NeuroMetrix, Inc.
Form S-1
November 23, 2011

As filed with the Securities and Exchange Commission on November 23, 2011

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

NEUROMETRIX, INC.

(Exact name of registrant as specified in its charter)

Delaware	3841	04-3308180
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

62 Fourth Avenue
Waltham, Massachusetts 02451
(781) 890-9989

(Address, including zip code, and telephone number,
including area code, of registrant s principal executive offices)

Shai N. Gozani, M.D., Ph.D.
Chief Executive Officer
NeuroMetrix, Inc.
62 Fourth Avenue
Waltham, Massachusetts 02451
(781) 890-9989

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

Copies to:

Jonathan L. Kravetz, Esq.
Megan N. Gates, Esq.
Mintz, Levin, Cohn, Ferris,
Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111
Telephone: (617) 542-6000
Fax: (617) 542-2241

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box: o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

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

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company x

---

TABLE OF CONTENTS

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered[1]	Proposed Maximum Aggregate Offering Price[2]	Amount of Registration Fee[3]
Units consisting of Common Stock and Warrants[4][5]	$ 15,750,000	$ 1,805
Common Stock Underlying Units[6]		
Warrants Underlying Units[6]		
Total	$ 15,750,000	$ 1,805

(1) The securities registered also include such indeterminate amounts and numbers of shares of common stock issuable to cover additional securities that may be offered or issued to prevent dilution resulting stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) under the Securities Act of 1933.

(3) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

(4) Includes shares of common stock underlying the warrants offered as part of the units.

(5) Pursuant to a shareholder rights agreement, dated as of March 7, 2007, between the Company and American Stock Transfer & Trust Company, as amended, each share of common stock has an attached right to purchase our Series A Junior Cumulative Preferred Stock, which rights are not currently exercisable.

(6) No fee required pursuant to Rule 457 under the Securities Act of 1933.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

TABLE OF CONTENTS

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated November 23, 2011

Up to $10,500,000

Units, each consisting of Common Stock and Warrants

We are offering up to units, each consisting of share(s) of common stock and warrant(s). Each warrant entitles the holder to purchase share(s) of our common stock. The shares of common stock and warrants are immediately separable after purchase and will be issued separately. The warrants are exercisable at an exercise price of $ per share (% of the aggregate offering price for a unit) for a five year term. We are not required to sell any specific dollar amount or number of units but will use our best efforts to sell all of the units being offered.

Our common stock is listed on the NASDAQ Capital Market under the symbol NURO. We do not intend to apply to list the warrants on any securities exchange. The last reported sale price of our common stock on the NASDAQ Capital Market on November 22, 2011 was $1.82 per share.

Investing in our common stock and warrants involves risks. See Risk Factors on page 9.

	Per Unit	Total
Offering price per unit	$	$
Placement agent s fees	$	$
Offering proceeds, before expenses, to NeuroMetrix	$	$

We intend to engage a placement agent for this offering. We anticipate that such placement agent will not purchase or sell any units, nor will they be required to arrange for the purchase and sale of any specific number or dollar amount of units, other than to use their best efforts to arrange for the sale of units by us. We do not intend to have multiple closings. We have not arranged to place the funds in an escrow, trust or similar account.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

We expect to deliver the securities to investors on or about , 2011.

The date of this prospectus is , 2011.

TABLE OF CONTENTS

You should rely only on the information contained or incorporated by reference in this prospectus and any free-writing prospectus prepared by or on behalf of us or to which we have referred you. Neither we nor the placement agent have authorized anyone to provide you with additional or different information. We are offering to sell, and are seeking offers to buy these securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our securities.

Registered Trademarks and Trademark Applications: In the United States we have registered trademarks for NEUROMETRIX , NC-STAT and onCall , each registered with the United States Patent and Trademark Office. In addition, the marks ADVANCE and NC-stat DPNCHECK are the subject of either a trademark registration or application for registration in the United States. We also hold certain foreign trademark registrations for the marks NEUROMETRIX and NC-STAT. Solely for convenience, the trademarks, service marks and trade names referred to in this prospectus are without the ® and ™ symbols, but such references are not intended to indicate, in any way, that the owner thereof will not assert, to the fullest extent under applicable law, such owner s rights to these trademarks, service marks and trade names. This prospectus contains additional trade names, trademarks and service marks of other companies, which, to our knowledge, are the property of their respective owners.

We obtained industry and market data used throughout and incorporated by reference into this prospectus through our research, surveys and studies conducted by third parties and industry and general publications. We have not independently verified market and industry data from third-party sources.

On September 1, 2011 we completed a 1-for-6 reverse split of our common stock. Throughout this prospectus we have restated historical per share data, as well as data related to common stock, options and warrants to reflect the effects of this reverse split.

TABLE OF CONTENTS

PROSPECTUS SUMMARY

This summary highlights selected information contained in greater detail elsewhere in this prospectus or incorporated by reference into this prospectus. This summary may not contain all of the information that you should consider before investing in the common stock and warrants. You should carefully read the entire prospectus, including Risk Factors beginning on page 9 and the financial statements and related notes and other documents incorporated by reference into this prospectus, before making an investment decision. As used in this prospectus, references to we, our, us and NeuroMetrix refer to NeuroMetrix, Inc. unless the context requires otherwise.

Our Business and Opportunity

We are an emerging diabetes company that also manages a legacy, point of care neurodiagnostics franchise to optimize its cash contribution to our diabetes initiatives. Diabetes is a worldwide epidemic. Recent studies estimate the worldwide prevalence of diabetes to be over 350 million people, of which approximately 90% are of the Type II variety. Within the United States, there are over 25 million people with diabetes and another 80 million people with pre-diabetes, which represents a constellation of conditions such as obesity and high triglyceride levels that are likely to progress to diabetes. In the United States, the annual cost of treating diabetes is over $100 billion. Although there are dangerous acute manifestations of diabetes, the primary burden of the disease is in the long term complications of chronic high blood sugar, or hyperglycemia. These complications include among other things cardiovascular disease, nerve disease and resulting pathological conditions such as foot ulcers and amputation, eye disease leading to blindness, and kidney failure.

The most common long-term complication of diabetes, which affects approximately 60% to 70% of the diabetic population, is nerve disease or diabetic neuropathy. There are different forms of diabetic neuropathy; the most common are diabetic peripheral neuropathy, or DPN, carpal tunnel syndrome, or CTS, and autonomic neuropathy. DPN is a systemic nerve disease that is worse in the feet and lower legs. It may lead to loss of sensation in the feet, severe pain in the feet and legs, and increases the risk of falling. DPN is the primary trigger for diabetic foot ulcers which may progress to the point where amputation is required. People with diabetes have a 15% to 25% lifetime risk of developing a foot ulcer and 15% of foot ulcers lead to amputation. Foot ulcers are among the most expensive complications of diabetes, with a typical cost of $5,000 to $50,000 per episode. CTS is caused by focal damage to the median nerve as it passes from the forearm into the hand, through the wrist. When the median nerve is compressed it can lead to symptoms in the hand including pain, numbness, and loss of strength. Autonomic neuropathy is a systemic disease of the autonomic nerves, which regulate the heart, digestion, sexual function, and other essential bodily functions. Damage to these nerves leads to a host of clinical complications that include an increased risk of sudden death, elevated risk of stroke, digestion difficulties and impotence.

Most people with diabetes receive health care attention in primary care settings where physicians have limited access to sophisticated diagnostic tools to detect diabetic neuropathy early and monitor its progress and response to treatment. As a result, they rely primarily on clinical examination of patients, which although it is an important part of the evaluation of a patient with diabetes, has limited sensitivity and specificity and can usually only detect later stage disease where treatment options and efficacy are compromised.

Early detection of DPN is particularly important because there are no treatment options once the nerves have degenerated. At the present time, the most widely used and recommended diagnostic method for DPN is the 5.07/10-g monofilament test. This test assesses the patient s ability to detect focal pressure application in the foot. The inability to detect a monofilament indicates that the patient lacks adequate sensation to protect their feet from mechanical

insults that can lead to foot ulcers; a condition known as loss of protection sensation, or LOPS. Although the monofilament is an important clinical test, it is insensitive to early DPN where interventions may slow or even halt further nerve damage. Nerve conduction studies, or NCS, are objective electrical tests of nerve function. They are widely considered the gold standard diagnostic method for DPN and can even detect mild nerve damage before it is expressed as clinical symptoms. NCS have typically been provided by specialists using expensive equipment and therefore access has been limited, particularly for common conditions such as DPN.

1

TABLE OF CONTENTS

Currently, there are limited treatment options for diabetic neuropathies. There are no approved disease modifying treatments for DPN, although a few pharmacological candidates are in clinical trials. Several large studies have shown that reducing hyperglycemia lowers the risk of developing DPN and decreases its severity. There is also observational data that suggests that reductions in triglyceride levels slows the progression of DPN. Several drugs, such as duloxetine, gabepentin, and pregabalin, have been approved to treat the pain associated with DPN, which is referred to as painful diabetic neuropathy. Unfortunately, these drugs, which are also anti-depressants or anti-seizure medications, have systemic effects and are therefore often associated with intolerable side effects. Like DPN, autonomic neuropathies are difficult to manage, however early identification may allow physicians to lower cardiovascular risk. Mild to moderate CTS is effectively treated with conservative measures such as splinting and local steroid injections. More advanced CTS is usually managed surgically. In either case, it is essential to intervene before extensive nerve degeneration has occurred.

Our Strategy

We believe that there are large and important unmet needs in both the diagnosis and treatment of diabetic neuropathies. As a medical device company with both unique and substantial experience in devices to measure and alter peripheral nerve function, we believe we are in the unique position to address these unmet needs through the development of novel proprietary medical devices. Therefore, we are focused on developing and marketing medical devices for the diagnosis and treatment of diabetic neuropathies. We believe that we are the only medical device company with a strategic focus on the diabetic neuropathy vertical market and our goal is to be the dominant player in this field.

Our key business strategies by which we intend to meet our objectives in diabetic neuropathy include:

Drive Adoption of NC-stat DPNCheck, Our Initial Product for Diabetic Neuropathy, in the United States. NC-stat DPNCheck was launched in September 2011. Our initial target market is endocrinologists and podiatrists in the United States. We believe that this market represents approximately 15,000 physicians who are viewed as leaders in the detection and management of DPN. We have initiated sales into this market through a direct, specialty sales force that we hired, trained and deployed during the third quarter of 2011.

Over 100,000 primary care physicians provide front-line care to approximately 85% of people with diabetes in the United States. We believe this is the most attractive sector of the United States market for NC-stat DPNCheck. Due to the size of the market and the large number of potential call points, we believe that the most effective sales approach is through national and/or regional third party distributors. Our strategy is to first establish product credibility in the endocrinology/podiatry market before negotiating arrangements with distributors to address the United States primary care market.

We believe that there may be an opportunity to sell NC-stat DPNCheck for use in retail medical clinics such as those in chain drug stores and department store pharmacies. There are approximately 1,200 retail medical clinics in the United States, a number growing at a double digit rate.

We believe that corporate accounts, including managed care organizations, companies that self-insure the health care risks of their employee populations, and governmental entities represent an attractive opportunity because of their focus on prevention and on health care costs over long durations. We plan to hire internal sales resources to market NC-stat DPNCheck directly to these corporate accounts.

Commercialize NC-stat DPNCheck in Select International Markets Using a Distribution Network. We have gained some experience in international markets with our ADVANCE System, which is currently used in the United Kingdom, Netherlands and India, among other countries, and which we sell through a distribution network. While international markets are a secondary priority at present, we believe we can leverage our distribution network to either sell NC-stat DPNCheck or to help us identify more appropriate distributors.

TABLE OF CONTENTS

Expand Our Diabetic Neuropathy Products in the Near Term to Include SENSUS, a Pain Therapy Device. We are developing SENSUS, a pain therapy device which is a transcutaneous electrical nerve stimulator designed specifically for use in treating painful diabetic neuropathy. We believe that our unique expertise in peripheral nerve stimulation will expedite product development resulting in a product that is attractive to endocrinologists, podiatrists, and primary care physicians that are challenged with trying to manage pain in their patients with diabetes.

Initiate Clinical Studies to Further Validate the Clinical and Economic Benefits of Our Diabetes Products. We appointed a Chief Medical Officer in September 2011 who is responsible for developing and managing our diabetes-related clinical programs. These include studies to further validate the clinical and economic benefits of NC-stat DPNCheck testing, and various clinical and research and development activities in support of new diabetic neuropathy focused products, including SENSUS. This work should provide important support to our commercialization efforts and our efforts to obtain third party reimbursement for physicians using our products.

Obtain Coverage and Payment for NC-stat DPNCheck. While payers are not our direct customers, their coverage and reimbursement policies influence medical practice. We believe that NC-stat DPNCheck is appropriately described under the existing Category I CPT Code 95905; however, we expect only limited third-party reimbursement for health care providers using the device to detect and monitor diabetic neuropathy. We believe that the low cost of testing with NC-stat DPNCheck combined with its clinical utility will result in the development of an out-of-pocket payment model. We intend to initiate the type of clinical studies that may lead to expanded third party coverage over time.

Manage Our Legacy Neurodiagnostics Business to Optimize Cash Flow. Our neurodiagnostics business currently accounts for nearly all of our revenue. We restructured this portion of our business in January 2011 when we shifted our strategic focus toward more attractive opportunities in diabetes care. Accordingly, the legacy business is managed for cash and not growth and it is our intention to continue to carefully manage this business in order to optimize its future cash contribution.

Our Business Model

We develop and market neurodiagnostic systems which typically consist of a medical device plus single-use biosensors or electrodes. Other accessories are also offered to our customers. Our goal for these systems is to build an installed base of active customer accounts that regularly reorder consumables to meet their clinical practice needs. We successfully implemented this model when we started our business with the NC-stat System, applied it to subsequent product generations and, more recently, to the ADVANCE System. The planning for our diabetes care pipeline including NC-stat DPNCheck and products in development such as SENSUS, is based on the device plus consumables business model.

Our Products

Marketed Products

NC-stat® DPNCheck™

NC-stat DPNCheck is a fast, accurate, and quantitative nerve conduction test that may be used to evaluate systemic neuropathies such as DPN. It is designed to be used by primary care physicians, endocrinologists, podiatrists and other clinicians at the point-of-care to objectively detect, stage, and monitor DPN. The device measures nerve conduction velocity and response amplitude of the sural nerve, a nerve in the lower leg and ankle. These parameters are widely

recognized as sensitive and specific biomarkers of DPN.

ADVANCE™ NCS/EMG System

The ADVANCE NCS/EMG System, or the ADVANCE System, is a comprehensive platform for the performance of traditional nerve conduction studies and invasive electromyography procedures. Historically, the ADVANCE System has been marketed to a broad range of physician specialties including neurologists, orthopedic surgeons, primary care physicians, and endocrinologists, and utilized for a variety of different clinical indications including assessment of CTS, low back and leg pain, and DPN. It is most commonly used in the assessment of CTS. Numerous papers have been published on the use of this technology in this clinical

TABLE OF CONTENTS

application. With the Company s focus on diabetic neuropathies, we intend to target new sales of ADVANCE Systems for use by endocrinologists and primary care physicians who evaluate patients with diabetes and upper extremity symptoms suggestive of CTS.

Products in Development

SENSUS™

The SENSUS pain therapy device is a transcutaneous electrical nerve stimulator, or TENS, designed specifically for use in treating painful diabetic neuropathy, or PDN. A recent evidence based review by the American Academy of Neurology determined that TENS was a useful modality for managing this form of pain. TENS may reduce pain in patients with PDN without significant side effects and we believe that a PDN-specific TENS device that is effective, easy to use and low cost could improve management of pain in patients with PDN. We further believe that currently available TENS devices do not meet this need because they are not optimized for PDN, but are instead targeted at low back pain, sports medicine, and rehabilitation applications. Furthermore, they are difficult to administer and tend to be complicated for clinicians and patients.

ADVANCE™ CTS

We are currently exploring the market for a version of the ADVANCE device dedicated to detection of CTS in people with diabetes. The second most common form of diabetic neuropathy is focal damage to the median nerve or CTS. We are currently investigating this market opportunity by creating a diabetes CTS package consisting of the ADVANCE System and the combined median and ulnar nerve specific electrode, both of which are commercially available. If we determine that an attractive market exists for this clinical indication, then we will invest in development of an easier to use and lower cost version of the ADVANCE System dedicated specifically to detection of CTS in diabetes.

Legacy Neurodiagnostics Business

We were founded in 1996 as a science-based health care company. Our focus had been the development of innovative products for the detection, diagnosis, and monitoring of peripheral nerve and spinal cord disorders, such as those associated with carpal tunnel syndrome, lumbosacral disc disease and spinal stenosis, and diabetes. Our NC-stat System for the performance of nerve conduction studies at the point-of-care was commercially launched in 1999. The second generation NC-stat was released in 2002. In 2008 we brought to market the more sophisticated ADVANCE System for nerve conduction testing and performance of invasive needle electromyography. These systems were general purpose with broad application in evaluating and diagnosing nerve disorders. Numerous studies demonstrating the clinical accuracy and utility of these devices have been conducted and published in high quality peer-reviewed journals. Furthermore, these devices have been used in clinical trials sanctioned by the Food and Drug Administration, or FDA, for pharmacological agents and large scale epidemiological studies sponsored by the National Institute of Health, or NIH, the Center for Disease Control, or CDC, and other governmental agencies. The products have been cleared by the FDA, field tested for over a decade and highly regarded for their ease of use, accuracy and reproducibility of results.

Following launch of NC-stat in 1999, we experienced rapid revenue growth, which lead to our initial public offering in 2004. The health market, particularly the physician office segment, embraced the opportunity to perform nerve conduction tests which previously had always required referral to specialists. Point-of-care nerve testing was seen to provide a combination of improved patient care and patient convenience. The success of point-of-care nerve testing, a market which we created, was met with resistance in some sectors of the medical community, particularly by

neurologists and physical medicine and rehabilitation physicians, both of which had traditionally provided nerve testing services. As a consequence of successful lobbying by these specialists, physicians using our technology experienced increased denials of coverage by third party payers resulting in their discontinuing usage and our difficulty in accruing new customer accounts. In late 2009, the U.S. Centers for Medicare and Medicaid Services, or CMS, included in the Physician Fee Schedule a new Category 1CPT Code (95905) for nerve conduction studies performed using preconfigured electrodes such as those employed with our products. During 2010 most Medicare fiscal intermediaries assumed coverage for CPT 95905 for at least some clinical indications; however, the health care environment has been such that we

TABLE OF CONTENTS

have been unable to secure broad coverage among private payers, which is essential to the success of our products. This experience was reflected in our revenues which peaked in 2006 at $55.3 million. Over the last three years, we have reported revenue from this business of $31.1 million in 2008, $26.1 million in 2009 and $13.9 million in 2010 and for the nine month period ended September 30, 2011 reported revenue of $8.0 million.

As we managed our general purpose neurodiagnostic business to improve reimbursement and minimize customer erosion, we increasingly became aware of the unmet medical need for improved diagnostic tools and therapies in the specific area of diabetic neuropathy. Diabetes care is one of the fastest growing sectors of health care as discussed above. We believe that our tools and therapies for addressing diabetic neuropathy represent a significant market opportunity. Consequently, in January 2011 we announced a shift to diabetes care as our primary business focus. We also restructured our neurodiagnostics business to consolidate functions and to eliminate our direct sales force. We emphasized our commitment to supporting our neurodiagnostic products and installed base of physician accounts. Our objective for our legacy neurodiagnostics business is to maintain a high standard of product support while managing the business to optimize cash flow.

Risks Affecting Us

Our business is subject to numerous risks, as discussed more fully in the section entitled Risk Factors immediately following this prospectus summary. At September 30, 2011 we had an accumulated deficit of $126.2 million and held cash and cash equivalents of $11.7 million. We believe that these resources and the cash to be generated from expected product sales will be sufficient to meet our operating needs into the fourth quarter of 2012. We face significant challenges and uncertainties and, as a result, our available capital resources may be consumed more rapidly than expected. We require additional funding to support our operating and capital needs. However, we may not be able to secure financing in a timely manner and on favorable terms, if at all. Without additional funds, we may be forced to delay, scale back or eliminate some of our sales and marketing efforts, research and development activities, or other operations in an effort to provide sufficient funds to continue our operations.

Our Corporate Information

Our President and Chief Executive Officer, Shai N. Gozani, M.D., Ph.D. founded NeuroMetrix in June 1996. We originally were incorporated in Massachusetts in 1996, and we reincorporated in Delaware in 2001. Our common stock is listed on the NASDAQ Capital Market under the ticker symbol NURO. Our principal offices are located at 62 Fourth Avenue, Waltham, Massachusetts 02451 and our telephone number is (781) 890-9989. Our web site is *www.neurometrix.com*. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this document. Our web site address is included in this document as an inactive textual reference only. The NeuroMetrix name and logo and the names of products and services offered by NeuroMetrix are trademarks, registered trademarks, service marks or registered service marks of NeuroMetrix.

TABLE OF CONTENTS

The Offering

Securities offered

Up to units. Each unit will consist of share(s) of common stock and warrant(s). Each warrant entitles its holder to purchase shares of our common stock. The shares of common stock and warrants will immediately separate upon issuance.

Offering price

An assumed price of $ per unit, which is the closing price of our common stock on , 2011. This assumed offering price per unit is used throughout this prospectus each time the price per unit is stated.

Description of the warrants

The warrants will be exercisable at any time until the fifth anniversary of the closing date at an exercise price of $ per share.

Common stock outstanding before this offering

3,888,082 shares

Common stock to be outstanding after this offering

shares, assuming shares are issued in this offering, which does not include shares of common stock issuable upon exercise of the warrants included in the offering units.

Use of proceeds

We intend to use the net proceeds of this offering for general corporate purposes, including continuing our commercialization efforts for NC-stat DPNCheck and development of our product candidates. See Use of Proceeds for additional information.

Risk factors

You should read the Risk Factors section of, and all of the other information set forth in, this prospectus to consider carefully before deciding whether to invest in the units offered by this prospectus.

NASDAQ Capital Market symbol

NURO

The number of shares of our common stock that will be outstanding immediately after this offering is based on 3,888,082 shares outstanding as of November 18, 2011 and excludes the following:

1,430,480 shares of common stock issuable upon the exercise of warrants outstanding as of November 18, 2011, at a weighted average exercise price of $13.20 per share;

540,991 shares of common stock issuable upon the exercise of options outstanding as of November 18, 2011, at a weighted average exercise price of $23.65 per share;

151,662 shares of common stock available for future issuance under our 2004 Stock Option and Incentive Plan as of November 18, 2011;

37,499 shares of common stock available for future issuance under our 2009 Non-qualified Inducement Stock Plan as of November 18, 2011;

23,364 shares of common stock available for future issuance under our 2010 Employee Stock Purchase Plan as of November 18, 2011; and

shares of common stock issuable upon the exercise of the warrants sold in this offering.

Except where we state otherwise, the information we present in this prospectus reflects a 1-for-6 reverse stock split.

TABLE OF CONTENTS

Selected Financial Data

The following tables summarize our financial data for the periods presented. The summary statement of operations data and balance sheet data for each of the years ended December 31, 2010, 2009, 2008, 2007, and 2006 have been derived from our audited financial statements. The audited financial statements for the years ended December 31, 2010, 2009, and 2008, and the report thereon, were included in our Annual Report on Form 10-K for the year ended December 31, 2010 and are incorporated by reference into this prospectus. The summary statement of operations data for the nine months ended September 30, 2011 and 2010 and summary balance sheet data as of September 30, 2011 have been derived from our unaudited financial statements which were included in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 and are incorporated by reference into this prospectus. The pro forma balance sheet data gives effect to the sale of units offered by this prospectus at an assumed aggregate offering price of $ after deducting the estimated placement agent fees and offering expenses payable by us. Our historical results are not necessarily indicative of the results to be expected for any future periods.

Our interim unaudited financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America, or GAAP, on the same basis as the annual audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to a fair statement of our financial position as of September 30, 2011 and the results of its operations for the nine months ended September 30, 2010 and 2011.

You should read this data together with the financial statements and related notes incorporated by reference into this prospectus, as well as Management s Discussion and Analysis of Financial Condition and Results of Operations and the other financial information in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, which are incorporated by reference into this prospectus.