

Q1 2022

NAILMAIL

INVESTOR NEWS

QUARTERLY NEWSLETTER TO SHAREHOLDERS, INVESTORS AND INTERESTED PARTIES. FOR FURTHER INFORMATION VISIT OUR WEBSITE AT HEXIMA.COM.AU.



MAJOR ACHIEVEMENTS COVERED IN THIS REPORT

- ✓ Appointed Mr Philip Rose as Chief Commercial Officer and strengthened the manufacturing team with the appointment of Mr Om Srivastava as Vice President Tech Ops. Both roles are based in the US;
- ✓ Participated in the Edison Open House Global Healthcare 2022;
- ✓ Presentation of pezadeftide's Mechanism of Action at AAD Conference in Boston, MA;
- ✓ Ongoing preparations for the initiation of the phase I Maximal Use clinical trial (MUSt HXP124-ONY-003) to be conducted in the US. This study is expected to start in mid 2022;
- ✓ Continued steady progress towards completion of the phase II study (HXP124-ONY-002) and results announcement on schedule for Q2 2022.

The initiation of the Company's first US clinical trial (HXP124-ONY-003) remains on track for mid 2022. In advance of that trial Hexima expects to file its IND application with the FDA in the second quarter of 2022. The Company's overall timetable of development activities remains on track, importantly including the release of its phase II clinical trial results in Q2 2022 and the subsequent initiation of phase III.

ABOUT HEXIMA

Hexima is a clinical stage, anti-infectives focused biotechnology company engaged in the research and development of defensin peptides for applications as human therapeutics. Our lead product candidate, pezadeftide (formerly HXP124) applied in a topical formulation, is a potential new prescription treatment for toenail fungal infections (or onychomycosis).

Hexima is currently conducting an Australian phase IIb clinical trial testing pezadeftide for the treatment of onychomycosis. Hexima holds granted, long-life patents protecting pezadeftide in major markets globally.

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INVESTOR ENGAGEMENT

During the quarter Hexima attended a number of investor focused events. This is a carefully developed strategy to enhance engagement with domestic and international investors as it progresses towards the release of phase II clinical trial results in Q2 2022.

In January, the Company participated in Edison Open House Global Healthcare 2022. The Open House is hosted at <https://www.edisongroup.com/> where Hexima's CEO, Michael Aldridge presented to international investors. A copy of the presentation and Edison's research report is available on [Hexima's website](#).

The benefit of the Edison platform is the ability to track engagement with international investors in real time. During the Open House we enjoyed 10,943 video views of our presentation with the largest segment (27.8%) being North American investors.

Don't forget to visit
our new website
www.hexima.com.au
to learn more about
pezadeftide and
onychomycosis

MUSt PHASE I CLINICAL PHARMACOLOGY TRIAL (HXP124-ONY-003)

This single centre study is designed as an open label study to evaluate the pharmacokinetics and safety of pezadeftide when applied in a maximal use setting to the toenails of patients with severe onychomycosis. The study plan is to enroll approximately 20 patients and treat all 10 toe nails daily for 4 weeks.

An important goal of the study is to show minimal or no absorption of pezadeftide into the patient's bloodstream when applied under maximal use conditions. Such an outcome could facilitate Hexima's progress to pivotal phase III studies, and may also enable Hexima to secure a waiver for certain clinical and non-clinical toxicology studies which FDA might otherwise have required. As such the MUSt is an important study. The final protocol will be included in our Investigational New Drug application (IND) we plan to file in Q2 2022 which will allow us to initiate the study in mid-2022.



PHASE II CLINICAL TRIAL (HXP124-ONY-002)

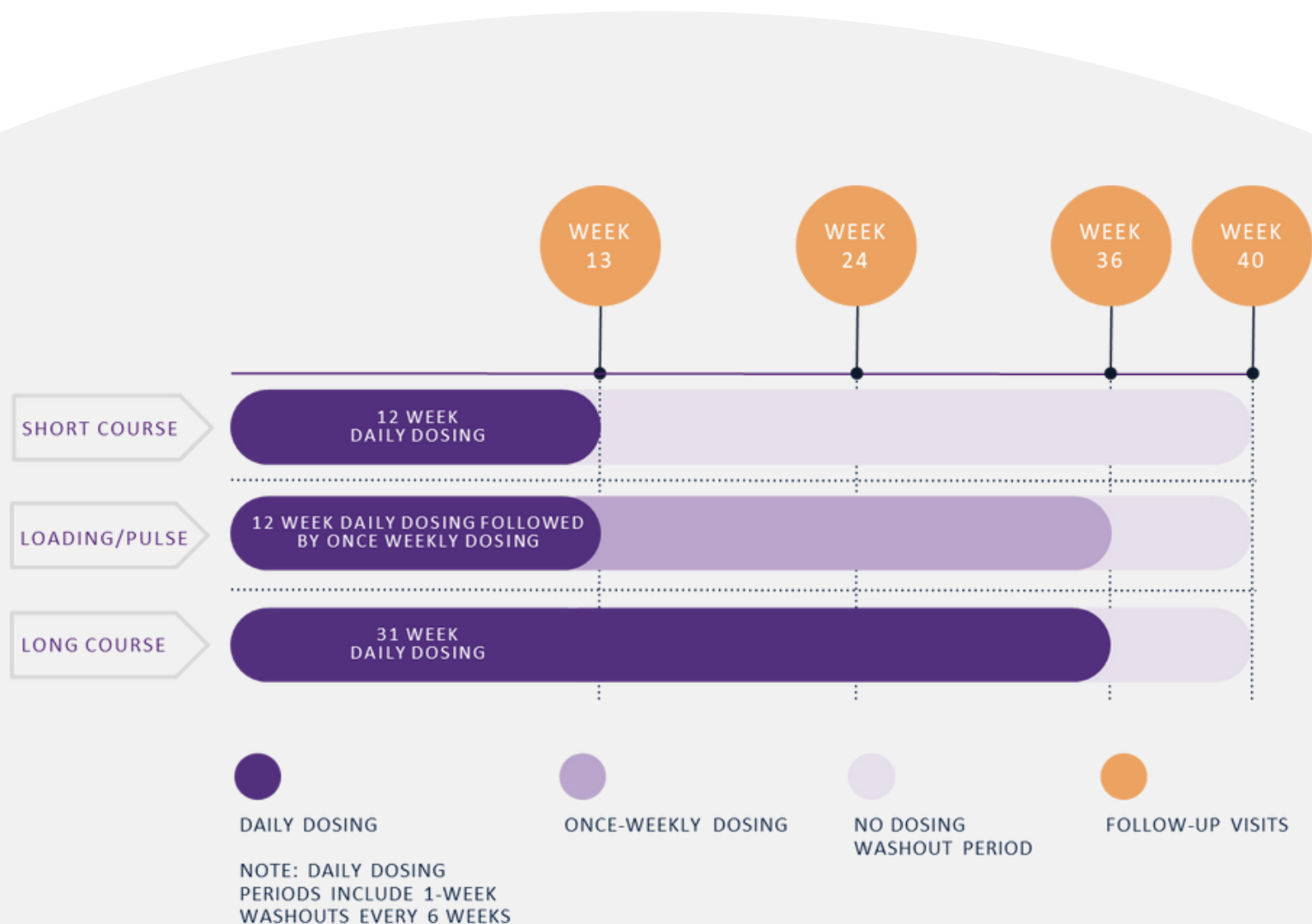
The most important and near term event in Hexima’s development program is the planned announcement of phase II clinical trial results in Q2 2022.

This phase II trial is a multi-centre, randomized, double-blind, vehicle-controlled study to investigate the efficacy, safety, and tolerability of pezadeftide in patients with mild to moderate onychomycosis.

Hexima is comparing three separate treatment regimens (as set out in the schematic below). Each treatment regimen has an active (formulation containing drug) and a vehicle (formulation with no drug) arm. Both the patient and the clinician are blinded as to which subjects are on active or vehicle.

As of the end of April 2022 all patients are in the process of completing final follow-up visits and the Company will now collect final data, clean the database and submit critical queries to clinical sites, ensuring completeness prior to database lock and breaking the blind. Hexima will then analyse the data by treatment group and key efficacy and safety parameters prior to presenting the results.

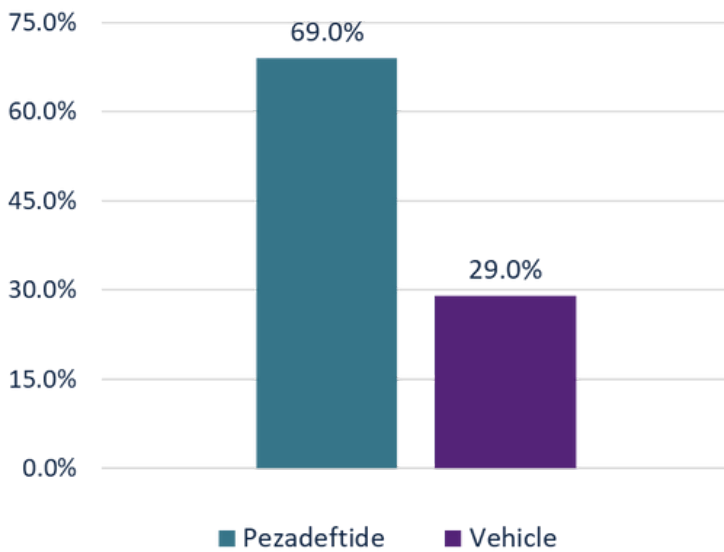
This study is central to Hexima’s development program because it is intended to provide critical information on the safety and efficacy of topical 2% pezadeftide in treating onychomycosis and to provide data to determine which treatment approach is the safest, most effective and convenient for patients.



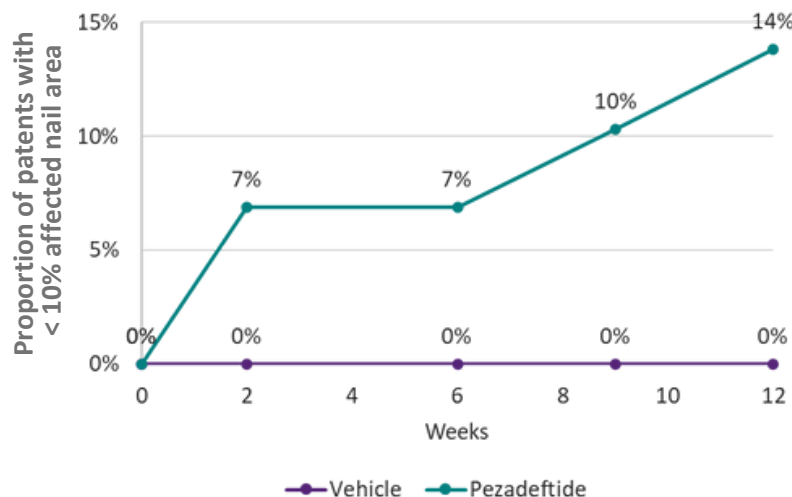
PHASE II CLINICAL TRIAL (HXP124-ONY-002) - RESULTS EXPECTED Q2 2022

In the phase I clinical trial (HXP124-ONY-001) the Company observed mycological cure rates of greater than 50% and early evidence of visual improvement of the nail and clearance of the fungal infection (after just 6 weeks of daily treatment and 12 weeks follow-up). Both these measures showed a clear differential from vehicle.

Mycological Cure at 12 weeks



Clinical Efficacy over time



In contrast, this phase II study design allowed the Company to treat nails for longer periods of time (up to 36 weeks) and follow-up all patients out to 40 weeks. As compared to the phase I study, the success of the phase II study would be defined by:

- comparable or better mycological cure rates; coupled with
- stronger evidence of clinical cure, particularly as the nails have a longer time to grow out healthy and clear.

Finally and ideally, evidence of differential activity between the three different treatment regimens will help inform our phase III strategy.

We would regard such results as valuable support for our goal of seeking approval from FDA to advance into phase III clinical trials.



From a value perspective, positive results would significantly de-risk the potential for pezadeftide to ultimately represent a new and clinically differentiated, safe and more effective topical product for onychomycosis with a potentially shorter course of therapy.

PRESENTATION OF PEZADEFTIDE'S MECHANISM OF ACTION AT AMERICAN ASSOCIATION OF DERMATOLOGY (AAD) CONFERENCE IN BOSTON, MA

Hexima presented a poster at AAD's annual conference in Boston, MA in March 2022, this demonstrating pezadeftide's novel and powerful fungicidal mechanism of action.

Pezadeftide is a broad spectrum and powerful anti-fungal agent. Its unique ability to rapidly penetrate the human nail and attack and kill the fungal infection under the nail makes it an ideal candidate for the treatment of onychomycosis.

In addition, pezadeftide's mechanism of action is novel. This means that Hexima is the first in the world to characterize the fungicidal activity of this new class of compounds. This novelty is valuable because pezadeftide's fungicidal activity includes some fungal species which are either resistant to, or difficult to kill with existing drugs.

Presenting this data to dermatologists at AAD is important because dermatologists are the specialists conducting much of the research in onychomycosis and are the clinicians to whom more challenging cases are often referred.

The Company's presence and publications at international dermatology and podiatry conferences continues to generate increasing awareness of pezadeftide among specialist clinicians and are important initiatives as the Company seeks to develop a new and more attractive treatment option for this common and very difficult to treat disease.

The novel mechanism of action is described on the following page and you can also [view the full poster](#) as presented at AAD.



MILESTONES TO LOOK FORWARD TO IN Q2 2022

[File IND with FDA](#)

As noted earlier, Hexima anticipates completing and compiling its manufacturing and toxicology information ahead of filing the Investigational New Drug (IND) Application with FDA. This is a pre-requisite to the initiation of a clinical trial program in the US.

[Announce results of Phase II clinical trial \(HXP124-ONY-002\)](#)

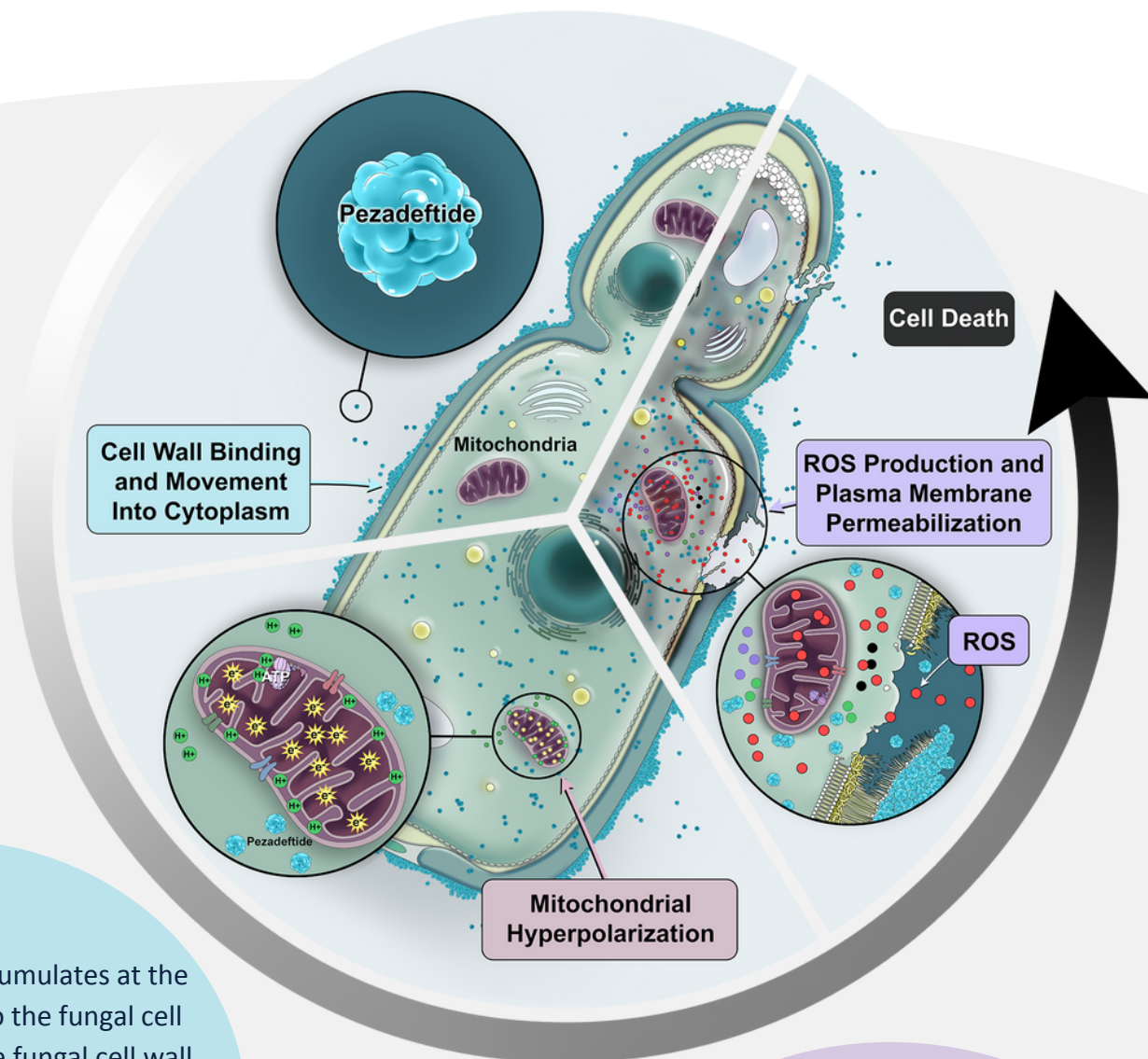
Hexima expects to complete the phase II study and announce results on schedule in Q2 2022.

[Initiation of Maximal Use Clinical Trial \(HXP124-ONY-003\)](#)

Following acceptance by FDA of the IND, the Company anticipates completing study start-up preparations and initiating the Maximal Use clinical trial in mid-2022.

PEZADEFTIDE NOVEL FUNGICIDAL MECHANISM OF ACTION

PEZADEFTIDE HAS A NOVEL FUNGICIDAL MECHANISM OF ACTION THAT CAN BE DESCRIBED IN THREE KEY STEPS.



STEP 1

Initially, pezadeftide accumulates at the cell surface and binds to the fungal cell wall. The structure of the fungal cell wall is unique to fungal cells and likely drives the specificity of pezadeftide for fungal cells over mammalian or bacterial cells.

Pezadeftide then moves into the cytoplasm of the cell.

STEP 2

Once inside the cell, pezadeftide hyperpolarises the mitochondrial membrane, increasing the negative charge inside the mitochondrial matrix. Under normal conditions, cells use an electron gradient in their mitochondria to generate energy. When pezadeftide hyperpolarises this membrane, energy generation in the cell rapidly increases, putting the cell into 'overdrive'.

STEP 3

A by-product of energy generation in the cell is the production of reactive oxygen species (ROS). These ROS are damaging to cellular components, including membranes. Their production increases in response to pezadeftide, resulting in permeabilization of the plasma membrane and cell death.