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

**FORM 8-K**

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

| | |
|---|---|
| Date of Report (Date of earliest event reported) | January 11, 2010 |

NEOPROBE CORPORATION
(Exact name of registrant as specified in its charter)

| Delaware | 0-26520 | 31-1080091 |
|---|---|---|
| (State or other jurisdiction of incorporation) | (Commission File Number) | (IRS Employer Identification No.) |

| 425 Metro Place North, Suite 300, Columbus, Ohio | 43017 |
|---|---|
| (Address of principal executive offices) | (Zip Code) |

| | |
|---|---|
| Registrant's telephone number, including area code | (614) 793-7500 |

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 8.01. Other Events.**

On January 11, 2010, Neoprobe Corporation (the "Company") issued a press release announcing that it had submitted an investigational new drug (IND) amendment to the United States Food and Drug Administration (FDA) which includes the design of a proposed Phase 3 clinical trial of the Company's RIGScan® CR radiopharmaceutical. RIGScan CR is designed to identify and evaluate potentially tumor-associated tissue in patients with colon or rectal cancer. The IND amendment includes a Special Protocol Assessment (SPA) in accordance with the Prescription Drug User Fee Act of 1992 (PDUFA) and current regulatory guidelines, and will be registered on www.clincaltrials.gov following discussions with FDA regarding the SPA. A copy of the complete text of the Company's January 11, 2010, press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Statements contained or incorporated by reference in this Current Report on Form 8-K which relate to other than strictly historical facts, such as statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, anticipated clinical and regulatory pathways and markets for the Company's products, are forward-looking statements. The words "believe," "expect," "anticipate," "estimate," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, the Company's continuing operating losses, uncertainty of market acceptance of its products, reliance on third party manufacturers, accumulated deficit, future capital needs, uncertainty of capital funding, dependence on limited product line and distribution channels, competition, limited marketing and manufacturing experience, risks of development of new products, regulatory risks and other risks detailed in the Company's most recent Annual Report on Form 10-K and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

| *Exhibit Number* | *Exhibit Description* |
|---|---|
| 99.1 | Neoprobe Corporation press release dated January 11, 2010, entitled "Neoprobe Files Clinical Package for RIGS Technology with FDA." |

**SIGNATURES**

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

Neoprobe Corporation

Date: January 11, 2010

By: /s/ Brent L. Larson
Brent L. Larson, Vice President, Finance and Chief Financial Officer

Exhibit 99.1

**IMMEDIATE RELEASE**
**CONTACTS:**
**Brent Larson,**
**Vice President / CFO**
**614 822 2330**

**January 11, 2010**

**Tim Ryan,**
**The Shoreham Group**
**212 242 7777**

**NEOPROBE FILES CLINICAL PACKAGE FOR RIGS TECHNOLOGY WITH FDA**
**Phase 3 Clinical Trial Design Filed Under Special Protocol Assessment**

DUBLIN, OHIO – January 11, 2010 – Neoprobe Corporation (OTCBB: NEOP), a diversified developer of innovative oncology surgical and diagnostic products, announced today that it has submitted an investigational new drug (IND) amendment to the United States Food and Drug Administration (FDA) which includes the design of a proposed Phase 3 clinical trial of Neoprobe's RIGScan® CR radiopharmaceutical. RIGScan CR is designed to identify and evaluate potentially tumor-associated tissue in patients with colon or rectal cancer. The IND amendment includes a Special Protocol Assessment (SPA) in accordance with the Prescription Drug User Fee Act of 1992 (PDUFA) and current regulatory guidelines, and will be registered on www.clincaltrials.gov following discussions with FDA regarding the SPA.

The Phase 3 clinical study as currently designed would be a randomized clinical study that would evaluate the ability of RIGScan CR to identify tumor-associated tissue in a group of patients as compared to a group of patients provided with traditional surgical care. The sample size of the proposed Phase 3 clinical study has been estimated at approximately 250 patients including both the RIGScan CR and traditional treatment groups. In addition to assessing the ability of RIGScan CR to identify tumor-associated tissue, the overall survival of the RIGScan CR treated patients will be compared to the patients treated with conventional treatment modalities.

"The identification of tumor-associated tissue in cancer patients through the use of biomarkers is of increasing clinical interest and importance," said Dr. Fred Cope, Neoprobe's Vice President, Pharmaceutical Research and Clinical Development. "RIGScan CR provided indications in earlier clinical studies that it could identify potentially tumor-associated tissue and that the removal of such tissue might improve patient outcomes. The objective of the proposed Phase 3 trial is to confirm those findings," concluded Dr. Cope.

"The filing of the SPA request follows our successful discussions with the centralized European regulatory authorities (the EMEA) under their Scientific Advice process," said David Bupp, Neoprobe's President and CEO. "Dr. Cope and his team have completed an extensive scientific literature evaluation to support the design of the Phase 3 study and we initiated the biologic development activities to support the proposed Phase 3 study in 2009. The commencement of an evaluation of the Phase 3 study design under the SPA provisions is an important step in the development of RIGScan CR. The proposed trial design incorporates both diagnostic and therapeutic endpoints for the RIGS technology," concluded Mr. Bupp.

RIGScan CR, when used with a commercially available hand-held gamma radiation detection probe, provides surgeons with real-time information used to locate tumor components not detectable by conventional methods, and assist in the more thorough removal of the potentially cancerous tissue. The RIGScan CR targeting agents are monoclonal antibodies labeled with a radioactive isotope that emits low energy gamma rays. Before surgery, a cancer patient is injected with the monoclonal antibody targeting agent, which circulates throughout the patient's body and binds specifically to cancer cell components (cancer antigens). Concentrations of the targeting agent are then located during surgery by the gamma detection device, which emits an audible tone to direct the surgeon to tumor-involved tissue. Information on the clinical history and current development status of RIGScan CR can be obtained from Neoprobe's previous press releases and filings with the U.S. Securities and Exchange Commission.

*- more -*

**About Neoprobe**

Neoprobe is a biomedical company focused on enhancing patient care and improving patient outcome by meeting the critical intraoperative diagnostic information needs of physicians and therapeutic treatment needs of patients. Neoprobe currently markets the neoprobe® GDS line of gamma detection systems that are widely used by cancer surgeons. In addition, Neoprobe holds significant interests in the development of related biomedical systems and radiopharmaceutical agents including Lymphoseek® and RIGScan® CR. Neoprobe's subsidiary, Cira Biosciences, Inc., is also advancing a patient-specific cellular therapy technology platform called ACT. Neoprobe's strategy is to deliver superior growth and shareholder return by maximizing its strong position in gamma detection technologies and diversifying into new, synergistic biomedical markets through continued investment and selective acquisitions. www.neoprobe.com

*Statements in this news release, which relate to other than strictly historical facts, such as statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, anticipated clinical and regulatory pathways, and markets for the Company's products are forward-looking statements The words "believe," "expect," "anticipate," "estimate," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, the Company's continuing operating losses, uncertainty of market acceptance of its products, reliance on third party manufacturers, accumulated deficit, future capital needs, uncertainty of capital funding, dependence on limited product line and distribution channels, competition, limited marketing and manufacturing experience, risks of development of new products, regulatory risks and other risks detailed in the Company's most recent Annual Report on Form 10-KSB and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements.*