UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report April 16, 2024

Incannex Healthcare Inc. (Exact name of registrant as specified in its charter)

Delaware	001-41106	93-2403210		
(State or other Jurisdiction of Incorporation)	(Commission (IRS Employer File Number) Identification No.)			
•	The Number)	identification (vo.)		
Suite 105, 8 Century Circuit Norwest, NSW 2153 Australia		Not applicable		
(Address of Principal Executive Offices)		(Zip Code)		
Registrant's Telep	phone Number, including Area Code:	+61 409 840 786		
(Former Name or Form	er Address, if Changed Since Last Re	port): Not Applicable		
Check the appropriate box below if the Form 8-K filing is i following provisions:	ntended to simultaneously satisfy the fil	ing obligation of the registrant under any of the		
\square Written communications pursuant to Rule 425 under the	ne Securities Act (17 CFR 230.425)			
☐ Soliciting material pursuant to Rule 14a-12 under the E	Exchange Act (17 CFR 240.14a-12)			
☐ Pre-commencement communications pursuant to Rule	14d-2(b) under the Exchange Act (17 C	FR 240.14d-2(b))		
\square Pre-commencement communications pursuant to Rule	13e-4(c) under the Exchange Act (17 C	FR 240.13e-4(c))		
Securities registered pursuant to Section 12(b) of the Act:				
Title of each class	Trading Symbol	Name of exchange on which registered		
Common Stock, \$0.0001 par value per share	IXHL	The Nasdaq Stock Market LLC		
Indicate by check mark whether the registrant is an emergin chapter) or Rule 12b-2 of the Securities Exchange Act of 19		05 of the Securities Act of 1933 (§230.405 of this		
Emerging growth company ⊠				
If an emerging growth company, indicate by check mark if or revised financial accounting standards provided pursuant				

Item 8.01

On April 16, 2024, Incannex Healthcare Inc. announced its quarterly activities update and for the quarter ended 31 March 2024. Further information is included in the press release attached as Exhibit 99.1 hereto, which is incorporated by reference into this Item 8.01.

Item 9.01 Financial Statements and Exhibits.

/ 1		. 1			
(ď	۱ ۲	₹xl	11	hı:	tc

Exhibit No.	Description
99.1 104	Press Release of Incannex Healthcare Inc., dated April 16, 2024. Cover Page Interactive Data File (embedded within the Inline XBRL document)
	1

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: April 16, 2024

Incannex Healthcare Inc.

/s/ Joel Latham

Name: Joel Latham

Title: Chief Executive Officer and President



Incannex Healthcare Inc. Quarterly Update, Q1 2024

Melbourne, Australia, April 16, 2024 - Clinical stage pharmaceutical development company, Incannex Healthcare Inc. (NASDAQ: IXHL), ('Incannex' or the 'Company'), is pleased to provide quarterly activities update and for the quarter ended 31 March 2024.

Incannex is undertaking various U.S. Food and Drug Administration ('FDA') research and development ('R&D') programs for cannabinoid pharmaceutical products and psychedelic medicine therapies. The nearest-to-market projects in the Company's therapeutic pipeline are:

- IHL-42X drug candidate for Obstructive Sleep Apnea ('OSA') Phase 2/3 studies underway.
- IHL-675A drug candidate for Rheumatoid Arthritis ('RA') Phase 2b studies also underway.
- Psi-GAD psilocybin treatment protocol for generalised anxiety disorder: Phase 2b studies commencing following successful Phase 2 proof of concept studies in 73 patients.
- Clarion Clinics opens first clinic for the provision of psychedelic-assisted psychotherapies in regulatory permissible locations.

IHL-42X for Treatment of Obstructive Sleep Apnea

IHL-42X is Incannex's proprietary fixed dose combination drug comprising dronabinol and acetazolamide for treatment of OSA, a condition in which a person's airways are obstructed during sleep. That obstruction results in reduced oxygen uptake, poor-quality sleep and higher risk of heart disease, mental health disorders and accidents due to sleepiness or cognitive impairment. The current standard of care for OSA are positive airway pressure ('PAP') devices, however, patient compliance with PAP machines is limited due to patient discomfort. There are no approved drugs for OSA and IHL-42X is designed to fill this unmet need, particularly for patients who are intolerant to PAP machines.

The RePOSA Phase 2/3 Clinical Trial

The FDA provided clearance for the multi-site Phase 2/3 IND opening clinical trial in 2023. The trial, which has been given the name **RePOSA**, derived from **Revealing the Efficacy of IHL-42X** use in **Patients with OSA**, will assess the safety and efficacy of IHL-42X compared to the component active pharmaceutical ingredients, dronabinol and acetazolamide, as well as placebo.

Design of the RePOSA study consists of a Phase 2 dose ranging study that will be conducted at twenty-five sites in the United States. Patients in the Phase 2 study will receive one of two doses of IHL-42X or placebo for 4 weeks. After 4 weeks treatment, the patients will undergo assessment using overnight polysomnography to determine the severity of their sleep apnea, as well as various patient-reported outcomes and blood sample collection to determine the effects of IHL-42X on their sleep quality and the safety of IHL-42X.



The Phase 3 component of the study will expand the trial to sites in Europe, extend the treatment period to 1 year, and will compare IHL-42X at the optimal dose from Phase 2 to the component active pharmaceutical ingredients, dronabinol and acetazolamide, as well as placebo. The study is registered on clinicaltrials.gov with NCT number NCT06146101.

During the quarter, Incannex focused on preparing for patient dosing in Phase 2 and achieved the following:

- All 25 US based Phase 2 trial sites ('sites') have been selected for the RePOSA study. The sites are at various stages of start-up, as follows:
 - o Contracts executed with 20 sites.
 - o 16 sites have full Institutional Review Board ('IRB') approval.
 - o 11 investigators have been added to the FDA IND.
- The IHL-42X drug product has been manufactured and shipped to a depot in the US, from where it will be distributed to sites. Arrival of drug product at sites will be followed shortly by commencement of patient dosing.

Preparation for the Phase 3 component of the trial is being undertaken in parallel with start-up activities for Phase 2. The 25 US sites selected for the Phase 2 component of the trial will also participate in Phase 3. The Phase 2 and Phase 3 components are contained within a single protocol that has already been approved by the IRB. The Phase 3 trial will also include sites in Germany, Spain, Finland, and the UK. Progress towards Phase 3 in the quarter included:

- All 30 additional sites have been selected for Phase 3. This consists of 16 sites in Germany, 7 in Spain, 2 in Finland and 5 in the United Kingdom ('UK').
- EU-CTR package for approval to conduct the study in Europe is nearing finalisation and submission.

President and CEO Incannex Inc., Mr Joel Latham said, "There are no FDA or EMA registered drugs for the treatment of sleep apnea, which we believe represents a major opportunity for Incannex to provide patients with a novel treatment option with no direct market competitors."

"The initial Phase 2 proof of concept clinical trial investigating IHL-42X in patients with OSA demonstrated an average reduction in AHI of 50.7%, with 25% of subjects having a reduced AHI of >80%. Importantly, we also observed a reduction in average patient oxygen desaturation index of 59.7% and markedly improved patient reported sleep quality."

These results were truly remarkable and has facilitated our investment in the Phase 2/3 trial. If we again observe such notable drug efficacy, safely administered over the 52 weeks of the Phase 3 component of the trial, Incannex is confident that our product will be marketable."



The IHL-42X Bioavailability/Bioequivalence Study

Incannex intends to submit a New Drug Application ('NDA') for IHL-42X fixed dose combination drug to the FDA using the 505(b)2 pathway. The 505(b)2 NDA permits an applicant to rely on information on the component drug substances, via previous approved reference listed drugs, from studies not conducted by Incannex. The previously FDA-approved reference drugs, dronabinol and acetazolamide, correspond to the active pharmaceutical ingredients in IHL-42X.

To use the FDA505(b)2 pathway, the pharmacokinetics of the active pharmaceutical ingredients in IHL-42X must compared directly to the reference listed drugs. The Bioavailability/Bioequivalence ('BA/BE') study is being undertaken to assess the bioavailability of IHL-42X and determine the bioequivalence to the reference listed drugs.

The BA/BE study is progressing and aims to recruit at least 116 healthy volunteers who will each receive a single dose of IHL-42X, dronabinol and acetazolamide under fasted conditions, as well as IHL-42X under fed conditions. After each drug is administered, patients will have blood samples collected at defined timepoints over 48 hours. These blood samples will be analysed for dronabinol, acetazolamide and their relevant metabolites. This data will be used to determine pharmacokinetic parameters for the drugs and their metabolites. Participants will also be monitored throughout the study to collect additional data on the safety of IHL-42X. The study is registered on clinicaltrials.gov with NCT number NCT05857384.

Patient recruitment continued during the quarter, a total of 72 participants have been randomised and received a minimum of one dose in the trial. No serious adverse events have occurred to date. An additional site has been added to hasten the study and screening has commenced at the second site.

IHL-675A for Treatment of Inflammatory Diseases

IHL-675A is Incannex's proprietary fixed dose combination drug for the treatment of chronic inflammatory diseases. Inflammatory conditions occur when the body's immune system attacks its own tissues and organs causing inflammation, pain, discomfort, and damage to the affected tissues. IHL-675A is a multi-use, anti-inflammatory drug targeting rheumatoid arthritis, inflammatory bowel disease (colitis and Crohn's disease) and lung inflammation (COPD, asthma, bronchitis, and ARDS). IHL-675A is a combination of hydroxychloroquine ('HCQ'), a registered pharmaceutical, and cannabidiol ('CBD'), for which Incannex has observed synergistic anti-inflammatory activity in pre-clinical studies.

Incannex's current focus is on developing IHL-675A for treatment of rheumatoid arthritis ('RA'), an inflammatory condition that predominantly affects the joints. Although there are various approved treatments for RA, these often have limited efficacy or come with safety concerns, resulting in many RA patients continuing to experience pain, which reduces their quality of life. HCQ is commonly prescribed to patients with RA. IHL-675A is designed to provide additional therapeutic activity through the addition of CBD and the synergistic activity with HCQ, providing relief to patients with pain associated with their RA.



Phase 2 clinical trial investigating IHL-675A in patients with Rheumatoid Arthritis

This Phase 2 clinical trial will include a minimum of 128 participants with RA who are experiencing pain and reduced function resulting from their disease, regardless of current treatment status. Participants are randomized to one of 4 arms: either IHL-675A, CBD alone, HCQ alone or placebo. The primary endpoint for the trial is pain and function relative to baseline, determined via the score on the RAPID3 assessment at 24 weeks.

Participants also record their pain and function outcomes daily, by completing questionnaires on pain, fatigue, joint stiffness and quality of life, using an electronic Patient Reported Outcomes (PRO) device. The participants will attend monthly visits at the clinical trial site, where blood tests, and physical examinations will monitor additional safety and efficacy outcomes, including inflammatory biomarkers. The study is registered on clinicaltrials gov with NCT number NCT05942911.

Patient dosing commenced during the quarter. Other progress in the trial has included:

- Site initiation completed at all ten trial sites
- Screening ongoing
- No serious adverse events reported to date.

PsiGAD for Treatment of Generalised Anxiety Disorder

PsiGAD is Incannex's psilocybin associated psychotherapy treatment for generalised anxiety disorder ('GAD'). GAD is a relatively common, but serious psychiatric condition affecting around 4-6% of the population during their lifetime. GAD can severely affect quality of life and professional career prospects. International guidelines for GAD treatment recommend selective serotonin reuptake inhibitors ('SSRIs'), serotonin and noradrenaline reuptake inhibitors ('SNRIs'), and pregabalin as first-line options, with benzodiazepines such as diazepam as second-line options. GAD is also treated with psychotherapy alone, or in combination with pharmacotherapies. However, these traditional treatments show limited efficacy, with less than half of patients achieving remission following these treatments and substantial treatment side-effects and cost.

PsiGAD1 - Results from Phase 2A Proof of Concept Clinical Trial

During the quarter, Incannex released top line results from the PsiGAD1 clinical trial conducted at Monash University, based in Melbourne, Australia. The reduction in Hamilton Anxiety Ratings Scale ('HAM-A') score from baseline in the psilocybin group was 12.8 points, from 29.5 at baseline, to 16.8 at week 11 (6 weeks following the final dosing session). This reduction in HAM-A score observed in the psilocybin group was 9.2 points greater than the reduction observed in the placebo group (-12.8 psilocybin vs. -3.6 placebo; p<0.0001).



Further analysis revealed that 44% of patients in the psilocybin group were observed to have a clinically meaningful improvement of at least 50% reduction in anxiety score from baseline; a 'response rate' more than four times higher than that of the placebo group. 27% of patients in the psilocybin group achieved full disease remission; a rate five times higher than that of psychotherapy with placebo. Psilocybin within the context of PsiGAD psychotherapy was observed to be well-tolerated, with only mild and moderate adverse events (AEs) reported. The reported AEs were consistent with the known effects of the drug. No serious or severe adverse events were observed.

PsiGAD2 IND-opening Phase 2B Clinical Trial

Incannex subsidiary, called Psychennex, commenced preparing an FDA Investigational New Drug ('IND') application for the PsiGAD program. The results of the PsiGAD1 study are being incorporated into the IND dossier along with finalization of the other modules in preparation for submission to the FDA. Work on the IND dossier during the quarter includes:

- Description of the formulation development of Incannex's psilocybin drug product PSX-001 along with relevant quality and stability data.
- Summaries of clinical and non-clinical data on the safety and efficacy of psilocybin for the treatment of GAD.
- Finalisation of the clinical trial protocol and other study documents with Clerkenwell Health, a UK based contract research organization specializing in psychiatry and central nervous system treatments.

The IND opening clinical trial will be conducted at sites in the US and the UK. In parallel with the preparation of the IND dossier, Incannex and Psychennex have been working with Clerkenwell to prepare the corresponding submission to the Medicines and Healthcare products Regulatory Agency ('MHRA'), to allow for conduct of the trial at sites in the UK.

Clarion Clinics

Clarion Clinics has been designed and fitted out specifically to provide the optimal environment for psychedelic-assisted therapy. With seven treatments rooms and a group therapy room, the first operational clinic is a commercial scale prototype and has the capacity to treat approximately 600 people per year in normal working hours and substantially more in extended hour operations. Clarion Clinics started to receive its first patients during the quarter and first revenues from the operation are expected in the current quarter. Other clinics are being planned and expected to be larger than the initial clinic.

Initial response to the clinic opening has been strong with over 500 potential patients expressing an interest in treatment to date. Clarion has assembled a world class clinical leadership team and has the most experienced clinical delivery team for psychedelic-assisted therapy in Australia. Clarion, per the Australian Therapeutic Goods Administration (TGA) down-scheduling, can treat patients with post-traumatic stress disorder (PTSD) and treatment resistant depression (TRD) by augmenting specialist psychotherapy with MDMA and psilocybin, respectively.

This announcement has been approved for release to NASDAQ by the Incannex Board of Directors.

END



About Incannex Healthcare Inc.

Incannex is a clinical stage pharmaceutical development company that is developing unique medicinal cannabis pharmaceutical products and psychedelic medicine therapies for the treatment of obstructive sleep apnoea (OSA), traumatic brain injury (TBI) and concussion, lung inflammation (ARDS, COPD, asthma, bronchitis), rheumatoid arthritis, inflammatory bowel disease, anxiety disorders, addiction disorders, and pain, among other indications.

U.S. FDA approval and registration, subject to ongoing clinical success, is being pursued for each drug and therapy under development. Each indication under investigation currently has no, or limited, existing registered pharmacotherapy (drug) treatments available to the public and represent major global economic opportunities to Incannex and its shareholders.

Incannex has a strong patent filing strategy in place as it develops its products and therapies in conjunction with its medical and scientific advisory board and partners. The Company holds 19 granted patents and 30 pending patent applications. Incannex is listed on the NASDAQ as IXHL

Website: www.incannex.com.au Investors: investors@incannex.com.au

Forward-looking statements

This press release contains "forward-looking statements" within the meaning of the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements are made as of the date they were first issued and were based on current expectations and estimates, as well as the beliefs and assumptions of management. The forward-looking statements included in this press release represent Incannex's views as of the date of this press release. Incannex anticipates that subsequent events and developments may cause its views to change. Incannex undertakes no intention or obligation to update or revise any forward-looking statements, whether as of a result of new information, future events or otherwise. These forward-looking statements should not be relied upon as representing Incannex's views as of any date after the date of this press release.

Contact Information:

Incannex Healthcare Inc.

Mr Joel Latham Chief Executive Officer, President and Director admin@incannex.com.au

Investor Relations Contact – United States

Laine Yonker Edison Group +1 (610) 716 2868 lyonker@edisongroup.com