

## 2023 Annual General Meeting – CEO’s Address

Thank you, Alex and good morning, to our shareholders and others attending today’s AGM.

I would also like to welcome Wally and Marie from north Queensland who grow the rare eucalypt cultivar from which Qcide® oil is extracted.

I have been Bio-Gene’s Managing Director and CEO since 28 August this year. Today’s AGM is a well-timed opportunity for me to introduce myself and share my early observations and insights. I will also cover Bio-Gene’s business model and prospects, the Company’s FY23 key achievements highlighting their significance, and our strategic priorities.

Over the past 27 years I have managed six early-stage companies in the life sciences sector, including agriculture, food and human health across Australia, New Zealand, the US and the UK.

I also managed Monsanto’s agriculture-related growth and new technology activities in Australia and New Zealand, with a focus on broadacre cropping.

After Monsanto, I managed the commercial development and technology licensing activities at Starpharma, an ASX-listed biotech active in public health, including establishing and managing partnerships with large pharmaceutical companies.

Finally, for seven years I provided life-sciences industry expert advice to an Australian fund manager investing in ASX-listed companies.

My background enables me to bring a commercial perspective to help Bio-Gene navigate current industry practice in commercial partnering interactions, deal structuring and IP management strategies.

I joined Bio-Gene to provide the leadership required to make it a commercial success through its next pivotal stages as we accelerate our path to commercialisation and maximise value for shareholders.

Bio-Gene is unique. It has significant opportunities to harness Qcide and Flavocide® in several product applications in public health, pest control and crop and non-crop opportunities in agriculture. While this diverse range of applications is a fundamental strength of our company, it can lead to practical challenges around focus and communication, as I will touch on later.

Each product application comprises unique combinations of target pest species, method and place of application and the type of user. Some formulation examples include:

- Flavocide as a professional-use outdoor residual barrier spray against flying insects;
- Flavocide as a treatment against grain storage pests; or
- Qcide as an indoor space spray against mosquitos and flies.

Our business model and commercial partnering strategy have many similarities with biotech companies who create new and innovative products and undertake early-stage product development before licensing their products to larger pharma companies. They typically complete the later-stage product development and regulatory steps before large scale manufacture, marketing and distribution.

Similarly, we are developing new products to help solve some of society's big insect-related challenges. First, we undertake early-stage product development and regulatory activities. We then enter technology licensing arrangements with larger companies who have a significant presence in our target markets internationally.

Our target markets are large. They include public health, where we develop new ways to control mosquitos and protect the public from mosquito-borne diseases, such as malaria and dengue fever, and in agriculture where we seek to reduce crop yield loss and spoilage in grain storage because of insect infestations. Around 20-40% of food produced globally is lost to pests and these losses are valued at around US\$2.0 trillion p.a.

We use capital raised to fund product development, in a staged manner to minimise risk and maximise future shareholder return.

This business model is attractive as it enables us to:

1. develop a portfolio of product opportunities to manage and offset technical risks;
2. leverage investment and expertise from diverse commercial partners with deep regulatory and market knowledge; and
3. generate up-front milestone and royalty payments, and revenue from the supply of Qcide and Flavocide, by licensing others to use our patented products. This means we can generate increasing revenue from partners as products move from development to commercialisation.

You can see from the pie graphs that our ratio of income streams will change over the next eight years leading to more royalty payments at higher margins.

Our strategic objective is to secure active ingredient registrations, develop proprietary manufacturing and production knowhow, and work with strong commercial partners on formulated product development, marketing and distribution.

Longer term, we will evolve to a proven high-margin business model that is not capital intensive.

Importantly, we have already announced three commercial partnerships with Evergreen Garden Care based in the UK, Clarke Mosquito Control in the US and STK Bio-Ag Technologies in Israel. The solid partnering validation Bio-Gene has received to date really attracted me to take the CEO role.

One inherent risk is that partners can sometimes change their area of focus. As announced last year, this occurred when BASF advised that, despite positive trials, it was unable to continue our joint program with the GRDC relating to use of Flavocide to control stored grain pests. We maintain a strong interest in this opportunity and are seeking a suitable commercial partner. Having a portfolio of product and partnership opportunities does help minimise the impact of this type of risk.

The development of both Qcide and Flavocide to control insect pests, and their approval for sale, as active ingredients and then as formulated products, is a highly regulated activity. Australia's APVMA and the US FDA and EPA specify the data Bio-Gene is required to submit for review to ensure products are safe, effective and do not harm the environment. Generating this important data takes time.

I understand the time taken to complete product development and regulatory steps can be a source of frustration as they are not always well understood. We will do our best to continue to communicate as simply as possible the complexity of these regulatory and development stages, and how they help progress our overall strategy.

To help shareholders understand our model, it's useful to consider Bio-Gene's progress against the following challenges that must be met:

1. Can you make it?

This relates to the production methods and scale-up stages for both Qcide and Flavocide.

2. Does it work?

This includes product testing by Bio-Gene or by partners. The data usually relates to a particular product application and target insect species. We need to determine efficacy and how competitive Qcide and Flavocide are against current alternative products.

3. Can you sell it?

This refers to regulatory approvals for active ingredients and formulations as well as distribution.

Regulatory approval includes submission of extensive data, including safety and environmental acceptability of the active ingredient.

Sales rely on a contractual arrangement with a commercial partner to market and distribute.

Typically, later-stage commercial achievements trigger the largest milestone payments from commercial partners to us, usually followed by revenue from the sale of the active ingredient to our commercial partner as well as royalties from our partner calculated as a percentage of their product sales.

4. Do you have the capability to deliver?

As we accelerate our pathway to commercialisation, we need to manage capital carefully, with the financial support of our shareholders, partners and grants. Each milestone achievement reduces

our development risk. Capability also extends to our growing portfolio of granted patents, and access to external specialist expertise from technical collaborators, contractors and advisors.

As you may know, our technology is based around two active ingredients, Qcide and Flavocide.

Qcide is an optimised natural oil that is extracted from a rare Australian eucalypt grown in far north QLD.

FLAVOCIDETM is an active ingredient found in nature, but not in the quantities needed to make it commercially viable. Because we can synthesise Flavocide, it is considered a 'nature-identical' compound.

Qcide and Flavocide have two unique attributes:

1. Flavocide has a different mode of action (MoA) from any other class of chemistry classified to date by the Insecticide Resistance Action Committee (IRAC). A MoA is the way an insecticide works to control the pest. If not well managed, populations of pests exposed to a MoA can build resistance, making it less effective as an insecticide. By introducing a new mode of action, we can create the next generation of insecticide solutions.
2. Both Qcide and Flavocide are derived from nature. Qcide is a botanical oil, and Flavocide can be produced in a manner identical to the naturally occurring compound. The natural basis for these ingredients is a key point of differentiation and this may result in some regulatory benefits in some countries and it also meets changing consumer demands for safe and environmentally friendly products.

Changes in consumer sentiment are also having a significant impact on how large ag-chem and pest management companies source new products. As such, there is great demand for new insecticides derived from nature, such as Qcide and Flavocide.

The field of insect control product development is not a crowded space. The properties of Qcide and Flavocide and the product development and regulatory steps we are required to go through means we have few direct competitors.

In addition to Qcide and Flavocide being developed in a stand-alone 'single active ingredient' product format, we announced in April this year that both Flavocide and Qcide, when used in combination with other commercially important insecticides, show positive synergistic ability. These positive synergy results significantly expand the potential commercial opportunities for Bio-Gene in the US\$31 billion global insecticide market.

Industry benefits include:

- lower dosage requirements, leading to reduced cost of application and improved environmental safety; and

- extending the life of commercial partners' post-patent products with the added benefit of increased efficacy against resistant pests.
- Owners of marketed insecticides with resistance management challenges or those facing patent expiry deadlines have a strong commercial interest to consider a combination product that includes either Qcide or Flavocide. These results have opened an important new category of opportunity in our partnering discussions.

Over the past 12 months we have strengthened our commercial and research partnerships, further developed our products and moved closer to commercialisation.

Our agreement with STK Bio-Ag Technologies was key. STK's capabilities enable us to expedite the registration process for Qcide in international markets. The agreement sources the necessary investment for Qcide registration but also provides us with flexibility in our key markets, allowing us to confidently pursue commercial deals and future revenue.

We expanded our partnership with Clarke Mosquito Control in North America beyond outdoor space spray applications to the use of Flavocide as an outdoor barrier surface spray that provides residual protection around residential homes, parks and gardens.

We also received confirmation that the Grains Research and Development Corporation (GRDC) will continue to support us to develop Flavocide as a stored grain protectant.

Just after the end of FY23, we were also selected to participate in a significant research program funded by the US Centers for Disease Control on vector-borne diseases using our products specifically focused on tick-borne pathogens.

From a financial perspective, we continue to manage our capital efficiently. Partnerships with both commercial and research-based organisations have and will continue to support our progress.

The FY23 total income of \$681,000 includes a milestone payment of \$150,000. The additional income related to R&D tax incentive payments.

During the year, \$3.3 million in net cash was used to fund operations, which included \$2 million in R&D expenditure.

We ended the year with \$3 million in cash and have recently completed a capital raising of \$2.0 million to support the next phase of investment required to continue to progress Flavocide active ingredient through registration.

The important work we do now to cost-effectively register our products will allow us to enter into additional licensing deals with commercial partners.

Overall, the milestone achievements during FY23 have provided significant support to the further development of Qcide and Flavocide.

Separate to the agriculture-related target pests we are pursuing, I wanted to single out one particular pest we are focussed on, the mosquito.

Living in Australia, we remain largely unaware of the serious threat mosquitos pose to public health in many other areas of the world. To put their status as a 'high value' target pest species into perspective, the U.S. Center for Disease Control and Prevention describes mosquitoes as the "world's deadliest animal", as they are responsible for more human deaths than any other creature on earth. Researchers estimate approximately five per cent of all human deaths in history have been caused by mosquito-borne diseases.

The WHO estimates more than half the world is at risk of vector-borne diseases.

Annual sales of mosquito insecticides used in public health applications is approximately \$840 million per annum.

The WHO also reports there are over 125 mosquito species with documented resistance to one or more insecticides, and 78 of the 88 malaria-endemic countries have detected resistance to at least one insecticide class. Twenty-nine countries have confirmed resistance to four insecticide classes – pyrethroids, organophosphates, carbamates and organochlorines.

The fundamentals driving the demand for an effective insecticide with activity against mosquitos are clear.

We are in regular contact with several public sector agencies to identify ways to accelerate the development of Qcide and Flavocide as effective insecticides active against mosquitos.

This context will help you to appreciate why we have mosquitos firmly in our sights.

In my first three months, we have undertaken a structured prioritisation process to assess and rank over 50 potential product applications for Qcide and Flavocide. Clearly, we are not able to develop all of these, even with access to commercial partners' resources and capabilities. We must remain focused.

This process has involved detailed assessments of the relative strengths and weaknesses of each application, the key technical, commercial and market data, and the required development process to obtain regulatory approval through to product launch.

Next month, we will provide an investor update that will describe a portfolio of specific products we have in development based around some of these specific applications. Shareholders will be able to see more clearly the specific products we are developing derived from Qcide and Flavocide, and the problems they solve in public health and agriculture, as well as our regulatory and commercial milestones against progress.

Our strategic priorities are:

1. Speed, particularly the pre-registration manufacturing and safety studies for Flavocide and Qcide active ingredients.
2. Focussed product development, to deploy our resources against a pipeline of the most commercially attractive development products and partnered programs (both as stand-alone and combination products) that can be developed as soon as possible.
3. Commercial validation, to build on existing commercial partnerships and secure the resources of additional large companies and funding organisations to support the development of additional commercially attractive botanically derived insecticides.
4. Efficient use of capital, leveraging the funding from shareholders wherever possible with partner contributions and grants.

In addition to the important ingredients of great technology and supporting capital, the future success of Bio-Gene is dependent on its people.

I would like to thank the Bio-Gene management team for their work during FY23, the Bio-Gene Board and shareholders for your continuing support.

I would also like to thank Richard Jagger, Bio-Gene's former Managing Director and CEO for his leadership during FY23.

I look forward to updating you on Bio-Gene's further commercial development and delivering on our strategic priorities in FY24.

Approved for release by the Board of Directors

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**About Bio-Gene Technology Ltd**

Bio-Gene is an Australian agtech development company enabling the next generation of novel insecticides to address the global problems of insecticide resistance and toxicity. Its novel platform technology is based on a naturally occurring class of chemicals known as beta-triketones.

Beta-triketone compounds have demonstrated insecticidal activity (e.g. kill or knock down insects) via a novel mode of action in testing performed to date. This platform may provide multiple potential new solutions for insecticide manufacturers in applications across crop protection, grain storage, public health and consumer products. Bio-Gene's aim is to develop and commercialise a broad portfolio of targeted insect control and pest management solutions.

**Qcide® and Flavocide®** are trademarks of Bio-Gene Technology Limited.