

## **Organic revolutionary**

Skin Elements's goal with natural antimicrobials has been to create organic products that surpass their chemical alternatives, both in effectiveness and in shelf life. \$30m and 15 years later, SKN is ready to compete globally and possibly become the next Blackmores or the next BWX.

#### Natural beats chemical

In 2006, Elon Musk saw the future of the car industry and detailed his three phase plan for developing the world's preeminent Electric Vehicle company, Tesla. In 2005 SKN set out on a similar three phase research program. Instead of clean energy, it targeted natural organic products. The first phase was creating a natural preservative formula to prevent bacterial growth in organic formulations. The resulting product was Soleo Organics, released in 2016, a multi-award winning, all-natural sunscreen, tested on the shelf to five years. The next phase was upgrading its preservative formula to keep already active cultures inert. The result was PapayaActivs released in 2019, with six times higher concentrations of Papaya than any product in the market. Finally, with the COVID-19 pandemic, SKN used its 15 years of R&D experience to develop safer disinfectants. The result is SKN's game-changer product, SuprCuvr.

#### SuprCuvr is arguably the game changer

SuprCuvr is arguably the world's most effective COVID-19 killing, hospital grade disinfectant, being Log 7 (99.99999% effective), chemical free, plant-based, and demonstrated to not irritate the skin. With TGA approval in August 2021, and the first distribution agreement in January 2022 (with Pacific Health Care), SuprCuvr raises the bar on how effective disinfectants should be and is opening the doors to safer hospitals, aged care homes and much more. The new endmarket created by SuprCuvr is expected to rapidly expand with the rising concerns around chemical exposure and skin sensitivity in customers, and the resumption of global travel during COVID-19.

#### Valuation range \$0.21-\$0.40

We have valued SKN at 21 cents per share base case and 40 cents optimistic case using the DCF approach, with reasonable assumptions on growth of its existing skin care product lines and a more aggressive view on the potential of the Invisi Shield SuprCuvr product range. The key risk to our valuation is execution risk related to SuprCuvr. Please refer to page 18 for details on share price catalysts and other risks.

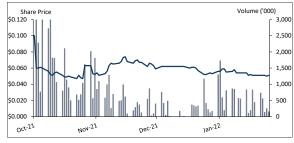
### Share Price: \$0.053

ASX: SKN Sector: Healthcare 18 March 2022

Market Cap. (A\$ m)	23.0
# shares outstanding (m)	433.2
# share fully diluted	506.2
Market Cap Ful. Dil. (A\$ m)	26.8
Free Float	87.5%
12 months high/low (A\$)	0.120 / 0.045
Avg. 12M daily volume ('1000)	264.0
Website	skinelementslimited.com

Source: Company, Pitt Street Research

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



Source: Refinitiv Eikon, Pitt Street Research

Valuation metrics	
DCF fair valuation range (A\$)	0.21–0.40
Discount rate	10.9%
Assumed terminal growth rate	1.0%

Source: Pitt Street Research

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## Introducing Skin Elements, ASX:SKN

Founded in 2005 and headquartered in Perth, Skin Elements is focused on the development of natural organic products that perform better and last longer than their chemical counterparts. The company has four main product lines. It sells all natural sunscreen products under the Soléo Organics brand, therapeutic papaya skin treatment products under the PapayaActivs brand, cosmetic skin care products under the Elizabeth Jane brand, and a recently developed, plant-based hospital-grade disinfectant under the SuprCuvr brand, which has now been included in the Australian Register of Therapeutic Goods.

### Benefiting from the Global shift in conscious consumerism

Consumer preferences are shifting heavily and rapidly towards natural skin care and cosmetics products that are chemical-free and transparent about their ingredients. The global market for natural and organic cosmetics, and personal care products is estimated to grow at a CAGR of over 4.4% between 2021 and 2027, to reach a value of US\$55bn. SKN, with its portfolio of multiple natural and plant-based products and market presence of over 15 years, is in a strong position to tap this rapidly growing market.

SKN's sunscreen range is based on a unique patented micronised zinc oxide but includes other natural ingredients, such as green tea and chamomile. The products, which have been well accepted by the market, have won accolades from several groups including the Environmental Working Group, the Washington Post and Elle magazine.

SKN's PapayaActivs range, which offers natural skin, hair, body and therapeutic products, has 10 times more papaya concentrate as compared with other similar products. It is the only papaya cream to have 600mg/g of natural papaya extract concentration. This is especially notable because the concentration is limited to the capability to prevent bacterial infection.

SKN is also set to enter the cosmetic market through its Elizabeth Jane Natural Cosmetics product range, which has been trialled in Europe and is slated for commercial release in the near future.

### SuprCuvr opens an altogether new end market

The market for antiseptics and disinfectants has recorded sharp growth with the onset and continued prevalence of COVID-19. Demand is likely to surge further, with a global market expected to enjoy a CAGR of ~18% between 2021 and 2028 and surpass the US\$100bn mark by that stage.

Although the primary focus of customers purchasing antiseptics and disinfectants has been protection against germs, there is also a strong growing trend towards preference for environmentally-friendly, natural and healthy alternatives.

SKN's plant-based hospital-grade disinfectant, SuprCuvr, received TGA approval in late August 2021. SuprCuvr is the world's first and only approved disinfectant that has been scientifically proven to bring about 7 log reduction (99.99999% effectiveness) against the COVID-19 virus. SuprCuvr is now included in the Australian Register of Therapeutic Goods and it can now be lawfully supplied in Australia as a hospital-grade disinfectant effective against COVID-19. SKN's management is pursuing commercial-scale sales of SuprCuvr and recently secured an Australian and New Zealand distribution agreement with Pacific Healthcare Pty Ltd targeting 1.2 million litres just in the first year.

SKN's portfolio is based on antimicrobial, plant-based ingredients that are completely chemical-free. No 'nasties' whatsoever.

SuprCuvr is the world's most effective hospital grade disinfectant against COVID-19.



### SuprCuvr may prove disruptive

SKN argues that SuprCuvr, by providing a product that is on the right side of history in terms of its being natural, organic and plant based, is likely to upend the established chemical companies with their disinfection products in a not dissimilar way to how Tesla has upended the automotive industry Consider Toyota and VW, traditionally the No.1 and No.2 automakers globally in terms of revenue. Both companies were founded in 1937. Tesla's effective founding was only 2006, when the Roadster was unveiled. Yet currently Tesla's market capitalisation is around US\$800-900bn. Toyota is only US\$250-300bn while VW is closer to US\$100bn, and Tesla's sales are growing significantly faster than Toyota's and VW's. A similar dynamic, SKN would argue, is likely to be at work in its story in the years ahead.

### Ten reasons to look at SKN

- SKN is operating in markets that are currently experiencing rapid growth. Consumers are increasingly becoming health conscious and prefer natural alternatives to chemical-based products. In fact, organic and natural products are likely to be amongst the key drivers for the cosmetics market in the coming years. The global natural and organic cosmetics and personal care market is expected to grow from ~US\$38bn in 2020 to ~US\$55bn in 2027.
- 2) The company's entire product range is natural and shows a far higher naturopathic capability than others in the market. For example PapayaActivs is the only papaya-based cream in the market to have a 60% concentration of natural papaya extract. In comparison, other papayabased products contain just 3-8% of papaya extract. That's amazing given the constraints developers usually face from bacterial contamination when they seek to increasing concentrations of papaya as an active ingredient.
- 3) Repeated human exposure to disinfectants and chemical-based sanitisers has raised questions regarding long-term health risks and occupational safety, leading to increasing demand for greener solutions. Hospitalgrade eco-friendly disinfectants, where SKN has presence through Invisi Shield SuprCuvr, are becoming popular in the market.
- 4) SKN has invested heavily in R&D over the past 15 years and this backs all its products. The company has spent over A\$35m in R&D and the resulting high-value products show that the R&D has been well spent. SKN spent over 15,000 hours on R&D in 2021. We believe SKN is well funded to continue to support its R&D and mass market its products, having raised over A\$24m in equity funding during the year 2021.
- 5) SKN is well-placed to gain from the fast-growing sanitiser and disinfectant market. SKN's SuprCuvr is the first and only approved disinfectant globally that can bring about 7 log reduction (99.99999%) in COVID-19 coronavirus on surfaces.
- 6) The recent **TGA registration of SKN Invisi Shield SuprCuvr has opened new doors for the company,** since settings such as hospitals and aged care facilities are obliged to use only TGA-registered disinfectants in their cleaning protocols. It's also now the most effective against COVID-19 and thereby the best option. Having now signed a distribution agreement with Pacific Healthcare, we expect many commercial sales agreements to be

The difference between 99.99% (LOG 4) and 99.99999% (LOG 7) in COVID-19 coronavirus is significant.



## log 4 disinfectant

LOG 5 DISINFECTANT

99.999%

viruses.

With a typical sample size of

disinfectant leaves 50 infectious

000.000 viruses, a L

With a typical sample size of 5,000,000 viruses, a LOG 4 disinfectant leaves 500 infectious viruses.





#### LOG 6 DISINFECTANT 99.9999% With a typical sample size of

5,000,000 viruses, a LOG 6 disinfectant leaves 5 infectious viruses.





announced, not only in healthcare but also in government, hotels, offices, airports and public transport hubs, and even in private homes.

- 7) The company's leadership is highly experienced and the board members have strong past records. Peter Malone, the current Executive Chairman and CEO, has over 30 years' experience in global financial markets and has raised more than A\$150m for innovative technology development programmes in the past.
- 8) SKN's products have a presence in the major markets of Americas, Europe and Asia. In all, the company is present across 16 countries worldwide. With SuprCuvr receiving TGA approval and SKN now funded for further growth, management is planning to penetrate further into international markets.
- 9) SKN's product ranges are unique in their respective markets. For example, SKN's Soleo Organics sunscreen range is designed with patented non-whitening micronised zinc as the active ingredient to provide broadspectrum protection from the sun's harsh rays while also providing skin care and protection through botanical extracts and anti-oxidants. This type of product has huge and growing demand in developed countries.
- 10) We believe SKN is undervalued at its current market value. We value the company at 21 cents per share base case and 40 cents per share optimistic case using the DCF approach with reasonable assumptions on growth of its existing skin care product lines and the recently launched Invisi Shield product range.



#### Figure 1: Product portfolio of SKN

Source: Company





SKN offers natural alternatives

to commonly used synthetic

products

### SKN's origins as the 'organic skin care boutique'

The company offers a range of natural and organic skin care products with the aim of providing consumers naturally formulated alternatives to common synthetic skin care products. At present, SKN's product portfolio has four key categories (Figure 1), which have been developed using its proprietary all-natural 'SE Formula':

- 1) Soleo Organics SKN's flagship brand under which it sells all-natural and organic sunscreens.
- 2) PapayaActivs SKN's haircare, skincare and therapeutic skin treatment product range.
- 3) Elizabeth Jane Natural cosmetic skin care range.
- 4) Invisi Shield SuprCuvr Company's recently developed plant-based hospital-grade disinfectant and sanitiser range.

#### What differentiates SKN from other organic wellness brands?

All SKN's products are based on naturopathic principles and use only organic and natural ingredients (Figure 2). From non-whitening (micronised) zinc to botanically fortifying extracts with anti-oxidants, the company has invested over 15 years and more than A\$35m in designing and developing its formula and products. Further, SKN's Solèo Organics and PapayaActivs products have bagged FDA, TGA and other international approvals.

The company has also regularly collaborated with other natural product companies to enhance its organic product lines. For instance, in 2017, SKN acquired McArthur Skincare and in 2018, it entered into a Memorandum of Understanding with Affinity Energy and Health Ltd aimed at developing a new range of algae and cannabidiol (CBD) based skincare products.

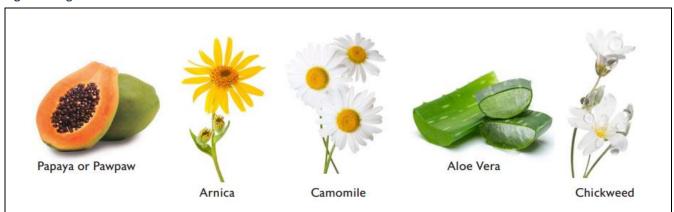


Figure 2: Ingredients used in SKN's formulations

Source: Company



SKN has had a consistent focus on developing its natural product portfolio through a combination of organic and inorganic means

#### Looking at SKN's journey

SKN's journey began in 2005, with the idea of a proprietary all natural 'SE Formula', a formula that would solve the problems inherent in organic products. To make them more effective and longer lasting than the chemical alternatives.

SKN spent the first five years of R&D discovering and searching out ingredients, after which it developed and released its first product range, Soleo Organics. The original all-natural sunscreen was released in 2016. Soleo uses micronised zinc rather than the more common nano zinc, making it non-comedogenic (i.e. does not block pores) and fortifies the skin with a series of natural oils. It has also shown at least five years of shelf life in stability testing.

To broaden its natural skin care products range, the company decided to go ahead with the strategic acquisition of McArthur Skincare in May 2017. The deal gave SKN 12 cosmetic skin care products, five therapeutic products and an established multi-channel sales model. SKN improved the existing formula's increasing the shelf life from six months to two years, and started selling these products under the new name PapayaActivs. These were released in 2019.

Further, in 2020, SKN decided to make a foray into the market for disinfectants and sanitisers amidst the COVID-19 pandemic. In April 2020, the company announced that it had developed an organic range of sanitisers and disinfectants called Invisi Shield SuprCuvr, building on 15 years of antimicrobial research and development. Invisi Shield SuprCuvr addresses the rising concerns of skin sensitivity resulting from repetitive use of alcoholbased sanitisers. SKN's new hospital grade disinfectant, SuprCuvr. SuprCuvr is the world's most effective disinfectant against COVID-19, and like SKN's other products, is plant-based. Included in the Australian register of therapeutic goods in 2021.

SKN's journey shows a heavy emphasis on R&D and an increase in frequency of release as the formula was developed. The first product line took 10-11 years to release, but the second product line took just three years and the most recent product was developed, released, and included in the Australian Register of Therapeutic goods in just two years.

### **Global reach of SKN's products**

SKN sells its products through a network of websites including SKNLife and a physical distribution network, which includes retail pharmacies and health chains. The company is present across 16 countries worldwide (Figure 3). Post the recent TGA approval for SuprCuvr, SKN is looking for approvals from European regulators in order to penetrate markets beyond Australia for this unique disinfectant offering.





#### Figure 3: SKN's global presence



Source: Company

#### Soléo Organics – the foundation stone of SKN

SKN sells its all-natural and organic sunscreens under the Soléo Organics brand name. The sunscreens are made from antioxidants, natural oils and botanical extracts. Micronised zinc oxide is the active ingredient in Soléo along with a host of other natural ingredients, such as cucumber, Vitamin E, chamomile and green tea extract. Micronised zinc is proprietary to SKN and covered by patents granted and pending. It's superior to the 'nano' zinc used by most sunscreens, where the smaller particle size can clog or get stuck in the skin.

Soléo Organics has a high-protection formula that protects from both Ultraviolet-A and Ultraviolet-B solar radiation. The product does not have the regular UV chemical absorbers, titanium dioxide, synthetic preservatives, parabens, sodium lauryl sulphate, benzoates, petrochemicals, and artificial colours or fragrances. Soléo was formulated in 2006 and developed over the next ten years at a cost of ~A\$8.5m.

#### PapayaActivs – the top papaya-based cream in the market

SKN inherited the original McArthur Skincare product range through its acquisition of McArthur Skincare in 2017. PapayaActivs is SKN's release, improving the original formula and combining papaya with other herbal ingredients. It is the only papaya cream to have a 60% concentration of natural papaya extract – the highest concentration available in the market currently. In comparison, other papaya-based products contain ~3–8% of papaya extract. Even with all this it has a shelf life of two years thanks to the SE Formula.

PapayaActivs is currently the highest papaya concentration product in the market



The other natural ingredients in PapayaActivs therapeutic creams include mainstays of herbal medicine such as chickweed, aloe vera, chamomile and arnica. PapayaActivs can help in relieving skin conditions including dermatitis, psoriasis, rashes and eczema. It also assists in healing minor burns, and relieving mild muscle and joint pain.

### Elizabeth Jane – SKN's key to cosmetic industry

In order to enter the multibillion-dollar cosmetics industry, SKN developed the Elizabeth Jane Natural Cosmetics product range using natural, plantbased ingredients. The product range includes age-defying renewal cream, snow white brightening essence, intensive recovery night cream, delicate eye rejuvenation gel, purifying foam cleanser, hydra-fresh revitalising spritzer, daily revival moisturising cream, ultra C+ serum and gentle microdermabrasion facial polish.

Elizabeth Jane has been trialled in Europe and is set for commercial release in the near future.

### SKN's new company maker Invisi Shield

In 2020, SKN's management decided to pivot its strategy and make a foray into the market for sanitisers and disinfectants, following the onset of the COVID-19 pandemic. This was not an overnight move because it was backed by decades of research conducted by the company. SKN, using its expertise in advanced organic anti-microbial formulations, developed a range of natural and alcohol-free hand sanitisers. It launched the Invisi Shield Natural hand sanitiser in April 2020, which proved to be 99.99% effective against coronavirus. The sanitisers are made from organic plant extracts including lemon grass, sage, and thyme combined with natural anti-microbial compounds. Invisi Shield offers a natural alternative to other harsh, alcohol-based products and thus addresses the rising concerns of skin sensitivity due to repetitive use of sanitisers.

### SuprCuvr – SKN's game changer

As part of the Invisi Shield product line, the company later developed SuprCuvr, the world's most effective disinfectant against COVID-19. By August 2021 SKN had secured TGA approval for SuprCuvr. Independent laboratory testing of SuprCuvr shows that the product can bring about 7 log reduction (99.99999%) in COVID-19 coronavirus on test surfaces, making it the first and only approved disinfectant with such a high score against COVID-19 (Figure 4).

How effective is Invisi Shield SuprCuvr? Consider that the top safety ratings secured by top-of-the-range competitor products are in the 5–6 log reduction range but these also are generally high on the chemical content. In contrast, SuprCuvr is made from a 100% plant-based formula that is biodegradable, vegan, non-corrosive, non-flammable and at least 10x more effective than a 6 log reduction product. It does not contain typical chemical ingredients of disinfectant products, such as benzalkonium chloride, hydrogen peroxide, quaternary ammonium compounds, or bleach/chlorine compounds. Moreover SuprCuvr is certified as a 100% botanical-based organic input by National Association for Sustainable Agriculture Australia, as per that body's NASAA Organic and Biodynamic Standard.

Invisi Shield leverages the company's expertise in formulating chemical-free products

SuprCuvr is the best natural disinfectant globally for protection against COVID-19



#### Figure 4: SKN's disinfectant spray offering for surface sanitisation



Source: Company

SuprCuvr will be the key growth engine in the near term

The TGA registration provides numerous benefits to SKN. First, the registration allows the company to make more detailed and specific product and label claims with respect to Invisi Shield SuprCuvr. Second, it opens new doors for SuprCuvr, since settings such as hospitals and aged-care centres are only allowed to use TGA-registered disinfectants. Finally SuprCuvr's distribution deal with Pacific Healthcare opens the door to large scale distribution beyond hospitals and aged care centres, to include hotels, offices, airports, and public transport hubs. We believe the milestone of TGA registration allows SuprCuvr to emerge as a strong, near-term growth driver for SKN. Moreover, the company is well-funded to support the development and sales strategy for the Invisi Shield SuprCuvr product range given that it has raised over A\$24m in equity funding in 2021.

The next steps for the management in terms of regulatory approvals include applying for European approvals for SuprCuvr and completing the testing of its sanitiser product for potential approval by the TGA in 2022.

# SuprCuvr – The first of the distribution agreements is now in place

**Pacific Health Care will distribute of SuprCuvr in Australia and New Zealand.** Under a binding agreement signed in January 2022 with the Perth-based Pacific Health Care<sup>1</sup>, that company, an ISO 9001:2015-certified supplier of medical and healthcare consumables, will target sales of 1.2 million litres of SuprCuvr over the first twelve months. The financial terms of the deal are confidential but Pacific Health Care gets to buy at a distributor price. Pacific Health Care has the right customer base, with various state health systems as well as hospitals, aged care facilities, and so on as long standing customers.

The sales targets increase over time. The Pacific Health Care arrangement is only for 12-months but can renew annually for another four if escalating sales

<sup>1</sup> pacifichealthcare.com.au.



targets are met. This potentially sees a target for year four of around 1.6 million litres.

A template for distribution agreements elsewhere. The Pacific Health Care agreement is exclusive for Australia and New Zealand but if it works in the early stages we argue that it can allow other distribution agreements to be secured for territories considerably larger than Australia and New Zealand. We believe major chemical companies will be watching SKN's progress on distribution agreements given the rising market opportunity for natural and organic disinfectants post-Covid-19.

### The rise and rise of antiseptics and disinfectants

Since the dawn of the 21st century, the world has witnessed several epidemics and pandemics besides COVID-19, such as SARS, MERS, Zika, Ebola and Swine Flu. The impact of global warming and urbanisation has had on the spread of infections have reinforced the necessity of improved hygiene levels. Infection transmission is expected to become a global issue in the coming decades, as growing populations and increasing migration are leading to a higher probability of disease transmission. Over the next 30 years, an additional 2.5 billion people will live in cities, the increase being predominantly driven by Africa and Asia, with 10 new megacities expected by 2030<sup>2</sup>. Climate change is also being linked by some thinkers to an increase in infections and diseases, with deforestation considered to be the cause of one-third of new and developing outbreaks, such as Ebola and Zika<sup>3</sup>. Self-care and hygiene requirements are also becoming more popular, owing to a growing share of ageing population.

2.5 billion people will be living in urban areas over the next 30 years WHO estimates that over 2 billion people across the world will be over the age of 60 by 2050

Consequently, the use of disinfectants and antiseptics has increased in various healthcare, commercial and residential applications. Manufacturers are developing many antiseptic and disinfection products such as wipes, gels, disposable paper towels, and alcohol-based and alcohol-free solutions. The market for antimicrobial disinfectants is further driven by demand for novel items, such as surface disinfectant sprays, cloth disinfectant sprays and veggie washes. Moreover, natural and organic disinfectants are becoming more popular among manufacturers<sup>4</sup>.

# Significant growth expected in the global antiseptics and disinfectants market

The global market for antiseptics and disinfectants was valued at US\$24bn in 2020, and the market is predicted to grow at a staggering 18% CAGR between 2021 and 2028 (Figure 5). Besides COVID-19, the occurrence of diseases, such as cholera, typhoid, Hepatitis A and dengue, primarily due to a lack of cleanliness, is expected to support the demand for sanitisers and disinfectants. In 2020, North America dominated the antiseptics and disinfectants market, accounting for 34% of the total revenue share. The

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Factors such as global warming, urbanisation and ageing population are driving the need for better self-care and personal hygiene

North America dominates the antiseptic and disinfectants market, thereby providing lucrative growth opportunities

<sup>&</sup>lt;sup>2</sup> See Longer Term Investments Emerging market infrastructure – update by Carl Berrisford, UBS, 10 September 2019.

<sup>&</sup>lt;sup>3</sup> Scientific Reports. 2019; 7(14291); 1-9. <sup>4</sup> See Fact.MR's market release dated August 2021 and headlined 'Antiseptic and Disinfectant Market'.



rising number of surgeries conducted in North America, as well as the growing number of workers in the healthcare industry, are expected to continue to drive demand for antiseptics and disinfectants in this region.

The chemical-based product segment led the market in 2020, accounting for 92% of the total revenue share. However, chemical-based cleaning and disinfecting agents are harmful to animals and humans and can enter the body by ingestion, inhalation or skin absorption. The respiratory system, eyes and skin can all be affected by chemical-based compositions.

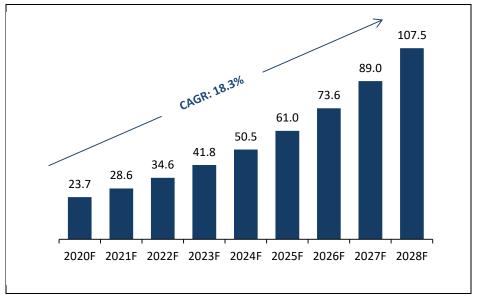


Figure 5: Global antiseptics and disinfectants market size (US\$bn)

In terms of end use, hospitals dominate the antiseptic and disinfection industry, with hospitals accounting for  $\sim$ 46% of the total revenue share in 2020<sup>5</sup>.

#### Sales of hand sanitisers to remain elevated in the medium term

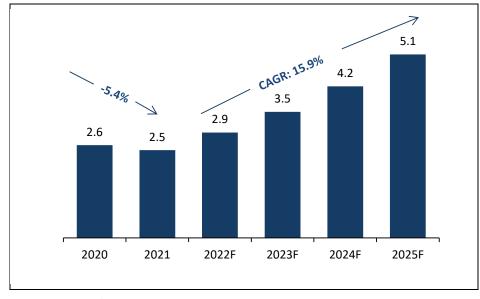
Hand sanitisers are made up of alcohol, water, emollients, polyacrylates, artificial and natural colours, and fragrances, and are available in foam, gel and liquid forms. Alcohol-free variants, which are manufactured using glycerine, thickening agents and disinfectants (such as benzalkonium chloride and other plant-based formulations and antimicrobial agents) are also available. The global hand sanitisers market probably declined by 5% in US\$2.45b. The decline would be primarily due to companies cutting back on production after catering to skyrocketing demand in 2020. However, during 2021-2025, the market is estimated to grow at a CAGR of 16%, reaching US\$5.12bn (Figure 6). Several key manufacturers, such as Gojo Industries and Purell, expect that America's fixation on new hygiene habits will outlast the COVID-19 health crisis<sup>6</sup>.

Demand for hand sanitisers will continue to rise because of the newly acquired hygiene habits

Source: Grand View Research

 <sup>&</sup>lt;sup>5</sup> See Grand View Research's market release dated February 2021 and headlined 'Global Antiseptics And Disinfectants Market Report, 2021-2028'.
 <sup>6</sup> See Hand Sanitier Sales Jumped 600% in 2020. Purell Maker Bets Against a Post-Pandemic Collapse by Sharon Terlep, The Wall Street Journal, 22 January 2021.





#### Figure 6: Global hand sanitiser market (US\$bn)

Source: ReportLinker

# COVID-19 and Hospital Acquired Infections have changed people's disinfection habits

It is evident that the global market for sanitiser and disinfection products will continue to grow at promising levels in the medium term. Some of the key factors backing this growth potential are elaborated below.

**The COVID-19 pandemic will have a long-lasting impact on consumer habits.** The role of sanitisers and disinfectants in limiting the transmission of COVID-19 is undeniable. However, even after the pandemic has subsided, the hygiene-related habits developed among consumers will not alter easily. As per a survey conducted by Statista in July 2021, 44% of the male consumers and 50% of female consumers expected that they would spend more on personal hygiene items, such as hand sanitisers and hand soaps, because of the COVID-19 pandemic<sup>7</sup>. Not only hand sanitisers but surface disinfectants as well, will benefit going forward. The global surface disinfectant market was valued at US\$4.5bn in 2020, and the market is projected to grow at a CAGR of ~7% between 2021 and 2028. As businesses have started reopening, several factors are contributing towards market expansion, such as increased vehicle manufacturing, construction and infrastructure activities, travel, industrial activity, and the need to keep these areas clean<sup>8</sup>.

**Hospital Acquired Infections (HAIs) are increasing** across the globe, primarily driven by a lack of sanitation and precaution. These days infections equivalent to HAIs are showing up not just in hospitals but also in other care institutions such as nursing homes, outpatient clinics or health centres. HAIs are a leading cause of morbidity, mortality, lengthened hospital stays and higher healthcare costs. These factors also lead to an increase in intensive care unit admissions, re-hospitalisation rates, and in certain cases, catastrophic healthcare costs<sup>9</sup>. According to a study released in February 2020 titled

COVID-19-induced habits and procedures will have a longlasting impact

> >50% of the HAIs originate in intensive care units

research coverage. Please refer to the final page of this report for the General Advice Warning, disclaimer and full disclosures.

<sup>&</sup>lt;sup>7</sup> See Statista's market release dated March 2020 and headlined 'Do you expect to spend more or less on personal hygiene products such as hand sanitizer and hand soap because of the coronavirus?'.

<sup>&</sup>lt;sup>8</sup> See Grand View Research's market release dated April 2021 and headlined 'Surface Disinfectant Market Size, Share & Trends Analysis Report'.
<sup>9</sup> See Dearth of data: We don't know much about infections originating in hospitals by Sanjay Bhattacharya, DownToEarth, 17 November 2020.

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"Healthcare-Associated Infections—A New Pathology in Medical Practice?", over 50% of HAIs originate in the intensive care unit<sup>10</sup>. In order to avoid these illnesses, the use of surface disinfectants and hand sanitisers is essential. The use of disinfectant solutions in hospitals and clinics protects against contamination and reduces the incidence of HAIs.

**The geriatric population continues to expand** at an unprecedented rate. In 2019, the world's population of persons aged 65 and above was estimated to be 703 million. By 2050, the number of such persons is expected to be 1.5 billion. Elderly patients are a lot more prone to HAIs as compared to younger population. Consequently the increase in the geriatric population will naturally lead to a larger market for disinfectants and sanitisers.

## Eco-friendly formulations will become a key requirement of this industry

Repeated human exposure to disinfectants has raised questions regarding exposure-related long-term health risks and occupational safety. Chemicals such as quaternary ammonium compounds (QACs), hydrogen peroxide, bleach (sodium hypochlorite) and alcohol are active constituents in typical disinfectants indicated for use against COVID-19 viruses. The structures, characteristics, modes of action, environmental behaviours and consequences on human health are all different for these disinfection compounds. Disinfecting chemicals can be absorbed through the skin, inhaled or ingested by humans, and lead to several ill effects:

- Excessive use of bleach, hydrogen peroxide or alcohol-based disinfectants can cause respiratory damage and has been linked to increased risk of asthma.
- QACs have been linked to occupational illnesses such as asthma and an increased risk of chronic obstructive pulmonary disease (COPD).
- The presence of QACs in human blood has been linked to changes in health biomarkers, such as an increase in inflammatory cytokines, impaired mitochondrial function and disruption of cholesterol homeostasis in a dose-dependent manner.
- Ingestion of hand sanitisers, which contain high quantities of alcohol, can cause acute alcohol poisoning in children and adults.

No wonder, then, that plant-based hand sanitisers are being developed by manufacturers to address the concerns associated with alcohol-based sanitisers. Alcohol-free solutions are usually much easier on the hands and represent far less of a concern in the event of inadvertent consumption. Also, alcohol-free hand sanitisers have a low fire risk and do not damage surfaces<sup>11</sup>.

In our view, SKN's Invisi Shield product range offers the best of both worlds in terms of safety against coronavirus and use of chemical-free ingredients. There are not many comparable offerings currently in the global market and this should provide the company the edge to leverage shifting consumer preference for chemical-free sanitisers and disinfectants.

<sup>10</sup> Int J Environ Res Public Health. 2020 Jan 25; 17(3):760.

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The world geriatric population is estimated to double by 2050

Consumers are increasingly becoming concerned with alcohol-based hand sanitisers and disinfectants

<sup>&</sup>lt;sup>11</sup> See Comparing Alcohol-Based Vs. Alcohol-Free Hand Sanitizers, Zogics, 29 January 2021.



### The lucrative market for organic skin care products

Customers are providing a higher weight to organic composition of products versus their costs We believe SKN with its portfolio of organic skin care products and established market presence will be a key beneficiary of the trend of increasing preference for eco-friendly products against discounted and mass-produced products. With the rise in incomes, consumers are willing to pay more for sustainable skin care products that use good quality and natural ingredients. As a result, skin care products marketed using the natural, organic and clean tags are likely to attract more buyers and perform better in the market. By 2027, the global market for natural cosmetics is estimated to be worth US\$55bn (Figure 7). Concerns about the negative effects of chemicals on the skin, such as skin irritation, allergies and lack of skin sensation have fuelled the market expansion of eco-friendly formulations.

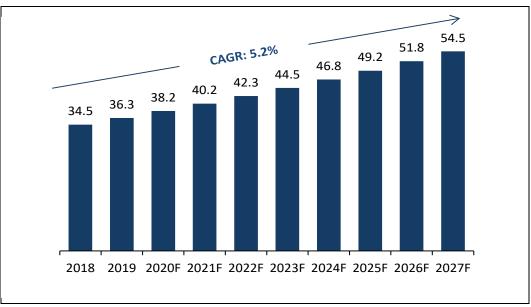


Figure 7: Global market value for natural and organic cosmetics and personal care (US\$bn)

Source: Statista

There is also an increase in the use of plant and herbal extracts and natural cosmetic preservatives. In 2020, the global market for plant and herbal extracts, and natural preservatives crossed US\$80m, and it is expected to grow significantly over the next few years. Plants and herbal extracts used in cosmetics, such as rosemary, aloe vera, grape seed and neem, include phytochemicals that act as natural defences against insects, herbivores and microbes. These benefits will further drive the growth of the natural and organic skin care products market<sup>12</sup>.

When it comes to natural cosmetics, sustainability encompasses not just how components are sourced or how the product is made, but also the materials utilised in the manufacturing and post-production stages. To contribute towards environmental conservation, manufacturers are increasingly focusing on the biodegradability of cosmetics. At the formulation level,

<sup>12</sup> See Global Market Insights' market release dated 2020 headlined 'Cosmetic Preservatives Market Size by Product'.



innovation has allowed for the development of alternatives for some compounds that were traditionally utilised in the formulation of cosmetics. For instance, microplastics – which are water-insoluble plastic particles where the particle size is less than 5 mm – are used in cosmetics for a variety of purposes, including skin exfoliation and dental care. Microplastics can readily get through water treatment plant filters and end up in the sea due to their small size. Many cosmetic companies are concerned about the potential impact on marine habitats. Because of the potential damage that microplastics pose to marine ecosystems, cosmetic manufacturers are investing in initiatives that will likely help limit or eliminate microplastics from their products. Many companies are also turning to natural alternatives such as inorganic minerals (quartz sand) or plant-based products (cellulose beads, fruit seeds and shells)<sup>13</sup>.

## Growing product awareness among millennials will be another key driver

Young consumers are likely to respond positively to the participation of celebrities in the promotion of natural beauty products. The fashion-conscious millennial generation usually keeps itself updated about the new product launches happening in the market. Further, the millennial population's disposable income level has increased consumer spending on high-quality skin care products. All this is helping in driving the global organic skin care products market forward.

Even though millennials are generally price-conscious, ~73% of them are willing to pay more for sustainable items, compared to only 66% consumers being price-conscious when all age groups are considered. Their highest priority is that the skin care products should be 'cruelty-free' and should not be tested on animals. This has been supporting the expansion of the global vegan cosmetics market, which is predicted to reach US\$25bn by 2029 at a CAGR of about 6%<sup>14</sup>.

## Adoption of paraben-free products is gaining traction in the skin care market

Parabens are a class of chemical preservatives that are often used by the beauty and skin care industry to increase the shelf life of products. They are commonly found in many beauty and skin care products, such as moisturisers, sunscreen, shampoos, conditioners and lip balms. However, in the last decade, the long-term effects of paraben exposure have become a subject of concern. Parabens have the ability to imitate the human hormone oestrogen. This means that they may disrupt the body's hormone balance, regardless of gender. This is causing concern among consumers as parabens may have an impact on female reproductive functions. Studies have demonstrated that parabens can be easily absorbed by the skin, thereby causing accumulation of parabens in the body upon everyday use of paraben-containing beauty and skin care products<sup>15</sup>. If consumed on a regular basis, parabens are believed to play a role in the emergence of breast cancer in women<sup>16</sup>.

Parabens such as propylparaben and butylparaben are no longer considered safe for usage. Only 35% of the cosmetic products in the market include parabens presently, a drop of roughly 7% in the last few years. Many sectors

<sup>13</sup> See Sustainability in natural cosmetics: the key for innovation by Ana Ledesma, The International Natural and Organic Cosmetics Association.

<sup>14</sup> See Research Report's market release dated 30 June 2021 and headlined '12 Industries That Will Thrive Thanks To Millennials'.

<sup>16</sup> See 8 Beauty eCommerce Trends That Will Define the Industry in 2021, Yieldify, 28 January 2021.

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Parabens are becoming a popular issue among skin care consumers owing to its longterm health hazards

<sup>&</sup>lt;sup>15</sup> See What Does Paraben-Free Mean in Beauty Product? , Healthline.



of the beauty industry still draw a considerable portion of sales from goods containing parabens (and possibly many other undesirable substances), but these are gradually converting to paraben-free alternatives<sup>17</sup>. Some examples of action by cosmetic majors on this front include:

- Kiehl's, an American cosmetics company, updated its Ultra Facial Cream to remove parabens and witnessed a US\$5m increase in sales as a result. It climbed into the top five prestige skin care brands in the US this year as a result of the growth<sup>18</sup>.
- Aloe Unique, a US-based skin care company that manufactures a 100% natural South African skin care range, has introduced a new line of paraben-free skin care and body products. The newly launched products from Aloe Unique are made from pure aloe and are considered 'ecofriendly'.

## Valuation

We value SKN at 21 cents per share base case and 40 cents per share optimistic case, using the DCF approach.

In our valuation of Skin Elements we have assumed a steady increase in the number of commercial-scale contracts, and the average value of such contracts, for Invisi Shield SuprCuvr out to 2031. At that time we model revenues for the entire Invisi Shield SuprCuvr product range at between A\$180m and A\$300m. We argue that this approach is reasonable, for five reasons:

- The expected fourfold increase In the global antiseptics and disinfectants market, to over US\$100bn, before the decade is out;
- The willingness of building and infrastructure owners to continue spending on hygiene;
- The quality of the product in terms of its performance against COVID-19, in an environment that is likely to be concerned about that virus, and all sorts of other infectious diseases new and old, for years to come;
- The fact that the company was the world first with the kind of 7 log virus reductions we saw beforehand;
- The fact that the product does not have the kind of issues many consumers will have with existing antiseptic and disinfectant products.

Skin Elements will need to execute well to get the most out of Invisi Shield SuprCuvr. To state the obvious, Skin Elements is not S.C. Johnson, Reckitt Benckiser, Procter & Gamble, 3M or Clorox, to name a few leading players in the disinfection space. We argue that the lion's share of the market will stay with companies like these. However there is plenty of room for emerging players cognisant of the new needs of the market, like Skin Elements. To continue the Electric Vehicle analogy we used on page 1 of this note, Skin Elements may only become Rivian, not Tesla, but the shareholders will still make out very well from here. We look to see significant growth from FY24, once Skin Elements has the following:

- Approvals in all key jurisdictions, particular FDA and CE Mark;
- Established distribution networks to sign on to the product;

 <sup>&</sup>lt;sup>17</sup> See Mordor Intelligence's market release dated 2020 and headlined 'Organic Skin Care Products Market - Growth, Trends, Covid-19 Impact, and Forecasts (2021 - 2026)'.
 <sup>18</sup> See 8 Beauty eCommerce Trends That Will Define the Industry in 2021, Yieldify, 28 January 2021.

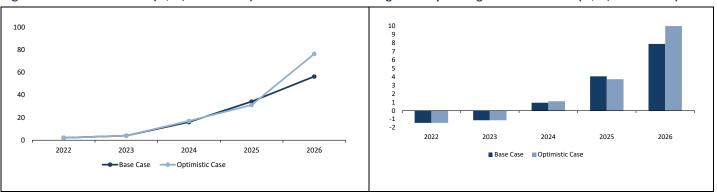


Strong investment in brand development between Skin Elements and its partners.

Realisation of the ultimate payoff from Invisi Shield SuprCuvr will require the company to start delivering these kind of developments, and this represents a key risk to our valuation. We believe the company's ability to manage the Invisi Shield SuprCuvr development process suggests that it can deliver, but the stock needs to be watched carefully between now and 2024.

We also use the following key assumptions in our model:

- Top-line growth. We have considered the revenue growth of SKN's existing skin care product lines and the recently launched Invisi Shield product range. In our forecasts, we have assumed a greater contribution of the latter to the company's overall revenue considering the impact of COVID-19 and reliance on large-scale commercial deals for sales of Invisi Shield products. The distribution deal signed between SKN and Prudential Consultants in 2020, with a minimum sales commitment of A\$2.4m over three years, has been used as an indication of the typical deal size in our forecasts for Invisi Shield SuprCuvr. In our optimistic (bull) case, we have assumed a stronger revenue growth rate for all SKN's product lines. Our sales forecasts for SKN during 2022–2026 in both the scenarios are shown in Figure 8.
- Operating margins. We have not assumed any margin improvements across the forecast years in our base case. However, in the optimistic case, we have factored in an improvement in gross and operating margins on account of economies of scale and related efficiencies once SKN crosses a significant revenue milestone. Based on our forecasts, SKN will become profitable at the operating income level by 2024 in both these scenarios (Figure 9).
- Funding. We have assumed 100% equity funding.





We expect Invisi Shield sales to

to skin care products

grow at a faster rate as compared

#### Figure 9: Operating income forecast (A\$m, 2022–2026)

Source: Pitt Street Research

- Discount rate. We arrive at a WACC of 10.9%, reasonable for an earlystage Life Sciences company with approved products.
- **Terminal Value.** We have used a terminal growth rate of 1% considering the long-term growth potential and defensive nature of SKN's products.



Figure 10 shows our DCF value for SKN and the upside potential of the stock.

#### Figure 10: Valuation summary

SKN Valuation (A\$m)	Base	Optimistic
Present value of FCF	34.7	60.5
Present value of Terminal FCF	73.7	145.4
Enterprise Value	108.4	205.9
Net Debt (cash)	0.5	0.5
Minority Interest	-	-
Other Investments	-	-
Equity Value	107.8	205.3
Diluted Shares (million)	506.2	506.2
Implied Price (A\$)	0.213	0.406
Current Price (A\$)	0.053	0.053
Upside (%)	301.9%	665.2%

Source: Pitt Street Research

### **Catalysts and risks**

We think the following factors can help SKN's stock price move towards our fair valuation range:

- Signing of large-scale international sales deals for SuprCuvr, which provide strong revenue visibility.
- Clearance for Invisi Shield SuprCuvr products in countries outside Australia.
- Key acquisition of other natural skin care companies or brands.

We see the following key risks associated with our investment thesis:

- Slower-than-expected traction of the Invisi Shield SuprCuvr product line in Australia.
- Delays in regulatory approval for Invisi Shield sanitisers.
- Low acceptance of the Elizabeth Jane product line among potential customers.
- Low growth or penetration in international markets and regulatory hurdles.



For Skin Elements management believes there are potential parallels with Blackmores (ASX: BKL) and BWX Ltd (ASX: BWX)

# Two companies Skin Elements believes it can ultimately be compared to

**Skin Elements has the makings of a large company**. Obviously Skin Elements is a small company right now. However with a potentially-world leading product in SuprCuvr and enabling intellectual property at the cutting edge in the health and beauty space, there are potential parallels with Blackmores (ASX: BKL) and BWX Ltd (ASX: BWX). Skin Elements believes it can aspire to be compared with these two companies

**Blackmores – a leader in the complementary medicine space**. Blackmores is Australia's leading vitamin, minerals, and herbal supplements maker and a key supplier to 16 other Asia-Pacific markets. It also holds the top market share in Malaysia, Singapore, and Thailand. The company sells its products under the Blackmores natural health brand as well as BioCeuticals for the physician market, and the Impromy weight management program. Then there is the animal health side of the business cleverly dubbed Pure Animal Wellbeing, or PAW, which is becoming an increasingly important part of the growth story. Blackmores is an old company, having been founded in the late 1930s. It has been a public company since May 1985. Currently Blackmores is capitalised at >A\$1.4bn on ASX with FY21 revenue of A\$575m driven by what we understand is in excess of 600 product lines.-

- We argue three factors have propelled Blackmores to its current position as a Top 200 company in Australia, namely 1) The rise in complementary medicine in Australia, 2) Blackmore's willingness to invest in clinical data around its products, often in conjunction with academic laboratories; and 3) increased sales to China. The COVID-19 pandemic has interfered with the latter pathway but Blackmore's is investing heavily in brand development in China.
- Prior to COVID-19, China accounted for 20% of Blackmores overall revenue. But with China's rising middle class being a key growth catalyst it moved forward with a plan to invest more in China as well as Indonesia. The company raised \$141m in mid-2020 to accelerate growth in Asia and strengthen the balance sheet during the pandemic. Much of the new capital was slated for enhancing Blackmores' presence on China's digital platforms such as Tmall and JD.com.
- Aside from opportunities in China, the pet market for Blackmores is another major growth catalyst. Blackmore's PAW is the leading pet supplements brand in Australia and the company is moving to expand the business in international markets to capitalise on people's increasing love for pet companionship in the COVID-19 era. In a September 2020 survey PAW posted a respectable 82% brand awareness score.

**BWX** – A leader in the natural and organic skincare and cosmetic products. The Melbourne-based BWX Ltd has been built on a portfolio of 'natural' brands that include Sukin, Andalou, Mineral Fusion and Nourished Life. In recent years the company has also moved into the 'organic' beauty products category as well. 'Natural' beauty products are simply products whose raw ingredients come from nature, as opposed to something artificial. 'Organic' products are those where the ingredients are organically farmed, meaning no use of Genetically Modified Organisms (GMO), herbicides or synthetic fertilisers. Natural and organic products have propelled BWX to a current market capitalisation of \$300-A\$400m.



- The natural beauty market is huge globally, probably worth more than US\$600m today and growing 6% p.a. due to rising consumer consciousness that demands organic and natural products, and in particular transparency of product ingredients, combined with the ease with which consumers can source products online. Basically, it's the same mindset that allowed Dame Anita Roddick to start The Body Shop in the mid-1970s but working at a much larger scale. In Australia natural cosmetics is expected to grow by 9% over the next few years, mainly due to use of Social Media by key players and increasing numbers of beauty blogs dedicated to the benefits of organic products.
- In mid-2018 BWX was riding high on the growth of the natural beauty products space and the success of its own products. In FY18 revenue had doubled to \$149m and EBITDA had risen 52% to \$40m. In May 2018 the company had received a tentative offer of \$6.60 per share from a consortium led by the Boston-based Bain Capital. Then on 17 September 2018 the BWX board announced that there was no deal. The stock was about \$3.90 at the time and this rejection was, we think, the main reason for the rapid slide down to \$1.35 by January 2019.
- BWX has since recovered the lows of 2018/19. In FY21 revenue was \$194m and EBITDA was up 11.5% at \$34.5m. The key BWX brands remain powerful. Sukin is the No. 1 natural skincare brand in Australia while Andalou is the No. 1 facial skincare brand in the US natural channel. BWX is now seeking 'mainstream' its brands in North America and the rest of the world.

## **Highly experienced leadership**

SKN's top management is highly experienced and the members have strong past records. Their experience has been the key behind the development of SKN's corporate strategy as the firm transitions from R&D to commercial operations. The company's current board composition is as below (Figure 11).

Name	Designation	Affiliations (Current and Past)
Peter Malone	Executive Chairman and CEO	Commercialisation Studies Centre Ltd
Phil Giglia	Independent Non- Executive Director, Company Secretary	PwC, Giglia & Associates, Global Marine Enclosure Pty Ltd
Lee Christensen	Independent Non-Executive Director	CX Law, Titanium Sands Ltd

#### Figure 11: Board and management team members

Source: Company

**Peter Malone** has over 30 years' experience in global financial markets and has a proven track record of developing and managing the commercialisation of disruptive new technologies. He has raised more than A\$150m for innovative technology development programmes. He holds a Master's degree from the University of Western Australia.

**Phil Giglia** joined the board in November 2017 and was appointed as the Company Secretary in March 2021. Giglia is a Chartered Accountant by profession and has more than 25 years' experience in senior roles. He holds a



Bachelor's degree in Business from the Western Australian Institute of Technology.

**Lee Christensen** is the Principal of CX Law. He has a Bachelor's degree in Commerce, Law and Jurisprudence from the University of Western Australia. He has over 30 years' experience as a barrister and solicitor in corporate and commercial law. Christensen is also the Chairman of ASX-listed Titanium Sand Ltd (ASX: TSL).

### Appendix I – Glossary

**Aldehyde:** Aldehydes derive their name from the dehydration of alcohols. Aldehydes contain the carbonyl group bonded to at least one hydrogen atom.

**Argireline:** Also known as acetyl hexapeptide-3 or acetyl hexapeptide-8, a synthetic six amino acid peptide used in anti-aging skin care products to reduce the appearance of fine lines and wrinkles.

**Beeswax:** A product made from the honeycomb of the honeybee and other bees.

**Butylparaben:** Butylparaben is an organic compound with the formula C  $_4$ H  $_9$ O  $_2$ CC  $_6$ H  $_4$ OH. It is a white solid that is soluble in organic solvents. It has proven to be a highly successful antimicrobial preservative in cosmetics. It is also used in medication suspensions, and as a flavouring additive in food.

**Candelilla wax:** A wax from the leaves of the small Candelilla shrub native to northern Mexico and the south-western US.

**Cannabis:** Refers to a group of three plants with psychoactive properties, known as Cannabis sativa, Cannabis indica and Cannabis ruderalis. Cannabis has been witnessing growing applications in the health and wellness industries.

**Caprylic triglyceride:** An ingredient used in soaps and cosmetics and is usually made by combining coconut oil with glycerine.

**Chronic obstructive pulmonary disease (COPD):** A group of lung diseases that block airflow and make it difficult to breathe.

**Cytokines:** Cytokines are small proteins that are crucial in controlling the growth and activity of other immune system cells and blood cells. When released, they signal the immune system to do its job. Cytokines affect the growth of all blood cells and other cells that help the body's immune and inflammation responses.

**Ebola:** A virus that causes severe bleeding, organ failure and can lead to death.

**Eczema:** A condition in which patches of skin become inflamed, itchy, cracked and rough.

**Emollients:** A preparation that softens the skin.

**Estrogen:** A category of sex hormone responsible for the development and regulation of the female reproductive system and secondary sex characteristics.

**Homeostasis:** Any self-regulating process by which an organism tends to maintain stability while adjusting to conditions that are best for its survival.

**Hospital-Acquired Infection (HAI):** An infection whose development is favoured by a hospital environment, such as one acquired by a patient during a hospital visit.



**Micronisation:** The process of reducing the average diameter of a solid material's particles. Traditional techniques for micronisation focus on mechanical means, such as milling and grinding.

**Phytochemicals:** Chemical compounds produced by plants, generally to help them resist fungi, bacteria and plant virus infections, and also consumption by insects and other animals.

**Polyacrylate:** Any of a number of synthetic resins produced by the polymerisation of acrylic esters.

**Propylparaben:** The n-propyl ester of p-hydroxybenzoic acid, whioccurs as a natural substance found in many plants and some insects, although it is manufactured synthetically for use in cosmetics, pharmaceuticals and foods. It is a member of the class of parabens.

**Psoriasis:** A condition in which skin cells build up and form scales and itchy, dry patches.

**Quaternary Ammonium Compound:** Any of numerous strong bases and their salts derived from ammonium by replacement of the hydrogen atoms with organic radicals and important especially as surface-active agents, disinfectants and drugs.

Zika: A disease caused by Zika virus that is spread through mosquito bites.

### Appendix II – Capital Structure

Class	In million	% of fully diluted	Note
Ordinary shares	433.2	85.6%	
Unlisted options	26.0	5.1%	Wtd. avg. exercise price of 15 cents
Unlisted performance rights	47.0	9.3%	
Fully diluted shares	506.2		

Source: Company

## **Appendix III – Major Shareholders**

The company currently has two major shareholders – LDA Capital and Sovereign Empire Pty Ltd – that own 6.35% and 6.11% stake, respectively. LDA Capital is an alternative investment group with expertise in complex, cross-border transactions.



## **Appendix IV – Analysts' Qualifications**

Stuart Roberts, lead analyst on this report, has been an equities analyst 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 speciality 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 over 2015–2016 doing Investor Relations for two ASXlisted cancer drug developers, Stuart founded NDF Research in May 2016 to provide issuer-sponsored equity research on ASX-listed Life Sciences 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 Sciences companies.
- Since 2018, Stuart has led Pitt Street Research's Resources Sector franchise, spearheading research on both mining and energy companies.

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