

BIOME AUSTRALIA LTD

Equity Research Report – 5 September 2024

Capital Structure

Current share price	\$0.68
Intrinsic value per share	\$1.10
Potential upside	64%
Ordinary shares on issue	215,390,901
Market capitalisation	\$145.4m
Options outstanding*	9,306,404
Total shares and options	224,697,305

*Includes 2,175,000 12c options, 2,500,000 20c options, and 2,500,000 50c options held by Canary Capital Pty Ltd expiring 31/03/2026

Major Shareholders

Blair Norfolk	8.54%
Douglas Loh	6.59%
Raymond Demaio Pty Ltd	5.57%
Richard Tegoni	4.72%
Burrangong Pty Ltd	1.86%

Board of Directors

- Ilario Faenza – Non-Executive Chairman
- Blair Norfolk – Managing Director
- Dominique Fisher – Non-Exec Director

Key Achievements To Date

- Achieved sales of \$13.0m in FY24, beating its original \$11.5m sales target
- \$3.8m in sales for the FY24 June quarter, up 88% versus PCP
- Generated positive cash flow for three consecutive quarters through to Q4 FY24
- Grown distribution points to more than 5,000 in Australia

Research Team

Nathan Oyet – Head of Research

Stuart Craigie – Associate Director

INTRODUCTION

Biome Australia (ASX: BIO) is focused on becoming a global leader in the complementary medicine industry. BIO offers clinically proven condition-specific probiotic products backed by double-blinded placebo-controlled clinical research programs that demonstrate their efficacy.

Activated Probiotics®, Biome’s flagship range of novel live biotherapeutics (probiotics), was created in partnership with world-leading organisations in microbiome research. The products use unique encapsulation delivery technologies that improve their stability and efficacy.

Biome is a certified B Corporation, a designation that a business is meeting high standards of verified performance, accountability and transparency.

THE POTENTIAL OF PROBIOTICS

Probiotics are microorganisms that are beneficial to health when taken as a supplement. Within the gut, probiotics and the microorganisms that live in our body perform many different biological actions that can influence our health. They can help improve digestive health by inhibiting the growth of pathogens and supporting the balance of gut microorganisms; they can also improve the function of other body systems beyond the digestive tract, such as the immune or central nervous systems. They achieve these effects through many different mechanisms, such as producing biologically active molecules that can be absorbed like nutrients and travel through the body. Different probiotic supplements will offer different health benefits depending on the probiotic strains being used and the biological actions they can perform.

The global market for probiotic products is valued at an estimated US\$78.96 billion in 2024¹. Biome’s Activated Probiotics® range includes 18 evidence-based probiotics, each targeting a different aspect of human health with clinically tested probiotic strains. They are shelf-stable and use Microbac™ technology to ensure up to 5x more effective delivery.

¹ <https://www.mordorintelligence.com/industry-reports/probiotics-market>

CLEAR BUSINESS STRATEGY

Underpinning the Biome offering to health professionals and consumers is the significant level of clinical research undertaken to demonstrate the efficacy of the Activated Probiotics product range. The ability to offer clinically proven condition-specific probiotic products places Biome as a leading-edge provider of quality probiotics. In addition to this, Biome can extract and maintain a price premium over competitors via its sales strategy of:

- Selling via qualified health practitioners in pharmacies and private practice
- Locating products at the script-in counter (enabling companion selling with prescriptions)
- Providing extensive education to in-store pharmacy staff and health professionals
- Limiting exposure to discounting, transactional-based chains

The success of this strategy has been validated by a substantial increase in sales during the past two years of 80% (FY24 vs FY23) and 76% (FY23 vs FY22). In the June 2024 quarter, \$3.8m in sales was achieved, up 88% on the same period last year.

SCALABLE BUSINESS MODEL

Biome has demonstrated a highly scalable business model in the last two years. Since the IPO, the number of distribution points has increased by more than 250% to over 5,000 in Australia and New Zealand. With 370 high-volume service-based pharmacies, Priceline Pharmacy was a major distribution agreement signing, with sales beginning in the 2nd quarter of 2023. While the growth in distribution points has been impressive, the same-store pharmacy sales growth has been exceptional. Terry White Chemmart (TWCM) recorded a 59% growth in same-store sales in the first half of 2023. Activated Probiotics is now the number one growth brand in the community pharmacy channel that includes TWCM and Priceline.

Since the IPO, the focus has been on expanding the ANZ business, but significant opportunities exist in Europe, the United Kingdom and Canada. Biome has commenced distribution in the United Kingdom and is increasing marketing spend, while recruiting and training additional sales and education staff. The high-margin, shelf-stable (non-refrigerated), long-life (2+ years) product is ideal and cost-effective for distribution and sales in overseas countries.

Since listing on the ASX, Biome has maintained an exceptional sales growth rate whilst increasing its gross margin. The stock market has not fully rewarded this. FY24 sales were \$13m, which represented an increase of 80% compared to the previous financial year. FY23 sales revenue was also very impressive at 76% above FY22.

Sales Growth

Biome uses a unique training and education-driven model to drive sales in the pharmacy and practitioner channels.

- The Biome sales team comprises of health qualified Practitioner Education Consultants and Territory Managers
- Practitioner Education Consultants undertake high-level product detailing and training in community pharmacies and with independent health practitioners
- High-quality training and education develop stronger trust and relationships with health practitioners
- Biome's support leads to active recommendations of Biome Australia probiotics
- Digital educational content and assets effectively support the national sales team in servicing practitioner markets
- Health Clinics are provided to key accounts to gain trust and deliver the knowledge required to drive rapid sales growth

How the Sales Training and Education Model Works

The Biome sales team work with Activated Probiotics in pharmacy on a disciplined process of:

1. Introduction
2. Initial education
3. Deep dive education
4. Account development plans
5. Further targeted support

On an ongoing cycle, Biome develops an account from selling 0-5 units per month at introduction to significant volume after the following stages. For high volume accounts, they work to maintain and continue to build sales with monthly incentives based on growth. This initiative typically achieves strong growth - in some cases, up to 900 monthly units or \$100k+ revenue p.a. from a single account.

Other brands cannot easily replicate this model as it is achieved through meticulous service and educational support. The education built into Biome's business development prominently features clinical trial data relating directly to the Activated Probiotics range of products and high-quality practitioner-level education about how probiotics work. The company also works with dispensary teams in the pharmacy channel to implement co-prescribing programs so that their products are recommended alongside specific pharmaceutical interventions where no drug interactions exist.

Examples of Sales Growth Achieved

The data below compares the average units sold per month for the 3-month period to June 2024 vs. the prior corresponding period (3-month period to June 2023) and the annualised sales run rate based on the last 3 months' sales to June 2024 at an average price of \$22.22.

Northern Territory - An Independent Pharmacy

- 158 units (3 months to June 23) to 1,706 units (3 months to June 24), an increase of 1,548 units or \$138k p.a.

Victoria – A Blooms The Chemist pharmacy

- 129 units (3 months to June 23) to 649 units (3 months to June 24), an increase of 520 units or \$46k p.a.

New South Wales - A Terry White Chemmart pharmacy

- 48 units (3 months to June 23) to 392 units (3 months to June 24), an increase of 344 units or \$31k p.a.

Queensland - A Terry White Chemmart pharmacy

- 243 units (3 months to June 23) to 708 units (3 months to June 24), an increase of 465 units or \$41k p.a.

Western Australia - A Blooms The Chemist pharmacy

- 348 units (3 months to June 23) to 565 units (3 months to June 24), an increase of 217 units or \$19k p.a.

Biome Vision 27 Strategic Plan

On 29 July 2024, Biome announced to the market a key part of its Vision 27, which is a three-year strategic plan. As part of the plan, Biome has set a revenue target of \$75m to \$85m in cumulative revenue over the next three years (FY25-27). This reflects growth of more than 400% over the preceding period's (FY21-24) target of \$21m, which the company exceeded by 14% to deliver \$24m in revenue. Biome's Vision 27 plan is a strong testament to the persistently high revenue growth the company is expected to experience in the medium to long term.

Distribution Network

Biome has over 5,000 distribution points in pharmacies and independent health practitioners across Australia. The company has a distribution agreement with Terry White Chemmart, Priceline Pharmacy and the leading pharmacy distributors Symbion (EBOS) and API (Wesfarmers Health).



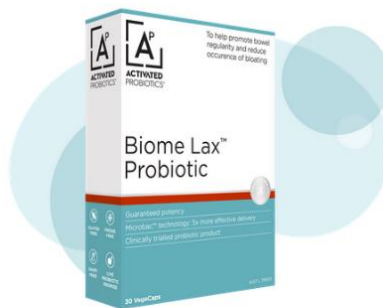
New Product Launches

In H1 FY24, Biome launched three new products: Biome Dental, Biome Lax, and Biome Recovery, and more recently in August 2024, Biome Cholesterol. These product launches are expected to drive significant sales growth for the company in FY25 and beyond.



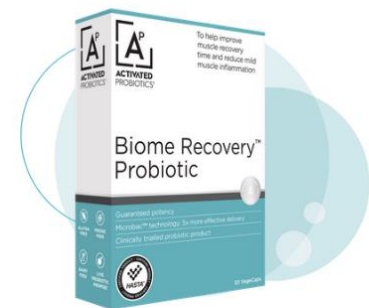
Biome Dental™ Probiotic

To help support dental health and a healthy oral microbiome



Biome Lax™ Probiotic

To help promote bowel regularity and reduce occurrence of bloating



Biome Recovery™ Probiotic

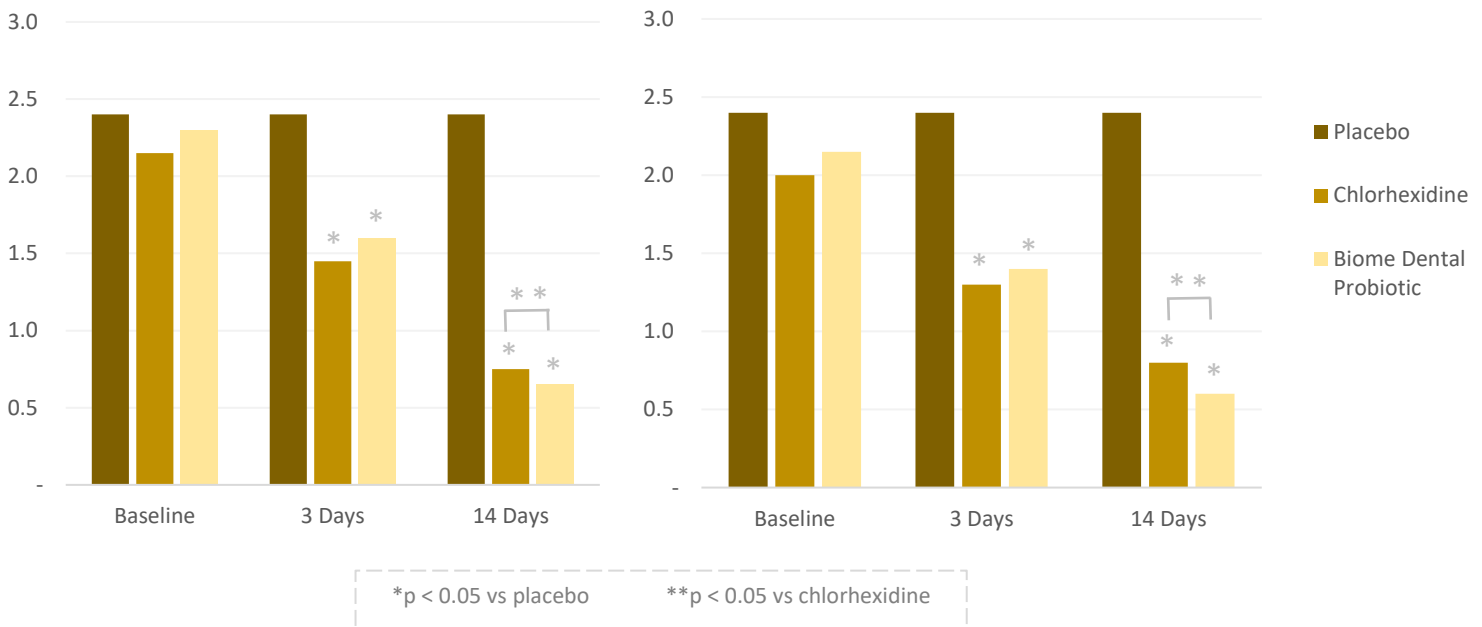
To help improve muscle recovery time and reduce mild muscle inflammation

Biome Dental™. A clinically trialled formulation designed to help support dental health and a healthy oral microbiome. The global periodontal disease treatment market was valued at USD 7.6 billion in 2021 and is expected to grow to USD 12.2 billion by the end of 2031 at a CAGR of 4.8%. The probiotic formulation in Biome Dental was compared to placebo and chlorhexidine mouthwash (standard treatment) in 60 healthy children.

A significant decrease of plaque score and gingival index was seen on day three compared to placebo; after 14 days of intake, these results persisted ($p < 0.05$). At day 14, plaque score and gingival index were significantly better for Biome Dental compared to chlorhexidine ($p < 0.05$).

Mean Plaque Score

Mean Gingival Score



Source: Sharma et al., 2019

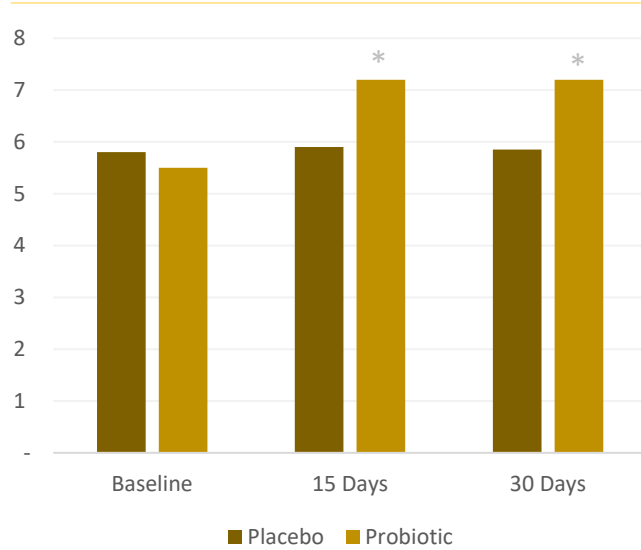
Biome Cholesterol™. Launched on 16 August 2024, Biome Cholesterol™ Probiotic helps support healthy cholesterol levels. Clinical trial results released on 21 December 2023 showed strong results in reducing cholesterol levels. In a double-blind, placebo-controlled clinical trial, supplementation of Biome Cholesterol Probiotic for 12 weeks reduced total cholesterol by 14% and LDL cholesterol by 15% and improved HDL cholesterol by 7% compared to the baseline. The study's authors noted that the reductions in LDL cholesterol from this simple one-a-day capsule are similar to those shown for recommended dietary interventions such as plant sterols and viscous fibres.

There is potential for Biome Cholesterol to be used as an adjuvant alongside statins to support the increased efficacy of treatment or to reduce the dosage and side effects of this type of treatment. For people who can't take statins due to side effects, this new product will offer physicians an additional therapeutic option to help manage cholesterol levels in their patients.

Biome Lax™. A clinically-trialled formulation to help promote bowel regularity and reduce bloating. The global constipation treatment market size was valued at USD 17.04 billion in 2020 and is projected to reach USD 29.04 billion by 2028, growing at a CAGR of 6.77% from 2021 to 2028.

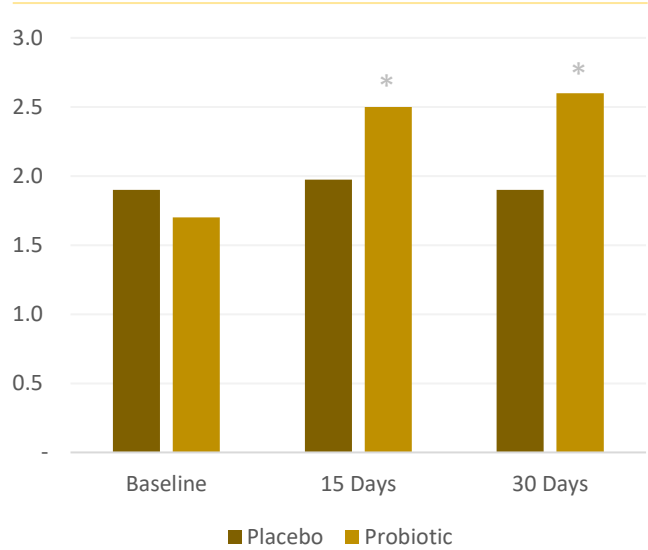
In a double-blind, randomised, placebo-controlled study across 5 years in over 300 subjects, the product formulation in Biome Lax™ was found to significantly improve the frequency of bowel movements, consistency of stool, ease of evacuation, sensation of complete emptying and abdominal bloating compared to placebo ($p < 0.001$) after 30 days.

Number of Weekly Evacuations



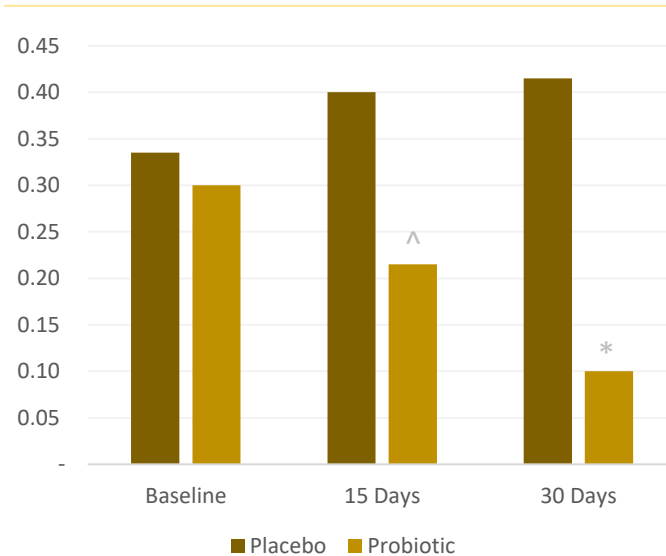
* $p < 0.001$ compared to placebo

Improvement in Bloating



* $p < 0.001$ compared to placebo

Level of Discomfort Associated with Bowel Movements



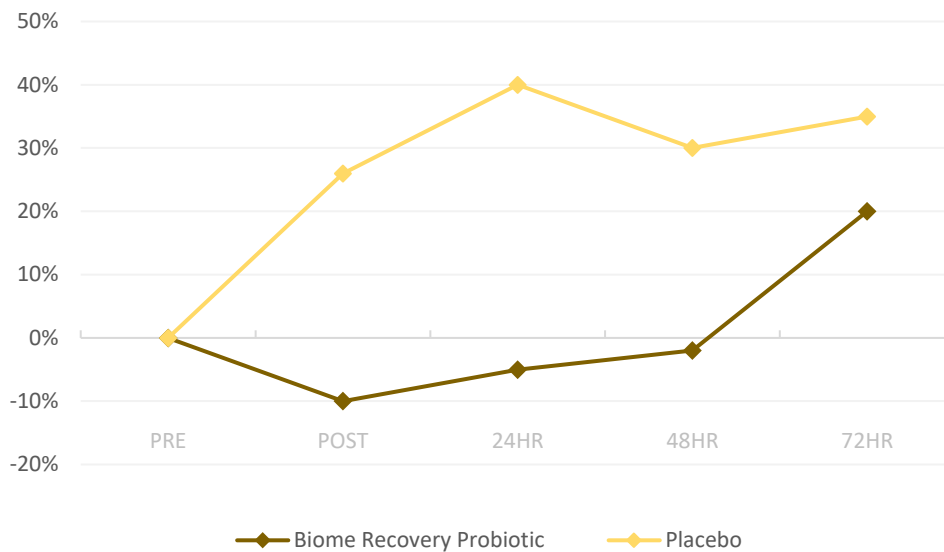
^ $p = 0.007$ compared to placebo * $p < 0.001$ compared to placebo

Source: Drago et al., 2022

Biome Recovery™. A clinically trialled formulation designed to help reduce muscle inflammation and recovery time following exercise. The Australian sports supplement category was worth AUD 1.4 billion in 2021. The Asia Pacific is the fastest-growing region in the global sports nutrition market, with an expected 9.8% CAGR to 2028.

A double-blind, randomised, placebo-controlled trial investigated the effect of the probiotic formulation in Biome Recovery™ on physical performance and levels of inflammation following muscle-damaging exercise in healthy men. After three weeks of supplementation, Biome’s probiotic helped to reduce the negative effect of muscle damage on performance, improved range of motion following muscle-damaging exercises and lowered levels of the pro-inflammatory cytokine interleukin-6 at baseline and up to 48 hours post-exercise.

Percentage change of interleukin-6 (pro-inflammatory cytokine) compared to baseline before and after exercise



Source: Jäger et al., 2016

HIGH BARRIERS TO ENTRY

The most significant barrier to entry and point of difference underpinning the Biome offering is the high level of clinical research undertaken, confirming the probiotic products' stability and efficacy. Biome’s flagship range of probiotics, Activated Probiotics, have been created in partnership with world-leading organisations in microbiome research and are, in many cases, the first mover with clinically proven probiotics to support patients with conditions such as asthma, osteoporosis prevention, mental health and dermatological conditions. Ongoing clinical trials will ensure that this strategic advantage is maintained. In addition to the proven efficacy, Biome’s products are:

- Fridge-free, shelf-stable
- Vegan
- One-a-day formulation
- Have long use-by dates of 2 years

Biome is a certified B Corporation, a designation that a business is meeting high standards of verified performance, accountability and transparency. Biome also holds extensive trademark registrations for the Activated Probiotics

range. Biome owns the formulations of 6 of its Activated Probiotics products, including all of the top 4 selling lines. The company has exclusive distribution licenses for 5 years on many of its other key lines. Where Biome does not own a product formulation, its strategy is to use clinical research to leverage local IP in its branded product. Between Biome's ownership of product formulations and long-term exclusivity, we believe Biome has significant protection on its Activated Probiotic product range from other market competitors.

Unique Microencapsulation Technology

In its Activated Probiotics product range, Biome uses an innovative microencapsulation technology to protect its probiotic bacteria from the harmful effects of stomach acid. This advanced protection ensures up to 5x more probiotics survive transit through the stomach, allowing them to reach the colon alive and deliver maximum benefits - far outperforming traditional uncoated probiotics and creating a technological barrier to entry.



Differentiated Education Model

The company's unique training and full-service approach with pharmacists, complementary medicine practitioners, and other medical professionals develop strong, difficult-to-replicate relationships. This creates a strong barrier against other brands entering the market and existing brands copying Biome's unique strategy.

Extensive Product Range

Biome offers a diverse selection of 18 probiotic products, each designed to address specific health conditions and supported by clinical trials. The Activated Probiotics range covers key areas such as digestive health, women's health, allergies, and dermatology. With such a comprehensive lineup, Biome positions itself as a go-to destination for customers seeking to enhance their health through probiotics. This extensive offering fosters customer loyalty, making them less inclined to switch to alternative brands.

Biome's comprehensive product range strengthens its competitive edge

DIGESTIVE HEALTH		<p>Biome Daily™</p> <p>To help enhance immune system function and promote healthy digestion</p>		<p>Biome IBS™</p> <p>To relieve the symptoms of medically diagnosed Irritable Bowel Syndrome</p>
		<p>Biome Lax™</p> <p>To help promote bowel regularity and reduce occurrence of bloating</p>		
		<p>Biome Breathe™</p> <p>To help stimulate a healthy immune system response in children</p>	DENTAL HEALTH	

PAEDIATRIC DIGESTIVE & IMMUNE HEALTH



Biome Daily Kids™

To help reduce the occurrence & duration of common colds



Biome Baby™

To help support digestive and immune health in infants

DERMATOLOGY



Biome Eczema™

To help reduce the symptoms of mild eczema



Biome Acne™

To relieve the symptoms of acne

MENTAL HEALTH



Biome Lift™

To support healthy mood balance and enhance sleep quality

ANTIBIOTIC SUPPORT



Biome Advanced™

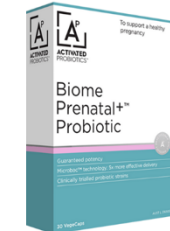
To help restore the balance of beneficial gut bacteria after antibiotic use

WOMEN'S HEALTH



Biome Her™

To maintain a healthy vaginal microbiome



Biome Prenatal™

To support a healthy pregnancy



Biome Osteo™

To help support healthy bone density in adults



Biome Iron™

To help increase absorption of dietary iron

MUSCULOSKELETAL HEALTH



Biome Recovery™

To help improve muscle recovery time and reduce mild muscle inflammation

Biome Proprietary IP Strategy




On 11 December 2023, Biome announced the execution of an agreement with one of its key probiotic research and development partners to develop multiple novel probiotic strains to be 100% owned by Biome. The company plans to utilise these proprietary strains to support the development of new products with mainstream gut and immune health targets, as well as future therapeutic development for condition-specific live biotherapeutics. We strongly believe that by developing and 100% owning its IP, Biome is well positioned to not only defend its market leadership but also grow its product range and resulting revenue. There is significant potential for these new probiotic strains to add significant value to Biome’s balance sheet. For example, lactobacillus rhamnosus GG, protected under the trademark LGG®, was acquired by Chr. Hansen in 2016 for EUR €73M (AUD \$120M), including all trademarks and related business.

Clinical Research

Biome Australia is focusing on becoming a global leader in the complementary medicine industry, offering clinically proven, condition-specific probiotic products. Biome is supporting novel clinical research to cement and extend the evidence base of its probiotic products. Biome’s academic research partners, La Trobe University and Federation University, are conducting ongoing clinical trials.

Expanding the evidence base of Biome’s products is key to increasing health professionals' trust in product efficacy. This strengthens one of Biome’s key strategies, which is to promote the recommendation of its products alongside prescription medications for specific health concerns to improve patient outcomes. This level of research also solidifies Biome’s competitive advantage and will support commercial growth opportunities for the business.

Biome has a various currently in the clinical research phase

 <p>BIOME LIFT</p> <p>Assessing the efficacy of the Biome Lift™ Probiotic compared to a placebo in reducing the severity of symptoms in patients with subthreshold depression.</p> <p>Endpoints:</p> <ul style="list-style-type: none"> • Measures of anxiety, stress and mood • Effects on biomarkers of inflammatory, immune, and stress responses • The gut microbiota composition and function (via faecal samples assessing microbiota genome and functional predictions of gut microbiota) • Body composition markers • Gastrointestinal symptoms <p>Trial completed & Results Received Publication expected in Q4 FY24.</p>	 <p>BIOME KIDS</p> <p>Analysing the influence of probiotic use on absenteeism and immune health among children aged 2-5 years attending childcare centres.</p> <p>Assessment criteria and outcomes:</p> <ul style="list-style-type: none"> • The duration of symptoms of common infections (gastrointestinal and respiratory infections, etc) • The number of children with different varieties of infectious diseases (gastrointestinal infections; respiratory infections, hand, foot and mouth disease, etc) • Use of antibiotics or other medication related to infectious diseases • Changes in mood and behaviour (secondary outcome) <p>Trial completed Preliminary results in Q4 FY24</p>	 <p>BIOME OSTEO</p> <p>Examining the effect of 12-month supplementation with Biome Osteo on bone metabolism and mineral density.</p> <p>Endpoints:</p> <ul style="list-style-type: none"> • DXA measurements • Blood indices, e.g. vitamin D, P1NP (collagen deposition, marker for bone formation) and CTx (a marker for bone rate turnover) • Gut microbiota composition • Body composition <p>Recruitment Completed and Trial Underway Preliminary results are expected in Q4 FY24 and final results in Q2 FY25</p>
---	---	--

Source: Biome Australia

HISTORICAL FINANCIALS

Revenue

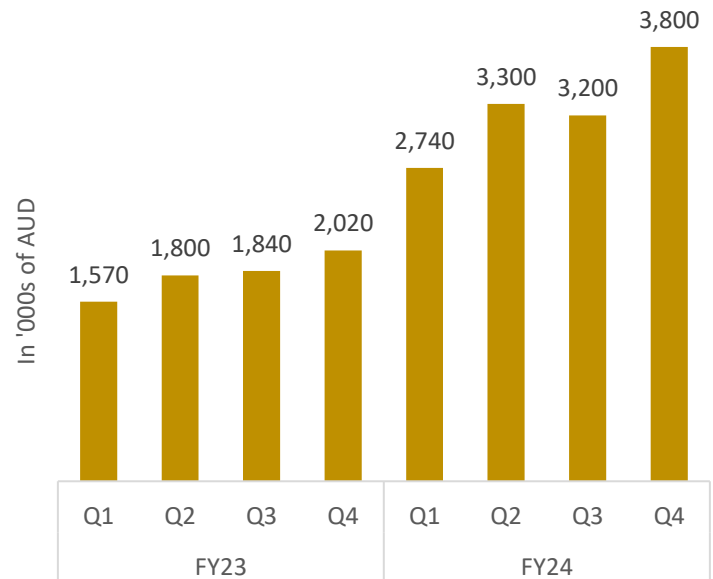
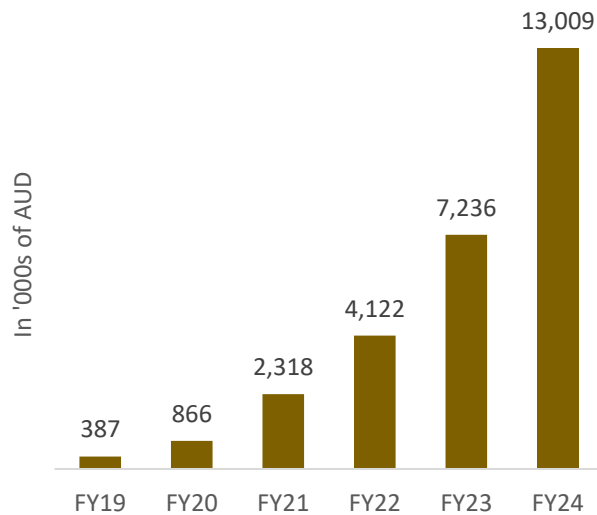
Biome Australia has experienced impressive revenue growth, with sales in FY24 reaching \$13m, up 80% year-on-year (yoy). Revenue growth has been driven by strong growth in units sold in the practitioner and pharmacy sales channels in Australia.

Gross Margin

The gross margin on sales revenue has steadily increased from 51% in FY21 to 60.8% in FY24. As of the end of the June quarter of 2024, BIO's gross margin has maintained its strength at 60% of sales revenue. The proportion of sales generated in products with a higher overall sales value and margin (product mix) has increased, driving improved margin performance.

Biome has experienced phenomenal growth in annual revenue...

..... and quarterly revenue



Source: Biome Australia

Source: Biome Australia

EBITDA

As Biome has grown its revenue, its leverage against operating expenses has increased. Fixed cost centres like corporate and administrative expenses don't scale linearly with revenue. Consequently, the company's EBITDA margin has improved to -13% of sales in FY24 from -520% in FY19. The financial modelling prepared by Canary Capital shows increasing operating leverage, expected to continue in future years, resulting in EBITDA turning positive during FY25.

Free Cash Flow (FCF)

Being at its growth stage, Biome was cash flow negative in FY24, with FCF of -\$185k and an FCF margin of -1.4%. Despite continued investment in headcount and inventory to support sales growth, we expect the company to become FCF-positive during FY25 as revenue continues to scale.

Financial Position

Biome's balance sheet is strong, with a cash position of \$2.9m and debt of \$1m, implying a net cash position of \$1.9m. Given that the company generated positive operating cash flow in the last three quarters of FY24, its normal business operations have become self-sufficient without relying on external capital. Consequently, Biome does not require external funding for its existing operating business.

DISCOUNTED CASH FLOW VALUATION

Revenue

Canary Capital has prepared a 5-year (FY25 - FY29) projection for Biome's valuation. Biome's projected revenue is the aggregated total of estimated revenue for each of its key sales channels: Australian pharmacy, Australian practitioner, and Overseas.

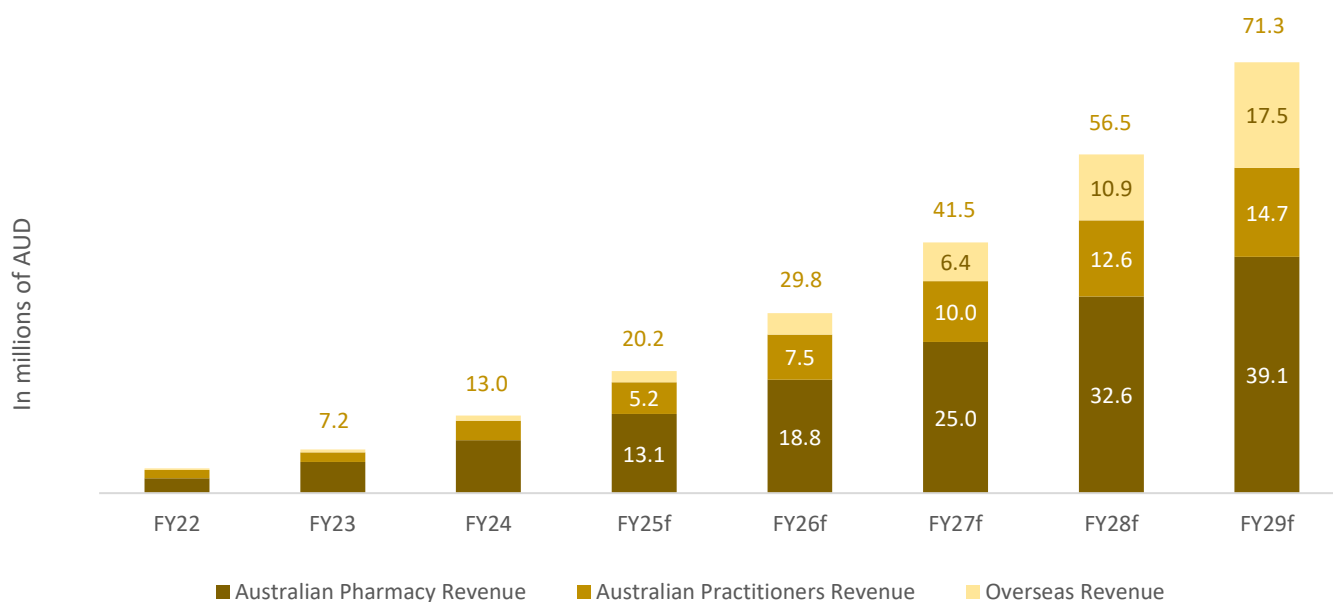
Australian Pharmacy. Key drivers, active pharmacy accounts, and average sales per active pharmacy are forecasted to calculate Australian pharmacy revenue. We expect Biome's Australian pharmacy account numbers to reach 4,230 by FY29, up 1.7x from an estimated ~2,500 in FY24. We anticipate a significantly larger percentage of total pharmacy accounts to be active during the forecast period. An active pharmacy has been defined as one with unit sales greater than 5 units per month in the most recent rolling 6 months. The projected growth in active pharmacies is driven by higher engagement from the sales team based on increased site visits and a recent shift in the sales team's KPI towards increasing the number of active pharmacies. We also project an increase in average sales per active account driven by a shift in KPI focus towards increasing the sales volume per active account. Due to growth in the number of active pharmacies and average sales per active pharmacy, Australian pharmacy revenue is estimated to have reached between \$8.5m and \$9m in FY24. In FY29, the Australian pharmacy distribution channel is forecasted to generate \$39.1m in revenue from revenue, implying a 5-year CAGR of ~35%.

Australian Practitioner. A similar methodology to that used for Australian pharmacy projects Australian practitioner revenue. However, the key revenue drivers for this distribution channel are active practitioner accounts and average sales per active practitioner account. Biome's total Australian practitioner distribution points are expected to reach 4,320 by FY29. Similar to Australian pharmacy and driven by identical factors, we expect active practitioners and average sales per active practitioner to grow. As a result, Australian practitioner revenue is estimated to have reached ~\$3m in FY24. Australian practitioner revenue is expected to grow at a CAGR of ~35% over the forecast period, reaching \$14.7m by FY29.

Overseas. While only \$894k was generated in overseas revenue in FY24, we expect this number to grow significantly as the company invests in its overseas strategy. This investment is expected to include the hiring of key sales personnel to drive sales in primary overseas markets such as the UK, Ireland and Canada. In the later years of the forecast period, we expect Biome to use local partners to expand into the rest of Europe, including Germany and Spain, countries that are expected to have significant demand for probiotics. Canary predicts the ramping up of sales and distribution efforts to result in overseas revenue growing at a CAGR of 81% from \$894k in FY24 to \$17.5m in FY29.

Total Revenue. Biome's consolidated revenue from all sales channels is predicted to grow by 55% year-on-year from ~\$13m in FY24 to \$20.2m in FY25. FY29 revenue is projected to reach \$71.3m, reflecting a CAGR of 40% during the forecast period.

BIO revenue is expected to experience significant growth across all key sales channels



Source: Canary Capital Estimates, Biome Australia

Profitability and Free Cash Flow

Gross Profit. Biome’s gross profit margin is expected to remain between 60% and 61% over the forecast period. While an increasing proportional revenue contribution from the practitioner channel is expected to improve gross margin, this will be offset by the growth of the overseas business, which operates at a lower gross margin. The overall effect is that Biome’s gross margin remains relatively flat over the forecast period.

Operating Expenses. As the company scales and realises operating leverage from its fixed cost base, we expect operating expenses as a percentage of revenue to decline from -76% in FY24 to 30% by FY29. The main driver of the decline is that corporate and administrative expenses and sales and marketing expenses (to a lesser extent) are not anticipated to increase proportionally with revenue growth.

EBITDA. Based on Canary Capital’s modelling, we expect Biome’s EBITDA for FY29 to be \$22m, giving an EBITDA margin of 31% on FY29 revenue of \$71.3m. The company is expected to reach EBITDA breakeven during FY25.

Operating Income and Net Operating Profit After Tax (NOPAT). To derive operating income, EBITDA is adjusted for depreciation and amortisation. Depreciation and amortisation as a % of revenue is expected to decline gradually during the forecast period from -1.86% in FY23 to 0.75% in FY29. Adjusting for depreciation and amortisation results in operating income of \$21.5m in FY29, up from -\$2.2m in FY24. After taking into account tax payable on operating income, we expect Biome to generate \$15m in NOPAT by FY29, up from -\$2.2m in FY24.

Free Cash Flow (FCF). NOPAT is adjusted for net capital expenditures, inventory investments and changes in Non-Cash Working Capital (excluding inventory) to compute FCF. In FY25, Biome is expected to generate FCF of \$626k. FCF is expected to grow to \$15.5m in FY29, reflecting a strong FCF margin of 22%.

In AUD	FY23	FY24	FY25 E	FY26 E	FY27 E	FY28 E	FY29 E
Revenue	7,235,611	13,008,897	20,215,891	29,797,168	41,485,118	56,051,370	71,286,436
% Growth (YoY)	76%	80%	55%	47%	39%	35%	27%
EBITDA	(3,133,998)	(1,934,403)	1,273,589	4,853,619	10,874,135	16,297,644	22,002,000
Margin	-43%	-15%	6%	16%	26%	29%	31%
Free Cash Flow	(3,897,844)	(185,413)	626,613	4,493,118	9,311,811	12,195,924	15,474,868
Margin	-54%	-1%	3%	15%	22%	22%	22%

Equity Valuation

Discount Rate. The WACC methodology was used to calculate the discount rate applied to the company's future cash flow. To compute Biome's cost of equity of 6.94%, an implied equity risk premium of 3.97% and the Australia 10-year T-Bond rate of 3.86% were used as inputs. The Australia and New Zealand biotechnology industry average levered beta of 0.77 was used for levered beta. Using Biome's cost of equity of 6.94%, cost of debt of 14.13%, and the company's capital structure, a WACC of 6.96% is derived. To adjust for the additional risk associated with the company being a small cap, a small cap premium of 2.5% was applied to the company's cost of equity to derive a final discount rate of 9.46%.

During the forecast period, the discount rate is assumed to decline as the risk-free rate decreases. This is in line with our expectation that inflation in the medium term will ease, leading to the RBA's policy rate and, thus, decreasing treasury yields. We forecast that the risk-free rate will remain at ~3.86% during FY25 before declining to 3.5% in FY26 and 3% in FY27 through to FY29. The resulting discount rate is 9.46% in FY25, 9.1% in FY26 and 8.6% from FY27 to FY29.

Terminal Value. A terminal discount rate of 8.1% and a terminal growth rate of 3.5% are assumed to calculate BIO's terminal value. Using the Gordon growth model and the terminal year (FY29), FCF of \$15.5m results in a terminal value of \$314m in FY29. When discounting is applied, BIO's present terminal value is computed at \$205.3m.

Valuation. Adding the discounted cash flows to the terminal value results in an enterprise value of \$235.6m. Adding net cash of \$1.9m derives an equity valuation of \$237.5m. Given the total shares outstanding of 215 million shares, The company's estimated fair value per share is \$1.10, representing a significant upside potential of 64% from its latest closing price of \$0.675. It's important to highlight that our valuation doesn't incorporate the potential value of Biome's proprietary strains and intellectual property anticipated to be developed in the future.

COMPARABLES

Blackmores

Blackmores is an Australian health supplements company founded in 1938. The company manufactures an extensive range of vitamin, mineral and herbal supplements sold in 17 international markets. In mid-2023, Blackmores was bought by Japanese company Kirin for \$1.88 billion in an all-cash transaction. For the half year ending 31 December 2022, Blackmore reported \$338m in sales revenue and \$36.2m in EBIT.

Life-Space

Life-Space is a brand of probiotics that contains up to 15 strains of beneficial bacteria to support a healthy digestive and immune system function. In 2018, Chinese health supplement giant By-Health bought Melbourne-based probiotics manufacturer Life-Space for almost \$690m. At the time of acquisition, Life-Space generated \$71m in its last financial year, FY17. Life-Space distributes its products in Australia, Asia, North America and the Middle East.

Swisse

Swisse is an Australian health and wellness company that produces vitamins and supplements. China's Health and Happiness bought Australian vitamins group Swisse for \$1.7 billion in late 2015. In FY15, Swisse is estimated to have generated \$360m in sales revenue.

Comparables Table

Company	Blackmores	Life-Space	Swisse
Year of takeover	2023	2018	2015
Annual revenue (at time of acquisition)	\$676m*	\$71m	\$360m
Purchase price	\$1,880m	\$690m	\$1,670m
Price/Sales multiple	2.8x	9.7x	4.6x

*Annualised based on \$338m in revenue for H1 FY23

KEY PEOPLE

Blair Norfolk – Managing Director

Biome has a highly credentialed and experienced team led by the Managing Director and CEO, Blair Norfolk. Blair has over 12 years of experience in the pharmaceutical and natural medicine industries. As the founding Managing Director of Biome, Blair has successfully secured the unique products underpinning the company, facilitated clinical trials, established distribution, recruited staff and led the IPO process. Blair's passion, drive, and entrepreneurial management style have led Biome to where it is today.

Blair is a member of the Australian Institute of Company Directors (AICD) and holds a Master of Advanced Marketing from Monash University and a Bachelor of Commerce – Marketing/Accounting from Deakin University.

Ilario Faenza – Chairman

Ilario has over 30 years of corporate and director experience in Australia, the United States, New Zealand, and the United Kingdom. He has built and worked with more than 30 companies over the past 30 years, including roles as Chief Operating Officer, Managing Director, Executive Director, Advisor, Executive Director, Executive Chairman, Non-Executive Director, and Non-Executive Chairman. Ilario has also been a Director of multiple ASX-listed companies over the past 22 years.

Ilario has chaired the audit and risk committee and served on the remuneration committee for ASX-listed Eftel Limited, as well as being a member of the audit and risk committee and Remuneration committee for ASX-listed TPC Consolidated Limited. Ilario also managed the Scheme of Arrangement for People Telecom Limited in relation to its merger with M2 Group Limited.

Dominique Fisher – Non-Executive Director

Dominique couples her experience in tech-driven businesses with a strong focus on risk mitigation and financial management. She has worked in a range of sectors in both executive and non-executive roles, including insurance, procurement, publishing, media, wholesale manufacturing, retail, biotech, e-commerce, business mobility software, performing arts, location data, digital and internet services, transport and logistics, artificial intelligence, property development, telecommunications, Edtech, postal services, advertising and professional services.

Dominique has combined her executive career with an extensive non-executive career, having served on four ASX listed companies and has been involved in two IPOs (IAG and TGO); numerous private companies, including Integrity Life Group, various government and private advisory boards at both state and federal for both major political parties, Geoscape Australia and government agencies including the Sydney Opera House and Australia Post.

Douglas Loh – Chief Financial Officer

Douglas holds a Bachelor of Economics (Hons) from the University of Monash, is a CPA and a Member of the Australian Institute of Company Directors. He has over 30 years of advisory, company management, investment management, and market research experience with a focus on smaller companies. He is a founding member of Acorn Capital, Australia's first boutique investment manager, specialising in the Australian microcap sector.

Douglas' 19-year career at Acorn Capital included roles as Portfolio Manager, CFO, COO and Executive Director of the Company. For more than 10 years, Douglas was responsible for managing the firm's microcap portfolios and growing its funds under management (FUM) to more than \$1.3 billion. In 2013, Douglas became Head of Equities with direct responsibilities for Acorn Capital's new Asian small-cap strategy.

Dr. Jaroslav Boublik – Chief Science Officer

Dr. Boublik has conducted research at Prince Henry's Hospital Medical Research Centre, The Shanghai Institute of Biochemistry in China, The Salk Institute in La Jolla, USA, and the Baker Medical Research Institute in Melbourne, Australia. He previously held a Fulbright Postdoctoral Fellowship, a Neil Hamilton Fairley Postdoctoral Fellowship, and was an R. Douglas Wright Fellow. Dr Boublik has over 30 peer-reviewed and invited articles in scientific journals and is an inventor on four patents.

Dr. Boublik is a consultant to the nutrition R&D sector and has been a board member of several companies in nutritional medicine and complementary medical research and development. In the USA, between 2008 and 2017, he developed dozens of new products for client companies in nutrition, sports performance, hydration and functional foods. He has also served three years as Lead OHSE Auditor for the CSIRO, Australia's peak scientific and industrial research organisation.

Dr Boublik is an Associate Member of the Australian College for Nutritional and Environmental Medicine, a member of the Royal Australian Chemical Institute and a Chartered Chemist. He has a Ph.D. in Medicine and a B.Sc. (Hons) in Chemistry (Monash University) and is a member of the Monash University and Fulbright Alumni Associations.

Rebecca Edwards – Education Director

Rebecca is a speaker, writer, educator and qualified naturopath (BA, Adv Dip Nat, Dip Nut). She has over 15 years of experience educating on all aspects of complementary and integrative health, delivering naturopathic education to healthcare practitioners worldwide. Rebecca has lectured to undergraduate students in Australia, the UK and the US and is a passionate and inspiring speaker. Rebecca leads the national team of educators of Biome to provide high-quality, evidence-based education on the world of the microbiome.

KEY RISKS

Loss of a Major Pharmacy Contract

One of the significant investment risks facing Biome is the potential loss of a key pharmacy contract that serves as a crucial distribution and sales channel for its products. The termination of a key pharmacy contract could result in a sudden and significant decline in Biome's product sales and revenue. This may lead to decreased cash flows and profitability. However, it is worth noting that Biome has shown positive signs of mitigating this risk through its improving relationship with key pharmacy accounts. Recent developments, such as securing more shelf space and expanding its product range with prominent pharmacy chains like TerryWhite Chemmart and Priceline Pharmacy, indicate that the company is strengthening its position in the market. Moreover, Biome is yielding an impressive gross margin return of up to \$50,000 per square meter in top pharmacy accounts. The significance of these returns for key pharmacy accounts makes it highly unlikely that Biome will be dropped as a supplier.

Increased Competition from New Entrants

Due to the rapid growth of the probiotics market, new entrants might attempt to compete directly with Biome. These new entrants may resort to aggressive pricing strategies, offering lower-priced products that could entice price-sensitive consumers away from Biome's offerings. As a result, the company might face challenges in maintaining its pricing power, potentially leading to margin erosion and reduced revenue streams. On the other hand, Biome's established relationships with major pharmacy chains and distribution partners can act as significant barriers to entry for potential competitors. This entrenched presence within the retail landscape creates obstacles for new players attempting to gain a foothold in the market. Moreover, Biome's reputation for delivering high-quality probiotics and its emphasis on unique formulations backed by double-blinded placebo-controlled clinical trials strengthen barriers to entry and contribute to brand loyalty among existing customers.

Adverse Economic Conditions

Another key risk for Biome is the potential negative impact of tough economic conditions, including higher interest rates and inflation, on the purchasing power of its end customers. Economic downturns or uncertainties can reduce disposable income and heighten consumer caution, decreasing spending on discretionary products like probiotics. However, Biome's products, being part of customers' health plans, offer a degree of protection against constrained spending. Health-related purchases tend to be more resilient during economic challenges, as customers are often reluctant to compromise their well-being and healthcare.

Key Supplier Risk

Biome's key supplier risk stems from its reliance on only two suppliers in Europe for its core probiotic products. Sourcing products from a limited number of suppliers exposes Biome to potential disruptions in the supply chain. Biome's ability to meet customer demand and maintain sales revenue could be severely impacted if these suppliers cannot fulfil their obligations due to production issues, regulatory challenges, or unforeseen circumstances. Biome's owned formulations (Biome Daily, Biome Daily Kids, Biome IBS, Biome Advanced & Biome Prenatal) account for just over 70% of probiotic sales. Non-owned formulations are under 5-year exclusivity agreements for the company's territories.

Inability to Achieve Financial Targets

If Biome is unable to achieve its financial targets due to various factors, such as intensifying competition or the loss of a key customer contract, its implied value would be negatively impacted. In such an event, there is a heightened risk of the company's implied valuation being lower, resulting in diminished upside potential for investors.

APPENDIX – Clinical Research References

Biome Daily

[Berggren A, Lazou Ahrén I, Larsson N, Önning G. Randomised, double-blind and placebo-controlled study using new probiotic lactobacilli for strengthening the body immune defense against viral infections. Eur J Nutr \[Internet\]. 2011 Apr 28;50\(3\):203–10](#)

[Busch R, Gruenwald J, Dudek S. Randomized, double-blind and placebo-controlled study using a combination of two probiotic Lactobacilli to alleviate symptoms and frequency of common cold. Food Nutr Sci \[Internet\]. 2013;04\(11\):13–20.](#)

Biome Breathe

[Drago L, Iemoli E, Rodighiero V, Nicola L, De Vecchi E, Piconi S. Effects of Lactobacillus salivarius LS01 \(DSM 22775\) treatment on adult atopic dermatitis: A randomised placebo-controlled study. Int J Immunopathol Pharmacol. 2011;24\(4\):1037–48.](#)

Biome Lift

[Marotta A, Sarno E, Casale A Del, Pane M, Mogna L, Amoruso A, et al. Effects of probiotics on cognitive reactivity, mood, and sleep quality. Front Psychiatry. 2019;10\(164\):1–11.](#)

Biome Osteo

[Jansson PA, Curiac D, Lazou Ahrén I, Hansson E, Martinsson Niskanen T, Sjögren K, et al. Probiotic treatment using a mix of three Lactobacillus strains for lumbar spine bone loss in postmenopausal women: a randomised, double-blind, placebo-controlled, multicentre trial. Lancet Rheumatol \[Internet\]. 2019;1\(3\):e154–62.](#)

Biome Recovery

[Jäger, R., Purpura, M., Stone, J. D., Turner, S. M., Anzalone, A. J., Eimerbrink, M. J., Pane, M., Amoruso, A., Rowlands, D. S., & Oliver, J. M. \(2016\). Probiotic Streptococcus thermophilus FP4 and Bifidobacterium breve BR03 supplementation attenuates performance and range-of-motion decrements following muscle-damaging exercise. Nutrients, 8\(10\), 1–11.](#)

Biome Dental

[Sharma, P., Datta, G., Gandhi, K., & Kumar, D. \(2019\). A comparative evaluation of efficacy of proBiometric and chlorhexidine mouthrinses on gingival health and plaque accumulation in 6–9-year-old children. International Journal of Applied Dental Sciences, 5\(1\), 156–162.](#)

Biome Lax

[Drago, L., Cioffi, L., Giuliano, M., Pane, M., Amoruso, A., Schiavetti, I., Reid, G., Ciprandi, G., & PROPAM Study Group. \(2022\). The ProBiometrics in Pediatric Asthma Management \(PROPAM\) Study in the Primary Care Setting: A Randomized, Controlled, Double-Blind Trial with Ligilactobacillus salivarius LS01 and Bifidobacterium breve B632. Journal of Immunology Research, 2022, 1–7.](#)

Biome Iron

[Hoppe M, Önning G, Berggren A, Hulthén L. Probiotic strain Lactobacillus plantarum 299v increases iron absorption from an iron-supplemented fruit drink: A double-isotope cross-over single-blind study in women of reproductive age. Br J Nutr. 2015;114\(8\):1195–202.](#)

[Hoppe M, Önning G, Hulthén L. Freeze-dried Lactobacillus plantarum 299v increases iron absorption in young females - Double isotope sequential single-blind studies in menstruating women. PLoS One. 2017;12\(12\):1–15.](#)

AXP Recovery Probiotic

[Jäger R, Purpura M, Stone JD, Turner SM, Anzalone AJ, Eimerbrink MJ, et al. Probiotic Streptococcus thermophilus FP4 and Bifidobacterium breve BR03 supplementation attenuates performance and range-of-motion decrements following muscle-damaging exercise. Nutrients. 2016;8\(10\):1–11.](#)

[Montelius C, Erlandsson D, Vitija E, Stenblom EL, Egecioglu E, Erlanson-Albertsson C. Body weight loss, reduced urge for palatable food and increased release of GLP-1 through daily supplementation with green-plant membranes for three months in overweight women. Appetite \[Internet\]. 2014;81:295–304.](#)

[Stenblom EL, Egecioglu E, Landin-Olsson M, Erlanson-Albertsson C. Consumption of thylakoid-rich spinach extract reduces hunger, increases satiety and reduces cravings for palatable food in overweight women. Appetite \[Internet\]. 2015;91:209–19.](#)

Canary Capital Pty Ltd, its directors and associates own shares and options in Biome Australia Ltd.**Contact Details**

Paul Hart - Executive Director
Canary Capital
M: 0421 051 474
E: phart@canarycapital.com.au

Arun Sengupta - Executive Director
Canary Capital
M: 0417 617 181
E: asengupta@canarycapital.com.au

General Advice Warning

Please note that any advice given by Canary Capital Pty Ltd (Canary Capital) as a corporate authorised representative (CAR number 1254859) of BR Securities Australia Pty Ltd (ABN 92 168 734 530) which holds AFSL 456663 is GENERAL advice, as the information or advice given does not take into account your particular objectives, financial situation or needs. Before acting on the advice, you should consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument. Canary Capital Pty Ltd | ABN 18 618 657 640 | www.canarycapital.com.au. Our Financial Services Guide (FSG) is available on the Canary Capital website <https://canarycapital.com.au/financial-services-guide/>

Disclaimers

Canary Capital provides this financial advice as an honest and reasonable opinion held at a point in time about an investment's risk profile and merit and the information is provided by the Canary Capital in good faith. The views of the adviser(s) do not necessarily reflect the views of the AFS Licensee. Canary Capital has no obligation to update the opinion unless Canary Capital is currently contracted to provide such an updated opinion. Canary Capital does not warrant the accuracy of any information it sources from others. All statements as to future matters are not guaranteed to be accurate and any statements as to past performance do not represent future performance. Assessment of risk can be subjective. Portfolios of equity investments need to be well diversified and the risk appropriate for the investor. You acknowledge that you have assessed your own risk profile, with or without assistance from an AFSL holder licensed to provide such an assessment. We aren't licensed to assess your personal risk profile. Equity investments in listed or unlisted companies yet to achieve a profit or with an equity value less than \$50 million should collectively be a small component of a balanced portfolio, with smaller individual investment sizes than otherwise. Investors are responsible for their own investment decisions, unless a contract stipulates otherwise. Canary Capital does not stand behind the capital value or performance of any investment. Subject to any terms implied by law and which cannot be excluded, Canary Capital shall not be liable for any errors, omissions, defects or misrepresentations in the information (including by reasons of negligence, negligent misstatement or otherwise) or for any loss or damage (whether direct or indirect) suffered by persons who use or rely on the information. If any law prohibits the exclusion of such liability, Canary Capital limits its liability to the re-supply of the Information, provided that such limitation is permitted by law and is fair and reasonable.

Disclosures

Paul Hart and Arun Sengupta are directors and authorised representatives of Canary Capital. They certify that any advice given by them or any other authorised representative of Canary Capital reflects their honest view of a company. Directors and authorised representatives of Canary Capital may own securities in companies they recommend, which will be declared if they ever give advice. Authorised representatives receive a share of the brokerage and origination fees earned by Canary Capital in relation to companies they recommend, so they rely on their skills at selecting good investment opportunities for clients of Canary Capital. Canary Capital, its directors and associates and employees receive fees and share options from companies to which Canary Capital is mandated to provide corporate advisory services. The companies currently mandated are NYR, BIO, REZ, ReNerve, DekkoSecure, Auric Mining Limited and Tru Recognition.

Confidentiality Notice

This email (and any attachments) is intended only for the addressee and may contain information which is confidential and privileged. If you are not the addressee you may not use, disseminate or copy this information. If you have received this information in error, please notify us immediately and destroy this email and attachments. We do not guarantee the integrity of any e-mails or attached files and are not responsible for any changes made to them by any other person