

Share Price: \$0.06

ASX: CDY

0.4

cellmid.com.au

Sector: Consumer Staples

5 October 2021

Market Cap. (A\$ m)	12.0
# shares outstanding (m)	187.4
# share fully diluted	229.5
Market Cap Ful. Dil. (A\$ m)	14.7
Free Float	61.9%
12 months high/low	0.14 / 0.05

Source: Company, Pitt Street Research

Average daily volume (m)

Website

Anti-ageing superstar

Cellmid Limited (ASX: CDY) is a consumer health and beauty-tech company that develops and sells clinically validated antiaging solutions to customers globally. It has a diverse product portfolio that contains a number of premium quality brands including évolis®, JoJu® and Lexilis®, all of which resonate well with its recurring customer base. Its core products focus on the hair care segment (US\$7.6B) of the broader anti-aging market (US\$34B) and are effective in reducing hair loss and increasing hair growth.

Investment case

We believe CDY offers a compelling growth story driven by its differentiated product portfolio. As its products are clinically proven, they are efficacious due to the clear mechanism of action, namely inhibiting hair loss protein, FGF5. We believe this will build credibility with consumers and increase brand awareness and loyalty. Further, there doesn't seem to be many competing products that are clinically validated in this segment. Thus, we think CDY has a strong value proposition, which we expect to drive market share gain in the medium term.

We also expect near/medium term growth to be driven by: 1) new distribution partnerships, 2) launch of new products, 3) improved e-commerce capabilities, and 4) synergies from the BLC acquisition.

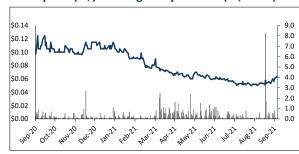
Valuation of \$0.21 per share

Our valuation range for CDY is \$0.21 – \$0.30 per share. This is based on a three-stage DCF approach. Our baseline valuation reflects a 25.4% CAGR in revenue between FY22e and FY26e. We expect bottom-line earnings to emerge in FY23e (\$0.3M). Refer to page 19 for key risks to our investment thesis.

Year to June (A\$)	FY20a	FY21a	FY22e	FY23e	FY24e
Sales (m)	7.3	5.8	13.6	19.5	23.3
EBITDA (m)	(4.2)	(2.8)	(1.1)	0.6	1.9
Net Profit (m)	(4.9)	(3.4)	(1.6)	0.3	1.8
EPS (cent)	(5.0)	(2.4)	(0.7)	0.1	0.8
DPS	nm	nm	nm	nm	nm
EV/Sales	1.1x	1.3x	0.6x	0.4x	0.3x
EV/EBITDA	nm	nm	nm	13.0x	4.1x
P/E	nm	nm	nm	53.1x	7.9x

Source: Pitt Street Research

Share price (A\$) and avg. daily volume (m, r.h.s.)



Source: CommSec, Pitt Street Research

DCF valuation	
Fair value (A\$ per share)	0.21 - 0.30

Source: Pitt Street Research

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Investment thesis

We initiate coverage of Cellmid Limited (ASX: CDY) with a fair valuation range of \$0.21-\$0.30 per share. CDY offers a strong growth story underpinned by its differentiated and efficacious anti-aging product portfolio. CDY also offers opportunities for attractive organic growth through its improved e-commerce platforms, new distribution partnerships as well as new product launches. In addition, CDY is also eyeing for complementary and synergistic acquisitions to scale up its business and expedite its growth trajectory. While CDY operates in a fragmented and competitive segment of the anti-aging market, its unique brand positioning, driven by its underlying superior technology proposition, resonates well with its customer base. As such, we believe CDY is attractively placed to win market share in the short to medium term.

- Large addressable market: The global total addressable market (TAM) for anti-aging products market is currently US\$34B, with hair care and skin care segments constituting US\$7.6B and US\$17.8B respectively. Based on CDY's FY21 sales, it is clear that CDY has barely scratched the surface of its TAM. Given CDY has a global distribution footprint, we believe there is a long runway of growth ahead for CDY to compound its future earnings.
- **Durable moat**: We believe évolis® has a solid economic moat arising from its underlying FGF5 inhibition technology which had been clinically tested and validated. Clinical studies showed that évolis® can reduce hair fall and increase the number of actively growing hair follicles. We think this is a strong value proposition that differentiates évolis® from its competitors.
- Improved e-commerce platform: CDY has expanded and strengthened its e-commerce capabilities through the implementation of many initiatives including the launch of new évolis® websites as well as the launch of its core brands on popular social media and e-commerce platforms in China. We expect this to drive CDY's online sales growth and profitability, grow its recurring customer base cost-effectively and create a better shopping experience for customers. We also expect to see margin expansion as a result of greater online penetration.
- New products: CDY has been constantly investing in R&D to research new hair loss targets and develop new formulations that can deliver improved efficacy. CDY's recent new products include the JoJu® RED EX range, a hair loss supplement as well as a skin care range. Management has indicated it will progressively launch the products in FY22, which we expect to drive an uplift in CDY's near-term sales.
- Complementary acquisitions: Management plans to grow CDY through a combination of organic and acquisitive strategies. Recently, CDY acquired an Australian leading distributor of global skin care and wellness brands, BLC Cosmetics, for \$3M, with an implied EBITDA multiple of 6x. We view BLC as highly complementary to CDY and should deliver multiple strategic advantages to the merged group such as revenue and cost synergies as well as diversification benefits.
- **Earnings profile**: We expect CDY to achieve profitability by FY23e, driven by strong top-line growth and operational leverage. We forecast EBITDA of -\$1.1M and \$0.6M for FY22e and FY23e respectively. If CDY can build scale in its target markets, we expect its subscription-type of sales model to generate recurring earnings streams in the medium to long term.
- Valuation: Our valuation range for CDY is \$0.21 \$0.30 per share. This is based on a three-stage DCF methodology. Our baseline valuation reflects a 25.4% CAGR in revenue between FY22e and FY26e.



Introducing Cellmid (ASX: CDY)

Company overview

CDY is a global consumer health company that develops and sells clinically and scientifically validated anti-aging solutions. To date, CDY has successfully developed and sold its proprietary brands of anti-aging haircare products to consumers in numerous countries including Australia, Japan, China and US. CDY aims to expand its global customer base through continued development and sales of innovative consumer products that can help people to improve their health and wellbeing.

On its corporate structure, CDY's consumer health business is run by its wholly owned subsidiary, Advangen Pty Limited. Within the Advangen group, there are three sub-subsidiaries, namely Advangen Inc (Japan), Advangen International Pty Ltd (Australia) and Advangen LLC (USA), each of which generates sales in its own target market.

Listed on the ASX in 2005, CDY began its journey as a biotechnology company that focused on developing a protein called midkine which is believed to have application across multiple diseases including heart disease, kidney disease and cancer. In the early 2010s, CDY saw an opportunity in the large global hair loss market and was introduced to a Japanese company called Advangen Inc, which at the time had developed several anti-aging haircare products based on a platform of Fibroblast Growth Factor 5 (FGF5) inhibitor technology. Attracted by its unique technology proposition and its strong product uptake in the Japanese hair loss market, CDY subsequently acquired Advangen Inc in 2013 and began selling its products on a global scale. In 2021, management divested their midkine life sciences business and transformed CDY into a pure consumer health company.

How the hair growth cycle works

Our hair grows from the follicles beneath the skin surface (Figure 2):

- 1) Anagen is the growth phase where hairs are being produced by the follicles. It typically can last from 3-7 years.
- 2) Catagen is the transition phase where the follicles undergo a structural rearrangement and prepare to rest. It can last about 2 weeks.
- 3) Telogen is the resting phase where quiescent follicles sit in the scalp. It can last around 3 months. During this stage a new hair follicle is formed from stem cells in the scalp
- 4) Exogen describes the process where the dormant hairs are eventually shed from the scalp, generally dislodged be pressure, e.g., combing, or by a new follicle growing underneath.



Figure 2: Four phases of the hair growth cycle



Source: Grymowicz M, Rudnicka E, Podfigurna A, Napierala P, Smolarczyk R, Smolarczyk K, Meczekalski B. Hormonal Effects on Hair Follicles. International Journal of Molecular Sciences. 2020; 21(15):5342.



CDY's patented and clinically proven FGF5 inhibitor technology platform

FGF5 is a naturally occurring protein that is produced in the outer root sheath of our hair follicles and other specialised immune cells in the scalp. It is a key regulator of the hair cycle biological clock because it acts as the primary signaling molecule in inducing the transition from the anagen (growth) phase to the catagen (preparing to rest) phase. Excess FGF5 in the scalp can slow down hair growth and drive an increase in hair fall, resulting in a shortened hair cycle. There are a number of factors that can drive the changes in the underlying hair cycle precipitated by FGF5 and these can include stress, aging, diet, lifestyle, illness, hormones and medication.

Inhibiting FGF5 in the scalp has been found to extend the Anagen phase of the hair growth cycle, resulting in reduced hair fall and increased hair growth (Figure 3).^{3,4} In 2007, Advangen scientists published a research paper⁵ in which it specified that extracts from several naturally derived botanical isolates such as *Sanguisorba officinalis* root extract had anti-FGF-5 activity. This significant finding had sparked them to create haircare products that leveraged on their FGF5 inhibitory technology.

After acquiring Advangen Inc, CDY scientists continued to screen for botanical molecules for efficacy against FGF5 signaling. They went on to observe anti-FGF5 activity for multiple compounds from the monoterpenoid family, with many showing greater efficacy than previous natural extracts. Their findings were evaluated in a clinical study that involved 32 healthy individuals with hair loss. Positive results were achieved and recorded in a paper⁶ published in 2017, which demonstrated that topical formulations containing the leading compound, namely MTP3, were c.7x more effective in blocking FGF5 versus previous extracts. These formulations largely improved the ratio of follicles in the Anagen phase to those in Telogen phase, reduced hair loss and increased hair density in the trial participants over a 16-week period.

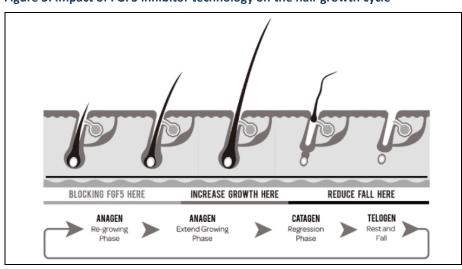
Inhibition of FGF5 prolongs

Anagen phase and reduces

hair loss

CDY's products are built on scientifically validated hair growth technology

Figure 3: Impact of FGF5 inhibitor technology on the hair growth cycle



Source: évolis® website

¹ Higgins CA, Petukhova L, Harel S, Ho YY, Drill E, Shapiro L, Wajid M, Christiano AM (July 2014). FGF5 is a crucial regulator of hair length in humans. *Proceedings of the National Academy of Sciences of the United States of America*. 111 (29): 10648–53.

² Hébert JM, Rosenquist T, Götz J, Martin GR (September 1994). FGF5 as a regulator of the hair growth cycle: evidence from targeted and spontaneous mutations. Cell. 78 (6): 1017–25.

³ Burg D, Yamamoto M, Namekata M, Haklani J, Koike K, Halasz M (2017). Promotion of anagen, increased hair density and reduction of hair fall in a clinical setting following identification of FGF5-inhibiting compounds via a novel 2-stage process. Clinical, Cosmetic and Investigational Dermatology. 10: 71–85.

⁴ Maeda T, Yamamoto T, Isikawa Y, et al. (2007). Sanguisorba Officinalis Root Extract Has FGF-5 Inhibitory Activity and Reduces Hair Loss by Causing Prolongation of the Anagen Period. *Nishinihon J. Dermatology*. 69 (1): 81–86.

⁵ See Note 4.

⁶ See Note 3.



CDY products and brands

Based off its scientifically validated FGF5 inhibitor platform technology, CDY has put together a product portfolio comprising various first-in-class antiaging haircare products. CDY currently owns three core brands: évolis[®], Joju[®] and Lexilis[®]. The brands offer a range of haircare products such as shampoos, conditioners, lotions, treatment masks and activators (Figure 4).

- **Joju**[®] and Lexilis[®] are brands originally created by Advangen Inc and are being currently marketed and sold in Japan and China.
- évolis® is CDY's own brand and is mainly marketed in the Australia, US, Europe and China markets. We note that all évolis® branded products include the lead compound MTP3 that demonstrated efficacy in reducing hair loss, as mentioned in the clinical study earlier. In Australia, évolis® gained a Therapeutics Goods Administration (TGA) listing, which we view as critical for CDY because it validates the quality, performance and safeness of évolis®. This in turn enables the brand to make powerful therapeutic claims such as increase hair growth and reduce hair loss.

Since acquiring Advangen Inc, CDY has diversified its évolis[®] haircare range and developed a new évolis[®] Professional line that encompasses a premium, salon offering, which are designed to combat different age-related hair issues. Refer to Figure 5 on next page for more detail.

Figure 4: CDY's anti-aging haircare product range



Source: Company

What is CDY's business model?

CDY uses a variety of distribution channels through which it sells its products to the end consumers. These mainly include: 1) non-grocery retailers such as pharmacies and health stores, 2) a direct to customer model via its upgraded évolis[®] e-commerce platforms, 3) B2B partnership with online retailers such as Amazon and Dermstore and 4) TV shopping channel such as QVC. Further, CDY's recent acquisition of BLC Cosmetics Pty Ltd (BLC) has created additional professional beauty channels which we expect to underpin future sales.

COVID has accelerated CDY's investment in e-commerce infrastructure, which resulted in CDY repositioning its sales channels to fit customers' new purchase pattern. CDY currently generates most of its sales through its online channels, which we expect to continue over the short to medium term. We believe the continued shift in channel mix towards e-commerce will drive margin upside.

Pricing for évolis[®] products varies and is largely product-driven. It's important to note that CDY deploys a subscription-type of sales model where customers are enticed to continually purchase and consume its products in order to keep up its efficacy longer term. Regular use has been recommended to keep hair and scalp healthy and avoid hair loss. Therefore, we view CDY's products as repeat consumables which should result in recurring revenues over time.



Figure 5 below takes a closer look at the évolis® Professional product line, all of which are formulated with 100% natural working actives that are known to inhibit FGF5.

They are available in three formulas:

- **Reverse** Aims to restore hair's lost beauty by improving hair density and vitality. Mixed with keratin and wheat proteins to strengthen thin hair.
- **Promote** Aims to promote long hair growth and protect against split ends and breakage.
- **Prevent** Aims to preserve the hair and prevent future challenges. This formulation is particularly designed for oily or sensitive scalps.

In addition to the above three formulas, CDY also added a new dry shampoo to its évolis® Professional product series. This new product is created with 100% botanical actives and is designed to style the hair and treat the scalp. It aims to instantly absorb excess oil while delivering its unique FGF5 inhibitory activity.

Figure 5: évolis® Professional product range



Source: évolis® website



Growth drivers

Management has indicated that they will deploy a combination of organic and acquisitive strategies to grow CDY's sales and cashflows. We will mainly focus on the driving factors for CDY's organic growth. We will also discuss our view on CDY's recent BLC acquisition and what it means on the merged group.

Global addressable market opportunity

CDY operates in a large and fast-growing global anti-aging products market

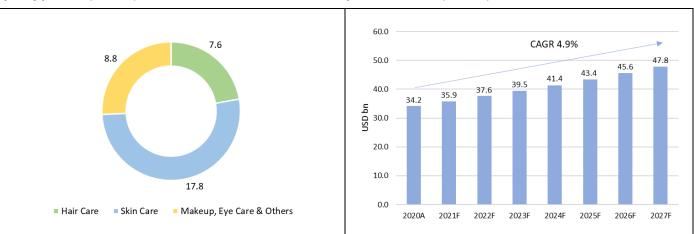
Global Industry Analysts estimates the global total addressable market (TAM) for anti-aging products market was c.US\$34B in 2020. We attempted to break up this TAM into product segments because CDY's core products and brands are heavily skewed towards anti-aging hair care, though we are cognisant that CDY has also begun making its way into the significant and lucrative skin care segment through its new product development and recent BLC acquisition.

Based on our research, the hair care and skin care segments were the major constituents and were estimated at c.US\$7.6B⁷ and c.US\$17.8B⁸ respectively (Figure 6). If we work off CDY's FY21 sales base, we can see that CDY has only scratched the surface of its serviceable hair loss market, evident in its current global penetration rate of <0.5%. We note the opportunity for the hair loss segment alone is material and provides a long runway of growth for CDY. The size of the potential TAM means if CDY can gain traction with strong sales growth in any of the hair care and/or skin care segments, the potential valuation upside will be significant, in our view.

Also, the global TAM for anti-aging products is expected to grow at a CAGR of 4.9% pa over the 2020-2027 period (Figure 7). We believe the market growth will be underpinned by the expected increase in uptake from the younger to middle-aged population, which we expect to be driven by: 1) their desire to look younger and confident, 2) aging anxiety, 3) stress and 4) increases in disposable income. We view this overall market growth as significant because it would provide CDY with a layer of sales growth in addition to its market share gains.

Figure 6: Size of global anti-aging products market for 2020, split by product (USD bn)

Figure 7: Expected growth trajectory for the global anti-aging products market (USD bn)



Sources: Global Industry Analysts, Inc., Grand View Research, Fortune Business Insights, Pitt Street Research estimates

⁷ Source: Data from Grand View Research.

⁸ The data on the anti-aging skin care segment is less clear. According to Fortune Business Insights, we note that this segment constituted 52.41% of the global anti-aging products markets share in 2018. We used this as a proxy for estimating the market size of the anti-aging skin care segment for 2020.

⁹ Source: Data from Global Industry Analysts Inc.



Sales channels repositioned for growth

We expect CDY's expansion in the lucrative China market to drive a new leg of growth in the short to medium term

In recent years, consumers' demand for hair loss products and services in China have surged, with growth underpinned by an increasing volume of people experiencing hair loss issues. According to data from the National Health Commission of the of the People's Republic of China, the number of people who have hair loss issues reached 250 million, representing c.18% of the entire China population. Importantly, there has been a shift in the hair loss trend towards young adults¹⁰, with 84%¹¹ of the people aged under 30s having suffered from the condition. The driving factors for this shift in trend are believed to be stress from long work hours, staying up late and pressure from high living costs in large cities¹². We view these underlying drivers will remain intact in the coming years and as such, we believe the demand for hair loss products and services will likely persist.

In terms of treatment methods, we are cognisant that hair transplant in China has recently gained increased attention from consumers, but we also want to highlight that this procedure is expensive and only half a million people have received it, equating to a market penetration of c.0.2%.¹³ Most consumers use topical applications such as lotions, shampoos and supplements, which we expect to underpin CDY's sales in the short to medium term.

In our view, the purchase pattern of consumers varies in different countries, and therefore, having the right marketing strategy and sales channel in place are critical for driving product uptake. Based on our understanding of Chinese consumers, the key to obtain their attention and interest in a product is by having a presence and a good reputation on trusted and popular e-commerce and social media platforms including Tmall.com and RED. Our insights tell us:

1) more and more Chinese consumers are using the RED when looking up for products and topics of interests, and 2) Tmall.com is regarded by the Chinese consumers as a preferred and trusted platform.

We believe CDY has the appropriate sales strategy that fits with our insights. Following its renegotiation with its Chinese distributor, Aeon International (Aeon), CDY successfully opened its Tmall store in 2Q FY21, which focuses on marketing its évolis branded products. Also, around the same time, CDY won a 10-year distribution agreement with Ourui Health Management (OHM) for the distribution of its Joju and Lexilis branded products in China. In 3Q FY21, CDY received its first order from OHM for 66,000 bottles of Joju shampoos, which totaled c.\$0.5M in sales. In 4Q FY21, CDY obtained import permits from the Chinese National Medical Products Administration, which we expect to drive sales as the import permits allow OHM to sell fully finished products in mainland China. Moreover, CDY has also invested and built a solid presence for all its three core brands on the RED platform (see figures on the next page), within which contains many positive customers feedback and a good user experience in relation to CDY's products and brands.

In summary, we think CDY is attractively placed to capitalise on the lucrative and fast-growing China hair loss market. Our view is that CDY's current sales channel and marketing strategy are rightly positioned to generate interest from the Chinese consumers, which we expect to drive strong top-line growth over the short to medium term in China.

We think CDY's investment in brand building on the popular RED platform will pay off and translate to strong top-line growth

¹⁰ Source: Global Times, Hair growth industry invests in acquiring customers, needs a more mature business model: analyst, 27 July 2021.

¹¹ Source: Dao Insights, Hair market booms as China's hair loss concerns grow, 13 May 2021.

¹² Source: China Marketing Insights, 1 in 6 Chinese People Have Hair Loss Symptoms, 17 September 2021.

¹³ Source: See Note 10.



Figure 8: évolis® on RED



Figure 9: évolis® on Tmall.com



Sources: Xiaohongshu, Tmall.com

Figure 10: Joju® on RED



Figure 11: Lexilis® on RED



Source: Xiaohongshu



CDY's enhanced e-commerce platform expected to drive online sales growth

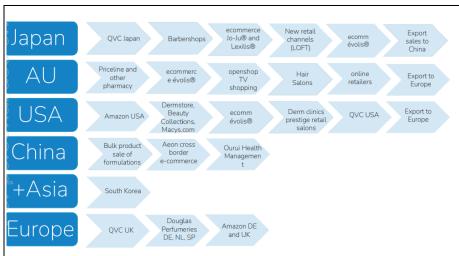
Prior to COVID, CDY had under-invested in its e-commerce capabilities. This area had not been a priority of investment when compared to store-based distribution. As such, CDY's sales for FY20 and FY21 were hampered as COVID has significantly disrupted some of its crucial sales channels such as wholesale pharmacy and retail salons. Amid the COVID disruption, CDY recognised the importance of e-commerce and quickly changed its distribution strategy by accelerating its investment in e-commerce and reducing its investment in prestige retail channels. This resulted in improved performance as the higher online sales allowed CDY to partially offset the drop in physical retail sales.

Some of the initiatives that management took to strengthen its e-commerce capabilities include:

- Development of new évolis® commercial websites, with the Australian site launched in 4Q FY21 and the US site expected to launch in early FY22.
 The new Australian website seems to have good user interface which we expect to drive customer conversion and online sales in the near-term.
- Launch of JoJu® and évolis® on cross border e-commerce platforms in China, the details and implications of which we have discussed earlier in the report.
- In the US, CDY repositioned its focus towards e-commerce partnerships, which resulted in the addition of multiple channels including Macys.com, Dermstore and Amazon USA.
- Further, CDY has built inhouse digital marketing capabilities in FY21 which include social media, content development and performance marketing.

Collectively, these incremental initiatives have materially strengthened CDY's e-commerce capabilities, which we expect to drive the company's online sales growth and profitability, grow its recurring customer base cost effectively and create a good shopping experience for customers. As we push through COVID, we expect the shift towards online retail to persist over the long term. And we see CDY as well-equipped to capitalise on this structural theme.

Figure 12: CDY's distribution channels



Source: Company



Strong qualitative features

In our view, CDY has a durable moat, which we expect to drive solid market share gains in the coming years

CDY operates in a fragmented market with a myriad of products and brands purporting to address consumers' hair loss/thinning challenges. To name a few, these include Aveda, Rogaine, Kerastase and Nioxin. Clearly, future growth for CDY is underpinned by its ability to win share from competing products. As such, we think it is critical to drill into the product proposition and work out the competitive advantages against each of these products. Our findings tell us that CDY has a sustainable moat / competitive advantages when compared to its competitor products, which we expect to assist CDY with gaining market share in the short to medium term.

Clinical validation

The FGF5 inhibition technology sitting behind CDY's évolis® has been clinically tested and validated with demonstrable results. Specifically, évolis® has been shown, via clinical studies, to reduce hair fall and increase the number of actively growing hair follicles¹⁴. We think this is a strong and differentiated value proposition because: 1) évolis® is efficacious, which we expect to build credibility and brand visibility with consumers, and 2) there aren't appear to be many competing products that are clinically validated.

Currently, there are only two Food and Drug Administration (FDA) approved products for hair loss: minoxidil¹⁵ (Rogaine) and finasteride¹⁶ (Proscar). Finasteride restrains an enzyme that converts testosterone to dihydrotestosterone (DHT) which is a hormone responsible for hair loss in some men.¹⁷ We believe évolis® has three key competitive advantages versus both of these competing products:

Versus minoxidil and finasteride:

- Side effects Finasteride has shown to have a potential adverse side effect which is erectile dysfunction, with an absolute increase in risk of c1.5%¹⁸. Around 1-in-80 men treated with finasteride suffers this side effect. ¹⁹ If the treatment is ceased, sexual dysfunction can persist in some patients. ²⁰ On Minoxidil, there is a risk of hypertrichosis²¹, meaning excessive hair growth in wrong places. In contrast, people using évolis® haven't recorded any serious side effects to date.
- Time needed to notice results The peak effect for minoxidil often comes through after 4 months of use. ²² For évolis®, although the time needed to see significant results similarly averages at 4 months, users will however be able to notice some changes much sooner, which include: 1) less hair fall in the first 30 days of use, 2) improved hair texture in 30-60 days of use, and 3) improvement in thinning areas in 60-90 days of use. ²³
- Accessibility Finasteride is a prescribed product and is exclusive to men. évolis®, however, can be used by both men and women, which implies a larger potential market uptake versus finasteride.

¹⁴ See Note 3.

¹⁵ Generic version, Rogaine®.

 $^{^{16}}$ Generic version, Propecia $^{\! \otimes}$.

¹⁷ Source: The Best Men's Hair-Loss Treatments, According to Doctors, *The Strategist*, 16 September 2021.

¹⁸ Mella JM, Perret MC, Manzotti M, Catalano HN, Guyatt G. Efficacy and safety of finasteride therapy for androgenetic alopecia: a systematic review. *Arch Dermatol* 2010; 146(10):1141–1150.

¹⁹ Male and female pattern hair loss: Treatable and worth treating, Cleveland Clinic Journal of Medicine, March 2021, 88 (3) 173-182.

²⁰ See Note 19.

²¹ Treating female pattern hair loss, Harvard Health Publishing, 31 August 2020.

²² See Note 23.

²³ FAQS section of évolis® website.



A patented technology with >15 years of R&D into hair biology

CDY has 14 granted patents related to its consumer health business. These include the IP associated with the innovative FGF5 inhibitor technology, which forms the basis of CDY's formulations behind its core brands. In addition, all of CDY's anti-aging hair care products have been trademarked to protect and improve brand identity. Accordingly, CDY's strong patent protection over its innovation and technology has created a strong barrier to imitation, which we expect to protect and grow its market share longer term.

To conclude, we believe évolis® has a solid economic moat, as reflected in its unique brand built on differentiated and efficacious anti-aging products. With this moat dug around CDY, we argue that the company is attractively placed to gain traction in its target markets and thereby achieve strong sales growth in the foreseeable future.

Figure 13 summarises the product competitive positioning, with CDY ticking all the boxes in terms of product quality.

Figure 13: Competitor analysis

	Clinical validation	Naturally based	Reduces Hair Fall	Increases Growth Rate	Increases Maximum Hair Length	Improves Texture	No side effects
évolis®	✓	✓	✓	✓	✓	✓	✓
Minoxidil	✓		✓	✓			
Nioxin						√	✓
Viviscal elixir		✓					✓
Galderma qilib		✓					✓
Alpecin							✓
Foltene serum		✓					✓
Aveda		✓				√	✓
Kerastase		✓				√	✓
Living Proof						√	✓
éprouvage		✓				√	✓

Source: Company



Product innovation

New product launch expected to drive near-term sales growth

Scientific innovation and clinical efficacy are the main drivers of CDY's product proposition. Leveraging its expertise in the anti-aging field, CDY continues to invest in R&D, which involves researching new hair loss targets as well as developing new formulations that contain new ingredients for improved efficacy. This continuous R&D effort has resulted in a range of new products, as shown below. Management has said it will progressively launch them in FY22. We expect this to lead to an increase in near-term sales growth.

- JoJu® RED EX range targets FGF5 and FGF7 for improved efficacy in hair loss prevention. This new product was launched on QVC Japan in 4Q FY21, which generated record sales of A\$1.4M over the first 24 hours.
- Hair loss supplements there are three supplement formulations been developed. Details are light to date, but management has indicated it will launch the first supplement in 1H FY22, while the other two supplements are expected to launch later on in FY22.
- **Skin care range** developed based on a novel technology. Management expects to initially launch it on QVC Japan under the JoJu® brand.

Moreover, we see growth optionality in the FGF5 inhibitory technology, as we believe CDY will leverage this technology platform to innovate and develop products that could potentially target new anti-aging applications. Further, by having a more expanded and diversified product portfolio, CDY's investment case should be de-risked, in our view.

BLC Cosmetics takeover

CDY could benefit materially from its recent BLC acquisition should it be able to extract synergies as per management expectation.

In 1Q FY22, CDY entered into a commercial agreement with HGL Limited (ASX: HNG) to acquire 100% of its shares in BLC Cosmetics Pty Ltd (BLC). The terms of the deal involved a consideration of \$1M payable in cash and \$2M payable in CDY shares at 6.1 cents, a 15% premium to the current share price. CDY will issue 32.8M shares which will be escrowed for 24 months. Further, there is an earn-out consideration of 3x the incremental growth between BLC's FY21 and FY22 EBITDAs, should BLC be able to deliver EBITDA growth in FY22.

BLC is an Australian exclusive distributor of premium international and local skin care and wellbeing brands, with an extensive professional distribution network servicing more than 900 spas, clinics, salons, retail stores and online in Australia, New Zealand and the Pacific Islands. Refer to Figure 14 on next page for BLC's brand portfolio, which include Thalgo and Comfort Zone as the premium European professional anti-aging brands, and HydroPeptide as a leading global cosmeceutical skin care brand.

Financially, BLC appears to be a growth business, with management expecting to deliver \$7M in sales for FY21²⁴ (+20% growth YoY) and \$0.5M in EBITDA. Based on a \$3M purchase consideration, this implies a 0.4x sales multiple and a 6x EBITDA multiple paid by CDY, which we regard as relatively cheap when compared to the recent transaction multiples^{25,26} that were paid by acquirers in the broader global personal care market²⁷.

²⁴ BLC's financial year ends in the September month.

²⁵ Coty divested a 60% stake in its Professional Beauty and Retail Hair business for \$4.3B enterprise value, implying a 1.8x sales multiple and a 12.3x EBITDA multiple.

²⁶ Margaret Dabbs London sold a large stake to Best World International for £27.7M, implying a 3.6x sales multiple and a 15.5x EBITDA multiple.

²⁷ Source: Intrepid Beauty & Personal Care, Beauty Care M&A Dips in Q2'20 but Proves Resilient, Beauty Care M&A Report - Q2'20.



We view the BLC business as highly complementary to CDY and should deliver a number of strategic advantages to the merged group:

- Revenue synergies due to cross-selling opportunities such as: 1) CDY to leverage BLC's sales knowledge and sell its own branded products to BLC's professional beauty network in Australia and New Zealand; and 2) BLC to cross-sell its brands to CDY's customer base. Also, instead of reinventing the wheel, BLC can now simply leverage CDY's enhanced e-commerce capabilities to drive further sales success in its target markets.
- Cost synergies we think the merged group will be able to reduce its cost base through shared use of the same resources (eg warehouses). Other potential savings could result from shipping and fulfilment. We expect these operational efficiencies to provide margin expansion opportunities.
- Diversification CDY's product offering will be expanded to include BLC's premium skin care products, which in turn will enable CDY to service the highly lucrative and growing skin care segment of the broader anti-aging market. As CDY's product range becomes more diversified, we expect to see reduced volatility in its expected sales and earnings.

When and if BLC is fully integrated and the above synergies are extracted, we expect material upside to accrue to the merged group.

Figure 14: BLC's brand portfolio



Source: Company



Financial performance and growth forecasts

Sales revenue

CDY offers attractive growth opportunities through its organic and acquisitive strategies. We expect CDY's group sales will be \$34M in FY26e, which implies a CAGR of 25.4% for the period between FY22e and FY26e.

We dissect group sales into two components: 1) sales from Advangen, and 2) sales from BLC. We further dissect Advangen's sales into its key geographies, namely Australia, Japan, China and US, from which we forecast regional sales by estimating their expected growth rates.

For new markets like China, we forecast sales in three stages: 1) a high-growth stage (FY22e – FY26e) during which we model 30% growth pa, underpinned by CDY's distribution agreements with OHM and Aeon as well as its marketing strategies on social media and e-commerce platforms like RED and Tmall, 2) a transition stage (FY27e – FY31e) in which we expect growth to moderate, and 3) a stable growth stage where we assume 2% growth post FY31e.

We apply the same framework to Australia and US. On Australia, we expect its initial elevated growth to be driven by its repositioning of its sales channel as well as the revenue synergies which are yet to be extracted from its recent BLC acquisition. On the US, we believe short to medium growth will be backed up by CDY's expanded e-commerce capabilities. Furthermore, CDY's competitive advantage, as discussed earlier, is also a key market share driver which should complement CDY's top-line growth in all of its target markets.

On Japan, we assume an organic growth of 10% pa as it is a more mature market, although we are also cognisant that CDY is rolling out new products which could drive upside risk to our forecasts.

On FY22e, we forecast CDY's group sales will see a step-change growth with an 8-month contribution from BLC. We estimate sales growth on a group level to be 133.6%, with organic growth constituting 32.2% and acquisitive growth making up 101.4%. On FY23e, we expect group sales growth will be driven by a full year contribution from BLC and 18% growth in CDY's core products. See Figure 15 for our sales forecasts.

Gross margin

If CDY has success in building scale in its targeted markets, we expect to it to explore opportunities for large scale sourcing of ingredients and packaging, which should translate to gross margin expansion. In addition, optimisation in supply chain through strategic ingredient sourcing should also improve CDY's cost of sales, thus providing further gross margin upside. We estimate CDY's long-term gross margin will approach 70% (versus 64% for FY21a). However, post-BLC integration, we expect group gross margins to be lower (Figure 16) because we think BLC warrants a more modest gross margin profile (28.4%²⁸) due to it being a pure play distributor. Based on our assumptions, we estimate FY22e group gross margin will be 50.4%.

Opex

If CDY can scale globally, we expect to see high operating leverage with opexto-sales ratio expected to reduce to around 40% by FY24e. We see a number of factors driving operational efficiency and these include improved internal and third-party logistics capabilities as well as some cost synergies expected from the BLC integration. Moreover, we believe increased online penetration will also be a key driver to CDY's cost efficiency.

²⁸ Source: Data from the website of Aswath Damodaran at the Stern School of Business at New York University.



Earnings profile

As a result, we expect group EBITDA for FY22e to improve to a loss of \$1.1M. This would include an expected EBITDA contribution of \$0.5M from BLC. Over time, we model CDY and BLC EBITDA margins to progressively improve to their industry averages of 22.7% and 9.6% respectively²⁹. We note CDY operates on a capital light business model and as such, depreciation from PP&E should be minimal. CDY currently has \$5.8M in net cash. It also has significant tax losses which we expect to be carried forward over many years. Overall, we forecast the merged group will achieve profitability in FY23e (Figure 18).

Figure 15: CDY sales profile

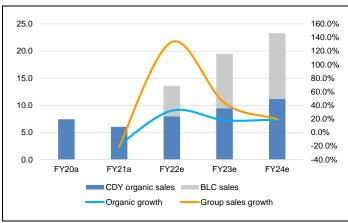
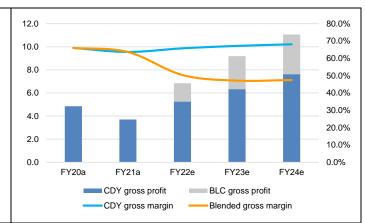


Figure 16: CDY gross profit and margin profile



Source: Company, Pitt Street Research

Figure 17: CDY EBITDA profile

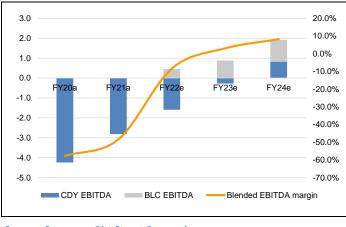
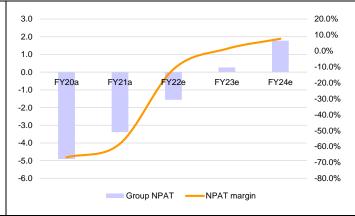


Figure 18: CDY NPAT profile



Source: Company, Pitt Street Research

²⁹ See Note 29.



Valuation

Three-stage DCF

Based on a three-stage DCF methodology, we value CDY at \$0.21ps base case and \$0.30ps bull case. Our valuation reflects the assumptions discussed in the previous section.

To summarise, our valuation is primarily driven by CDY's ability to deliver sales growth organically and also successfully integrate BLC's operations. Also, we factor in margin expansion as CDY optimises its supply chain and expands its online penetration.

We assume a WACC of 11.8%, comprising a cost of equity of 12.8%³⁰ and a cost of debt of 1.5%. Our terminal growth rate is set at 2.0%.

Figure 19: DCF summary

Base Case Valuation	
Present value of FCF	13.5
Present value of Terminal FCF	28.0
Enterprise Value (m)	41.5
Net debt (cash)	(5.8)
Equity value (m)	47-3
Diluted shares	229.5
Implied price	0.21
Current price	0.06
Upside (%)	222%

Present value of FCF 25.2 Present value of Terminal FCF 38.9 Enterprise Value (m) 64.1 (5.8) Net debt (cash) Equity value (m) 69.9 Diluted shares 229.5 Implied price 0.30 Current price 0.06 Upside (%)

Source: Pitt Street Research

Figure 20: DCF Sensitivities

Sensitivity Analysis									
WACC	11.8%								
Terminal Growth Rate	2.0%				Change in '	WACC			
Implied Price (AUD)	0.21	10.3%	10.8%	11.3%	11.8%	12.3%	12.8%	13.3%	13.8%
	1.3%	0.24	0.22	0.21	0.20	0.18	0.17	0.16	0.16
	1.5%	0.24	0.23	0.21	0.20	0.19	0.18	0.17	0.16
	1.8%	0.25	0.23	0.22	0.20	0.19	0.18	0.17	0.16
Change in Terminal Growth Rate	2.0%	0.25	0.24	0.22	0.21	0.19	0.18	0.17	0.16
	2.3%	0.26	0.24	0.22	0.21	0.20	0.18	0.17	0.16
	2.5%	0.27	0.25	0.23	0.21	0.20	0.19	0.18	0.17
	2.8%	0.27	0.25	0.23	0.22	0.20	0.19	0.18	0.17

Source: Pitt Street Research

Peer analysis

We have undertaken a peer analysis in the domestic consumer health sector. We note the sector can be sub-divided into various segments such as skincare, vitamins and baby formula. While there are many companies operating in this sector, there don't appear to be any pure plays that operate in the same niche as CDY and therefore, their comparability is uncertain, in our view.

Figure 21: Domestic consumer health peers

Company	Ticker	Market Cap	Sales		EV/Sales		
		(AUD m)	FY21a	FY21a	FY22e	FY23e	FY24e
ASX consumer health peers							
BWX	ASX:BWX	776.7	194.1	4.0X	2.8x	2.5X	2.2X
McPherson's	ASX:MCP	138.9	200.8	o.8x	0.7X	0.7X	0.7X
Skin Elements	ASX:SKN	40.7	0.3	136.0x	nm	nm	nm
JATCorp	ASX:JAT	28.2	21.0	1.9X	1.0X	0.9x	0.9x
Nutritional Growth Solutions	ASX:NGS	22.9	3.7	5.2X	nm	nm	nm
EZZ Life Science Holdings	ASX:EZZ	21.4	22.3	o.6x	nm	nm	nm
Fiji Kava	ASX:FIJ	13.4	1.2	10.7X	nm	nm	nm
Average				3.9x	1.5X	1.4X	1.3X
Cellmid	ASX:CDY	12.0	5.8	1.3X	o.6x	0.4X	0.3x

Source: Capital IQ, Pitt Street Research (peer avg for FY21a EV/Sales excludes Skin Elements)

³⁰ Risk-free rate of 2.6%, market risk premium of 4.7% and a levered beta of 2.2.



Catalysts

We have identified the following near-term events as important facilitators of moving the current stock price towards our fair valuation range:

- Higher than expected order volumes from the Chinese distributors;
- Successful extraction of synergies from the BLC acquisition;
- Better than expected consumer uptake of CDY's new products;
- Increased e-commerce penetrations in all target markets;
- Entrance into a new market; and
- New accretive acquisitions.

Risks

We see the following as key risks to our investment thesis:

- Uptake risk: There is a risk that CDY may not able to gain traction in its target markets. There is no guarantee that CDY and/or its distributors will be able to secure a specific number of purchase orders for its existing and new products. If the existing distributors are unable to meet their sales targets, CDY may terminate the agreements and need to find a new seller. Also, the launch of new products may receive lower than expected uptake from consumers. If this risk materialises, CDY will likely report financials below our forecasts.
- **Integration risk**: There is a risk that BLC may not be able to successfully integrate into the CDY group. This could result in a situation where the expected synergies from the acquisition may fail to eventuate.
- **Competition risk**: There is the "what if" scenario where new and/or existing competitors coming up with a better and cheaper product that seeks to address the same market opportunity set as CDY. If this risk materialises, it can hamper CDY's market share growth and margins.
- **Commercial risk**: Demand for CDY's products is arguably sensitive to changes in consumer confidence. In a scenario where there is a steep fall in confidence level, CDY's sales could be negatively impacted.
- Regulation risk: CDY operates in multiple jurisdictions. If there is a change in the regulation for imports in the countries to which CDY exports its products to, CDY's sales could be negatively impacted.
- Funding risk: If one or more of the above risks eventuate, CDY could take longer to reach the scale needed to generate internal cashflows to fund its operations. This means CDY will need to tap the equity and/or debt markets for a capital raise.



Appendix I – Glossary

Anagen –The growth phase of the hair cycle where hairs are being produced by the follicles. It typically can last from 3-7 years.

Catagen – The transition phase of the hair cycle where the hair follicles undergo a structural rearrangement and prepare to rest. It can last about 2 weeks.

Dihydrotestosterone – Commonly shortened to DHT, a hormone that triggers the development of male characteristics. It is also linked to hair loss in men.

Exogen – the process where the dormant hairs are eventually shed from the scalp, generally dislodged be pressure, e.g., combing, or by a new follicle growing underneath.

FGF5 —Fibroblast Growth Factor 5, a naturally occurring protein that is produced in the outer root sheath of our hair follicle and in specialist immune cells in the scalp. It is a key regulator of the hair cycle as it acts as the primary signalling molecule in inducing the transition from the anagen (growth) phase to the catagen (preparing to rest) phase.

Hair follicle – Specialised organs that produce hair. See Figure 1 for more detail.

Sanguisorba officinalis – A perennial plant in the family Rosaceae. It is grown in the cooler regions of the Northern Hemisphere in Europe, northern Asia and northern North America.

Telogen – The resting phase where quiescent follicles sit in the scalp. It can last around 3 months. During this stage a new hair follicle is formed from stem cells in the scalp

Appendix II – Capital structure

As at 30 June 2021	In millions	% of fully diluted
Ordinary fully paid shares	187.4	81.7%
Options	42.1	18.3%
Fully diluted shares	229.5	

Appendix III – Leadership team

- CEO and Managing Director Maria Halasz has been involved with biotechnology companies for over 27 years; initially working in executive positions in biotechnology firms, then managing investment funds and later holding senior positions in corporate finance specialising in life sciences. Since taking over as Chief Executive and Managing Director of Cellmid in 2007 Maria has led the restructure of the business, the acquisition of the midkine and FGF5 intellectual property portfolios and the recapitalization of the company. An accomplished public company CEO with international experience Maria has executed transactions in the US, China, Europe, Japan and the UK. Maria is a graduate of the University of Western Australia (B.Sc., MBA) and the Australian Institute of Company Directors (GAICD). She has board experience in public and private companies and has acted on advisory boards of non-profit organizations.
- COO Dr Dominic Burg is an experienced scientist and an accomplished science communicator with a background in large multi-national projects in translational medicine. Dominic has successfully transitioned his analytical and operational skillset towards directing the day to day



operations, logistics, manufacture, HR and regulatory affairs of Cellmid. Dominic is also responsible for scientific and technical aspects of new product development as well as science communications. Dominic undertook his PhD studies at the University of NSW School of Biotechnology and Biomolecular Sciences and underwent post-doctoral training at the University of Sydney, and in the EU public-private research consortium UBIOPRED

- Chairman Bruce Gordon is an experienced finance professional with a career spanning more than 35 years' advising and providing financial services to private and publicly listed companies as well as subsidiaries of large multinationals. Formerly lead partner of the BDO Australia National Corporate Finance Team and the BDO East Coast Partnership Corporate Finance Team he presently holds a number of directorships and senior financial consulting positions. He is a Fellow of Chartered Accountants Australia and New Zealand, and a Fellow of the Australian Institute of Company Directors.
- Non-Executive Director Dr Martin Cross is a highly regarded pharmaceutical executive with over 30 years' experience including corporate and industry leadership roles directly influencing healthcare policy and government legislation in Australia and global business management, marketing and sales roles. From 2013 to 2015, Dr Cross was Chairman of Medicines Australia, the country's peak body representing the research based pharmaceutical industry in Australia. Prior to leading Medicines Australia, from 2010 to 2013 Dr Cross was Chairman of both the Generics Medicine Industry Association and Pharmaceutical Industry Council. During this time, Dr Cross was also Managing Director of Alphapharm in Australia and New Zealand, with responsibility for 750 employees and sales of over US \$500m per annum. From 2003 to 2008, Dr Cross was Country Head and Managing Director of Novartis Australia and New Zealand, and Head of Global Marketing and Sales Capabilities from 2001 to 2003, based in Switzerland.
- Non-Executive Director Mr Dennis Eck brings 40 years' senior management experience in the retail sector to Cellmid's board, providing significant strategic and operational expertise. Mr Eck, a professional investor, has extensive retail experience, from fashion to groceries, including cosmetics and hair salons. As a senior strategist, Mr Eck has helped reshape the operations of several retail businesses delivering outstanding shareholder returns. Mr. Eck served as the Chief Executive Officer of Coles Myer Ltd. from November 1997 to September 2001 following his service in a number of positions including as Chief operating officer of Coles Myer Ltd and Managing director of Coles Myer Supermarkets. Mr Eck's outstanding successes at Coles were recognised by the Association of Chartered Accountants when, in 2001, he was named the Astute Business Leader of the Year in Australia. Recently, Mr Eck served as an Interim Chief Executive Officer at Ulta Beauty, and currently holds a position as Board Member at that Company.



Appendix IV - Analysts' qualifications

Cheng Ge, lead analyst on this report, is an equity research analyst at Pitt Street Research.

- Cheng obtained a B.Com in Finance and LL.B from University of New South Wales, in 2013. He also completed all three levels of the CFA Program.
- Before joining Pitt Street Research, he has worked for several financial services firms in Sydney, where his focus was on financial advice.
- He joined Pitt Street Research in January 2020.

Stuart Roberts has been covering the Life Sciences sector since 2002.

- Stuart obtained a Master of Applied Finance and Investment from the Securities Institute of Australia in 2002. Previously, from the Securities Institute of Australia, he obtained a Certificate of Financial Markets (1994) and a Graduate Diploma in Finance and Investment (1999).
- Stuart joined Southern Cross Equities as an equities analyst in April 2001. From February 2002 to July 2013, his research specialty at Southern Cross Equities and its acquirer, Bell Potter Securities, was Healthcare and Biotechnology. During this time, he covered a variety of established healthcare companies such as CSL, Cochlear and Resmed, as well as numerous emerging companies. Stuart was a Healthcare and Biotechnology analyst at Baillieu Holst from October 2013 to January 2015.
- After 15 months in 2015 and 2016 doing Investor Relations for two ASX listed cancer drug developers, Stuart founded NDF Research in May 2016 to provide issuer-sponsored equity research on ASX-listed Life Science companies.
- In July 2016, with Marc Kennis, Stuart co-founded Pitt Street Research Pty Ltd, which provides issuer-sponsored research on ASX-listed companies across the entire market, including Life Science companies.



Cellmid Limited

Profit & Loss (AUD m)	2020a	2021a	2022e	2023e	2024e	2025e
Sales Revenue	7-3	5.8	13.6	19.5	23.3	27.9
Operating expenses	(11.6)	(8.6)	(14.7)	(18.9)	(21.4)	(24.8)
EBITDA	(4.2)	(2.8)	(1.1)	0.6	1.9	3.1
Depn & Amort	(0.5)	(0.5)	(0.4)	(0.3)	(0.1)	(0.1)
EBIT	(4.8)	(3.3)	(1.5)	0.3	1.8	3.0
Net Interest	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	0.0
Profit before tax	(4.8)	(3.3)	(1.6)	0.3	1.8	3.0
Tax expense	(0.1)	(0.0)	-	-	-	-
NPAT	(4.9)	(3.4)	(1.6)	0.3	1.8	3.0
Cash Flow (AUD m)	2020a	2021a	2022e	2023e	2024e	2025e
Profit after tax	(4.9)	(3.4)	(1.6)	0.3	1.8	3.0
Depreciation	0.5	0.5	0.4	0.3	0.1	0.1
Change in working capital	(0.3)	(1.3)	(0.4)	(1.6)	(1.0)	(1.2)
Other operating activities	0.7	0.1	-	-	-	-
Operating cashflow	(4.0)	(4.1)	(1.5)	(1.0)	0.9	1.9
Capex	-	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)
Other investing activities	-	0.5	-	-	-	-
Investing cashflow	-	0.5	(0.1)	(0.1)	(0.1)	(0.1)
Dividends	-	-	-	-	-	-
Equity raised	8.8	4.5	-	-	-	-
Debt drawdown (repaid)	(0.0)	(0.4)	(0.3)	-	-	-
Other financing activities	(0.8)	(0.6)	-	-	-	-
Financing cashflow	8.0	3.5	(0.3)	-	-	-
Net change in cash	4.0	(0.1)	(1.9)	(1.1)	0.8	1.8
Cash at End Period	7.0	6.7	4.8	3.7	4.5	6.3
Net Debt (Cash)	(5.0)	(5.3)	(3.7)	(2.6)	(3.4)	(5.2)
Balance Sheet (AUD m)	2020a	2021a	2022e	2023e	2024e	2025e
Cash	7.0	6.7	4.8	3.7	4.5	6.3
Total Assets	14.9	13.3	11.4	12.1	14.2	17.6
Total Debt	2.0	1.4	1.1	1.1	1.1	1.1
Total Liabilities	5.1	2.9	2.5	3.0	3.3	3.7
Shareholders' Funds	9.8	10.4	8.9	9.1	10.9	13.9

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