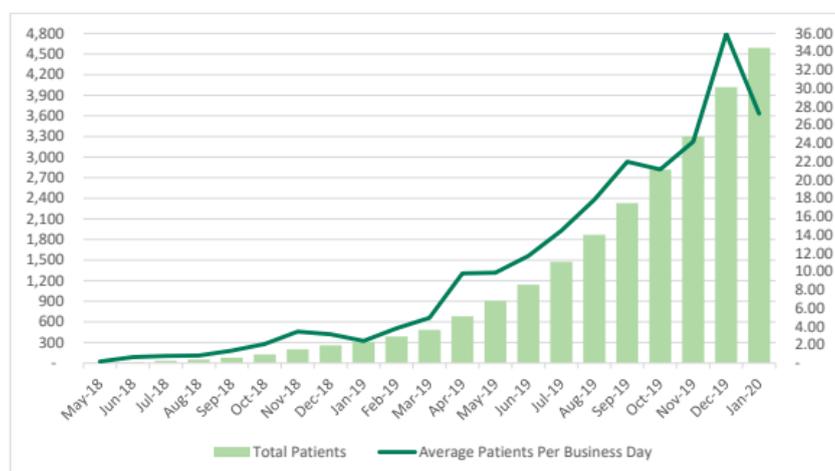
AGH launched in May 2017 with 5 products, all made by Aphria Inc. in Canada, and recently added a 6th product, made under contract in Australia – a highly concentrated CBD oil called “CBD100”.

AGH: Products	Product Size	RRP	RRP per mL
Cannabis Oils			
CBD 100 Cannabis oil (new highly concentrated product)(THC < 1 mg/mL; CBD 100mg/mL)	25 mLs	\$ 299	\$ 11.96
Rideau Cannabis oil (THC 1 mg/mL; CBD 23 mg/mL)	50 mLs	\$ 299	\$ 5.98
Jasper Cannabis oil (THC 5 mg/mL; CBD 8 mg/mL)	50 mLs	\$ 299	\$ 5.98
Capilano Cannabis oil (THC 9 mg/mL; CBD 13 mg/mL)	50 mLs	\$ 299	\$ 5.98
Champlain Indica Cannabis oil (THC 20 mg/mL; CBD <1 mg/mL)	100 mLs	\$ 299	\$ 5.98
Dried Flower			Price per gram
Henik Cannabis Dried Flower (THC 20%)	10 grams	\$ 299	\$ 29.90
New products coming			
Oral spray ???			
Others ???			

Source: AGH prospectus; ASX announcements; Discussions with management
 THC = delta-9-tetrahydrocannabinol (intoxicating)
 CBD = cannabidiol (non-intoxicating)

Market Share

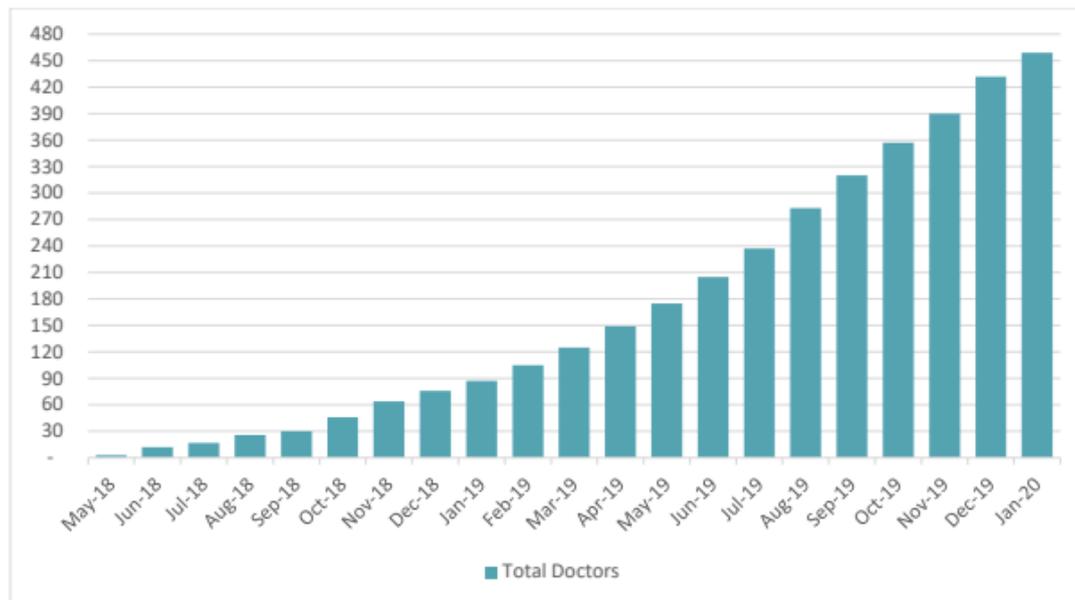
In a relatively short period of time, AGH has established itself as one of the leaders in the Australian MC market, with its “patient first” and education based strategy. At 31 January 2020, AGH had 4,590 patients who have been prescribed Althea branded MC. We estimate AGH’s market share to be approximately 32% (based on approximately 24,000 TGA Category B approvals, adjusted for TGA double counting of 6 monthly scrips and patients with multiple prescriptions).



Source: AGH announcement 11/2/20

Market Penetration

At end-January 2020 AGH had over 459 doctors / Australian Healthcare Professionals (HCPs) who have prescribed AGH's products, up eleven-fold from 42 in October 2018 shortly after its IPO.



Source: AGH announcement 11/2/20

Education Platforms

- Althea Concierge is AGH's web-based education platform and mobile app designed to educate and support patient access to MC in Australia. Launched September 2018. It is aimed at both patients and doctors. It is currently available to patients and doctors in Australia and the UK, with Germany and Canada (possible licence to Aphria).
- Medic (Medical Education in Cannabinoids) is a free online education portal for healthcare professionals (doctors, psychiatrists etc.) wanting to learn more about the safety, clinical considerations and areas of use of MC. It was developed by Hahn Healthcare through exclusive sponsorship from AGH. Medic is accredited in Australia by the RACGP (The Royal Australian College of General Practitioners) and ACRRM (Australian College of Rural and Remote Medicine), and in the UK. It is only available for healthcare professionals. They can earn continuing professional education (CPD) points with every course module completed.

Cultivation & Manufacturing

AGH has a long term lease (30 years) on a 10 acre (40,000 sqm) vacant site in Skye, near Frankston (see Google Maps image at Appendix 2). It recently obtained Council approval to construct a 4,080 square metre greenhouse cultivation, extraction, and manufacturing facility (scalable to 21,000 sqm). The goal is to produce approximately 3 tonnes of high grade dried MC flower each year at the facility. Construction was originally intended to start and be completed by the end of 2019 for an estimated cost of \$11.2m per the prospectus.

However in its December quarterly report, AGH announced the project had been put on hold due to the shift in the international cannabis landscape, particularly the increasing number of cannabis growers (cultivators).

AGH has also entered into discussions regarding a possible cultivation and manufacturing facility in Portugal.

International

AGH has entered the UK and Canadian markets recently, and announced plans to enter the German market in early 2020.

MC was legalised in the UK from 1 November 2018. AGH commenced its market entry to the UK in February 2019, and received its import licence in July 2019. It opened a dedicated MC prescribing clinic in Belgravia London in July, followed by another in Bristol (October 2019) with London to open soon. These trade under the brand “My Access Clinics”. See: www.myaccessclinics.co.uk. Medical education has replicating the successful Australian strategy. A UK version of Althea Concierge was launched in May 2019.

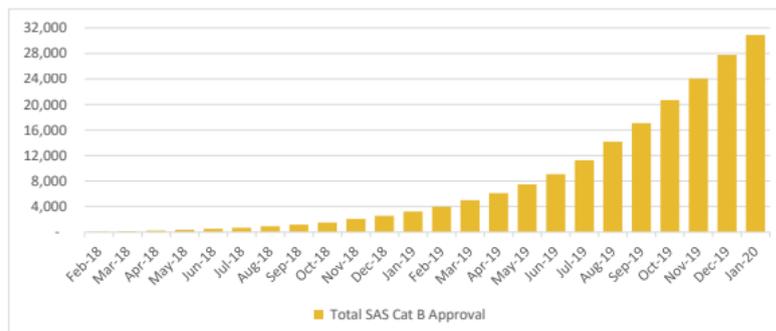
In July 2019 AGH acquired Peak Processing Solutions, a Canadian based extraction and contract manufacturer which has applied for a large scale infused cannabis processor licence (expected early 2020), aiming to service other companies and brands looking to launch recreational cannabis and CBD (cannabidiol) wellness products e.g. cannabis infused edibles, topicals and beverages.

In November 2019, AGH announced plans to enter the German market in early 2020 with the appointment of Nimbus Health GmbH as distributor. Nimbus applied for an import licence in November 2019. AGH plans to develop a local version of its Althea Concierge and MEDIC educational platforms for the German market. In May 2016 the Cabinet of Germany approved legislation allowing the use of cannabis for seriously ill patients who have consulted with a doctor and have no therapeutic alternative. The legislation took effect on March 10, 2017.

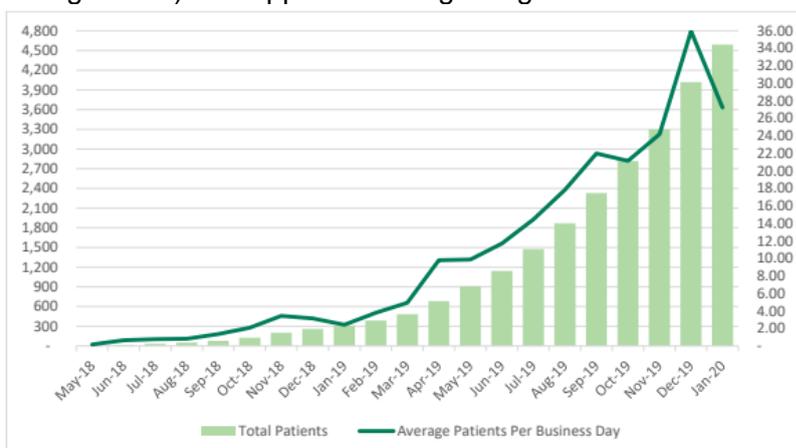
Under current MC legislation, German public health insurers, which cover 90% of the population, are mandated to provide coverage for up to 140 grams eligible cannabis medications per month, making Germany one of the most potentially valuable MC markets in Europe (Source: mjobserver.com 3/1/20).

Positive Factors / Reasons to Buy

- 1. Australian Medicinal Cannabis (MC) market still in its infancy, but growing exponentially.** The number of Special Access Scheme approvals (SAS-B) granted to patients by the TGA has increased 11-fold from 2,560 at December 2018 to approximately 31,000 at end January 2020. And this is growing by approximately 3,400 approvals per month (3 month moving average +3,412) or 11% per month.

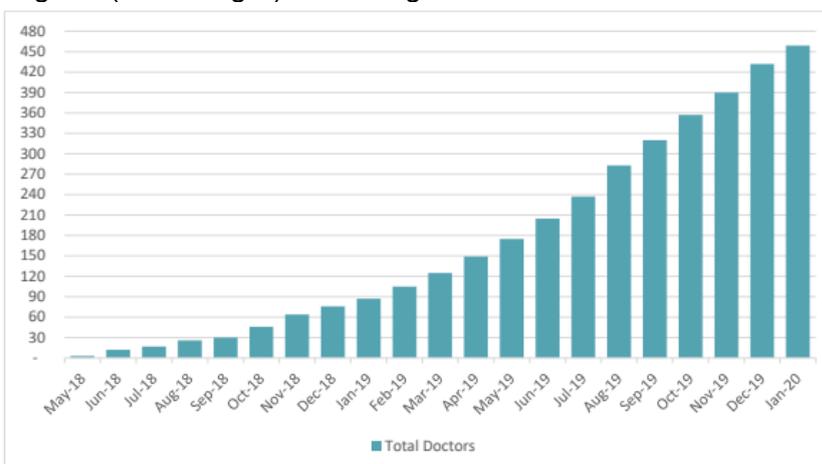


- 2. AGH patient numbers also growing exponentially –** AGH patient numbers have increased from 259 at December 2018 to 4,590 at end-January 2020, up 17-fold. AGH is adding nearly 600 patients per month (3 month moving average +592) and appears to be gaining market share.



Source: AGH 11/2/20 ASX announcement

- 3. AGH prescribing doctors also growing exponentially –** AGH has increased the number of doctors / healthcare professionals (HCP's) prescribing its products from 76 at December 2018 to 459 at end January 2020, up 6-fold. This confirms that AGH's doctor and patient education program ("Concierge") is working well.



Source: AGH 11/2/20 ASX announcement

4. **Involvement in Clinical research trials to grow the market** - AGH is one of only a few MC companies supplying the Care NSW clinical trial through the University of Newcastle, and also a planned 20,000 patient trial in the UK for an independent scientific body called Drug Science (Project TWENTY21). Assuming positive results from such trials, we expect these results to help grow the market by providing clinical evidence of the safety and efficacy of MC as a medicine, which should give both doctors and patients become more confidence. AGH's direct involvement in these trials should have both an awareness and a marketing benefit, even though the trial results and data will be owned by others. We see this as a low cost way of AGH (and others) growing the MC market.
5. **New products** – AGH commenced sales in late FY18 with 5 initial products (4 oils and 1 dried flower) and has recently added a high potency 100mg/ml cannabidiol (CBD) product (Althea CBD100 cannabis oil). AGH expects Althea CBD100 to be a strong seller, possibly accounting for up to 30% of sales based on anecdotal industry feedback.
6. **UK and German opportunities** – AGH commenced selling MC products into the UK in July 2019 to pharmacies, and has opened 2 of its own specialist MC access clinics. MC was legalised in the UK from 1 November 2018, but access rules are very tight, such that AGH has only supplied 88 patient prescriptions to date (to January 2020). But with an estimate ~7m people using cannabis products illegally, the UK represents a big opportunity if the access rules are relaxed. The proposed 20,000 patient trial planned to be conducted by UK organisation Health Science may help open up the UK market. Industry analysts Prohibition Partners estimate the UK market could be 330,000 patients by 2024.
7. **Planned German market entry** – MC was legalised there from 10 March 2017. AGH has announced an import partner, and plans for a German version of Althea Concierge and Medic education platforms, to replicate its Australian success. The German market has opened up much more quickly than the UK, with an estimated 60,000 patients at 31 December 2018 due to easier access regulations. Industry analysts Prohibition Partners estimate the German market could be 1.0 million patients by 2024.
8. **New Canada contract manufacture opportunity** (for cannabis infused edibles, beverages or topicals). In September 2019, AGH acquired Peak Processing Solutions, an early stage contract pharmaceutical manufacturer with a freehold factory in Ontario Canada. The business was acquired from Gregg Battersby, the former President of Aphria Inc. and will be managed semi-autonomously by Gregg and 4 ex-Aphria senior managers. AGH has high hopes that a large and sustainable business can be created here.

AGH Canada - Phillip Capital estimates	Year FY20e	1H21e	2H21e	Year FY21e	1H22e	2H22e	Year FY22e
Contract manufacturing sales (C\$m)	0.0	3.0	4.0	7.0	18.0	18.0	36.0
Ebitda (C\$m)	0.0	0.9	1.2	2.1	5.4	5.4	10.8
Ebitda margin	0%	30%	30%	30%	30%	30%	30%
Contract manufacturing sales A\$m	0.0	3.4	4.5	8.0	20.5	20.5	40.9
Ebitda (A\$m)	0.0	1.0	1.4	2.4	6.1	6.1	12.3
Ebitda margin	0%	30%	30%	30%	30%	30%	30%
Earn-out performance target 1 Canadian licence granted	Assume Yes						
Earn-out performance target 2 C\$7.0m of sales within 12 mths of licence C\$2.0m of Ebitda				7.0 2.1	Assume Yes Assume Yes		
Earn-out performance target 2 C\$25.0m of sales within 18 mths of licence C\$12.5m of Ebitda					18mth cumulative: 25.0 7.5	Assume Yes Assume No	

9. **Sensible, partnership-based strategy** – To date AGH has adopted a careful strategy partnership based strategy, benefitting from the experience and product cultivation, manufacturing, marketing and supply of Aphria Inc. in Canada, to help it navigate a path towards growth and profitability. We are pleased with the recent decision to put the previously proposed greenhouse and manufacturing build at Skye (Frankston) on hold, given more economical alternatives and seeing Cann Group (CAN)'s difficulties in financing its major greenhouse project at Mildura.
10. **Adequately funded to achieve profitability** – AGH had net cash of \$22.4m at end-December 2019. We forecast this will reduce to around \$5m at June 2020 after the set up and establishment costs of the Peak Processing Solutions contract manufacturing business in Canada. However we forecast that a \$20m capital raising will be required during FY21, This might be avoided depending on how the new business in Canada performs, but we have factored a capital raise in to be conservative.

Risks / Negative Factors

- 1. Competition / Barriers to Entry** – In Australia, MC is a fairly new, highly regulated industry with high selling prices and high margins, but this has already attracted a lot of new entrants. The Australian regulator (TGA) has already issued over 80 MC licences of various kinds and does not publish a full list. Whilst many of these companies may be small, private companies with limited funding, there are around 20 MC related companies already listed on the ASX which arguably have reasonable access to public markets for funding. Some of the private operators may also look to float at some stage. The recent shake-out has already seen Cann Group (CAN) scale back its Mildura project (construction stalled, and planned scaled back to ~\$120m whilst it seeks additional finance) and AGH put its cultivation and manufacturing project at Skye (Frankston) on hold. We will watch with interest the progress of THC Global (THC)'s new Southport manufacturing facility in Q1 (uses imported crude cannabis extract), Cann Group (CAN)'s refinancing, and an unlisted player's first few large-scale MC crops in Brisbane.
- 2. Major pull-back in overseas listed MC companies** – There has been a major correction in the share prices of most listed Canadian and US MC stocks which are down on average -70% over the last 12 months, we think on fears of industry over-supply, excessive competition and a couple of major corporate governance failures. The two MC exchange traded funds (ETFs) we found are down an average of -60%. This pull back has also de-rated the ASX listed MC stocks which are down an average of 44%. AGH itself has pulled back from an all-time high of \$1.45 to \$0.33 per share currently, down -78%. The silver lining is that this correction may strengthen the market position of the more established operators and early movers such as AGH, and make it harder for new entrants and secondary players to secure adequate funding.

Sector	Market Cap \$m	Net Cash (Debt)	Performance (TSR)		
			-1 Mths	-3 Mths	-12 Mths
Australian MC stocks	755.7	272.9	-28.4%	-19.7%	-43.7%
International MC stocks	22,509.4	4,402.0	-18.6%	-17.4%	-69.8%
MC ETFs (MJ & HMMJ.TO)			-14.7%	-11.0%	-59.8%
Aust Vs International			-9.8%	-2.3%	26.1%

Source: Refinitiv price data for selected MC stocks & ETFs

- 3. AGH has growing revenues, but is still a loss making, early stage company** and is also cash flow negative. So AGH is currently not self-funding, and is dependent on the equity market to fund its growth and continuing losses. AGH should be considered a high risk investment.
- 4. UK expansion looks tough given tight access restrictions there** – With UK MC approval volumes so low, it is difficult to see AGH's operation becoming profitable there unless the access rules are relaxed. A number of commentators we have read think this will happen, given more accessible rules in many other countries including Australia.
- 5. Canadian contract manufacturing business looks high risk, and we have limited visibility.** AGH's Peak Processing Solutions business is effectively a start-up, being run by several senior managers ex-Aphria to try to take advantage of the new rules allowing cannabis infused edibles, beverages and topicals. Whilst these managers would no doubt have a good understanding of the new opportunity, we caution that does not guarantee success. And AGH has bought 100% of this business and is funding it.

AGH Share Price Catalysts

1. Canadian manufacturing licence expected approximately April, which would allow commencement of contract manufacturing and revenues (Peak Processing Solutions).
2. Canada – initial new customer announcements expected, and product launch details. This could give investors (and us) a lot more confidence.
3. Quarterly cash flow and operations reports demonstrating continued growth in patients, doctors / HCPs, and revenues. And Peak's revenues once operational.
4. UK milestones – achieving significant prescription numbers – either directly, or more likely into the TWENTY21 clinical trial planned by Drug Science.
5. German milestones – commencement of sales in Germany.
6. Positive progress by other local ASX-listed MC players – E.g. THC Global (THC)'s Southport manufacturing operation which recently commenced; Cann Group's (CAN) refinancing and possible re-start of construction at Mildura; Zelira Therapeutics (ZLD)'s full clinical trial results for chronic insomnia (due shortly). Successful progress by these and other sector participants could boost confidence in the local sector which has under-performed dramatically in the past 12 months.

Sector Share Price Performance

We show below a table of AGH's major listed peers in North America (mostly Canada) and in Australia.

Nearly all cannabis stocks have declined in the last 12-months, following a strong period of out-performance. In our opinion, the issues driving the recent correction include fears of over-capacity in cultivation and production, new cheaper supply potentially coming on stream from countries such as Lesotho / South Africa, Portugal and South America, some well publicised corporate governance blow-ups (see CannTrust Holdings (TRST.TO) in Canada), and excessive spending with some companies unlikely to ever make a profit.

Refinitiv Code	Company	Market Cap \$m	Net Cash (Debt)	Price A\$ 27-02-20	Performance (TSR)			Year End
					-1 Mths	-3 Mths	-12 Mths	
		FY0						
CAN.AX	Cann Group Ltd	132.5	46.4	0.930	-42.2%	76.8%	-49.9%	30-06-20
AC8.AX	Auscann Group Holdings Ltd	101.2	35.3	0.255	-13.3%	18.2%	-40.2%	30-06-19
BOT.AX	Botanix Pharmaceuticals Ltd	77.8	4.7	0.080	-11.7%	-21.0%	-24.5%	30-06-20
AGH.AX	Althea Group Holdings Ltd	73.5	14.9	0.315	-35.1%	-24.7%	-28.2%	30-06-19
MDC.AX	Medlab Clinical Ltd	60.6	10.5	0.260	-23.2%	-28.4%	-30.3%	30-06-19
EXL.AX	Elixinol Global Ltd	57.9	42.7	0.420	-62.6%	-60.9%	-87.7%	31-12-20
ZLD.AX	Zelira Therapeutics Ltd	45.4	3.1	0.047	-28.4%	-27.3%	-9.4%	30-06-19
THC.AX	Thc Global Group Ltd	44.3	5.9	0.315	-25.6%	-21.8%	-39.0%	31-12-18
CGB.AX	Cann Global Ltd	38.5	(1.2)	0.012	-35.3%	-35.3%	-70.3%	30-06-19
MXC.AX	MGC Pharmaceuticals Ltd	35.1	2.4	0.025	-25.7%	-23.5%	-33.3%	30-06-20
MMJ.AX	MMJ Group Holdings Ltd	21.8	95.5	0.097	-31.4%	-46.7%	-61.6%	30-06-20
BDA.AX	BOD Australia Ltd	21.5	2.8	0.235	-20.0%	-29.4%	-52.0%	30-06-19
CPH.AX	Creso Pharma Ltd	19.7	3.7	0.095	-45.1%	-53.2%	-75.1%	31-12-18
RGI.AX	Roto-Gro International Ltd	14.6	3.0	0.105	-4.5%	-22.2%	-62.5%	30-06-19
CP1.AX	CannPal Animal Therapeutics Ltd	11.2	3.3	0.120	-21.9%	4.2%	8.7%	30-06-19
Selected Aust Cannabis stocks		755.7	272.9		-28.4%	-19.7%	-43.7%	
GWPH.O	GW Pharmaceuticals PLC	3,308.7	531.4	107.000	-6.6%	8.3%	-38.5%	31-12-20
TLRY.O	Tilray Inc	1,584.0	88.5	15.890	-19.5%	-20.7%	-80.0%	31-12-19
WEED.TO	Canopy Growth Corp	9,230.8	3,569.0	26.400	-11.3%	9.7%	-56.1%	31-03-20
CRON.TO	Cronos Group Inc	2,777.6	11.7	8.080	-19.1%	-10.2%	-71.2%	31-12-19
ACB.TO	Aurora Cannabis Inc	2,349.6	(328.9)	2.010	-22.7%	-37.4%	-79.7%	30-06-20
APHA.TO	Aphria Inc	1,295.1	82.4	5.100	-26.4%	-15.1%	-61.9%	31-05-20
CWEB.TO	Charlotte's Web Holdings Inc	681.9	73.0	7.180	-29.8%	-43.5%	-63.1%	31-12-19
OGI.TO	OrganiGram Holdings Inc	515.7	(1.6)	3.140	-13.0%	-7.6%	-62.4%	31-08-20
HEXO.TO	Hexo Corp	456.3	106.1	1.670	-9.2%	-37.5%	-77.4%	31-07-20
TGOD.TO	Green Organic Dutchman Holdings Ltd	169.6	212.4	0.540	-21.7%	-26.0%	-86.2%	31-12-19
TRST.TO	CannTrust Holdings Inc	140.1	58.0	0.990	-25.6%	-11.6%	-91.8%	31-12-19
Selected International Cannabis stocks		22,509.4	4,402.0		-18.6%	-17.4%	-69.8%	
MJ	ETFMG Alternative Harvest ETF	658.1		14.940	-14.3%	-10.3%	-58.0%	
HMMJ.TO	Horizons Marijuana Life Sciences Index	404.6		7.750	-15.2%	-11.7%	-61.6%	

Source: Refinitiv; Note GWPH.O and TLRY.O are in USD. Other international stocks and ETFs are in C\$

Valuation & Recommendation

Refinitiv Code	Company	Market Cap \$m	Net Cash (Debt) A\$	Revenue			Ebitda			Ebitda Margin		Revenue Growth		EV / Sales			EV / Ebitda		
				\$m	\$m	\$m	\$m	\$m	\$m	FY1e	FY2e	FY1e	FY2e	FY0	FY1e	FY2e	FY1e	FY2e	
CAN.AX	Cann Group Ltd	132.5	46.4	0.930	2.3	5.5	29.2	(10.2)	(10.3)	(2.0)	-186.4%	-6.7%	134.3%	430.9%	98.6x	22.9x	4.3x	NaN	NaN
AC8.AX	Auscann Group Holding	101.2	35.3	0.255	0.9	NaN	NaN	(5.6)	NaN	NaN	NaN	NaN	NaN	NaN	82.3x	NaN	NaN	NaN	NaN
BOT.AX	Botanix Pharmaceutic	77.8	4.7	0.080	0.2	-	12.0	(21.6)	(13.6)	(6.5)	NaN	-54.3%	NaN	NaN	691.0x	NaN	NaN	6.1x	NaN
AGH.AX	Althea Group Holding	73.5	14.9	0.315	1.0	5.5	23.4	(7.3)	(12.5)	(6.9)	-226.0%	-29.4%	469.3%	322.7%	81.0x	10.3x	2.6x	NaN	NaN
MDC.AX	Medlab Clinical Ltd	60.6	10.5	0.260	7.8	NaN	NaN	(8.2)	NaN	NaN	NaN	NaN	NaN	NaN	8.1x	NaN	NaN	NaN	NaN
EXL.AX	Elixinol Global Ltd	57.9	42.7	0.420	37.6	32.8	34.2	0.3	(13.0)	(17.3)	-39.7%	-50.5%	-12.6%	4.2%	7.2x	0.5x	0.4x	NaN	NaN
ZLD.AX	Zelira Therapeutics Ltd	45.4	3.1	0.047	0.9	NaN	NaN	(3.4)	NaN	NaN	NaN	NaN	NaN	NaN	31.6x	NaN	NaN	NaN	NaN
THC.AX	The Global Group Ltd	44.3	5.9	0.315	2.7	NaN	NaN	(7.5)	NaN	NaN	NaN	NaN	NaN	NaN	20.0x	NaN	NaN	NaN	NaN
CG8.AX	Cann Global Ltd	38.5	(1.2)	0.012	0.6	NaN	NaN	(5.3)	NaN	NaN	NaN	NaN	NaN	NaN	NULL	NaN	NaN	NaN	NaN
MXC.AX	MGC Pharmaceuticals	35.1	2.4	0.025	0.9	2.4	7.3	(8.2)	(7.9)	(5.8)	-325.5%	-79.7%	181.1%	203.8%	70.6x	13.5x	4.4x	NaN	NaN
MMJ.AX	MMJ Group Holdings Ltd	21.8	95.5	0.097	0.1	NaN	NaN	(2.6)	NaN	NaN	NaN	NaN	NaN	NaN	-303.1x	NaN	NaN	NaN	NaN
BDA.AX	BOD Australia Ltd	21.5	2.8	0.235	0.9	NaN	NaN	(7.4)	NaN	NaN	NaN	NaN	NaN	NaN	23.3x	NaN	NaN	NaN	NaN
CPH.AX	Creso Pharma Ltd	19.7	3.7	0.095	0.7	NaN	NaN	(14.9)	NaN	NaN	NaN	NaN	NaN	NaN	79.0x	NaN	NaN	NaN	NaN
RGI.AX	Roto-Gro International	14.6	3.0	0.105	1.1	NaN	NaN	(4.8)	NaN	NaN	NaN	NaN	NaN	NaN	15.6x	NaN	NaN	NaN	NaN
CP1.AX	CannPal Animal Thera	11.2	3.3	0.120	0.4	NaN	NaN	(2.0)	NaN	NaN	NaN	NaN	NaN	NaN	26.6x	NaN	NaN	NaN	NaN
Selected Aust Cannabis stocks		755.7			58.0	46.3	106.2	(108.7)	(57.3)	(38.5)	-206.2%	-50.5%	157.7%	263.3%	29.1x	11.9x	4.3x		
GWPH.O	GW Pharmaceuticals Plc	3,308.7	531.4	107.000	311.3	533.3	839.6	NaN	39.4	264.3	7.4%	31.5%	71.3%	57.4%	8.7x	5.2x	3.3x	70.4x	10.5x
TLRY.O	Tilray Inc	1,584.0	88.5	15.890	43.1	175.1	302.6	(54.1)	(76.2)	(44.1)	-43.5%	-14.6%	306.1%	72.8%	150.3x	10.8x	6.3x	NaN	NaN
WEED.TO	Canopy Growth Corp	9,230.8	3,569.0	26.400	226.3	424.2	725.8	(544.7)	(428.3)	(211.5)	-101.0%	-29.1%	87.4%	71.1%	71.7x	18.4x	10.7x	NaN	NaN
CRON.TO	Cronos Group Inc	2,777.6	11.7	8.080	15.7	47.8	144.0	(27.2)	(71.6)	(49.6)	-149.7%	-34.5%	204.5%	201.2%	163.1x	16.6x	5.5x	NaN	NaN
ACB.TO	Aurora Cannabis Inc	2,349.6	(328.9)	2.010	247.9	281.3	455.7	(305.3)	(166.6)	17.7	-59.2%	3.9%	13.5%	62.0%	43.4x	9.8x	6.0x	NaN	155.1x
APHA.TO	Aphria Inc	1,295.1	82.4	5.100	237.1	542.6	700.7	(81.5)	26.6	93.2	4.9%	13.3%	128.8%	29.1%	9.2x	2.4x	1.9x	49.9x	14.2x
CWEBB.TO	Charlotte's Web Holdings Inc	681.9	73.0	7.180	69.5	99.2	148.0	18.1	10.0	19.4	10.1%	13.1%	42.7%	49.2%	13.9x	5.0x	3.4x	49.7x	25.6x
OGI.TO	OrganiGram Holdings Inc	515.7	(1.6)	3.140	80.4	131.4	215.4	4.4	31.2	65.7	23.7%	30.5%	63.4%	63.9%	10.9x	4.3x	2.6x	18.1x	8.6x
HEXO.TO	Hexo Corp	456.3	106.1	1.670	47.5	80.5	166.2	(86.6)	(57.2)	(2.8)	-71.1%	-1.7%	69.3%	106.5%	28.0x	5.7x	2.7x	NaN	NaN
TGOD.TO	Green Organic Dutchman	169.6	212.4	0.540	1.9	10.8	73.9	(43.8)	(57.8)	(29.3)	-535.7%	-39.6%	474.0%	585.1%	240.4x	13.8x	2.0x	NaN	NaN
TRST.TO	CannTrust Holdings Inc	140.1	58.0	0.990	45.6	40.1	62.0	(15.3)	(26.8)	(18.0)	-66.8%	-29.0%	-12.1%	54.6%	13.9x	2.8x	1.8x	NaN	NaN
Selected International Cannabis		22,509.4			1,326.5	2,366.3	3,833.9	(1,081.9)	(740.6)	(115.1)	-59.2%	-1.7%	71.3%	63.9%	66.1x	8.8x	4.1x	47.0x	42.8x
MJ	ETFMG Alternative Holdings	658.1	NaN	14.940															
HMMJ.TO	Horizons Marijuana Ltd	404.6	NaN	7.750															

Source: Refinitiv consensus estimates; Phillip Capital estimates for Althea AGH; NaN means no available number. GWPH & TLRY are in USD. Canadian stocks are in C\$. Averages are either mean averages, or medians where there are a lot of negative numbers

We show above valuation comparison data for AGH's local and international peers, sorted in descending order of market capitalisation for each group. Brokers analyst coverage is limited for the Australian group with only 2 brokers covering CAN, and 1 broker each covering BOT, EXL and MXC according to Refinitiv (Thomson Reuters).

The Australian stocks had combined revenues of just \$58m last year, mostly from Elixinol Global (EXL) and Medlab Clinical (MDC). This is expected to increase to a combined \$106m in FY2 (FY21).

Looking at international comparisons, the combined revenue for the 11 stocks we selected was ~C\$1.3bn which is expected to increase to C\$2.4bn in FY1 (mostly CY19) and C\$3.8bn in FY2 (mostly CY20). Only 2 companies were profitable at the Ebitda level last year (Charlotte's Web and Organigram), although this is forecast to improve to 5 companies in two years' time. The EV / Sales multiple (Enterprise value to Sales) is expected to improve from 66x last year to a more reasonable 8.8x FY1 (FY19) and 4.1x FY2 (FY20). EV/ Ebitda multiples look unreliable to us for this sector at this stage in their business development.

The MC industry both overseas, and here in Australia still appears to be in its infancy, with companies trading on widely disparate EV/ Sales and EV/ Ebitda multiples, few companies with real earnings so traditional P/E based earnings analysis is not possible, losses are more common than profits, and no dividends on any of the stocks that we could find based on consensus forecasts.

Althea valuation

We value AGH shares on a sum of the parts basis.

AGH has achieved impressive growth in patients and Doctors, and a very strong market share based on our analysis of the SAS-B approvals data. We think a realistic basis for this early stage business, which seems to be out-performing the competition, would be 3-4x FY21 Sales. This is based on the international multiples of around 4.1x FY2 sales.

For the UK business, we find it hard to ascribe much value currently, until we see some firm evidence of traction in the marketplace with patient numbers and or

prescribing doctor numbers. We use a nominal \$1.0m in our high case to reflect the time, cost and effort that AGH has already invested to get to the current position – at the starting blocks.

For the German business, we find it hard to ascribe much value currently, as operations haven't started, and we have little detail.

For Peak Processing, the contract manufacturing business in Canada, we have a wide valuation range as we have very little information to go on. We have assumed that Peak Processing achieves some of its performance targets as follows:

- Revenue of C\$7m within the first 12 months of achieving approvals, and C\$2.0m of Ebitda (implies 28.6% ebitda margin). We assume the revenue target is met in the FY21 year, and have used a 30% ebitda margin for simplicity. (A\$8.0m of revenue and A\$2.4m of ebitda).
- Revenue of C\$25m within the first 18 months, and Ebitda of C\$12.5m (implies 50% Ebitda margin). We have assumed that the revenue target is met (C\$7.0m in FY21 plus C\$18m in 1H22), but only a 30% ebitda margin is achieved for the 18-month period. We assume revenue of C\$36m in the full year of FY22 (A\$40.9m), and a 30% ebitda margin. So A\$40.9m revenue and A\$12.3m ebitda.
- We use the fully diluted share count, including shares for the first 2 earn-out performance targets for the Peak acquisition (but not the third target).

Our valuation range is \$0.29 to \$0.52 per share, with the valuation of the Canadian contract manufacturing business the key swing factor.

We set our 12-month price target at \$0.29 per share, and rate the stock a HOLD. Success with the new Peak Processing Solutions business in Canada offers clear potential upside, but we do not have sufficient confidence yet. Some investors may prefer to take a more bullish stance.

AGH - Phillip Capital Valuation			Low case	High case
		Method	\$m	\$m
1	Australian business	Low case: 3x FY21 sales; High case: 4x FY21 sales	38.8	51.8
2	UK Business	Nominal value for licences, premises, staff etc	0.0	1.0
3	German start up	Nominal value	0.0	0.1
4	Canada - Peak Processing	Acquisition cost Estimated capex & set up costs High case: 5x FY21 ebitda	20.0 8.0	73.6
5	Forecast Cash at June 2020		4.6	4.6
	Total Valuation		71.4	131.1
	Shares on issue	Fully Diluted shares now Plus contingent consideration shares - Canada licence granted Plus contingent consideration shares - C\$7m of sales & \$2.5m Ebitda within 12 mths Plus contingent consideration shares - C\$25m of sales & \$12.5m Ebitda within 18 mths	238.41 5.7 5.7 0.0 249.8	238.41 5.7 5.7 0.0 249.8
	Value per share (\$)		\$ 0.29	\$ 0.52

Source: Phillip Capital estimates and assumptions

1H20 Results & Phillip Capital Forecasts

We show below the historical results for the company including 1H20 just announced, and our forecasts for FY20 and FY21.

Althea (AGH) - 1H20 Results Review & Forecasts										1H20	Comments on 1H20 & forecasts
Years ended June \$m	1H19	2H19	FY19	1H20	2H20e	FY20e	1H21	2H21e	FY21e	v 1H19	
Period end Patients (Aust)	310	1,334	1,334	4,018	7,485	7,485	11,485	14,985	14,985	1196%	12 x growth in patient numbers, but off a low base
Average patients (Aust)	155	822	667	3,076	5,752	4,410	9,485	13,235	11,235	1885%	
Operating revenue											
-Australia	0.2	0.6	0.8	1.8	3.2	5.1	5.5	7.4	12.9	956%	12 x growth in patient numbers, but off a low base Most of sales expected to be into UK clinical trial by Drug Science We assume modest numbers in the absence of further information We assume Peak Processing Solutions achieves its 12 mth & 18 mth sales targets
-UK				0.0	0.4	0.4	0.7	1.3	2.0		
-Germany				0.0	0.1	0.1	0.2	0.3	0.5		
-Canada				0.0	0.0	0.0	3.4	4.5	8.0		
Op. Revenue worldwide	0.2	0.6	0.8	1.9	3.7	5.5	9.8	13.6	23.4	964%	
Cost of Goods Sold	(0.1)	(0.2)	(0.3)	(0.8)	(1.6)	(2.4)	(4.6)	(6.4)	(11.0)	1008%	We assume a 50% GP margin in Canada, 30% in UK and 20% in Germany
Gross Profit	0.1	0.4	0.5	1.1	2.1	3.2	5.3	7.2	12.4	933%	
Gross Profit Margin	59.2%	59.4%	59.3%	57.5%	57.4%	57.4%	53.6%	52.9%	53.2%		
Other Income	0.0	0.2	0.2	0.2	0.1	0.3	0.0	0.1	0.1		Interest income
Cash Operating Expenses	(2.5)	(5.0)	(7.4)	(7.1)	(8.4)	(15.5)	(8.1)	(10.7)	(18.9)	187%	Includes estimated costs of UK clinics & Peak Processing Solutions in Canada
Share based payments	0.0	(0.5)	(0.5)	(0.4)	(0.1)	(0.5)	(0.5)	(0.1)	(0.6)	n/a	We leave in as it is part of remuneration expense, even though non-cash
EBITDA	(2.4)	(4.9)	(7.3)	(6.3)	(6.2)	(12.5)	(3.4)	(3.5)	(6.9)	166%	
Ebitda Margin	-1361.5%	-827.0%	-948.2%	-340.0%	-168.8%	-226.0%	-34.3%	-25.8%	-29.4%		
Depreciation & Amort	(0.001)	(0.0)	(0.0)	(0.3)	(0.3)	(0.6)	(0.3)	(0.3)	(0.7)	29500%	Big increase in depn, but off a low base
EBIT	(2.4)	(5.0)	(7.3)	(6.6)	(6.5)	(13.1)	(3.7)	(3.8)	(7.5)	178%	
Ebit Margin	-1362.1%	-834.9%	-954.5%	-356.0%	-177.0%	-236.8%	-37.7%	-28.2%	-32.2%		
Interest (Expense)	0.004	(0.0)	(0.0)	(0.6)	(0.6)	(1.2)	(0.6)	(0.7)	(1.3)	-15725%	Now includes lease expense
Pre-tax profit	(2.4)	(5.0)	(7.3)	(7.2)	(7.1)	(14.3)	(4.3)	(4.5)	(8.8)	205%	
Income Tax Credit (Expense)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		No tax charge due to losses
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Abnormals	0.0	(1.3)	(1.3)	(1.1)	0.0	(1.1)	0.0	0.0	0.0		
NPAT (reported)	(2.4)	(6.3)	(8.7)	(8.4)	(7.1)	(15.5)	(4.3)	(4.5)	(8.8)	253%	
Adjustments	0.0	1.3	1.3	1.1	0.0	1.1	0.0	0.0	0.0		We add back FX loss \$387k and professional fees on acqn \$749k in 1H20
NPAT (adjusted)	(2.4)	(5.0)	(7.3)	(7.2)	(7.1)	(14.3)	(4.3)	(4.5)	(8.8)	205%	
EPS - Reported (cents)	(1.2)	(3.1)	(4.3)	(3.7)	(3.0)	(6.7)	(1.8)	(1.9)	(3.7)	216%	We use post IPO share count
EPS - Normalised (cents)	(1.2)	(2.4)	(3.6)	(3.2)	(3.0)	(6.2)	(1.8)	(1.9)	(3.7)	173%	
Share count used (wavg)	203.3		203.3	226.8		233.3	235.9		298.7		Includes Peak earn-out 5.7m & 5.7m shares; and a \$20m capital raise in FY21.
DPS (cents)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Franking	0%	0%	0%	0%	0%	0%	0%	0%	0%		

Source: AGH accounts; NB We use the post IPO share count for 1H19 & FY19 to allow more meaningful comparisons

AGH reported revenue of \$1.9m (v 0.2m) for 1H20 as its business model in Australia starts to get some real traction. Whilst still small numbers in absolute terms, AGH's education-based strategy is clearly working, with period-end patient numbers of 4,018 at December 2019 up 12 fold on December 2018's 310 patients. In January, AGH added a further 572 patients (+14% in a month) to 4,590 patients.

We forecast around 7,500 patients by June 2020 and 15,000 by June 2021.

Gross profit was \$1.1m (v \$0.1m) with the gross margin very healthy at 57.5%. We have forecast this to decline gradually going forward, as we assume a 50% gross margin in Canada once approvals are received and sales commence, a 30% gross margin in the UK and a 20% margin in Germany. We will refine these assumptions if better information becomes available.

Cash operating expenses were \$7.1m (v \$2.5m) +187% reflecting increased sales and marketing in Australia, establishment of operations and 2 access clinics in the UK, and operating and set up costs of Peak Processing Solutions in Canada (NB not capitalised).

Ebitda was a loss of \$6.3m (v \$2.4m loss pcp).

Interest / finance costs were \$0.6m (v \$0.0m). We assume this now includes lease payments on premises.

We have stripped out \$387k FX loss and \$749k consulting fees regarding acquisitions, as abnormal items.

The adjusted Net Loss was \$7.2m (v \$2.4m pcp).

Cash Flow

Cash from operations was an outflow of \$11.7m (v \$2.3m outflow) +400% worse. This included a \$2.6m increase in working capital (\$2.0m inventory build, a \$0.9m increase in debtors less a \$0.3m increase in creditors).

Investing cash outflow was \$4.5m (mainly the cash component of the Peak acquisition

\$1.9m and capex to refit the Peak facility for purpose in Canada).

Financing cash flow was \$23.6m (v \$20.5m). This included \$28.7m of new equity raised, less \$4.7m for Peak Processing Solutions in Canada (paying out the mortgage and other shareholder loans).

The total acquisition cost was A\$19.0m (including contingent consideration) and refitting the freehold facility is expected to be another A\$8m. Peak has applied for a manufacturing licence and expects to receive its licence approval upon final inspection of the upgraded facility around April / May. We have assumed revenue commences in July.

The contingent consideration is payable in 3 tranches of shares, subject to achievement of certain performance hurdles. We note that AGH directors have estimated the probability of Peak achieving its performance targets at between 85-100% likely.

- Performance target 1 - 5.7m AGH shares upon granting of the licence
- Performance target 2 - 5.7m AGH shares if Peak achieves C\$7.0m of revenue and \$2.0m Ebitda within 12 months of gaining the licence.
- Performance target 3 - 7.6m AGH shares if Peak achieves C\$25m of revenue and C\$12.5m of Ebitda within 18 months of gaining the licence.

We have assumed that the first two targets are achieved, but not the third. We do not have any evidence yet to support the \$25m target other than the background credentials of the managers involved.

Peak Processing Solutions - acquisition		\$m
Acquisition date		16-10-19
AGH share price on that date		\$0.64
Assets acquired :		
Freehold property plant & equipment		3.9
Cash & other assets		0.4
Liabilities acquired / paid out		(4.9)
Net Assets (Liabilities) acquired		(0.6)
Goodwill		19.6
Total book value		19.0
Consideration		
Cash		1.9
Fair value of contingent consideration\		17.1
(in 3 tranches of shares - 5.7m, 5.7m & 7.6m = up to 19.0m shares, subject to performance criteria)		
Total consideration		19.0

Source: AGH 1H20 accounts, Note 17

Balance Sheet

Net cash was \$19.6m at end-December 2019 (v \$14.9m at June 2019).

Major assets on the balance sheet are:

- Cash \$22.4m (less lease liabilities of \$2.8m = \$19.6m net cash)
- Intangibles \$21.4m (\$19.6m goodwill, \$1.4m capitalised software, \$0.4m website & intellectual property)
- Property plant & equipment \$6.6m (approx. \$1.0m at Skye, the balance is Peak Processing Solutions)
- Leased assets \$2.8m
- Inventories \$2.6m
- Debtors \$1.4m
- Other assets \$2.1
- **Total assets \$59.3m.** Book value per share is \$0.24. NTA per share is \$0.15.

Directors and Senior Management

AGH has one executive director, and three non-executive directors all based in Australia.

AGH - Directors Shareholdings	FY19 Ann Report	Latest	% of Coy	Performance Rights
Andrew Newbold, Chairman	1,638,000	2,068,000	0.9%	
Josh Fegan, MD & CEO - Shares	56,276,315	56,339,065	24.1%	
Josh Fegan, MD & CEO - Performance rights (Tranche 1; expiry 21/9/21; nil exercise price)				2,550,000
Josh Fegan, MD & CEO - Performance rights (Tranche 2; expiry 21/9/21; nil exercise price)				2,550,000
Alan Boyd, NED	100,000	350,000	0.2%	
Penelope Dobson, NED	0	30,000	0.0%	
Total Directors	58,014,315	58,787,065	25.2%	5,100,000
Total Company	233,310,000	233,310,000	100.0%	5,100,000

Source: FY19 Annual Report; ASX announcements

Andrew Newbold – Non-executive Chairman (appointed 21/6/18)

LLB / Bec

Andrew is a qualified lawyer having practiced for nearly 20 years at a large commercial firm. Following his retirement from the law in 2006, he founded a renewable energy business which he sold to Origin Energy in 2009. Since that time, he has been involved in a start-up property app business which he sold to ANZ in 2015 and various other businesses.

Andrew has been a director of numerous private companies and not-for-profit organisations and currently is a director of Supra Capital, a Commissioner of the AFL and a Chairman of Golf Australia.

Joshua Fegan – Managing Director and Chief Executive Officer (appointed 21/6/18)

BBus (Management and Marketing)

Previously Sales & marketing Manager – Strathfield Group.

Josh is the founder of Althea Group and has extensive experience in business building, sales and marketing. He has a range of proven business and strategy skills and has previously held a number of senior management roles at national value-based retailer, Strathfield Group.

Josh founded Althea Health and Wellbeing in 2016, coinciding with registration of the Narcotic Drugs Amendment Act 2016 (Cth)(ND Amendment Act), an Act to amend the Narcotics Drugs Act 1967 (Cth)(ND Act), legalising medicinal cannabis (MC).

Alan Boyd - Non-Executive Director (appointed 21/6/18)

BA (Econ), CA ANZ, GIA

Alan is the Chief Financial Officer and Company Secretary of Ridley Corporation Ltd (RIC), an ASX listed provider of high performance animal nutrition solutions. Prior to this role, Alan occupied the same position with listed Biotechnology companies Avexa Limited and Zenyth Therapeutics Limited, website pioneer Sausage Software Limited, and unlisted public entity HRL Limited where he later served as a non-executive director.

Alan started his professional career in chartered accounting firms in England and Australia and has broad financial experience across many industry sectors.

Penelope Dobson - Non-Executive Director (Appointed 30/11/18)

MBA (MGSM)

Penny is an experienced global healthcare executive. She has worked in the broad life-sciences space since her training as a pharmacist in New Zealand, including many years in the global pharmaceutical industry.

Penny is currently principal of Valida Consulting, offering a range of services to companies in the healthcare, pharma, biotech, not-for-profit, device and diagnostic sectors.

Other directorships: ANSTO (Australian Nuclear Science and Technology Organisation), Invetus Ltd.

Former Directors

Gregg Battersby – former NED (appointed 21/6/18 prior to the IPO; Resigned 7/3/19). B.Com (Accounting and Finance). Gregg was Vice President of Commercial Strategy at Aphria Inc. listed on the Toronto Stock Exchange. Prior to Aphria, Gregg worked with Jamieson Laboratories Ltd, a Canadian leader in natural health products and vitamins.

Senior Management

Robert Meissner – Company Secretary (appointed 15/4/19) and CFO.

AGH History & Key Events

- Founded in 2017 by Josh Fegan.
- May 2018 – Commences supply of imported MC products in Australia.
- Sep 2018 – IPO raised \$19.65m at \$0.20 per share. Market cap at the offer price \$40.7m. Althea Concierge education portal launched.
- Oct 2018 – First 100 patients for Althea MC products; 42 doctors have prescribed.
- Nov 2018 – Granted manufacturers licence by the Office of Drug Control. Granted licence to export MC.
- Nov 2018 – Application for planning permit for Skye cultivation, extraction and manufacturing facility lodged with Frankston Council.
- Nov 2018 - WA distributor appointed (already have in Vic, SA, NSW and Qld).
- Dec 2018 – Plans to launch 2 new products in 1H19 (gel capsules and 15ml mouth and nose spray).
- Jan 2019 – Agreement with Cannabis Access Clinics (8 locations in Aust & NZ) for the education of doctors (medical liaison).
- Feb 2019 – Announces plans to enter the UK market, to potentially treat up to 2.9m patients. UK's highly regulated market is similar to Australia's.
- Feb 2019 – Supply and distribution agreement with Cannvalate, one of Australia's largest networks of MC prescribing clinics > 1,000 doctors and 600 pharmacies, Cannvalate prescriptions are approx. 30% market share).
- Mar 2019 – Greg Battersby (Aphria President) resigns from AGH board. To be replaced by Jokob Ripshtein, previously Chief Commercial Officer of Aphria. (This did not proceed as Mr Ripshtein left Aphria).
- Mar 2019 – Dr Robert Pawinski appointed National Medical Director for Althea UK. Previously at Pfizer, with over 10 years clinical and pharmaceutical experience.
- May 2019 – Launches Althea Concierge platform in the UK.
- May 2019 – New partnership announced with Drug Science, a UK registered charity, and the UK's only completely independent scientific committee on drugs. AGH provides development grant to Drug Science. Drug Science was founded by Professor David Nutt who was removed in October 2009 as the Chair of the Advisory Council on the misuse of drugs, and has a scientific committee of 26 doctors and drug experts. It appears to be funded by the industry and donations (refer: <https://drugscience.org.uk>).
- May 2019 – AGH sponsors IOTOD training of 265 European healthcare professionals at IOTOD training event in Frankfurt.
- June 2019 – Granted licence for low THC cannabis (hemp) by Agriculture Victoria.
- June 2019 – Exclusive agreement with Tissue Culture Australia (TCA) for TCA to assist AGH to develop proprietary protocols for propagation of cannabis plants.
- June 2019 – AGH achieves 1,000 patient milestone, 5 months earlier than expected (Nov 2019).
- June 2019 – First prescription for AGH product written in UK.
- June 2019 – Planning permit granted by Frankston Council for cultivation, extraction and processing facility at Skye, Vic.
- June 2019 – AGH to be a supplier to the first UK national MC pilot clinical study, called "Project TWENTY21" targeting 20,000 patients by end 2021. This will target patients where alternative treatments have failed, including Chronic pain, PTSD

(post-traumatic stress disorder), Anxiety, Multiple Sclerosis and Tourette's Syndrome. Commencing Q4CY19.

- 25 Jul 2019 – A\$30m placement at \$1.00 per share, and A\$11.3m acquisition (plus earn-out subsequently valued at \$17.1m). Acquires Peak Processing Solutions in Canada from Greg Battersby (former President of Aphria Inc. and 8 employee shareholders of Peak. Consideration: C\$4.1m cash (A\$4.5m) and 1.331m shares to employees (~\$1.3m using the placement price), 5.5m shares to Greg Battersby (~A\$5.5m) = A\$11.3m plus up to 19.0m shares subject to various performance hurdles (~A\$19m in scrip). Peak is an early stage business which has applied for one of Canada's first large scale, infused cannabis processing licences. It plans to be a contract manufacturer for other brands looking to launch recreational cannabis and CBD wellness products. Freehold facility in Ontario Canada will be fitted out to include EU / GMP certified extraction and manufacturing.
- The placement proceeds to be applied as follows:
 - A\$4.5m cash component of acquisition
 - A\$8.0m fit out freehold premises
 - A\$1.5m to open 2 further access clinics in the UK
 - Providing product on commercial terms to Drug Science's TWENTY 21 pilot clinical study
 - Negotiating 50/50 joint venture to establish cultivation, extraction and manufacturing facility in Portugal
 - Australia – Increase medical science liaison staff; increase advertising budget to healthcare professionals; promote Althea Concierge to the general public.
- Jul 2019 – Received UK import licence and opened one of the UK's first "cannabis destination clinics" in Belgravia, central London (SW1). Plans for 2 more to open in Q3CY19 (Bristol and Glasgow).
- Proposed sale on MC products through Boots Pharmacy (~2,500 outlets in the UK).
- Aug 2019 – Exports first MC shipment to the UK. First patient in the UK received their medication. Multiple UK patients now being prescribed.
- Aug 2019 – Agreement with Cannvalate Pty Ltd extended. Cannvalate will serve as non-exclusive provider of AGH's MC products in the UK.
- 7 Aug 2019 – Appoints Tetra Health as non-exclusive education and distribution partner. Tetra is one of the leading MC service providers in Australia. Tetra will use the MEDIC on-line educational platform (developed with sponsorship from AGH) which offers evidence based education and resources for healthcare professionals, to continue to educate its increasing network of doctors in Australia about MC.
- 4 Oct 2019 – NSW Health simplifies requirements for MC prescribers. AGH expects uptake of AGH MC products in NSW to accelerate.
- 16 Oct 2019 – AGH subsidiary Peak Processing Solutions letter of intent with Wildleaf Ventures Group Inc. for cannabis infused beverages throughout Canada. Peak expects to receive licence in early 2020. Wildleaf has already developed ready-to-launch CBD infused beverages in the USA under the "Nyte" brand.
- 18 Oct 2019 – Completes Peak acquisition. AGH expects to realise exceptional returns on its investment in Peak. Canada's cannabis industry expected to more than double from A\$2.3bn to A\$5.4bn by end 2020 including A\$1.3bn sales of new cannabis infused products.
- 22 Oct 2019 – Directors' participation in placement at \$1.00 per share – Andrew Newbold (Chairman) \$180k; Penelope Dobson \$30k.
- Oct 2019 – AGH on track for 4,000 patients in Australia by Dec 2019 (2,705 currently & 348 health care professionals prescribing).

- **25 Oct 2019 –Aphria Inc. sold 36.697m AGH shares at \$0.40 each (A\$14.7m).** Aphria will continue to hold 12.25m shares (5.25%) escrowed until late September 2020 (previously held 24.96%). extends Aphria Inc. supply agreement until 2027.
- 25 Oct 2019 Andrew Newbold (Chairman) buys \$100k (250,000 shares); Alan Boyd buys \$100k; Josh Fegan (CEO) buys \$20k (50,000 shares) in the Aphria sell-down all at 40c.
- 28 Oct 2019 – AGH launches new “full spectrum”, highly concentrated cannabidiol (CBD) oral oil product called “CBD 100”. Manufactured in Australia, GMP certified and ready for export, AGH expects this product will substantially increase its new patient growth rate. Partner Cannvalate Pty Ltd which has one of Australia’s largest networks of prescribing clinics (1,000+ doctors) says that competing CBD only products account for ~30% of their total prescriptions across their network. AGH notes that GMP certification is a prerequisite in many emerging markets including Australia, the UK and Germany.
- 29 Oct 2019 - Pental Group (nee BT Investment Management) became substantial with 5.14% (12.0m shares) on 25/10/19.
- 12 Nov 2019 – MOU signed with Nimbus Health GmbH for the sale and distribution of AGH’s MC products throughout Germany. Nimbus is a leading wholesale pharmaceutical licence-holder based in Frankfurt. It estimates that it has access to 25% of all MC patients through its pharmacy network. AGH will develop a local German version of its Concierge and MEDIC educational platforms for the German market.
AGH believes that 60,000 patients were treated with MC in Germany last year with an estimated value of e73.7m (A\$118m), and cite a report by Prohibition Partners that this number is expected to rise to 1 million German patients by 2024 with a market value of e7.7bn (A\$12.3bn).
- 13 Nov 2019 – AGH to supply 2 cannabis medicines for Australian clinical trial – Agreement with the Australian Centre for Cannaboid Clinical and Research Excellence (through the University of Newcastle) for “cannabinoid for symptom control in advanced cancer” trial. Up to 600 patients. CARE NSW trial.
- 14 Nov 2019 – Secures licence for “My Access Clinic” Bristol clinic from Care Quality commission (CQC), the independent regulator of health and social care in England. This allows “My Access Clinics” prescribers to access the home care services market. The Bristol clinic is only the second MC clinic in the UK to receive a CQC licence, and the first outside of London. My Access Clinics currently has over 100 patients on the waiting list.
- 15 Nov 2019 – passes 3,000 patient milestone in Australia. (3,031 at 15/11/19). End October was 2,815 patients (up 462 for the month) Vs industry ~20,500 implying a ~14% market share.
- 27 Nov 2019 – AGM update – According to Freshleaf Analytics, as at July 2019, the addressable market for MC in Australia was up to 500,000 patients, but only around 5,000 active patients were having their needs met. According to Prohibition Partners, by 2028 Australia will be the leading marketplace on Oceania with a MC industry worth A\$11bn.
- 17 Dec 2019 – AGH approaching 4,000 patients in Australia (3,688 patients prescribed at 17/12/19). Althea “CBD 100” sales are exceeding expectations with 206 bottles sold in 18 business days since launch.
- 7 Jan 2020 – Announces 4,018 patients had been prescribed at 31 Dec 2019, by 432 doctors / HCPs. (v ~ 283 patients and 77 HCPs at 31/12/18, up 14-fold and 6-fold respectively). Added 36 new patients per day in December.
- 11 Feb 2020 – Announces 4,590 patients had been prescribed at 31 Jan 2020, by 459 doctors / HCPs. Added 572 new patients in January (+14%) and +27 doctors (+6%).

Capital History

- AGH was founded with contributions of \$3.1m from Josh Fegan and \$1.9m from Aphria (so FY18 issued capital \$5.0m).
- There was a pre-IPO raising of \$2.0m at \$0.1667 per share in August 2018 (FY19).
- AGH listed on the ASX in September 2018 after raising \$19.65m at \$0.20 per share for an initial market capitalisation of \$40.7m at the offer price.
- In July 2019 AGH conducted a \$30.0m institutional placement at \$1.00 per share, to fund the A\$4.5m cash component of an acquisition in Canada, and for several other business initiatives and working capital.

Appendix 1 - How Medicinal Cannabis Works

Cannabis has been used for centuries to treat pain and a variety of other ailments. There are more than 100 different cannabinoids (cannabis-specific chemicals) that have been identified in cannabis, but two in particular are medically important: delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD).

THC and CBD act through the body’s endocannabinoid system, and have different effects:

THC	CBD
Intoxicating	Non-intoxicating
Pain-relieving and anti-inflammatory properties	Pain-relieving and anti-inflammatory properties
May reduce nausea and vomiting	May reduce anxiety
May increase appetite	Anti-convulsant properties
May have sedative properties	Modulates the effects of THC

Source: AGH website

MC products have different actions depending on the ratio of THC to CBD that they contain. CBD acts to balance out some of the negative effects of THC, so combining THC with CBD can allow patients to receive higher doses of THC with a reduced risk of unwanted side-effects.

Varieties & Strains

According to Wikipedia, the two species of Cannabis plant grown most commonly are Cannabis Indica and Cannabis Sativa. Cannabis Indica is an annual plant in the Cannabaceae family. The plant is cultivated for many purposes. For example, the plant fibres are used to make cloth, paper and other industrial uses. Cannabis indica produces large amounts of Tetrahydrocannabinol (THC). The higher concentrations of THC provide euphoric and intoxicating effects making it popular for use both as a recreational and medicinal drug. Cannabis Indica strains typically have more chlorophyll than Cannabis Sativa, thus they are known to grow and mature faster. Cannabis Indica typically yield smaller but higher quality crops with the percentage of THC up to 18% more than when cultivated from the Sativa plant. As the plants grow fairly short they are the ideal for indoor growing.

Sativa plants are usually grown outdoors and can reach heights of up to 4.5 metres. Sativa is known for being more psycho-active for the head, whereas Indica plants have been used for relaxing and sedative drugs for the body.

A third species is called Cannabis Ruderalis, which is very low in THC and thus is not commonly grown for industrial, medicinal or recreational use. However the variety has been used to cross-breed auto-flowering plants.

Hybrid varieties have varying ratios of these varieties. E.g. “White Widow” has about 60% indica and 40% sativa ancestry.

Hemp – refers to the cannabis varieties with less than 0.2% THC, the intoxicating psychoactive cannabinoid present in cannabis. Hemp’s most lucrative application is for CBD extraction from the flower but it is also used for industrial purposes because of its fibre. Hemp production is also strictly controlled by governments. Hemp production has also been increasing strongly in the countries we have reviewed in this report.

Appendix 2 - The Australian Medicinal Cannabis Market

Australian MC Market – Major Listed Players

We have attempted to summarise the operations of major ASX listed MC companies in the table below. We will refine this further as we meet with the companies after the reporting season.

Stock Code	Company	Market Cap \$m 26-02-20	Net Cash (Debt) FY19	Revenue FY19A	PP&E 30/60/19	Annual Growing Capacity (proposed)	Growing Location	Pharmaceutical R&D Location	Pharmaceutical Manufacturing Location	No. of Patients
Growers (Asset & cultivation based MC companies)										
CAN.AX	Cann Group Ltd ACTRN12619001534178p	124.6	46.4	2.3	29.0	25,000 kg	Mildura (~\$120m)	Tullamarine	Outsourced to IDT	
	(Provisional, Ethics application not yet approved)									
THC.AX	THC Global Group Ltd ACTRN12619000932167p	42.9	5.9	2.7	18.5	80,000 kg	Southport & Bundaberg	Southport	Southport	
	(Provisional, Ethical application not yet submitted)									
BioPharma MC Companies (Clinical evidence focussed)										
AC8.AX	Auscann Group Holdings Ltd Registered clinical trials: Nil that we could find	103.2	35.3	0.9	7.2			Perth (\$6m facility under construction)	Outsourced to PCI	
AGH.AX	Althea Group Holdings Ltd Registered clinical trials: Nil However, AGH will be supplying the CARE NSW cancer pain trial ACTRN12619000265178 (target 600 patients) and the "Project Twenty21" trial in the UK (20,000 patients), and potentially others	71.2	14.9	1.0	1.1	3,000 Kg (on hold)	Frankston (on hold) (approved site)	Frankston (on hold) (approved site)	Frankston (on hold) (approved site)	4,590 (Patients)
BOT.AX	Botanix Pharmaceuticals Ltd ACTRN12618001802291	80.7	4.7	0.2	0.0			Perth		
MDC.AX	Medlab Clinical Ltd ACTRN12619001494123p	61.8	10.5	7.8	0.6		Imported from Aphria Inc (Canada)	Sydney (Alexandria)	Outsourced to Tasmanian Alkaloids	4,500 (Units)
ZLD.AX	Zelira Therapeutics Ltd ACTRN12619001013156	46.4	3.1	0.9	0.0			Perth & USA	Outsourced to HAPA & ILERA Healthcare	
MXC.AX	MGC Pharmaceuticals Ltd ACTRN12619000474156	35.6	2.4	0.9	1.5	unknown	site only (Malta)	Slovenia & trial at University of Notre Dame in Fremantle	Slovenia	811 (Patients)
Hemp / wellness product companies										
EXL.AX	Elixinol Global Ltd Registered clinical trials: Nil that we could find	59.3	42.7	37.6	12.6	unknown	JV in Colorado	Colorado	Colorado	
CGB.AX	Cann Global Ltd ACTRN12613000506796	35.3	(1.2)	0.6	0.1				Outsourced	

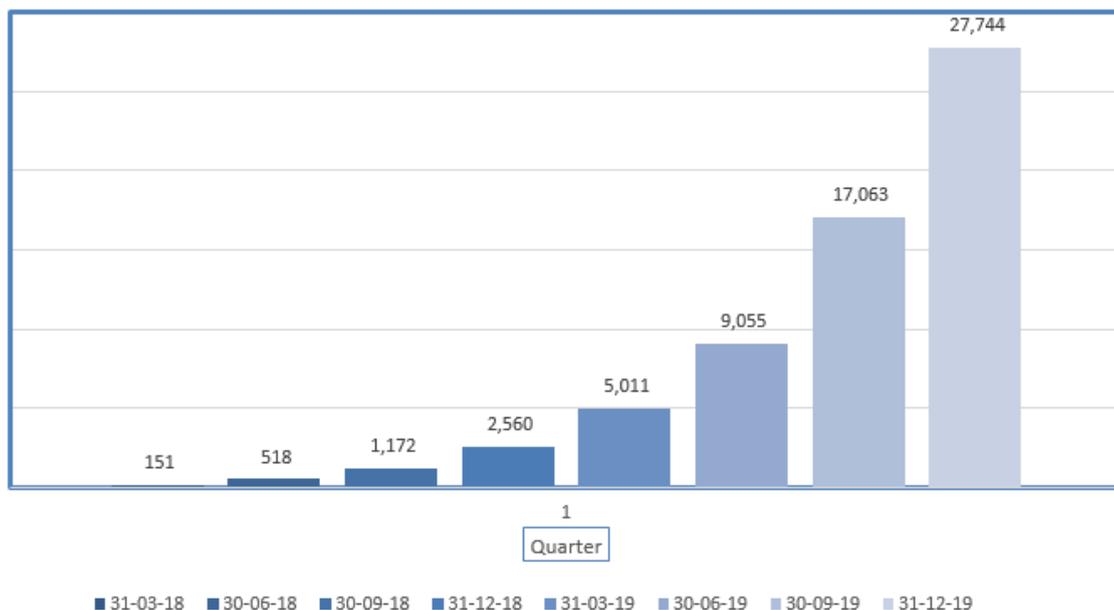
Source: Company reports; Phillip Capital classifications; ACTRN is the Aust & NZ Clinical Trial Registration numbers per www.anzctr.org.au

According to TGA website data, the TGA has approved approximately 28,000 SAS category B applications for "unapproved" MC products at end December 2019. There were ~25,000 approvals in CY19, up 10-fold on the 2,500 new approvals in CY18.

Breaking the data down into quarters, one can clearly see an acceleration in approvals. This may be partly due to the introduction of the TGA's on-line application system from 30/7/18, making it easier for doctors / healthcare professionals to apply for access for their individual patients.

If the December quarterly rate of additions (+10,681) can be maintained for 2020, approval numbers could be over 70,000 at December 2020 and over 113,000 by December 2021.

Medicinal Cannabis Approved Applications (SAS-B)



Source: TGA data from AGH and TGA website

These numbers are not the same as the number of “Active Patients” in the market, for which there is no reliable data. The SAS-B registrations effectively include a large double-count as we understand most doctors’ prescriptions are for 6 months, meaning 2 or more registrations per annum, with some for 3 months, and some for a full 12-months. In addition some patients are prescribed more than one medicine (e.g. one for morning, and a different possibly higher strength one for night). Also, some patients may discontinue their treatment and become inactive, but do not fall out of the TGA number.

For these reasons, we estimate the number of “active” MC patients in Australia at around 12,000 calculated as follows:

- No. of TGA registered patients – 30,895 at January 2020
- Divide by 2 (assume ~2 registrations pa)
- Divide by 1.1 (assume 10% of patients are prescribed more than 1 MC product e.g. one for daytime, and one for night)
- Multiply by 0.85 (assume 15% of registered patients become inactive)
- = 11,937.

AGH – estimated market share

AGH has announced that it has prescribed 4,590 unique patients (at end Jan 2020). We assume a 15% inactive rate for AGH also (so ~3,900 actives). On this basis we believe AGH has a 33% market share of active patients, and a 53% share of prescribing doctors / HCPs. This is an extremely strong performance.

AGH - Estimated Market Share	Raw Data 31/12/18	Raw Data 31-01-20	Change (in 13 mths)	Our est. of Actives 31-12-18	Our est. of Actives 31/1/20
AGH patients	259	4,590	1672%	220	3,902
AGH doctors / HCPs	76	459	504%		
TGA patients (SASB registrations)	2,560	30,895	1107%	989	11,937
TGA doctors / HCPs	537	870	62%		
AGH market share - patients	10%	15%		22%	33%
AGH market share - doctors / HCPs	14%	53%		n/a	n/a

Source: TGA data; Company data; Phillip Capital estimates

Appendix 3 - The UK Cannabis Market

Drugs in the UK are “approved” or “licenced” by either the UK regulatory body (MHRA) or the European Medical Agency (EMA). Doctors may prescribe unlicenced or “off-label” products, but must take full responsibility for doing so.

National Health Service (NHS) bodies in England, Scotland, Wales and the HSC in Northern Ireland (Health and Social Care) may fund the cost of approved drugs (and some unapproved drugs).

Medicinal Cannabis Market

The MC market refers to both medical and pharmaceutical cannabis products.

The UK Government legalised MC from 1 November 2018, but under very strict conditions. New regulations introduced a new definition of “cannabis-based products for medicinal use in humans” (CBPMH). Products meeting this definition were moved from Schedule 1 to Schedule 2, making them available on prescription from specialist doctors on the General Medical Council Specialist Register (about 80,000 of the UK’s 180,000 doctors), and only under strictly controlled circumstances.

Products that failed to satisfy this definition remain as Schedule 1 drugs that are available only under a Home Office licence.

Schedule 2 drugs – is a category of drugs considered to have a strong potential for abuse or addiction but that have legitimate medical use. Among the substances so classified by the Drug Enforcement Agency are morphine, cocaine, pentobarbital, oxycodone, alphaprodine, and methadone.

The new regulations allow just 3 access routes for the order, supply and use of MC products by patients.

1. A special medicinal product for use in accordance with a prescription or direction of a doctor (who has made the decision to prescribe) on the GMC Specialist Register.
2. An investigational medicinal product without a marketing authorisation for use in a clinical trial.
3. A medicinal product with a marketing authorisation.

UK Market Overview

The UK cannabis market can be broken down into 4 groups:

Pharmaceutical Cannabis market – Products with a marketing approval from MRHA or EPA

Pharmaceutical cannabis refers to products formulated using pure cannabinoids (either plant extracts or man-made synthetics) that have been through full clinical trials and licenced as a medicine. The UK is currently the world’s largest exporter of MC due to the presence of GW Pharmaceuticals plc (GWPH.O, market cap US\$3.3bn) which makes Sativex and Epidiolex.

To date, the NHS bodies have approved funding for just 3 cannabis-based drugs:

- Sativex (Nabiximols) – Sativex was the first cannabis-based medicine to be licensed in the UK after clinical trials. It was approved by the UK regulatory authority MHRA in 2010 as a treatment for MS. It has been available under the NHS in Wales since 2014, and from November 2019 in England. Sativex is cannabis-based sublingual (oral) spray which is a 50-50 combination of THC and CBD. The mouth spray has been approved as a treatment for multiple sclerosis (MS), specifically, muscle stiffness and spasms common to the condition. Although MS is often characterized by pain, doctors will not be allowed to prescribe the medication for pain relief. It can only be prescribed by a specialist

doctor with experience of treating MS spasticity – consultant neurologists, consultant rehabilitation specialists and consultant pain specialists. It costs patients £2,000 per year. Made by GW Pharmaceuticals plc.

- Cesamet (Nabilone) – approved for use by the EMA (European Medical Agency) in September 2019 (revising a negative opinion in 2011) and added to the NHS from November 2019. Nabilone is a synthetic (non-natural) cannabinoid taken in capsule form. It can be prescribed by specialists to help relieve the symptoms of chemotherapy induced nausea and vomiting. Made by Eli Lilly.
- Epidyolex (Epidiolex) – is the first plant-derived cannabis-based medicine to be approved by the EMA in September 2019 (approved by the US FDA in June 2018). Approved for the treatment of two rare forms of epilepsy (Dravet syndrome and Lennox-Gastaut syndrome - LGS) for patients 2 years of age and older. LGS and Dravet syndrome are two of the most severe and difficult to treat forms of childhood-onset epilepsy, with few patients achieving adequate seizure control. It was added to the NHS in November 2019 along with Sativex. Made by GW Pharmaceuticals plc. It is estimated that there are 5,000 people with Lennox Gastaut syndrome and 3,000 people with Dravet syndrome in England. Each patient will have to pay between £5,000 and £10,000 for the medication per year, but the manufacturer GW Pharmaceuticals has agreed to a lower discounted price with the NHS.

The Medicinal Cannabis Market

This includes the 3 approved drugs above, and unapproved MC drugs available by import and private prescription.

Examples provided in Prohibition Partners' UK Cannabis Report, Dec 2019 were as follows:

Drug Brandname (& Name)	Manufacturer	Average Daily Cost £	Average Monthly Cost £	Available in UK Import	Format
Approved					
Sativex (Nabiximols)	GW Pharma	9.03	271	Available in UK	Oromucosal spray
Cesamet (Nabilone)	Eli Lilly	39.20	1,176	Available in UK	Capsules
Epidyolex (Epidiolex)	GW Pharma	27.11	813	Import	Oral solution
Available, but unapproved					
Marinol (Dronabinol)	Insys	28.36	851	Import	Capsules
SYNDROS (Dronabinol)	Insys	234.68	7,040	Import	Oral solution
Bedica THC 2.0% (Cannabis sativa L "Talea")	Bedrocan	0.60	18	Import	Oil
Bedrolite CBD 10% (Cannabis sativa L "Rens")	Bedrocan	19.92	598	Import	Oil
Tilray 2:100 THC:CBD	Tilray	11.52	345	Import	Oil
Avidekel 1:15 THC:CBD	TikunOlam (Israel)	40.95	1,228	Import	Oil

Source: Prohibition Partners "The UK Cannabis Report", p41, Dec 2019. We have added the monthly column (x 30 days).

Daily costs vary from patient to patient based on source of medication and dosage.

Costs associated with importation, Doctor visits and VAT not included.

The Recreational Cannabis Market

According to Prohibition Partners, "Recreational Cannabis" refers to any cannabis used for non-medical purposes. It ordinarily has a higher concentration of THC, the psychoactive properties of the cannabis plant and is illegal in many countries and states.

Currently illegal in the UK for products containing 0.2% or more of THC.

CBD only Products

There is an emerging market for CBD-infused consumer products – food, capsules, oils, skin-care products. According to Prohibition Partners, although they may be used for wellness purposes including aiding sleep, or pain or anxiety management, they do not require a prescription.

An estimated 7.3 million people use CBD products in the UK every year according to Prohibition Partners.

Appendix 4 – Canadian MC Market

Canada was one of the first countries to legalise MC under certain conditions, in 2001.

And Canada was the first major G7 country to legalise cannabis for recreational or general use in 2018.

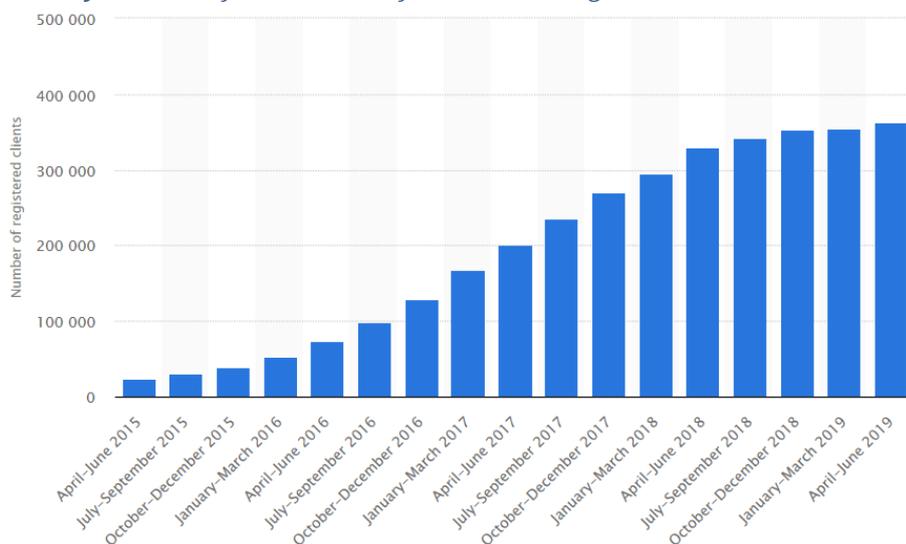
According to Statista.com, the laws and regulations continued to change and develop over time. The latest set of regulations, the “Access to Cannabis for Medicinal Purposes Regulations” (ACMPR), were established on August 24, 2016 and repealed and replaced the “Marihuana for Medical Purposes Regulations” (MMPR). The ACMPR allows for licensed producers to produce and sell cannabis products for medical use and allows individuals to grow their own cannabis for medical purposes.

In October 2018, recreational use of cannabis was legalised for all Canadian provinces after 95 years of prohibition. Canada became the first G7 nation to legalize cannabis nationwide for recreational use, and the second nation in the world after Uruguay.

These changes appear to have accelerated the use of MC as the chart below shows. At end-September 2019, there were approximately 370,000 registered medical marijuana clients in Canada, a significant increase on the 24,000 at June 2015. With a total population of 37.6m people, this represents a penetration rate of 1.0%.

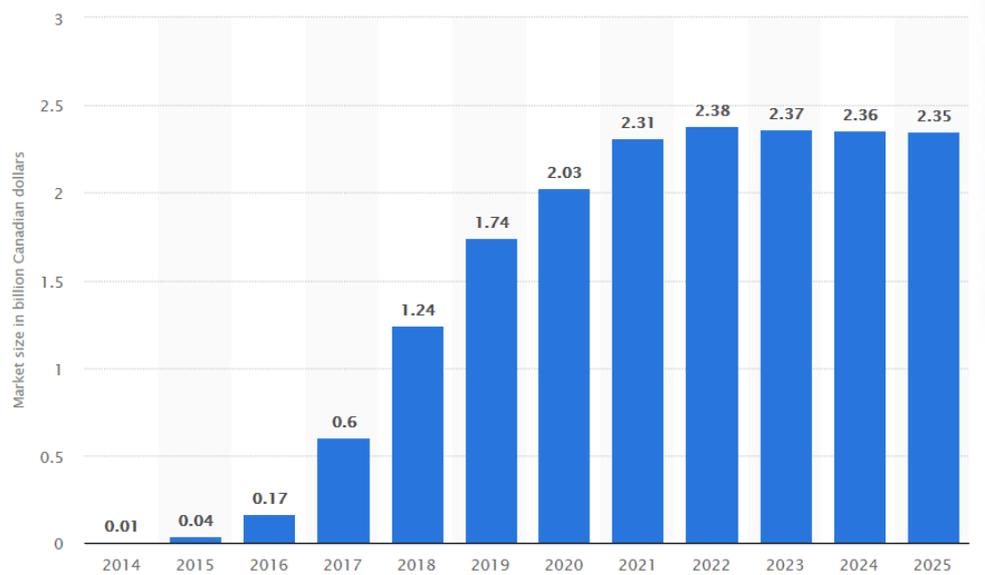
However 5.1m Canadians or 16.8% of Canadians aged 15+ reported using cannabis in 1H19, 48% from legal sources. So the recreational cannabis market potentially appears several times larger than the MC market.

Quarterly number of medical marijuana clients registered in Canada



Source: Chart: Statista.com, 9 August 2019; Other data: Health-Canada website

Estimated total market size of MC market in Canada 2014 – 2025 (C\$ billions)



Source: Statista.com, 9 August 2019

In 2017 the total size of Canada’s MC market was C\$600m (A\$660m).

In 2017, the consumer cost of medicinal cannabis per gram was C\$8.18, a decrease from C\$9.06 in 2010.

As at October 2018, there were 132 licenced MC cultivators and distributors across Canada.

Appendix 5 – World cultivation and production of cannabis

According to the International Narcotics Board 2017 report, the UK was the largest producer of cannabis in 2016 at 95 tonnes making up 45% of the total worldwide production. The UK was followed by Canada at 80.7 tonnes, Portugal at 21 tonnes, and Israel at 9.3 tonnes.

The UK was also the largest exporter in 2016 at 2.1 tonnes followed by the Netherlands (0.5 tonnes) and Austria (0.2 tonnes).

We understand that most of this UK production was for pharmaceutical manufacturing, and largely due to one company – GW Pharmaceuticals (GWPH.O) which makes Epidiolex (an epilepsy treatment) and Sativex (for multiple sclerosis) – both derived from cannabinoids grown at a 44 acre greenhouse in Norfolk, England. (Source: Cannabisnow.com, 10/3/18).

The UK is also now also an importer. In Feb 2019 Aurora Cannabis announced that it had completed the first commercial export of cannabis oil to the UK under the UK's new rules.

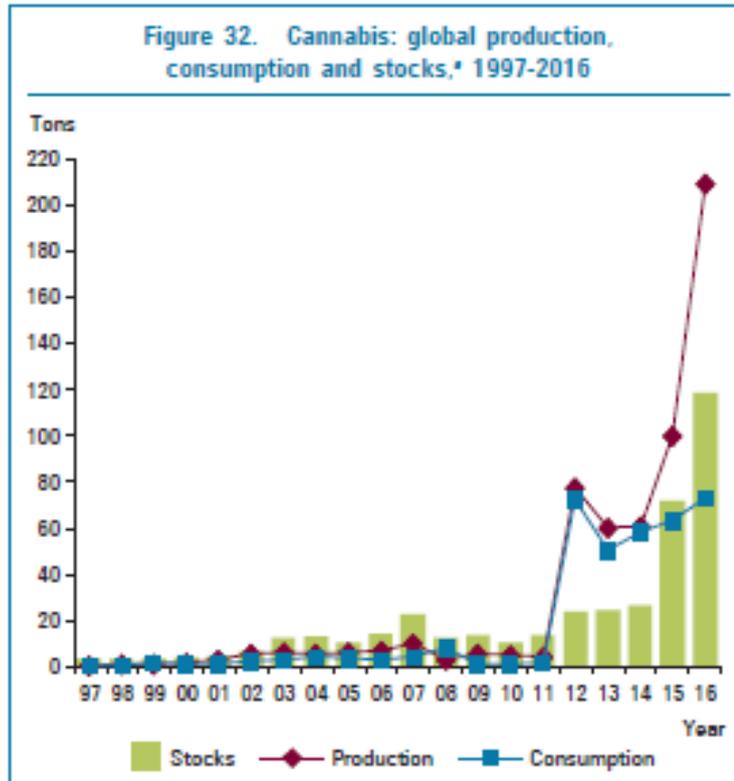
Unfortunately the data was not published in the 2018 report, though we expect that Canada would have overtaken the UK as the largest producer in the world.

Table 1. Cultivation of cannabis plant and production of cannabis, 2015-2016

Country ²	Year	Area harvested (hectares)	Quantity produced (kilograms)
Austria	2015	0.04	59
	2016	0.09	116
Canada	2015	--	48 491
	2016	10.22	80 732
Chile	2015	--	36
	2016	1.00	1 416
Czechia ³	2015	—	—
	2016	—	43
Israel	2016	7.45	7 758
	2016	8.45	9 263
Italy	2015	--	--
	2016	--	300
Japan	2015	0.57	--
	2016	0.58	--
Netherlands	2015	0.50	1 100
	2016	0.50	1 460
Portugal	2015	15.00	169
	2016	7.00	21 000
Switzerland	2015	--	315
	2016	--	453
United Kingdom	2015	--	41 706
	2016	117.00	95 000
United States ⁴	2015	--	566
	2016	--	--
Total	2015	23.56	100 201
	2016	144.84	209 783

Source: International Narcotics Board – 2017 report, p54 of 476

The chart below from the same source shows a dramatic increase in cannabis global production (the brown line) and a step change in cannabis consumption (the blue line) and a significant increase in inventories (the green bars). The INB said that since 2000, more and more countries have started to use cannabis and cannabis extracts for medical purposes as well as for scientific research. In 2000, total production was 1.4 tonnes; by 2016 it had increased to 209.9 tonnes.



*Stocks as at 31 December of each year.

Source: International Narcotics Board – 2017 report, p54 of 476

Appendix 6 – Althea Concierge – Doctor / HCP Directory

Currently the Althea Concierge website directory shows addresses and contact details for 62 doctors & healthcare professionals in Australia, and 6 in the UK. A few of these are multiple doctors at a single clinic (e.g. Hawthorn is 3 doctors at one clinic and 1 doctor at another clinic, making 4 for that suburb). But mostly there was one doctor per site.

Our view of this is that a small number of doctors and clinics are embracing MC, but that the industry is in its infancy, and there is significant growth for AGH (and others) still to go after.

The Gold Coast is an interesting example of stronger penetration for AGH. It is a well-known retirement area with excellent healthcare facilities. AGH has 7 MC prescribing doctors there at Arundel, Broadbeach, Bundall, Mudgeeraba, Paradise Point, Robina and Surfers Paradise. The Sunshine Coast has 3 at Buderim (2 Doctors, 1 clinic) and Maroochydore.

International

The UK is obviously small at this early stage. We were surprised not to see any doctors listed at AGH’s “My Access Clinics” in Belgravia London, Bristol and Glasgow.

There is a footnote that Germany and Canada are to come.

Althea Concierge - Doctors / Health Care Professionals (HCPs) by Location				
State	Doctors	Locations		
NSW	11	See below		
ACT	0			
Vic	20	See below		
Qld	27	See below		
SA	3	Mile End, Kilburn, Golden Grove		
WA	1	Subiaco		
Tasmania	0			
NT	0			
Australia	62			
UK	6	London 2 (Westminster & Tooting), Birmingham, Sheffield, Marple (Stockport), Oswestry (Shropshire)		

Victoria		NSW		Qld		SA	
Melbourne CBD	1	Sydney CBD	2	Bardon	1	Golden Grove	1
Prahran	1	Baulkham Hills	3	Springfield	1	Mile End	1
Hawthorn	4	Mosman	1	Redbank	1	Kilburn	1
Maribyrnong	1	Malabar	1	Algeria	1		
Eltham	1			Logan Central	1		
Hurstbridge	1			Upper Mt Gravatt	1		
North Bayswater	1			Victoria Point	1		
Mooroolbark	1			Belmont	1		
Endeavour Hills	1			Eagle Farm	2		
Melton	2			Aspley	1		
Regional		Regional		Regional		Regional	
Riddells Creek	1	The Oaks	1	Toowoomba	2		
Hastings	1	Camden	1	Gatton	1		
Jan Juc	1	Avalon Beach	1	Gold Coast	7		
Castlemaine	1	Bellingen	1	Sunshine Coast	3		
Mildura	2			Gladstone	1		
				Yeppoon	1		
				Hyde Park (Ayr)	1		
Victoria	20	NSW	11	Qld	27	SA	3

Source: Althea Concierge website - Aust & UK

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Source: www.myaccessclinics.co.uk

Appendix 7 – Proposed Cultivation & Manufacturing Site

We show below the Google Maps location image of the 4,000 square metre leased site at 150 Taylors Rd, Skye. We have highlighted in red the approximate area leased by AGH from Mansfield based on discussions with AGH.



Source: Google Maps

Althea (AGH)					\$ 0.285				
Profit & Loss					Per share & Ratio data				
Year end June	FY18	FY19	FY20e	FY21e	Year end June	FY18	FY19	FY20e	FY21e
	A\$m	A\$m	A\$m	A\$m					
Op. Revenue	0.0	0.8	5.5	23.4	Shares on Issue - Wavge (f/d)	203.3	203.3	230.8	235.9
Op. Revenue	nm	6873%	622%	323%	Shares on Issue - at year-end	203.3	203.3	233.3	298.7
Cost of Goods Sold	(0.0)	(0.3)	(2.4)	(11.0)	Reported EPS (cents)	nm	(4.3)	(6.7)	(3.7)
Gross Profit	0.0	0.5	3.2	12.4	Growth	n/a	363.7%	56.9%	-44.3%
Gross Profit Margin	9.1%	59.3%	57.4%	53.2%	P/E ratio (x)	n/a	-6.7x	-4.3x	-7.6x
Other Income	0.0	0.2	0.3	0.1	EPS (normalised)(cents)	nm	(3.6)	(6.2)	(3.7)
Cash Operating Expenses	(1.9)	(7.9)	(16.0)	(19.4)	Growth	n/a	291.7%	72.1%	-39.8%
EBITDA	-1.9	-7.3	-12.5	-6.9	P/E ratio (x)	n/a	-7.9x	-4.6x	-7.6x
Ebitda Margin	nm	-948.2%	-226.0%	-29.4%	DPS (cents)	0.0	0.0	0.0	0.0
Depreciation & Amort	0.0	(0.0)	(0.6)	(0.7)	Franking	0%	0%	0%	0%
EBIT	-1.9	-7.3	-13.1	-7.5	Yield	0.0%	0.0%	0.0%	0.0%
Ebit Margin	nm	-954.5%	-236.8%	-32.2%	OCF per share (cents)	-1.0	-3.0	-8.0	-3.7
Net Interest Income (Expense)	(0.0)	(0.0)	(1.2)	(1.3)	Price/OCF (x)	-29.0x	-9.4x	-3.6x	-7.6x
Share of Assoc NPAT	0.0	0.0	0.0	0.0	Enterprise Value \$m	64.2	51.6	61.8	52.8
Pre-tax profit	-1.9	(7.3)	(14.3)	(8.8)	EV/ Sales	5835.8x	67.3x	11.2x	2.3x
Income Tax Credit (Expense)	0.0	0.0	0.0	0.0	EV/EBITDA	-34.3x	-7.1x	-4.9x	-7.7x
Tax Rate	0.0%	0.0%	0.0%	0.0%	EV/EBIT	-34.3x	-7.0x	-4.7x	-7.0x
Minorities (share of loss)	0.0	0.0	0.0	0.0	Liquidity & Leverage				
Abnormals	0.0	-1.3	-1.1	0.0	Net Cash (Debt) \$m	2.3	14.9	4.6	13.7
NPAT (reported)	-1.9	-8.7	-15.5	-8.8	Net Debt / Equity %	-73%	-87%	-13%	-30%
Adjustments (Abnormals)	0.0	1.3	1.1	0.0	Net Debt / EBITDA	1.2x	2.1x	0.4x	2.0x
NPAT (normalised)	-1.9	-7.3	-14.3	-8.8	ROA (EBIT / T.Assets) %	-56.7%	-40.0%	-41.4%	-17.1%
Balance Sheet					ROE (NPAT / T.Equity) %	-59.7%	-43.0%	-41.1%	-19.1%
Cash	2.3	14.9	4.6	13.7	Interest Cover (EBIT)	-1870.0x	-1220.2x	-10.9x	-6.0x
Receivables	0.1	0.5	3.6	5.2	Dividend Payout % (of adj EPS)	n/a	n/a	n/a	n/a
Inventories	0.1	0.6	0.6	1.4	Cash Flow				
Other	0.8	0.2	0.2	0.2	EBITDA	-1.9	-7.3	-12.5	-6.9
Total current assets	3.3	16.2	9.1	20.4	Chge in Working Capital	0.0	0.0	-2.9	-0.8
PP&E	0.0	1.1	15.9	16.9	Interest Received (Paid)	0.0	0.2	-0.9	-1.2
Investments	0.0	0.0	0.0	0.0	Income taxes paid	0.0	0.0	0.0	0.0
Intangibles	0.0	0.8	6.6	6.6	Other	-0.1	0.9	-2.0	0.0
Deferred tax assets	0.0	0.0	0.0	0.0	Operating cash flows	-2.0	-6.2	-18.4	-8.8
Other	0.0	0.2	0.2	0.2	Capex	0.0	-1.1	-8.6	-1.1
Total non-current assets	0.0	2.1	22.7	23.7	Acqns & Investments	0.0	0.2	-5.8	0.0
Total Assets	3.3	18.3	31.7	44.1	Government Grants received	0.0	0.0	0.0	0.0
Payables	-0.2	-1.2	-1.4	-2.9	Payments for Intangibles	0.0	-0.8	-1.2	-1.0
Interest bearing liabilities - Current	0.0	0.0	0.0	0.0	Net investing cash flows	0.0	-1.7	-15.6	-2.1
Provisions	0.0	-0.1	-0.1	-0.1	Equity raised	4.3	20.7	28.7	20.0
Other	0.0	0.0	0.0	0.0	Change in Debt	0.0	-0.2	0.0	0.0
Total Current Liabilities	-0.2	-1.2	-1.4	-3.0	Other	0.0	0.0	-5.0	0.0
Interest-bearing liabilities - Non-curr	0.0	0.0	0.0	0.0	Financing cash flow	4.3	20.5	23.6	20.0
Provisions	0.0	0.0	0.0	0.0	Change in Cash	2.3	12.7	-10.3	9.1
Other	0.0	0.0	1.4	1.7	Revenue by Country				
Total Non-current Liabilities	0.0	0.0	1.4	1.7	Australia	0.0	0.8	5.1	12.9
Total Liabilities	0.0	-1.2	-0.1	-1.3	UK	0.0	0.0	0.4	2.0
Total Shareholders' Equity	3.1	17.1	31.6	42.8	Germany	0.0	0.0	0.1	0.5
Interims					Canada	0.0	0.0	0.0	8.0
Year end June	1H19A	2H19A	1H20	2H20e	Total Revenue	0.0	0.8	5.5	23.4
Sales	0.2	0.6	1.9	3.7	Patients by Country				
Sales Growth (g)	n/a	5291%	964%	522%	Australia	0.0	1,334	7,485	14,985
EBITDA	-2.4	-4.9	-6.3	-6.2	UK	0.0	0.0	1,000	4,000
EBITDA Margin	-1361%	-827%	-340%	-169%	Germany	0.0	0.0	300	1,000
EBIT	-2.4	-5.0	-6.6	-6.5	Canada	0.0	0.0	N/a	N/a
Equity Share of Assocs NPAT	0.0	0.0	0.0	0.0	Total	0.0	1,334	8,785	19,985
NPAT (Reported)	-2.4	-6.3	-8.4	-7.1	Major Shareholders				
NPAT (Adjusted)	-2.4	-5.0	-7.2	-7.1				Shares (m)	% of coy
EPS (adjusted)(cents)	-1.2	-2.4	-3.2	-3.0	Joshua Fegan (CEO)			56.3	24.1%
EPS Growth	888.1%	204.1%	173.3%	23.9%	Aphria Inc			12.3	5.3%
DPS (cents)	0.0	0.0	0.0	0.0	Pendal Group			12.0	5.1%
Source: Phillip Capital estimates					Mancann Pty Ltd (Skye landowner)			10.0	4.3%
					Hootch Pty Ltd (Pre IPO investors)			7.5	3.2%
					HSBC Custody Nominees (Aust) Ltd			7.4	3.2%
					Source: Refinitiv				

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