

2015 Equity Incentive Plan

(Full title of the plan)

Daron Evans

Chief Executive Officer

380 Lackawanna Place

South Orange, NJ 07079

(201) 343-5202

(Name, address and telephone number, including area code, of agent for service)

Copies to:

Christopher J. Melsha

Fredrikson & Byron, P.A.

200 South Sixth Street, Suite 4000

Minneapolis, MN 55402-1425

Telephone: (612) 492-7369

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered⁽¹⁾ (2)	Proposed maximum offering price per share⁽³⁾	Proposed maximum aggregate offering price⁽³⁾	Amount of registration fee
Common Stock, \$0.001 par value per share	3,000,000	\$ 0.486	\$1,458,000	\$ 181.52

Pursuant to Rule 416, this Registration Statement also covers an indeterminate number of additional shares of (1) Common Stock that may be offered or sold as a result of any adjustments based on stock splits, stock dividends or similar events provided under the 2015 Equity Incentive Plan.

(2) Represents shares that are reserved for issuance under the 2015 Equity Incentive Plan.

Estimated pursuant to Rule 457(c) and 457(h) solely for the purpose of calculating the registration fee and based (3) upon the average of the high and low prices of the Registrant's Common Stock as reported by OTCQB on March 19, 2018.

STATEMENT OF INCORPORATION BY REFERENCE

The purpose of this Registration Statement is to register additional shares for issuance under the Registrant's 2015 Equity Incentive Plan, as amended. This Registration Statement is submitted in accordance with General Instruction E to Form S-8 regarding registration of additional securities, and pursuant to such instruction, the contents of the Registration Statement on Form S-8, Reg. No. 333-205167, are incorporated herein by reference, except for Item 8, Exhibits.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

5.1 Opinion of Fredrikson & Byron, P.A.

23.1 Consent of Fredrikson & Byron, P.A. (included in Exhibit 5.1).

23.2 Consent of Moody, Famiglietti & Andronico, LLP.

24.1 Power of Attorney (previously filed with the Registrant's Registration Statement on Form S-8, Reg. No. 333-205167, on June 23, 2015).

99.1 Nephros, Inc. 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to Nephros, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 15, 2015).

99.2 Form of Incentive Stock Option Agreement under the 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015).

99.3 Form of Non-Qualified Stock Option Agreement under the 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015).

99.4 Form of Restricted Stock Agreement under the 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015).

99.5 Form of Restricted Stock Unit Agreement under the 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South Orange, State of New Jersey, on March 22, 2018.

NEPHROS, INC.

By: */s/ Daron Evans*
Daron Evans
President and Chief Executive Officer

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date listed below.

Signature	Title	Date
<i>/s/ Daron Evans</i> Daron Evans	Director, President and Chief Executive Officer	March 22, 2018
<i>/s/ Andrew Astor</i> Andrew Astor	Chief Financial Officer	March 22, 2018
* Arthur H. Amron	Director	March 22, 2018
* Paul A. Mieyal	Director	March 22, 2018
* Malcolm Persen	Director	March 22, 2018
<i>/s/ Moshe Pinto</i> Moshe Pinto	Director	March 22, 2018

* By: /s/ *Daron Evans*
Daron Evans Attorney-in-Fact

March 22, 2018

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