

PROSPECTUS



Incannex Healthcare Inc.

75,902,171 Shares of Common Stock

This prospectus relates to the offer and sale by the selling stockholders named in this prospectus, and any pledgee, donee, transferee or other successor in interest, of up to an aggregate of 75,902,171 shares (the “Shares”) of common stock, par value \$0.0001 per share, of Incannex Healthcare Inc. (the “Common Stock”).

We are registering for resale (i) 9,687,045 shares of Common Stock held by the selling stockholders, (ii) 1,887,045 shares of Common Stock issuable upon the exercise of pre-funded warrants (the “Pre-Funded Warrants”) to purchase shares of Common Stock held by certain selling stockholders, and (iii) 64,328,081 shares of Common Stock issuable upon the exercise of Series A common stock warrants (the “Series A Warrants”) and together with the Pre-Funded Warrants, the “Warrants”) to purchase shares of Common Stock held by the selling stockholders.

The Series A Warrants are not currently exercisable and will be exercisable following the date of Stockholder Approval (as defined in the Section titled “*Prospectus Summary – 2025 Private Placement*” on page 1 of this prospectus). In the event that we are unable to obtain the required Stockholder Approval for the Series A Warrants, such warrants will not be exercisable and therefore have no value.

Our registration of the Shares covered by this prospectus does not mean that the selling stockholders will offer or sell any of the Shares. The selling stockholders may sell any, all or none of the Shares offered by this prospectus and we do not know when or in what amount the selling stockholders may sell their Shares hereunder following the effective date of this registration statement. The selling stockholders named in this prospectus, and any pledgee, donee, transferee or other successor-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For further information regarding the possible methods by which our Common Stock may be distributed, see “Plan of Distribution” beginning on page 18 in this prospectus. Each of the selling stockholders is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended (the “Securities Act”).

We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of Shares by the selling stockholders. We will likely only receive nominal proceeds of \$0.0001 per share upon the cash exercise of the Pre-Funded Warrants. Though we would receive the proceeds for the cash exercise of the Series A Warrants per their terms, we are unlikely to receive any cash proceeds from the exercise of the Series A Warrants as the Series A Warrants may be exercised following Stockholder Approval on a zero exercise price basis where the holder will be eligible to receive, for each share of Common Stock issuable upon exercise of the Series A Warrant (which itself is subject to up to a tenfold increase depending on the price of our common stock on the Release Date, as defined in the Section titled “*Prospectus Summary – 2025 Private Placement*” on page 1 of this prospectus), three shares of our Common Stock without the payment of any exercise price.

As of April 11, 2025, the securities registered for resale by the selling stockholders in the registration statement of which this prospectus forms a part would represent approximately 275.5% of the 27,546,753 shares of our Common Stock outstanding and 20.1% of our total shares of Common Stock outstanding assuming the exercise of all Pre-Funded Warrants and the issuance of the maximum number of shares of Common Stock that may be issuable upon exercise of the Series A Warrants. Following and assuming our receipt of the Stockholder Approval to increase our authorized shares of Common Stock, we will be required to register an additional 282,894,619 shares of our Common Stock for resale. A total of up to 347,222,700 shares of Common Stock may be issuable upon exercise of the Series A Warrants. The securities to be registered for resale by the selling stockholders in the above referenced future resale registration statement and in the registration statement of which this prospectus forms a part would be approximately 1,260.5% of the 27,546,753 shares of our Common Stock outstanding as of April 11, 2025 and 92.19% of our total shares of Common Stock outstanding assuming the exercise of all Pre-Funded Warrants and the issuance of the maximum number of shares of Common Stock that may be issuable upon exercise of the Series A Warrants. Given the substantial number of shares being registered for potential resale by the selling stockholders pursuant to this prospectus, whether as a result of substantial sales of our Common Stock by the selling stockholders or the perception in the market that holders of a large number of selling stockholders intend to sell their shares, the market price of shares of our Common Stock could decline significantly and the volatility of the market price of our Common Stock could increase significantly, even if our research and development efforts are going well. See “*Risk Factors*” beginning on page 6 of this prospectus for more information.

Our Common Stock is traded on The Nasdaq Global Market under the symbol “IXHL.” On April 25, 2025, the closing sale price of the Common Stock on Nasdaq was \$0.629 per share.

We are an emerging growth company and a smaller reporting company under the federal securities laws and, as such, are subject to certain reduced public company reporting requirements. See “*Prospectus Summary - Implications of Being an Emerging Growth Company and a Smaller Reporting Company*” on page 4 of this prospectus.

Investing in our Common Stock involves a high degree of risk. Please consider carefully the risks described in this prospectus under “Risk Factors” beginning on page 6 of this prospectus and in our filings with the Securities and Exchange Commission.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 28, 2025

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	ii
<u>PROSPECTUS SUMMARY</u>	1
<u>THE OFFERING</u>	5
<u>RISK FACTORS</u>	6
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION</u>	9
<u>DIVIDEND POLICY</u>	10
<u>USE OF PROCEEDS</u>	10
<u>SELLING STOCKHOLDERS</u>	11
<u>DESCRIPTION OF CAPITAL STOCK</u>	14
<u>PLAN OF DISTRIBUTION</u>	18
<u>LEGAL MATTERS</u>	20
<u>EXPERTS</u>	20
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	20
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	21

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-1 that we have filed with the Securities and Exchange Commission (the “SEC”) pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the Shares covered by this prospectus. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or Shares are sold or otherwise disposed of on a later date.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the Shares, you should refer to the registration statement including the exhibits. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.” This prospectus contains summaries of certain provisions contained in some of the documents described herein, or that are filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus.

We and the selling stockholders have not authorized anyone to give any information or to make any representation to you other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any of our shares of Common Stock other than the Shares covered hereby, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about, and to observe, any restrictions as to the offering and the distribution of this prospectus applicable to those jurisdictions.

This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. This prospectus, including the documents incorporated by reference herein, include statements that are based on various assumptions and estimates that are subject to numerous known and unknown risks and uncertainties. Some of these risks and uncertainties are described in the section entitled “Risk Factors” beginning on page 6 of this prospectus and as described in Part I, Item 1A (Risk Factors) of our most recent Annual Report on Form 10-K for the year ended June 30, 2024 filed with the SEC on September 30, 2024, as updated by our subsequent filings with the SEC under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These and other important factors could cause our future results to be materially different from the results expected as a result of, or implied by, these assumptions and estimates. You should read the information contained in, or incorporated by reference into, this prospectus completely and with the understanding that future results may be materially different from and worse than what we expect. See the information included under the heading “Special Note Regarding Forward-Looking Statements.”

In this prospectus, references to “Incannex,” “Incannex Healthcare,” the “Company,” “we,” “us,” and “our” refer to Incannex Healthcare Inc. and its subsidiaries. The phrase “this prospectus” refers to this prospectus and any applicable prospectus, unless the context requires otherwise.

We use our trademarks in this prospectus as well as trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, certain trademarks and tradenames referred to in this prospectus appear without the ® and TM symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trademarks and tradenames.

PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in this prospectus and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and the documents incorporated by reference herein.

About Incannex Healthcare Inc.

We are a clinical-stage biopharmaceutical development company dedicated to developing combination medicines that target the underlying biological pathways associated with chronic conditions, including obstructive sleep apnea (“OSA”), rheumatoid arthritis and generalized anxiety disorder. We are advancing novel oral fix-dosed treatments and therapeutic regimens based on evidence-based innovation. Our lead Phase 2/3 and Phase 2 clinical programs include IHL-42X for the treatment of OSA; IHL-675A for the treatment of inflammatory conditions, including rheumatoid arthritis, and PSX-001, our oral synthetic psilocybin treatment, in combination with psychotherapy, for the treatment of generalized anxiety disorder. Our programs target disorders that have limited, inadequate, or no approved pharmaceutical treatment options.

To date, we have not generated any material revenue and do not expect to generate significant revenue from the sale of our drug candidates in development in the foreseeable future. If our development efforts for our drug candidates are successful and result in regulatory approval, we may generate revenue in the future from these sales. We cannot predict if, when, or to what extent we will generate revenue from the commercialization and sale of our drug candidates. We may never succeed in obtaining regulatory approval for any of our drug candidates.

2025 Private Placement

On March 7, 2025, we entered into a private placement (the “Private Placement”) pursuant to securities purchase agreements (“March 2025 Purchase Agreements”) with the selling stockholders for the purchase and sale of 9,687,045 shares (the “PIPE Shares”) of Common Stock for a purchase price of \$1.08 per share of Common Stock (and, in lieu thereof, Pre-Funded Warrants to purchase up to 1,887,045 shares (the “Pre-Funded Warrant Shares”) of Common Stock) at a price of \$1.0799 per Pre-Funded Warrant and Series A Warrants to purchase up to 11,574,090 shares of Common Stock at an initial exercise price of \$2.16 per share, subject to adjustment to up to an aggregate of 347,222,700 shares of Common Stock assuming full adjustment of the exercise price to the Floor Price (as defined below) and exercise pursuant to the zero exercise price provisions of the Series A Warrants as described below (the “Series A Warrant Shares” and together with the Pre-Funded Warrant Shares, the “Warrant Shares”). The PIPE Shares, the Series A Warrants, Series A Warrant Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares are collectively referred to as the “Securities.”

The Pre-Funded Warrants are exercisable (in cash or by cashless exercise) for shares of Common Stock for a nominal exercise price of \$0.0001 per Pre-Funded Warrant Share, were immediately exercisable upon issuance and expire when exercised in full.

The Series A Warrants are not currently exercisable, will be exercisable following Stockholder Approval and will expire two and one-half (2.5) years after the date of Stockholder Approval. If a registration statement registering the resale of the shares of Common Stock underlying the Series A Warrants is not effective or available following the date of Stockholder Approval, the holder may, in its sole discretion, elect to exercise the Series A Warrants through a cashless exercise. The Series A Warrants also include a zero exercise price provision (referred to in the text of the Series A Warrants as an “alternative cashless exercise”) where, following Stockholder Approval (even if a registration statement registering the issuance or resale of shares of Common Stock underlying the Series A Warrant is effective), the holder of a Series A Warrant has the right to receive, without paying any additional cash or consideration to the Company, an aggregate number of shares of Common Stock equal to the product of (x) the aggregate number of shares of Common Stock that would be issuable upon a cash exercise of the Series A Warrant multiplied (which is subject to adjustment, as described below, to a number of shares that is up to 10 times the number of shares underlying the Series A Warrant at issuance) by (y) three (3.0). As a result of these zero exercise price provisions, it is unlikely investors would choose to cash exercise the Series A Warrants, and we are unlikely to receive any cash proceeds from the exercise of the Series A Warrants. Similarly, as a result of the zero exercise price provisions, it is unlikely investors would choose to exercise the Series A Warrants on a “net” or “cashless” basis that would reduce the number of shares issuable upon exercise of the Series A Warrant by a number of shares having an aggregate value equal to the exercise price. The number of shares issuable upon exercise of the Series A Warrants is subject to adjustment in connection with the adjustment of the exercise price of the Series A Warrants, as described below, to a number of shares that is up to 10 times the number of shares underlying the Series A Warrant at issuance. The number of shares issuable pursuant to the Series A Warrants, including by way of its zero exercise price provisions, is also subject to proportional adjustments for stock splits, dividends, reclassifications and similar adjustments.

In addition, if we grant, issue or sell any options, convertible securities, or rights to purchase stock, warrants, securities or other property on a pro rata basis to the record holders of our common stock (such rights, the “Purchase Rights”), then each holder of a Warrant will be entitled to participate in this offering of Purchase Rights as if the holder of a Warrant were a holder of our common stock. The amount of Purchase Rights that a holder of a Warrant could acquire would be the amount of Purchase Rights the holder could have acquired if the holder of a Warrant had held the number of shares of common stock acquirable upon complete exercise of their Warrant immediately before the date on which a record date is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of our common stock is determined for the grant, issue or sale of such Purchase Rights. The number of shares issuable to Series A Warrant holders will be without regard to any 4.99% or 9.99% beneficial ownership limitation and the number issuable to the Pre-Funded warrant holders in excess of these blockers will be held in abeyance until such time as the issuance would be in compliance with these blocker provisions.

The exercise price of the Series A Warrants will be reduced (but in no event increased) to the greater of (I) the Floor Price (as described below) and (II) the lowest daily dollar-volume-weighted-average-price during the period beginning two full trading days prior to the Release Date and ending on the 10th trading day after the Release Date (as described below). Upon any such resulting adjustment of the exercise price in the Series A Warrants, the number of Series A Warrant Shares issuable under the Series A Warrants will be increased such that the aggregate exercise price of a Series A Warrants (adjusted for any exercises by a holder prior to this adjustment) will remain unchanged following such adjustment. As a result, the aggregate number of shares of Common Stock underlying all of the Series A Warrants, may increase from 11,574,090 to up to 115,740,900, assuming full adjustment of the exercise price to the Floor Price and before giving effect to the zero exercise price provision. Assuming full adjustment of the exercise price to the Floor Price, the aggregate number of shares of Common Stock issuable upon the exercise of all of the Series A Warrants pursuant to the zero exercise price provisions therein would be 347,222,700.

“Release Date” means the later of (x) the earlier of (i) the effective date of a registration statement registering all of the securities sold in the Private Placement (including any securities issuable upon exercise of the Pre-Funded and Series A Warrants) or (ii) the date that the securities sold in the Private Placement can be sold, assigned or transferred without restriction or limitation pursuant to Rule 144 or Rule 144A promulgated under the Securities Act and (y) the date that the Company obtains the Stockholder Approval. If, for any reason, less than all of the securities sold pursuant to the Purchase Agreement have been registered for resale prior to the expiration of the 90-day period immediately following the trading day during which the Company files a Current Report on Form 8-K giving public notice of Stockholder Approval, then a Series A Warrant holder, with respect to itself only, will have the right in its sole and absolute discretion, to deem that the Release Date has occurred with respect to such portion of a Series A Warrant as the holder determines and an adjustment to the exercise price and shares issuable upon exercise of the Series A Warrant will occur for that portion of the Series A Warrant. Any portion of a Series A Warrant not previously subject to an adjustment as a result of an exercise by the Holder in accordance with the previous sentence, will remain subject to a future adjustment in in connection with a Release Date.

In addition, if at any time during the term of the Series A Warrants there occurs any share split, reverse share split, share dividend, share combination recapitalization or other similar transaction involving the shares of our Common Stock (each, a “Share Combination Event”, and such date on which the Share Combination Event is effected, the “Share Combination Event Date”) and the lowest daily dollar volume-weighted average price per share of our Common Stock during the period commencing on the trading day immediately following the applicable Share Combination Event Date and ending on the fifth trading day immediately following the applicable Share Combination Event Date (the “Event Market Price”) (provided if the Share Combination Event is effective prior to the opening of trading on the market on which shares of our Common Stock are then traded, then, commencing on the Share Combination Event Date and ending on the fourth trading day immediately following the applicable Share Combination Event Date (such period, the “Share Combination Adjustment Period”)) is less than the exercise price then in effect (after giving effect to the adjustment for such event), then, at the close of trading on the last day of the Share Combination Adjustment Period, the exercise price then in effect will be reduced (but in no event increased) to the Event Market Price and the number of Series A Warrant Shares issuable upon exercise of a Series A Warrant (such resulting number, the “Share Combination Issuable Shares”) will be increased such that the aggregate exercise price, after taking into account the decrease in the exercise price, will be equal to the aggregate exercise price on the date of issuance of the Series A Warrants for the remaining Series A Warrant Shares then issuable pursuant to the Series A Warrant; provided, however, that in no event will the Event Market Price be lower than the Floor Price; and provided further that notwithstanding the foregoing, if one or more Share Combination Events occurred prior to Stockholder Approval being obtained and the reduction of the exercise price was limited by the Floor Price while it was \$1.08 per share, once Stockholder Approval is obtained, the Exercise Price will automatically be reduced to equal the greater of (x) the lowest Event Market Price with respect to any Share Combination Event that occurred prior to Stockholder Approval being obtained, and (y) \$0.216, the Floor Price following receipt of Stockholder Approval. If one or more Share Combination Events occurs prior to Stockholder Approval being obtained and the reduction of the exercise price to the Event Market Price, once Stockholder Approval is obtained, the exercise price will automatically be reduced to the lowest Event Market Price with respect to any Share Combination Event that occurred prior to Stockholder Approval being obtained and the Share Combination Issuable Shares will automatically be adjusted to equal the highest such number with respect to any Share Combination Event that occurred prior to the Stockholder Approval being obtained, provided that in no event will the exercise price be reduced below the Floor Price.

Adjustment of the Series A Warrant exercise price is currently subject to a floor price of \$1.08 per share and such floor price will be adjusted to \$0.216 per share following Stockholder Approval (such price, the “Floor Price”).

Assuming full adjustment of the exercise price of the Series A Warrants to the Floor Price and the full exercise of the Series A Warrants pursuant to the zero exercise price provisions, we would issue 347,222,700 shares of our Common Stock upon exercise of the Series A Warrants. However, only 75,902,171 shares are currently available for such issuance out of our authorized shares of Common Stock. As such, we are only seeking to register 64,328,081 shares of our Common Stock issuable upon exercise of the Series A Warrants pursuant to the registration statement on Form S-1 of which this prospectus is a part. Following and assuming approval of the Charter Amendment Proposal (as described below), we will seek to register the remaining 282,894,619 shares of our Common Stock issuable upon exercise of the Series A Warrants.

The Warrants may not be exercised if the aggregate number of shares of Common Stock beneficially owned by the holder thereof immediately following such exercise would exceed a specified beneficial ownership limitation (4.99%/9.99%); provided, however, that a holder may increase or decrease the beneficial ownership limitation by giving 61 days’ notice to the Company, but not to any percentage in excess of 9.99% (the “Beneficial Ownership Limitation”).

In connection with the Private Placement, the Company entered into a registration rights agreement with the selling stockholders on March 7, 2025 (the “Registration Rights Agreement”), pursuant to which the Company agreed to use reasonable best efforts to register the Securities for resale within thirty (30) days of the filing date of the registration statement (or, in the event of a “limited review” or “full review” seventy-five (75) days) and also agreed to call a special meeting of stockholders no later than sixty (60) days following the closing of the Private Placement for the approval of (i) the issuance of the Series A Warrant Shares and adjustments to the exercise price and shares in the Series A Warrants as required pursuant to the rules and regulations of the Nasdaq Stock Market LLC, and (ii) for an increase in the authorized number of shares of Common Stock as may be required for the full exercise of the Series A Warrants. We are seeking stockholder approval (“Stockholder Approval”) to, among other things, (i) approve, for purposes of complying with Nasdaq Listing Rule 5635(d), the issuance of the Series A Warrant Shares and certain provisions of the Series A Warrants, and (ii) approve a proposed amendment to our amended and restated certificate of incorporation (the “Certificate of Incorporation”) to increase the total number of shares of Common Stock authorized for issuance thereunder from 100,000,000 shares to 800,000,000 shares (the “Charter Amendment Proposal”), at a special meeting of stockholders.

On March 7, 2025, the Company also entered into a placement agency agreement with R.F. Lafferty & Co., Inc. (“R.F. Lafferty”) as the sole placement agent in connection with the Private Placement (the “Placement Agent”). As compensation to the Placement Agent, the Company paid a commission equal to 7.0% of the aggregate gross proceeds from the Private Placement.

The Private Placement closed on March 10, 2025. The Securities issued in the Private Placement were issued and offered pursuant to the exemptions from registration provided in Section 4(a)(2) under the Securities Act of 1933, as amended, and Rule 506(b) promulgated thereunder.

Recent Developments

ATM Offering

On April 7, 2025, we entered into Sales Agreement (the “Sales Agreement”) with A.G.P./Alliance Global Partners (“A.G.P.”) as sales agent, in connection with an “at the market offering” under which we may offer and sell, from time to time in our sole discretion, shares of our Common Stock having an aggregate offering price of up to \$16,768,099 at market prices or as otherwise agreed with A.G.P. The compensation to A.G.P. for sales of the shares is a placement fee of 3.0% of the gross sales price of the shares of Common Stock sold pursuant to the Sales Agreement. In connection with entering into the Sales Agreement, on April 7, 2025, we filed with the SEC a prospectus supplement relating to the offer, issuance and sale of up to \$16,768,099 of our shares of Common Stock pursuant to the Sales Agreement. As of April 11, 2025, we have not sold any shares of Common Stock pursuant to the Sales Agreement.

Pursuant to the March 2025 Purchase Agreements, we may not issue shares of Common Stock pursuant to the Sales Agreement at a price less than \$1.08 per share of Common Stock prior to the thirtieth day after the Release Date. Additionally, we may not issue more than seven shares of Common Stock pursuant to the Sales Agreement prior to the date of the Stockholder Approval as we currently have no other authorized shares of Common Stock available for issuance pursuant to the Sales Agreement. As a result, we will likely be unable to utilize the Sales Agreement in the near term.

Implications of Being an Emerging Growth Company and Smaller Reporting Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). We may take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm under Section 404 of the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments. We may take advantage of these exemptions until the last day of our fiscal year following the fifth anniversary of the date of the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act or until we are no longer an “emerging growth company,” whichever is earlier. We will cease to be an emerging growth company prior to the end of such period if certain earlier events occur, including if we become a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, our annual gross revenues exceed \$1.235 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this extended transition period under the JOBS Act until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act.

We are also a “smaller reporting company” as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company, which would allow us to take advantage of many of the same exemptions available to emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation. We will be able to take advantage of the scaled disclosures available to smaller reporting companies for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

Additional Information

For additional information related to our business and operations, please refer to the reports incorporated herein by reference, as described under the caption “Incorporation of Certain Documents by Reference” on page 21 of this prospectus.

Corporate Information

Incannex Healthcare Inc. was incorporated in Delaware in July 2023. On November 28, 2023, the redomiciliation of Incannex Healthcare Limited, an Australian corporation, or Incannex Australia, was implemented under Australian law in accordance with the Scheme Implementation Deed, as amended and restated on September 13, 2023, between Incannex Australia and the Company. As a result of the redomiciliation, Incannex Australia became a wholly-owned subsidiary of Incannex Healthcare Inc.

Our principal office is located at Suite 105, 8 Century Circuit Norwest, NSW 2153 Australia and our telephone number is +61 409 840 786. Our address on the Internet is <http://www.incannex.com>. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

The information on, or accessible through, our website is not part of this prospectus. We file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports with SEC. Our filings with the SEC are available free of charge on the SEC’s website and on the “Investors” section of our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains an internet site that contains reports and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

THE OFFERING

Common Stock offered by selling stockholders hereunder

75,902,171 shares, consisting of (i) 9,687,045 shares of Common Stock, (ii) 1,887,045 shares of Common Stock issuable upon the exercise of the Pre-Funded Warrants to purchase shares of Common Stock, and (iii) 64,328,081 shares of Common Stock issuable upon the exercise of the Series A Warrants to purchase shares of Common Stock. The Series A Warrants are not currently exercisable and will be exercisable following the date of Stockholder Approval.

Risk Factors:

Investing in our securities is highly speculative and involves a high degree of risk. You should carefully consider the information set forth in the “Risk Factors” section on page 6 before deciding to invest in our securities.

Use of proceeds

We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of Shares by the selling stockholders. We will likely only receive nominal proceeds of \$0.0001 per share upon the cash exercise of the Pre-Funded Warrants. Though we would receive the proceeds for the cash exercise of the Series A Warrants per their terms, we are unlikely to receive any cash proceeds from the exercise of the Series A Warrants as the Series A Warrants may be exercised following stockholder approval on a zero exercise price basis where the holder will be eligible to receive, for each share of Common Stock issuable upon exercise of the Series A Warrant, three shares of our Common Stock without the payment of any exercise price. To the extent we receive any proceeds, we intend to use the proceeds for working capital and general corporate purposes. See “*Use of Proceeds*” on page 10 of this prospectus for more information.

Nasdaq Global Market symbol:

IXHL

Risk Factors

Any investment in shares of our Common Stock is speculative and involves a high degree of risk. You should carefully consider the information set forth in this prospectus, particularly the information included in the section entitled “*Risk Factors*” beginning on page 6 of this prospectus.

RISK FACTORS

Investing in our Common Stock involves a high degree of risk. You should carefully consider the risks and uncertainties and all other information, documents or reports included or incorporated by reference in this prospectus and, if applicable, any prospectus supplement or other offering materials, including the risks and uncertainties discussed and described in Part I, Item 1A (Risk Factors) of our most recent Annual Report on Form 10-K for the year ended June 30, 2024 filed with the SEC on September 30, 2024, as updated by our subsequent filings with the SEC under the Exchange Act, which are incorporated by reference, in this prospectus, and any updates to those risk factors included from time to time in our periodic and current reports filed with the SEC and incorporated by reference in this prospectus, before making any decision to invest in shares of our Common Stock. If any of the events discussed in these risk factors occurs, our business, prospects, results of operations, financial condition and cash flows could be materially harmed. If that were to happen, the trading price of our Common Stock could decline, and you could lose all or part of your investment. Additional risks not currently known to us or other factors not perceived by us to present significant risks to our business at this time also may impair our business operations.

If we are unable to maintain or regain compliance with the requirements of the Nasdaq Stock Market (“Nasdaq”), this could result in the delisting of our Common Stock. A delisting of our Common Stock from the Nasdaq could adversely affect our ability to raise additional capital through the public or private sale of equity securities, the ability of investors to dispose shares of our Common Stock or obtain accurate quotations as to the market value of our Common Stock and the price and value of our Common Stock.

Our Common Stock is currently listed on the Nasdaq Global Market. Continued listing of a security on Nasdaq is conditioned upon compliance with various continued listing standards for the three Nasdaq market tiers: Nasdaq Global Select Market, Nasdaq Global Market and the Nasdaq Capital Market. On January 3, 2025, we received a letter (the “Notice”) from the Staff of Nasdaq (the “Staff”) notifying us that, we were not in compliance with Nasdaq Listing Rule 5450(b)(2)(A) (the “MVLS Listing Rule”), which requires us as a Nasdaq Global Market issuer to maintain a minimum Market Value of Listed Securities (“MVLS”) of at least \$50.0 million. The Notice stated that we have 180 calendar days, or until July 2, 2025, to regain compliance with the MVLS Listing Rule. To regain compliance, our MVLS must meet or exceed \$50.0 million for a minimum of ten consecutive business days during the 180-day compliance period ending on July 2, 2025. If we fail to regain compliance by this date, shares of our Common Stock may be subject to delisting. As a Nasdaq Global Market issuer, our market value of publicly held shares (“MVPHS”) (which includes outstanding shares of our Common Stock other than shares of our Common Stock held by executive officers, directors or affiliates), is also required to retain a market value of \$15 million pursuant to Nasdaq Listing Rule 5450(b)(2)(C). Since April 4, 2025, with limited exceptions, and as of the date of this prospectus, the MVPHS has been less than the required \$15.0 million. This deficiency would also be grounds for delisting from the Nasdaq Global Market. We may seek to cure these deficiencies by seeking to list our shares of Common Stock on the Nasdaq Capital Market, which has less stringent requirements than the Nasdaq Global Market, prior to the July 2025 deadline. However, in order to do so, we must then comply with the requirements of the Nasdaq Capital Market. There can be no assurance that we will qualify for any Nasdaq market tier when and as needed.

In particular, the requirements for all Nasdaq market tiers, including the Nasdaq Capital Market, impose a minimum \$1.00 per share bid price requirement. To comply with this requirement, the closing price for our Common Stock must not fall below \$1.00 for a 30 consecutive trading day period. Since March 7, 2025, the closing bid price for our Common Stock has been below \$1.00 per share. If we are unable to maintain a minimum closing price of \$1.00 per share for the preceding 30 consecutive trading days, we will receive a deficiency letter from the Staff. While the Staff may provide us with a 180-calendar day grace period to regain compliance with the bid price requirement, we may also need to be in compliance with this bid price requirement and other Nasdaq listing requirements to transfer the listing of the shares of our Common Stock to the Nasdaq Capital Market. Many companies seek to cure this bid price deficiency utilizing a reverse stock split. However, such a reverse stock split of our Common Stock would require prior stockholder approval (which may not be obtained), and the terms of the March 2025 Purchase Agreements prohibit us from effecting a reverse stock split prior to September 6, 2025, unless we are expressly required to effect a reverse split as a result of changes in applicable laws effected after the closing of the Private Placement related to Nasdaq Listing Requirements. To date, we are not aware of any such changes. In order to obtain a waiver of these provisions to effect a reverse stock split, we would need to obtain the waiver of the selling stockholders who purchased at least 50.1% of the Shares and Pre-Funded Warrants issued in the Private Placement.

In the event of a delisting notice, we would typically have an opportunity to appeal such decision to the Nasdaq Hearing Panel or take other measures to preserve the listing of our Common Stock on Nasdaq, but these measures and any appeal may not be successful. If our Common Stock is delisted by Nasdaq, our Common Stock may be eligible to trade on an over-the-counter quotation system, where an investor may find it more difficult to sell our Common Stock or obtain accurate quotations as to the market value of our Common Stock. We cannot ensure that our Common Stock, if delisted from the Nasdaq Global Market, will be listed on another Nasdaq market tier, any national securities exchange or quoted on an over-the counter quotation system.

In the event we are delisted from Nasdaq, the only established trading market for our common stock would be eliminated, and we would be forced to list our shares on the OTC Markets or another quotation medium, depending on our ability to meet the specific listing requirements of those quotation systems. As a result, an investor would likely find it more difficult to trade or obtain accurate price quotations for our shares. Delisting would likely also reduce the visibility, liquidity, and value of our common stock, reduce institutional investor interest in our company, and may increase the volatility of our common stock. Delisting could also cause a loss of confidence of potential industry partners, lenders, and employees, which could further harm our business and our future prospects.

Unless our Common Stock is listed on a national securities exchange, such as Nasdaq, our Common Stock will also likely be subject to the regulations and restrictions regarding trading in “penny stocks,” which are those securities trading for less than \$5.00 per share, and that are not otherwise exempted from the definition of a penny stock under other exemptions provided for in the applicable regulations. These penny stock requirements and regulations could severely limit the liquidity of our Common Stock in the secondary market because fewer brokers or dealers would likely to be willing to undertake related compliance activities to trade in our Common Stock. If our Common Stock is not listed on a national securities exchange, the rules and restrictions regarding penny stock transactions may limit an investor’s ability to sell to a third-party and our trading activity in the secondary market may be reduced. Delisting from Nasdaq would also likely limit the range and attractiveness of strategic alternatives that we are able to consider, adversely affect our ability to raise additional capital through the public or private sale of equity securities, significantly affect the ability of investors to trade our securities, and/or negatively affect the value and liquidity of our Common Stock.

The resale of the Shares offered pursuant to this prospectus (or the perception that such sales may occur) will result in substantial dilution and may materially and adversely affect the market price our Common Stock. Assuming we receive the Stockholder Approval, the Series A Warrants will likely be exercised pursuant to their zero exercise price provisions, and stockholders will suffer substantial additional dilution for such exercises.

We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of Shares by the selling stockholders. We will likely only receive nominal proceeds of \$0.0001 per share upon the cash exercise of the Pre-Funded Warrants. Though we would receive the proceeds for the cash exercise of the Series A Warrants per their terms, we are unlikely to receive any cash proceeds from the exercise of the Series A Warrants as the Series A Warrants may be exercised following Stockholder Approval on a zero exercise price basis where the holder will be eligible to receive, for each share of Common Stock issuable upon exercise of the Series A Warrant (which itself is subject to up to a tenfold increase depending on the price of our common stock on the Release Date, as defined in the Section titled “Prospectus Summary – 2025 Private Placement” on page 1 of this prospectus), three shares of our Common Stock without the payment of any exercise price. A total of up to 347,222,700 shares of Common Stock may be issuable upon exercise of the Series A Warrants assuming full adjustment of the exercise price to the Floor Price and exercise pursuant to the zero exercise price provisions of the Series A Warrants.

As of April 11, 2025, the securities registered for resale by the selling stockholders in the registration statement of which this prospectus forms a part represented approximately 275.5% of the 27,546,753 shares of our Common Stock outstanding and 17.520.1% of our total shares of Common Stock outstanding assuming the exercise of all Pre-Funded Warrants and issuance of the maximum number of shares of Common Stock that may be issuable upon exercise of the Series A Warrants (assuming full adjustment of the exercise price to the Floor Price and exercise by way of the zero exercise price provisions of the Series A Warrants). Following and assuming our receipt of the Stockholder Approval to increase our authorized shares of Common Stock, we will be required to register an additional 282,894,619 shares of our Common Stock for resale upon exercise of the Series A Warrants. The securities to be registered for resale by the selling stockholders in the above referenced future resale registration statement and in the registration statement of which this prospectus forms a part would be approximately 1,260.5% of the 27,546,753 shares of our Common Stock outstanding as of April 11, 2025 and 92.19% of our total shares of Common Stock outstanding assuming the exercise of all Pre-Funded Warrants and the issuance of the maximum number of shares of Common Stock that may be issuable upon exercise of the Series A Warrants.

Our stockholders will experience substantial dilution upon the exercise of the Series A Warrants. Sales of a substantial number of shares of our Common Stock by the selling stockholders in the public market could occur at any time. Given the substantial number of shares being registered for potential resale by the selling stockholders pursuant to this prospectus and our obligations to register for resale additional shares of Common Stock for resale upon exercise of the Series A Warrants assuming receipt of the Stockholder Approval, whether as a result of substantial sales of our Common Stock by the selling stockholders or the perception in the market that holders of a large number of Shares intend to sell their Shares, the market price of shares of our Common Stock could decline significantly and the volatility of the market price of our Common Stock could increase significantly, even if our research and development efforts are going well.

The price of our Common Stock may decline or be depressed as a result of short sales. There is an increased potential for short sales of our Common Stock due to the sale of shares of our Common Stock pursuant to the March 2025 Purchase Agreements, which could materially and adversely affect the market price of our Common Stock.

When an investor sells stock that it does not own, it is known as a short sale. The short selling investor, anticipating that the price of the stock will go down, intends to buy stock to cover its sale at a later date. If the price of the stock goes down, the short selling investor will profit to the extent of the difference between the price at which it originally sold it less its later purchase price. Short sales often enable the short selling investors to profit in a down market. Short sales in the past have, and could again, place significant downward pressure on the price of our Common Stock. The March 2025 Purchase Agreements do not contain a prohibition on the selling stockholders against short sales of our Common Stock following closing of the Private Placement, including short sales between the closing of the Private Placement and the date of Stockholder Approval. As such, receipt of the Stockholder Approval and, in particular the large number of shares then issuable upon exercise of the Series A Warrants and the exercise price adjustment provisions surrounding share combination events and Release Dates in the Series A Warrants, could encourage short sales of our Common Stock by the selling stockholders. When and if the Stockholder Approval is obtained, significant amounts of such short selling could place further downward pressure on the market price of our Common Stock.

Our failure to obtain the Stockholder Approval may adversely affect our ability to raise capital when and as needed, our results of operations, prospects and the price of our Common Stock.

We intend to seek the Stockholder Approval and approval of a reverse stock split of our Common Stock at a special meeting of our stockholders, but there can be no assurance that this approval will be obtained. As noted above, our stockholders are being asked to approve the issuance of shares upon exercise of the Series A Warrants, which, if fully exercised will be highly dilutive to our existing holders. Further, we currently do not have any available authorized shares of Common Stock to use for capital raising activities which greatly limits our ability to raise capital to fund our operations and we are contractually prohibited pursuant to the terms of the March 2025 Purchase Agreements from effecting a reverse stock split of our Common Stock prior to September 6, 2025, unless we are expressly required to effect a reverse split as a result of changes in applicable laws effected after the closing of the Private Placement related to Nasdaq Listing Requirements or we obtain a waiver from the selling stockholders who purchased at least 50.1% of the Shares and Pre-Funded Warrants sold in the Private Placement. To date, we are not aware of any such changes. So, until such time as we otherwise have additional shares of authorized common stock available (which may not occur), if the Stockholder Approval is not obtained, we will no longer be able to raise funds through the issuance of shares of our common stock, including through the Sales Agreement, or through the issuance of instruments convertible into shares of common stock at issuance and would have to raise funds through other means, including as debt financings or strategic transactions. These other means may not be available to us or available to us on reasonable terms. To date, we are not profitable and do not expect to be profitable in the near term. If we are unable to raise funds for this or any reason when and as needed to support our continued research and development plans and our ongoing operations, we may be required to again pause our research and development programs, again curtail our operations, enter into strategic transactions on unfavorable terms and/or cease our operations entirely. In addition, if our stockholders fail to authorize us to complete a reverse stock split once we are free to do so in accordance with the terms of the March 2025 Purchase Agreement, we may fail to comply with the Nasdaq minimum bid price requirements which could subject shares of our Common Stock to delisting. Further, pursuant to the terms of the Series A Warrants, if we fail to obtain the Stockholder Approval at the special meeting, we are required to continue to seek approval of the Stockholder Approval every 60 days following such a failure. Failure to obtain the Stockholder Approval and these circumstances would likely adversely affect our business, results of operations, prospects and the price of our Common Stock.

A reverse stock split could cause our stock price to decline relative to its value before the split and decrease the liquidity of shares of our Common Stock. Completion of a reverse stock split would not ensure Nasdaq compliance.

We intend to seek approval for a reverse stock split of our common stock at a special meeting of our stockholders. The primary intent for any reverse stock split that we may complete would be an anticipated increase in the price of our Common Stock immediately following and resulting from a reverse stock split due to a reduction in the number of issued and outstanding shares of our Common Stock to help us meet Nasdaq's minimum bid price requirements discussed above. It cannot be assured that a reverse stock split will result in any sustained proportionate increase in the market price of our Common Stock, which is dependent upon many factors, including the outcome of our research and development efforts, our results of operations, general market conditions, pending dilution and our prospects for future success, which are unrelated to the number of shares of our Common Stock outstanding. Many investors, analysts and other stock market participants have negative perceptions of reverse stock splits. It is not uncommon for the market price of a company's common stock to disproportionately decline in the period following a reverse stock split. Trading volumes following reverse stock splits for companies have historically varied, but there is often a decrease in trading volume following completion of a reverse stock split. If such a decrease in volume were to occur, the liquidity of the shares of our Common Stock would be adversely affected. In addition, a reverse stock split may increase the number of stockholders who own odd lots (less than 100 shares) of our Common Stock, creating the potential for such stockholders to experience an increase in the cost of selling their shares and greater difficulty effecting such sales. Finally, A reverse stock split may not result in a permanent increase in the market price of our common stock, which will continue to be dependent on many factors, including general economic, market and industry conditions and other factors detailed from time to time in the reports we file with the SEC. Even if we are able to obtain approval and complete a reverse stock split in accordance with the terms and restrictions of the March 2025 Purchase Agreements (which we may not be able to do), there can be no assurance this reverse stock split would result in a sustained daily closing price in excess of a \$1.00 for the 10 or 20 trading days required by the Nasdaq Staff for us to regain compliance with Nasdaq's bid price requirements. In addition, the Reverse Stock Split may result in an adjustment to the exercise price (down to as low as the Floor Price of \$0.216) and number of shares underlying the Series A Warrants (from 11,574,090 to up to 115,740,900, assuming full adjustment of the exercise price to the Floor Price and before giving effect to the zero exercise price provision and 347,222,700 assuming full adjustment of the exercise price and giving effect to the zero exercise price provision) as discussed above in the section entitled "Prospectus Summary-the 2025 Private Placement".

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus, including documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering, contain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. Forward-looking statements are statements other than historical facts and relate to future events or circumstances or our future performance, and they are based on our current assumptions, expectations and beliefs concerning future developments and their potential effect on our business. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect,” “possible,” “likely,” “probable,” and similar expressions that convey uncertainty of future events or outcomes identify forward-looking statements. These statements include, among other things, statements regarding:

- our ability to implement our product development and business strategies, including our ability to continue to pursue development pathways and regulatory strategies for IHL-42X, PSX-001, and IHL-675A and any of our other drug candidates;
- estimates regarding market size and related future growth rates;
- our research and development activities, including clinical testing and manufacturing and the related costs and timing;
- the possibility that we may be required to conduct additional clinical studies or trials for our drug candidates and the consequences resulting from the delay in obtaining necessary regulatory approvals;
- the timing, scope or likelihood of regulatory filings and approvals and our ability to obtain and maintain regulatory approvals for our drug candidates for any indication;
- the pricing, coverage and reimbursement of our drug candidates, if approved and commercialized;
- the rate and degree of market acceptance and clinical utility of our drug candidates;
- our expectations around feedback from and discussions with regulators, regulatory development paths and with respect to Controlled Substances Act designation;
- our ability to maintain effective patent rights and other intellectual property protection for our drug candidates, and to prevent competitors from using technologies we consider important to the successful development and commercialization of our drug candidates;
- our ability to comply with applicable listing standards within the compliance period and to maintain the listing of shares of our Common Stock on the Nasdaq Global Market;
- our estimates regarding expenses, revenues, financial performance and capital requirements, including the length of time our capital resources will sustain our operations;
- our ability to commercialize drug candidates and to generate revenues;
- our financial condition, including our ability to obtain the funding necessary to advance the development of our drug candidates and our ability to continue as a going concern;
- our ability to comply with the provisions and requirements of our debt arrangements and to pay amounts owed, including any amounts that may be accelerated;
- our ability to retain and attract qualified employees, directors, consultants and advisors;
- our ability to continue to comply with applicable privacy laws and protect confidential information from security breaches;
- how recent and potential future changes in healthcare policy could negatively impact our business and financial condition;
- the extent to which global economic and political developments, including existing regional conflicts, pandemics, natural disasters, and the indirect and/or long-term impact of inflation, will affect our business operations, clinical trials, or financial condition; and
- any statement of assumptions underlying any of the foregoing.

Although forward-looking statements in this prospectus, including the documents incorporated by reference herein and therein, and in any free writing prospectus that we have authorized for use in connection with this offering, reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include, without limitation, those specifically addressed under the heading “Risk Factors” contained in this prospectus, the accompanying prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus and the accompanying prospectus, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date made. We file reports with the SEC, and our electronic filings with the SEC (including our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and any amendments to these reports) are available free of charge on the SEC’s website at <http://www.sec.gov>.

We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this prospectus, except as required by law. Readers are urged to carefully review and consider the various disclosures made throughout the entirety of this prospectus, the accompanying prospectus and any related free writing prospectus, and the documents incorporated by reference into this prospectus and the accompanying prospectus, which disclosures are designed to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus forms a part to permit the holders of the Shares of our Common Stock described in the section entitled “Selling Stockholders” to resell such Shares. We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of Shares by the selling stockholders. We will likely only receive nominal proceeds of \$0.0001 per share upon the cash exercise of the Pre-Funded Warrants. Though we would receive the proceeds for the cash exercise of the Series A Warrants per their terms, we are unlikely to receive any cash proceeds from the exercise of the Series A Warrants as the Series A Warrants may be exercised following stockholder approval on a zero exercise price basis where the holder will be eligible to receive, for each share of Common Stock issuable upon exercise of the Series A Warrant, three shares of our Common Stock without the payment of any exercise price. To the extent we receive any proceeds, we intend to use the proceeds for working capital and general corporate purposes.

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of these Shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the Shares covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We intend to retain future earnings, if any, to finance the operation of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors after considering our financial condition, results of operations, capital requirements, business prospects and other factors the board of directors deems relevant, and subject to the restrictions contained in any future financing instruments and Delaware law.

SELLING STOCKHOLDERS

This prospectus covers the resale from time to time of up to an aggregate of 75,902,171 Shares by the selling stockholders, consisting of (i) 9,687,045 shares of Common Stock, (ii) 1,887,045 shares of Common Stock issuable upon the exercise of the Pre-Funded Warrants to purchase shares of Common Stock, and (iii) 64,328,081 shares of Common Stock issuable upon the exercise of the Series A Warrants to purchase shares of Common Stock. Exercise of the Series A Warrants are subject to receipt of Stockholder Approval and are not currently exercisable. The Shares registered for resale herein are pursuant to the March 2025 Securities Purchase Agreements between us and the selling stockholders and relate to shares held by the selling stockholders not otherwise previously registered for resale.

Assuming full adjustment of the exercise price of the Series A Warrants to the Floor Price and the full exercise of the Series A Warrants pursuant to the zero exercise price provisions, we would issue 347,222,700 shares of our Common Stock. However, only 75,902,171 shares are currently available for such issuance out of our authorized shares of Common Stock. As such, we are only seeking to register 64,328,081 shares of our Common Stock issuable upon exercise of the Series A Warrants pursuant to the registration statement on Form S-1 of which this prospectus is a part. Following and assuming approval of the Charter Amendment Proposal, we will seek to register the remaining 282,894,619 shares of our Common Stock issuable upon exercise of the Series A Warrants.

The selling stockholders may offer and sell, from time to time, any or the Shares described under the column “Number of Shares of Shares Being Offered” in the table below. Except for the ownership of the securities, the selling stockholders have not had any material relationship with us within the past three years.

As used in this prospectus, the term “selling stockholders” includes the selling stockholders listed in the table below, together with any additional selling stockholders listed in a subsequent amendment to this prospectus, and their donees, pledgees, assignees, transferees, distributees and successors-in-interest that receive shares in any non-sale transfer after the date of this prospectus.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the Shares by each of the selling stockholders as of April 9, 2025. The following table also provides the number of Shares that may be sold by each selling stockholder under this prospectus and that each selling stockholder will beneficially own assuming all the Shares that may be offered pursuant to this prospectus are sold. The number of shares described under the column “Shares of Common Stock Beneficially Owned Before this Offering” for each selling stockholder includes all shares of our Common Stock beneficially held by such selling stockholder as of April 9, 2025, which includes (i) all shares of our Common Stock purchased by such selling stockholder in the Private Placement, and (ii) all of the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants purchased by such selling stockholder in the Private Placement, subject to the Beneficial Ownership Limitation, and excludes shares of Common Stock issuable upon exercise of the Series A Warrants purchased by such selling stockholder in the Private Placement, the exercise of which is subject to the Beneficial Ownership Limitation and Stockholder Approval. Because each selling stockholder may dispose of all, none or some portion of their Shares, no estimate can be given as to the number of Shares that will be beneficially owned by a selling stockholder upon termination of this offering.

For purposes of the table below, however, we have assumed that after termination of this offering none of the Shares covered by this prospectus will be beneficially owned by the selling stockholders and further assumed that the selling stockholders will not acquire beneficial ownership of any additional Shares during the offering. In addition, the selling stockholders may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, the Shares in transactions exempt from the registration requirements of the Securities Act after the date on which the information in the table is presented. See the section titled “Plan of Distribution.”

Name of Selling Stockholder (1)	Beneficial Ownership Prior to This Offering		Number of Shares Being Offered (3)	Beneficial Ownership After this Offering	
	Shares	% (2)		Shares (4)	% (2)(4)
L1 Capital Global Opportunities Master Fund (5)	1,929,015	7.00%	12,650,362	—	—
S.H.N Financial Investments Ltd (6)	1,929,015	7.00%	12,650,362	—	—
Meteora Select Trading Opportunities Master, LP (7)	650,000	2.36%	6,325,177	—	—
Boothbay Absolute Return Strategies, LP (8)	650,000	2.36%	6,325,184	—	—
3i, LP (9)	1,300,000	4.72%	12,650,362	—	—
District 2 Capital Fund LP (10)	1,300,000	4.72%	12,650,362	—	—
Great Point Capital, LLC (11)	1,929,015	7.00%	12,650,362	—	—

- (1) All information regarding selling stockholders was provided by the selling stockholders as of April 9, 2025.
- (2) Percentage ownership is based on a denominator equal to the sum of (i) 27,546,753 shares of our Common Stock outstanding as of April 9, 2025 and (ii) the number of shares of Common Stock issuable upon exercise or conversion of convertible securities beneficially owned by the applicable selling stockholder.
- (3) The number of shares of Common Stock in the column “Number of Shares Being Offered” represents all of the shares of Common Stock that a selling stockholder may offer and sell from time to time under this prospectus, including (i) all shares of our Common Stock purchased by such selling stockholder in the Private Placement, (ii) all of the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants purchased by such selling stockholder in the Private Placement, without giving effect to the Beneficial Ownership Limitation, and (iii) certain of the shares of Common Stock issuable upon exercise of the Series A Warrants purchased by such selling for which we currently have sufficient authorized shares of Common Stock, without giving effect to the Beneficial Ownership Limitation.
- (4) Assumes that all shares of Common Stock being registered under the registration statement of which this prospectus forms a part are sold in this offering, and that none of the selling stockholders acquire additional shares of our Common Stock after the date of this prospectus and prior to completion of this offering.
- (5) The shares reported under “Beneficially Ownership Prior to this Offering” consist of 1,929,015 shares of Common Stock purchased in the Private Placement by L1 Capital Global Opportunities Master Fund Ltd. (“L1 Capital”) and excludes 1,929,015 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by L1 Capital, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 47,149,103 shares of Common Stock issuable upon the exercise of the Series A Warrants held by L1 Capital are not registered for resale in this prospectus because they are subject to Stockholder Approval. David Feldman and Joel Arber are the Directors of L1 Capital. To the extent Mr. Feldman and Mr. Arber are deemed to beneficially own such shares, Mr. Feldman and Mr. Arber disclaim beneficial ownership of these securities. The principal business address of the L1 Capital is 161A Shedden Road, 1 Artillery Court, PO Box 10085, Grand Cayman KY1-1001, Cayman Islands.
- (6) The shares reported under “Beneficially Ownership Prior to this Offering” consist of 1,929,015 shares of Common Stock purchased in the Private Placement by S.H.N Financial Investments Ltd (“S.H.N”) and excludes 1,929,015 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by S.H.N, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 47,149,103 shares of Common Stock issuable upon the exercise of the Series A Warrants held by S.H.N. are not registered for resale in this prospectus because they are subject to Stockholder Approval. Nir Shamir and Hadar Shamir have shared power to vote and dispose of the securities held by S.H.N and may be deemed to be the beneficial owners of such shares of common stock. The business address of S.H.N is Arik Einstein 3, Herzliya, Israel.
- (7) The shares reported under “Beneficially Ownership Prior to this Offering” consist of 650,000 shares of Common Stock purchased in the Private Placement by Meteora Select Trading Opportunities Master, LP (“MSTO”) and excludes (i) 314,507 shares of Common Stock underlying the Pre-Funded Warrants held by MSTO and (ii) 964,507 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by MSTO, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 23,574,540 shares of Common Stock issuable upon the exercise of the Series A Warrants held by MSTO are not registered for resale in this prospectus because these shares are subject to Stockholder Approval. Meteora Capital, LLC (“Meteora Capital”) serves as investment manager to MSTO. Voting and investment power over the shares held by MSTO resides with its investment manager, Meteora Capital. Mr. Vik Mittal serves as the managing member of Meteora Capital and may be deemed to be the beneficial owner of the shares held by such entities. Mr. Mittal, however, disclaims any beneficial ownership of the shares held by such entities. The business address of MSTO is 1200 N Federal Hwy, Ste 200, Boca Raton, FL 33432.

- (8) The shares reported under “Beneficially Ownership Prior to this Offering” consist of 650,000 shares of Common Stock purchased in the Private Placement by Boothbay Absolute Return Strategies, LP (“BBARS”) and excludes (i) 314,508 shares of Common Stock underlying the Pre-Funded Warrants held by BBARS and (ii) 964,508 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by BBARS, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 23,574,564 shares of Common Stock issuable upon the exercise of the Series A Warrants held by BBARS are not registered for resale in this prospectus because these shares are subject to Stockholder Approval. BBARS is managed by Boothbay Fund Management, LLC, a Delaware limited liability company (“Boothbay”). Boothbay, in its capacity as the investment manager of BBARS, has the power to vote and the power to direct the disposition of all securities held by the BBARS. Ari Glass is the Managing Member of Boothbay. Each of BBARS, Boothbay and Mr. Glass disclaim beneficial ownership of these securities, except to the extent of any pecuniary interest therein. The business address of BBARS 689 Fifth Avenue, 12th Floor, New York, NY, 10022.
- (9) The shares reported under “Beneficially Ownership Prior to this Offering” consist of (i) 1,300,000 shares of Common Stock purchased in the Private Placement by 3i, LP (“3i”) and excludes (i) 629,015 shares of Common Stock underlying the Pre-Funded Warrants held by 3i and (ii) 1,929,015 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by 3i, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 47,149,103 shares of Common Stock issuable upon the exercise of the Series A Warrants held by 3i are not registered for resale in this prospectus because these shares are subject to Stockholder Approval. 3i Management LLC is the general partner of 3i, and Maier Joshua Tarlow is the manager of 3i Management LLC. As such, Mr. Tarlow exercises sole voting and investment discretion over securities beneficially owned directly or indirectly by 3i and 3i Management LLC. Mr. Tarlow disclaims beneficial ownership of the securities beneficially owned directly by 3i and indirectly by 3i Management LLC. The business address of each of the aforementioned parties is 2 Wooster Street, 2nd Floor, New York, NY 10013. We have been advised that none of Mr. Tarlow, 3i Management LLC, or 3i is a member of the Financial Industry Regulatory Authority (“FINRA”), or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer.
- (10) The shares reported under “Beneficially Ownership Prior to this Offering” consist of (i) 1,300,000 shares of Common Stock purchased in the Private Placement by District 2 Capital Fund LP (“District 2”) and excludes (i) 629,015 shares of Common Stock underlying the Pre-Funded Warrants held by District 2 and (ii) 1,929,015 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by District 2, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 47,149,103 shares of Common Stock issuable upon the exercise of the Series A Warrants held by District 2 are not registered for resale in this prospectus because these shares are subject to Stockholder Approval. Michael Bigger, Managing Member of the general partner of District 2, has sole voting and dispositive power over the shares of our Common Stock held by, or issuable to, District 2. The principal business address of District 2 is 14 Wall St., 2nd Fl., Huntington, NY 11743. Mr. Bigger disclaims beneficial ownership in such securities, except for his pecuniary interest therein.
- (11) The shares reported under “Beneficially Ownership Prior to this Offering” consist of (i) 1,929,015 shares of Common Stock purchased in the Private Placement by Great Point Capital, LLC (“Great Point”) and excludes 1,929,015 shares of Common Stock (subject to the adjustment and zero exercise price provisions of the Series A Warrants) underlying the Series A Warrants held by Great Point, the exercise of which are subject to receipt of the Stockholder Approval and certain beneficial ownership limitations. 47,149,103 shares of Common Stock issuable upon the exercise of the Series A Warrants held by Great Point are not registered for resale in this prospectus because these shares are subject to Stockholder Approval. Dan Dimiero is the Manager of Great Point and may be deemed to beneficially own the securities held by it. The principal address of Great Point is 200 West Jackson, Ste 1000, Chicago, IL 60606.

DESCRIPTION OF CAPITAL STOCK

General

The following description summarizes some of the terms of capital stock. Because it is only a summary, it does not contain all the information that may be important to you and is subject to and qualified in its entirety by reference to our Certificate of Incorporation and amended and restated bylaws (the “Bylaws”), which are filed as exhibits to this registration statement on Form S-1, of which this prospectus forms a part, and are incorporated by reference herein. We encourage you to read our Certificate of Incorporation and our Bylaws for additional information.

Our authorized capital stock consists of 100,000,000 shares of Common Stock, \$0.0001 par value per share, and 10,000,000 shares of preferred stock, \$0.0001 par value per share.

Common Stock

As of April 9, 2025, there were 27,546,753 shares of our Common Stock issued and outstanding and held of record by 4,899 stockholders. Holders of our Common Stock are entitled to one vote for each share held on all matters on which stockholders are generally entitled to vote, including the election of directors, and do not have cumulative voting rights. At any meeting of stockholders at which directors are to be elected, directors shall be elected by a plurality of the votes cast. All corporate actions to be taken by stockholder vote shall be authorized by the affirmative vote of our stockholders having a majority in voting power of the shares present in person or represented by proxy and voting on such matter. Our Certificate of Incorporation and Bylaws also provide that our directors may be removed only for cause and only by the affirmative vote of the holders of at least 66 2/3% of the voting power of the outstanding shares of capital stock outstanding and entitled to vote thereon. In addition, the affirmative vote of the holders of at least 66 2/3% of the voting power of the outstanding shares of capital stock entitled to vote thereon is required to amend, alter, change or repeal, or to adopt any provision contained in the Certificate of Incorporation and add or insert other provisions authorized by the General Corporation Law of the State of Delaware, (the “DGCL”), and to adopt, amend or repeal the Bylaws. Subject to the rights of the holders of any outstanding series of preferred stock, the number of authorized shares of Common Stock or preferred stock may also be increased or decreased, but not below the number of shares thereof then outstanding, by the affirmative vote of at least a majority of the voting power of the capital stock outstanding and entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the DGCL.

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of Common Stock are entitled to receive ratably those dividends, if any, as may be declared by the board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, the holders of Common Stock will be entitled to share ratably in the assets legally available for distribution to stockholders after the payment of or provision for all of our debts and other liabilities, subject to the rights of any preferred stock then outstanding. Holders of Common Stock have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking funds provisions applicable to the Common Stock. All outstanding shares of Common Stock are, and the Common Stock to be outstanding upon the closing of this offering will be, duly authorized, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Computershare Trust Company, N.A. The transfer agent and registrar’s address is 150 Royall St., Canton, Massachusetts 02021.

Stock Exchange Listing

Our Common Stock is listed for trading on Nasdaq under the symbol “IXHL.”

Preferred Stock

As of April 11, 2025, there were no shares of our preferred stock outstanding. Under the terms of our Certificate of Incorporation, our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the designations, powers, preferences, and relative, participating, optional or other rights, if any, of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of Common Stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of the Common Stock and the voting and other rights of the holders of Common Stock. We have no current plans to issue any shares of preferred stock.

Prior to the issuance of shares of each series, the board of directors is required by the DGCL and our Certificate of Incorporation to adopt resolutions and file a certificate of designation with the Secretary of State of the State of Delaware. The certificate of designation fixes for each class or series the designations, powers, preferences, rights, qualifications, limitations and restrictions, including dividend rights, conversion rights, redemption privileges and liquidation preferences.

Warrants

As of April 11, 2025, (i) 1,978,338 shares of our Common Stock were issuable upon exercise of outstanding common stock warrants to purchase Common Stock with a weighted average exercise price of \$20.04 per share, (ii) 2,925,794 shares of our Common Stock were issuable upon exercise of outstanding common stock warrants to purchase Common Stock with a weighted average exercise price of \$0.0001 per share and (iii) 347,222,700 shares of our Common Stock would be issuable upon exercise of outstanding Series A Warrants to purchase Common Stock, assuming full adjustment of the exercise price per share from \$2.16 to the Floor Price and exercise by way of the zero exercise price provisions of the Series A Warrants following and assuming the Stockholder Approval.

Registration Rights

On October 31, 2024, pursuant to that certain Securities Purchase Agreement (the “ELOC Purchase Agreement”), dated September 6, 2024, by and between us and Arena Business Solutions Global SPC II, Ltd (“Arena Global”), we issued a warrant (the “ELOC Warrant”) to purchase up to 585,000 shares of Common Stock to Arena Global as a commitment fee pursuant to the ELOC Purchase Agreement. On March 10, 2025, the exercise price of the ELOC Warrant was reset to the par value of our Common Stock, which is \$0.0001 per share. The number of warrant shares underlying the ELOC Warrant remain unchanged.

On October 11, 2024, pursuant to that certain Securities Purchase Agreement, dated September 6, 2024 (the “Debenture Purchase Agreement”), by and between us and Arena Special Opportunities (Offshore) Master II LP (“Arena Opportunities”), we issued a warrant (the “First Tranche Warrant”) to purchase up to 453,749 shares of Common Stock to Arena Opportunities. On March 10, 2025, the exercise price of the First Tranche Warrant was reset to the par value of our Common Stock, which is \$0.0001 per share. The number of warrant shares underlying the First Tranche Warrant remain unchanged.

In connection with the Debenture Purchase Agreement, we are party to a registration rights agreement, pursuant to which we agreed to file a registration statement, within twenty days after the first closing date, with the SEC to register the shares of our Common Stock issuable upon (i) the conversion of 10% original issue discount secured convertible debentures, which are no longer outstanding, and (ii) the exercise of warrants issued pursuant to the Debenture Purchase Agreement. We were previously party to the ELOC Purchase Agreement with Arena Global, pursuant to which, among other things, we remain obligated to file a registration statement with the SEC within 30 days of the ELOC Purchase Agreement, to register shares of our Common Stock issuable upon the exercise of warrants issued pursuant to the ELOC Purchase Agreement.

On November 6, 2024, we filed a registration statement on Form S-3, as amended by a Pre-Effective Amendment No. 1 to Form S-3 on Form S-1, filed on November 26, 2024, in connection with our obligations pursuant to the ELOC Purchase Agreement and the registration rights agreement entered in connection with the Debenture Purchase Agreement, which was declared effective by the SEC on December 6, 2024.

In connection with the Private Placement, we are party to the Registration Rights Agreement, pursuant to which we agreed to use reasonable best efforts to register the PIPE Shares, Pre-Funded Warrant Shares and Series A Warrant Shares for resale within thirty (30) days of the filing date of the registration statement. We filed the registration statement of which this prospectus forms a part in connection with these obligations. Following the receipt of Stockholder Approval, we are required to file an additional registration statement to register for resale the remaining Series A Warrants Shares, in an amount equal to 282,894,619, assuming full adjustment of the exercise price to the Floor Price, not registered in this registration statement on Form S-1.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Some provisions of Delaware law, our Certificate of Incorporation and our Bylaws contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Undesignated Preferred Stock

The ability of our board of directors, without action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our board of directors could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Stockholder Meetings

Our Bylaws provide that a special meeting of stockholders may be called only by our board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our Bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of Stockholder Action by Written Consent

Our Certificate of Incorporation and Bylaws eliminate the right of stockholders to act by written consent without a meeting.

Staggered Board

Our board of directors is divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of Directors

Our Certificate of Incorporation provides that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of at least 66 2/3% of the voting power of all of our outstanding voting stock then entitled to vote in the election of directors.

Stockholders Not Entitled to Cumulative Voting

Our Certificate of Incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our Common Stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors.

Choice of Forum

Our Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative form, (i) the sole and exclusive forum for any complaint asserting any internal corporate claims (as defined below) will be the Court of Chancery of the State of Delaware and (b) the sole and exclusive forum for any complaint asserting a cause of action arising under the Securities Act shall be the federal district courts of the United States of America. The term “internal corporate claims” means claims, including claims in the right of the Corporation that are based upon a violation of a duty by a current or former director, officer, employee or stockholder in such capacity, or as to which the DGCL confers jurisdiction upon the Court of Chancery. This exclusive forum provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. To the extent that any such claims may be based upon federal law claims, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. The enforceability of similar choice of forum provisions in other companies’ certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. Our Certificate of Incorporation and Bylaws also provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision.

Amendment of Charter Provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue preferred stock, would require approval by holders of at least 66 2/3% of the voting power of the outstanding shares of capital stock entitled to vote thereon.

The provisions of Delaware law, our Certificate of Incorporation and our Bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our Common Stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

PLAN OF DISTRIBUTION

Each selling stockholder and any of their donees, pledgees, assignees, transferees, distributees and successors-in-interest may, from time to time, sell any or all of their Shares covered hereby on The Nasdaq Stock Market LLC or any other stock exchange, market or trading facility on which the Shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling Shares covered hereby:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such Shares at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell the Shares under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of Shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the Shares or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Shares in the course of hedging the positions they assume. The selling stockholders may also sell the Shares short and deliver these Shares to close out their short positions, or loan or pledge the Shares to broker-dealers that in turn may sell the Shares. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of the Shares offered by this prospectus, which Shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the Shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Shares.

We are required to pay certain fees and expenses incurred by us incident to the registration of the Shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We have agreed to keep the registration statement of which this prospectus forms a part effective until the earlier of (i) the date on which the Shares may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for us to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect, and (ii) all of the Shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale Shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale Shares covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale Shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

The validity of the Common Stock being offered by this prospectus is being passed upon by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., San Diego, California.

EXPERTS

The consolidated financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton Audit Pty Ltd, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

Our website address is <http://www.incannex.com>. Through our website, we make available, free of charge, annual, quarterly and current reports, proxy statements and other information as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information on our website, however, is not, and should not be deemed to be, a part of this prospectus.

This prospectus is only part of a registration statement on Form S-1 that we have filed with the SEC under the Securities Act, and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may obtain a copy of the registration statement, including the exhibits and schedules, from the SEC's website.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act in this prospectus, between the date of this prospectus and the termination of the offering of the securities described in this prospectus. This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on [Form 10-K](#) for the fiscal year ended June 30, 2024, filed on September 30, 2024;
- our Quarterly Reports on Form 10-Q for the quarter ended September 30, 2024, filed on [November 14, 2024](#); and the quarter ended December 31, 2024, filed on [February 14, 2025](#);
- our Current Reports on Form 8-K, filed on [July 30, 2024](#); [August 5, 2024](#); [September 10, 2024](#); [September 10, 2024](#); [September 30, 2024](#); [October 15, 2024](#); [October 21, 2024](#); [October 24, 2024](#); [October 24, 2024](#); [December 11, 2024](#); [January 10, 2025](#); [January 23, 2025](#); [February 4, 2025](#); [February 14, 2025](#); [March 10, 2025](#); [March 18, 2025](#); [April 3, 2025](#); and [April 7, 2025](#); and
- the description of our Common Stock contained in [Exhibit 99.1](#) of our Current Report on [Form 8-K](#) filed with the SEC on November 29, 2023, including any amendments or reports filed for the purpose of updating such description.

In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus and deemed to be a part of this prospectus from the date of filing of such reports and documents. Notwithstanding the foregoing, we are not incorporating by reference any documents or portions thereof that are not deemed "filed" with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

You may request a free copy of any of the documents incorporated by reference in this prospectus (other than exhibits, unless they are specifically incorporated by reference in the documents) by writing or telephoning us at the following address:

Incannex Healthcare Inc.
Suite 105, 8 Century Circuit Norwest,
NSW 2153 Australia
Attn: Investor Relations
Tel.: +61 409 840 786

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus or any accompanying prospectus supplement.

75,902,171 Shares



Common Stock

PROSPECTUS

April 28, 2025
