CLEVELAND BIOLABS INC Form 424B3 April 03, 2008

> Filed Pursuant to Rule 424(b)(3) Registration No. 333-143755

Prospectus Supplement No. 4 (to Prospectus dated December 10, 2007)

CLEVELAND BIOLABS, INC. 5,514,999 Shares

This Prospectus Supplement No. 4 supplements and amends the prospectus dated December 10, 2007 (the "Prospectus") relating to the offer and sale of up to 5,514,999 shares of our common stock which may be offered from time to time by the selling stockholders identified in the Prospectus for their own accounts. This Prospectus Supplement is not complete without, and may not be delivered or used except in connection with the original Prospectus.

This Prospectus Supplement No. 4 includes the attached Form 8-K of Cleveland BioLabs, Inc. dated April 3, 2008, as filed by us with the Securities and Exchange Commission.

This Prospectus Supplement No. 4 modifies and supersedes, in part, the information in the Prospectus. Any information that is modified or superseded in the Prospectus shall not be deemed to constitute a part of the Prospectus, except as modified or superseded by this Prospectus Supplement No. 4. We may amend or supplement the Prospectus from time to time by filing amendments or supplements as required. You should read the entire Prospectus and any amendments or supplements carefully before you make an investment decision.

Investing in our common stock involves risk. See "Risk Factors" beginning on page 8 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 No. 4 is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement No. 4 is April 3, 2008.

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): April 3, 2008

CLEVELAND BIOLABS, INC. (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 001-32954 (Commission File Number) 20-0077155 (I.R.S. Employer Identification Number)

73 High Street, Buffalo, New York 14203 (Address of principal executive offices)

Registrant's telephone number, including area code: (716) 849-6810

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 April 3, 2008, Cleveland BioLabs, Inc. (the "Company") issued a press release announcing that it has been awarded a contract by the U.S. Department of Defense for up to approximately \$8.9 million to fund the advanced development of the Company's lead product candidate, Protectan CBLB502, as a medical radiation countermeasure. A copy of the press release is attached as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit Exhibit

No.

99.1 Press Release dated April 3, 2008.

SIGNATURE

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.

CLEVELAND BIOLABS, INC

Date: April 3, 2008 By: /s/ Michael Fonstein

Michael Fonstein President and Chief Executive Officer

EXHIBIT INDEX

Exhibit

No. Exhibit

99.1 Press Release dated April 3, 2008.

FOR IMMEDIATE RELEASE

DEPARTMENT OF DEFENSE AWARDS CLEVELAND BIOLABS CONTRACT TO DEVELOP PROTECTAN CBLB502

Buffalo, NY — April 3, 2008 - Cleveland BioLabs, Inc. (NASDAQ:CBLI) today announced that the Department of Defense (DoD) has awarded the Company a letter contract through the Chemical Biological Medical Systems (CBMS) Joint Project Management Office Broad Agency Announcement (http://www.jpeocbd.osd.mil/page_manager.asp?pg=2&sub=66) for selected tasks in the advanced development of Protectan CBLB502 as a Medical Radiation Countermeasure to treat radiation injury following exposure to radiation from nuclear or radiological weapons. A letter contract is a written preliminary contractual instrument that authorizes initial performance prior to negotiating a definitized contract. When definitized, this contract shall not exceed \$8.9 million in development funding.

Michael Fonstein, Ph.D., Chief Executive Officer and President of Cleveland BioLabs stated, "The DoD's funding of Protectan CBLB502 reflects their evaluation of its potential safety and efficacy as a medical radiation countermeasure and recognition of its potential suitability for the armed forces' needs on the battlefield. We are pleased to be working for CBMS, which rapidly provides the Warfighter with safe, robust, affordable medical countermeasures against the broad spectrum of CBRN threats. We hope that Protectan CBLB502, when approved by the FDA, will offer a practical solution for one of the deadliest threats that exists in today's world."

"We have collaborated closely with the Armed Forces Radiobiology Research Institute on development of Protectan CBLB502 for several years and believe its unique abilities to mitigate both hematopoietic and gastrointestinal effects of ionizing radiation as well as demonstrate significant survival benefits are well suited to the DoD's requirements," continued Dr. Fonstein. "Moreover, we believe the compound's safety profile, stability, method of administration and cost effectiveness, make it highly practical for field deployment. We believe Protectan CBLB502, with its potential to protect both military and civilian populations, will play a significant role in domestic and global biodefense preparedness."

Colonel David Williams, Joint Project Manager, CBMS, commented: "CBMS uses Government and commercial best practices to acquire FDA-approved CBRN medical countermeasures and diagnostics. CBMS protects the Warfighter by maintaining uncontested global supremacy in CBRN medical countermeasure development and delivery. CBMS is pleased to contribute to Cleveland BioLabs' advanced development of Protectan CBLB502, which is a promising drug candidate for the Joint requirements of the DoD. Preliminary data suggests that Protectan CBLB502 is safe and efficacious in animals, is suitable for use on the battlefield or following evacuation, and has a manageable logistics burden."

Protectan CBLB502 is a bio-engineered derivative of a microbial protein that reduces injury from acute stresses by mobilizing several natural cell protecting mechanisms, including inhibition of programmed cell death (apoptosis), reduction of oxidative damage and induction of regeneration promoting cytokines. Cleveland BioLabs plans to initiate a Phase I human safety trial in the first half of 2008 for Protectan CBLB502 in Acute Radiation Syndrome. Subsequently, Phase II expanded clinical safety trials and definitive animal efficacy studies are planned in support of FDA approval using the "Animal Rule." The FDA's "Animal Rule" provides an alternate path for the approval or licensure of drugs and biologics, which cannot ethically be tested definitively for efficacy in human volunteers.

About Cleveland BioLabs, Inc.

Cleveland BioLabs, Inc. is a drug discovery and development company leveraging its proprietary discoveries about programmed cell death to treat cancer and protect normal tissues from exposure to radiation and other stresses. The Company has strategic partnerships with the Cleveland Clinic, Roswell Park Cancer Institute, ChemBridge Corporation and the Armed Forces Radiobiology Research Institute. To learn more about Cleveland BioLabs, Inc., please visit the company's website at http://www.cbiolabs.com.

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current expectations, as of the date of this press release, and involve certain risks and uncertainties. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors. Some of the factors that could cause future results to materially differ from the recent results or those projected in forward-looking statements include the "Risk Factors" described in the Company's periodic filings with the Securities and Exchange Commission.

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