

This prospectus supplement amends and supplements the prospectus dated May 10, 2023, (the "Prospectus"), which forms a part of our Registration Statement on Form S-1 (No. 333-271480). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information set forth below under "AMENDMENT TO COMMON WARRANTS" and "ADDITIONAL RISK FACTOR."

The Prospectus and this prospectus supplement relate to the issuance by us and the resale by the investors purchasing securities by means of this offering (the 'Selling Securityholders') of previously issued Series A-1 warrants to purchase 1,800,876 shares of common stock and Series A-2 warrants to purchase 1,800,876 shares of our common stock. The Series A-1 warrants and Series A-2 warrants are collectively referred to as the "common warrants."

Our common stock is listed on the Nasdaq under the symbol "ENSC" and our Public Warrants are traded on the OTC Pink Open Market under the symbol "ENSCW." On February 12, 2024, the closing sale price of our common stock as reported on Nasdaq was \$1.14 and the closing sale price on that date for our Public Warrants as reported on the OTC Pink Open Market was \$0.015.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

Our business and investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 7 of the Prospectus.

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

The date of this prospectus supplement is February 14, 2024.

AMENDMENT TO COMMON WARRANTS

This Supplement is being filed to disclose the following:

On February 12, 2024, we entered into an inducement offer letter agreement (the <u>Inducement Letter</u>") with certain Selling Stockholders pursuant to which the Company agreed to amend the Selling Stockholders' common warrants to purchase up to an aggregate of 3,601,752 shares of common stock for an original exercise price of \$3.637 per share.

Pursuant to the Inducement Letter, the Selling Stockholders have agreed to exercise their common warrants for cash at a reduced exercise price of \$1.31 per share in exchange for the Company's agreement to issue to such Selling Stockholders new common stock purchase warrants (the "New Warrants") to purchase up to 7,203,504 shares of common stock (the "New Warrant Shares") with an exercise price of \$1.06 per New Warrant Share from the date of issuance until (i) they expire on August 14, 2025 with respect to 3,601,752 shares and (ii) they expire on May 12, 2028 with respect to 3,601,752 shares. The amended exercise price of the common warrants was effective on February 14, 2024.

In connection with the Inducement Letter, a waiver was executed to the Securities Purchase Agreement dated October 23, 2023 ("Securities Purchase Agreement"), pursuant to which the transaction pursuant to the Inducement Letter was permitted and the Company will repay in full the notes which remained outstanding thereunder at a premium.

The Company agreed to issue to H.C. Wainwright & Co., LLC, or the Placement Agent, or its designees warrants, or the Placement Agent Warrants, to purchase up to 252,123 shares of common stock (representing 7% of the common warrants being exercised) which will have the same terms as the New Warrants except the Placement Agent Warrants will have an exercise price equal to \$1.6375 per share (125% of the reduced exercise price of the common warrants). Similar to certain of the New Warrants, the Placement Agent Warrants will be immediately exercisable from the date of issuance until their expiration on May 12, 2028.

The closing of the transactions contemplated pursuant to the Inducement Letter is expected to occur on or about February 14, 2024, subject to satisfaction of customary closing conditions. The Company expects to use the net proceeds from these transactions for activities related to preparation for Phase 3 clinical studies for its lead agent PF614, to repay the remaining amounts on the debt incurred in October and November 2023 under the Securities Purchase Agreement, and for general corporate purposes.

ADDITIONAL RISK FACTOR

If we are unable to maintain compliance with the listing standards of Nasdaq, our common stock may become delisted, which could have a material adverse effect on our ability to raise funding, which could negatively impact our business, capital and financial condition.

On November 13, 2023, we received notice from the Listing Qualifications department of Nasdaq stating that, due to our non-compliance with the \$2.5 million stockholders' equity requirement set forth in Nasdaq Listing Rule 5550(b)(1) as of September 30, 2023, we were subject to delisting unless we timely request a hearing before the Nasdaq Hearings Panel (the "Panel"), which we did, resulting in a hearing that was held in early February 2024, which request stays any further action by Nasdaq pending the conclusion of the hearing process. We intend to actively explore options to regain compliance with Nasdaq listing requirements; however, there can be no assurance that the Panel will grant our request for continued listing or that we will be able to evidence compliance prior to the expiration of any extension that may be granted to us by the Panel. We were not in compliance with Nasdaq listing standards and requirements for our common stock for approximately a one-year period ending in June 2023 and had been granted an exception through June 12, 2023 to meet a number of obligations before June 12, 2023 that had been imposed by Nasdaq. By letter dated June 13, 2023, Nasdaq advised us that we had regained compliance. Nasdaq requires that our common stock have a minimum bid price of at least \$1 per share (the "Minimum Bid Price"). At the end of October 2023 and during most of November 2023, the bid price for our common stock was below the Minimum Bid Price. There can be no assurance that we will be able to

maintain compliance with all of Nasdaq's listing requirements and standards in the future. If we do not continue to meet all of those obligations, our common stock could be delisted by Nasdaq. If delisting occurs, it could be more difficult to buy or sell our securities and to obtain accurate quotations, and the price of our common stock could suffer a material decline. In addition, a delisting would impair our ability to raise capital through the public markets, could deter broker-dealers from making a market in or otherwise seeking or generating interest in our securities and might deter certain institutions and persons from investing in our securities. Any of these could negatively impact our financial condition or our ability to operate our business and maintain adequate capital.