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Annual General Meeting 20th November 2017

Chairman's Address

Today I will give you a brief overview of the 2016-17 year for BioDiem Ltd and also for our subsidiary, Opal Biosciences Ltd.

The key events of this year were

- the successful nonrenounceable entitlement offer of convertible preference shares to raise \$1.149m;
- completion of Phase III LAIV clinical trials in China; and
- further progress with the development of BDM-I programs, through Opal.

We commenced the year with a successful capital raising securing \$1.149m from the issue of convertible preference shares (CPS) through a nonrenounceable entitlement issue. Each CPS holder is entitled to receive a priority amount equal to eight times the issue price of that share, before the holders of ordinary shares receive any amount by way of dividend, return of capital or otherwise. Once the CPS holders have received the priority amount, the CPS will convert automatically into ordinary shares, ranking equally with all other ordinary shares of the Company.

These funds were to be used to exploit commercial interest in the LAIV technology, while also progressing the development of the Opal antimicrobial technology.

As I presented to you last year, our LAIV flu vaccine technology has been caught up in uncertainty about the cause of reports, primarily coming from the US, suggesting LAIVs have been less effective than inactivated flu vaccines in recent years.

As a result, various studies were designed with input from the World Health Organisation to shed light on the reason for discrepancies in LAIV effectiveness data. We had hoped the results of these studies, whose timing has been outside the control of BioDiem, would have been available already this year but they are more likely to be completed and reported by early 2018.

The impact of these events has been not only on commercial interest in new LAIV licences from us, but also on sales royalties from India where the Indian vaccination guidelines take the US vaccination recommendations into consideration. Currently in the US, Medimmune's LAIV vaccine is not recommended to be used.

As for our Chinese licensee, Changchun BCHT Biotechnology company (BCHT), we are delighted about their progress and completion of Phase III clinical trials. The results of these trials will be used in a dossier for marketing approval in China. We note however that we are not able to predict with certainty the regulatory approval timing in China which could take one to two years or more.

Now turning to our subsidiary, Opal Biosciences where our preclinical compound BDM-I is being tested and developed to target the treatment of infections, including those caused by 'superbugs' which are resistant to antibiotics.

BDM-I has shown it can kill many different disease-causing microbes and has excited interest amongst researchers in the area due to the internationally-recognised need for new treatments for infections.

Some highlights in Opal during the past year have included

- developments in the understanding of the mechanism of action of BDM-I;
- IP strengthening through lodgment of a new patent plus the allowance of a new US patent;
- pilot antimicrobial activity testing of Opal-T prototypes; and
- a new additional business opportunity.

Firstly looking at the way BDM-I kills microbes: we were very encouraged by the work undertaken at Western Sydney University where the focus is on how BDM-I kills certain disease-causing bacteria. Based on this work, in August this year we lodged a new patent "*BDM-I Therapy*" to protect these novel research discoveries. These discoveries were then presented in September in Boston at the American Society of Microbiology meeting whose theme was antimicrobial resistance.

Also this year Griffith University researchers started new studies to look at how BDM-I kills certain disease-causing fungi. This is being supported by a Federal government ARC Linkage grant and has the potential to generate more interest given the need for new antifungal treatments.

Secondly, we have strengthened our IP portfolio: in addition to the new patent *BDM-I Therapy* lodged this year, we were pleased to receive the news of the allowance in the USA of another of our BDM-I patents "*Method of Treatment of Scedosporium species*".

Thirdly and very pleasingly, we can report significant progress in development of a topical formulation of BDM-I (Opal-T) which could be used to treat infections of the skin. Formulytica Pty Ltd, an expert formulation company in Melbourne, in its first round of work under contract to us, was able to present us with three prototype gels and ointments that could be tested for antimicrobial effect.

In May the three prototypes and matching placebos were tested in specialist labs in Taiwan to see if they were active against two different bacteria: methicillin-resistant Golden Staph (MRSA), and the one responsible for causing gonorrhoea. We chose these two bacteria in particular because they are a source of growing concern worldwide due to their increasing resistance to antibiotics. MRSA strains can cause many serious infections and are endemic in many American and European hospitals accounting for 29%–35% of all clinical isolates. As for gonorrhoea, the WHO has reported that some countries are finding cases of the infection that are untreatable by all known antibiotics, and the CDC has rated the threat level of drug-resistant gonorrhoea as urgent.

Our good news was that antimicrobial activity was shown for all our prototype formulations against the MRSA and gonorrhoea strains tested. We then chose only one of the prototype gel formulations to test in an animal model of the MRSA, and while the chosen gel prototype worked, it was not enough for us to claim success. However we were pleased with this first attempt of testing, but need to do more.

Beyond this progress, Opal has been pursuing options for lung delivery of BDM-I (Opal-L) and also for the injectable form (Opal-I).

We continue to do our best to access Australian and international grants to extend the program and leverage the resources in Opal. Expenditure has been managed very tightly with most program expenditure funded by BioDiem which owns 95% of Opal. Opal's cash position is \$78,231 and additional funds are needed to continue the development of Opal-T and to pursue the injectable and lung delivery forms.

In my address to you in the annual report this year I advised that the Board does not intend to raise further capital into BioDiem and we have begun the process of seeking partners for the LAIV program or monetizing it so that ongoing costs to maintain the program will be eliminated or reduced further. We are also separating Opal from BioDiem by undertaking a capital raising in Opal and including new directors in Opal with relevant expertise.

As the next step in this process you will be asked this morning to approve the acceptance of shares in lieu of a cash payment into BioDiem from Opal for the transfer of the BDM-I licence rights into Opal.

Following this and the approval from Opal shareholders to issue the shares, we will open a fund-raising in Opal to pursue the work in Staph and gonorrhoea as well as continue the injection and lung delivery forms of BDM-I. In Opal we will also develop a new portfolio of revenue-generating anti-infective products to exploit the need for alternatives to antibiotics which is poorly served. The Information Memorandum is under preparation for release shortly and will seek to raise \$1.5m. BioDiem shareholders will be able to participate if eligible. Opal Biosciences will become independent of BioDiem following its successful capital raising.

Our intention is that our shareholders will achieve the best return we can provide and on behalf of the BioDiem board I would like to thank fellow shareholders for their patience and support. I thank the other directors for their support and contributions during the year and also our staff. I look forward to advising you of our progress over the next few months.

ENDS

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