



FOR IMMEDIATE RELEASE

**NOVELOS THERAPEUTICS REPORTS POSITIVE RESULTS
FROM PHASE 1/2 LUNG CANCER STUDY**

- - -

***NOV-002 Treated Patients Show Improved Objective Tumor Response and
Higher Tolerance of Chemotherapy versus the Control Group***

NEWTON, Mass., August 8, 2005 – Novelos Therapeutics, Inc. (OTCBB: NVLT), a biotechnology company focusing on oxidized glutathione for use in fighting cancer and hepatitis, today announced positive results from a U.S.-based Phase 1/2 randomized clinical study in non-small cell lung cancer (NSCLC).

Forty-four chemotherapy-naive Stage IIIB/IV NSCLC patients (late-stage lung cancer patients who have not received prior chemotherapy) were randomized to one of three groups for six months of treatment:

Group A: NOV-002, administered intravenously (IV) and intramuscularly, in combination with cytotoxic chemotherapy.

Group B: NOV-002, administered IV and subcutaneously (SC), in combination with cytotoxic chemotherapy.

Group C: Cytotoxic chemotherapy alone was administered to this control group.

Based on the study protocol, the intent-to-treat analysis of the best overall objective tumor response (i.e. complete or partial tumor shrinkage) showed that eleven out of sixteen (69%) NOV-002 treated patients in Group B demonstrated greater than 50% tumor shrinkage versus only five out of fifteen (33%) in the control group (C). This difference was statistically significant ($p=0.044$ in a stratified analysis). Six out of thirteen (46%) patients in Group A demonstrated an objective response.

Further, NOV-002 treated patients better tolerated cytotoxic chemotherapy as evidenced by their ability to receive more cycles of chemotherapy compared to the control group (C). 100% of patients in Group B and 85% in Group A were able to complete four cycles of chemotherapy, while only 50% of control group patients (C) were able to do so. These differences were statistically significant ($p=0.004$). In addition, NOV-002 was well tolerated in this patient population, adding to NOV-002's already extensive safety database.

"We are very encouraged by such positive results in a relatively small Phase 1/2 study," said Dr. Christopher Pazoles, Vice President of Research & Development of Novelos Therapeutics. "The study revealed statistically significant improvement in a number of important efficacy measures after treatment with NOV-002 in combination with chemotherapy compared to chemotherapy alone. This was particularly evident in the case of patients receiving NOV-002 both intravenously and subcutaneously."

"Achieving these positive results in a U.S.-based Phase 1/2 clinical study is especially meaningful for us, because they provide confirmation of the clinical efficacy and excellent safety demonstrated in Russia where NOV-002 is already approved and marketed as GLUTOXIM[®],"



added Harry Palmin, President and Acting CEO of Novelos Therapeutics. “We look forward to commencing a Phase 2B/3 NSCLC study next year.”

Lung cancer is the leading cause of cancer death in the U.S. Lung cancer is expected to be diagnosed in approximately 175,000 people, and be responsible for about 165,000 deaths in 2005. NSCLC accounts for more than 80% of lung cancer. Only about 15% of NSCLC patients are diagnosed early enough to be eligible for surgery. Platinum-based chemotherapy regimens, such as carboplatin and paclitaxel (Taxol)*, are standard first-line treatment for advanced NSCLC patients, since these patients are not eligible for surgery. One-year survival rate for this first-line therapy is typically only 35%, median survival is 8.5 months and an objective tumor response rate is about 21%.

*www.cancer.gov

About Novelos Therapeutics, Inc.

Novelos Therapeutics, Inc. (OTCBB: NVLT) was established in 1996 to commercialize two promising oxidized glutathione-based compounds, NOV-002 and NOV-205, for the treatment of cancer and hepatitis. Both compounds have completed clinical trials in humans and have been approved for use in the Russian Federation where they were developed. NOV-002, marketed in Russia by an unrelated entity under the trade name GLUTOXIM[®], has been administered to over 5,000 patients, demonstrating clinical efficacy and excellent safety data. The U.S.-based Phase 1/2 clinical study of NOV-002 for lung cancer has been completed, with positive results. The Company plans to file an IND with the FDA for NOV-205 as a mono-therapy for hepatitis C in 2005.

About the Products

NOV-002, the lead compound, is being developed to treat non-small cell lung cancer (NSCLC). NOV-002 is designed to act as a cytoprotectant and an immunomodulator. When used in combination with chemotherapy, NOV-002 increased the one-year survival rate from 17% to 63% in a Russian study, a result that also represents an 80% improvement above the U.S. 35% current standard of care. A U.S.-based Phase 1/2 clinical study has been completed. NOV-002 treated patients demonstrated improved objective tumor response (defined as greater than 50% tumor shrinkage) and higher tolerance of chemotherapy versus the control group. NOV-002 was well tolerated, thus adding to the compound’s already extensive safety data base.

NOV-002 is also being developed to treat refractory (that is, not responsive to chemotherapy) ovarian cancer. Two additional clinical indications, radiation protection and psoriasis, will also be investigated for NOV-002.

NOV-205 is being developed to treat chronic hepatitis C in the U.S. NOV-205 is designed to act as a hepatoprotective agent with immunomodulating and antiviral activity. In Russian clinical studies, when used as mono-therapy for one month in hepatitis B and for two months in hepatitis C, NOV-205 has been shown to greatly reduce or eliminate viral loads and to vastly improve liver function relative to existing drugs on the market.

###

**COMPANY CONTACT**

Harry S. Palmin, President and Acting CEO
Novelos Therapeutics, Inc.
One Gateway Center, Ste. 504
Newton, MA 02458
Ph: 617-244-1616 ext.11
Fax: 631-574-3130
Email: hpalmin@novelos.com

INVESTOR RELATIONS

Stanley Wunderlich, CEO
Consulting for Strategic Growth
800 Second Avenue
New York, NY 10017
Ph: 800-625-2236
Fax: 212-337-8089
Email: CFSG1@aol.com

This news release contains forward-looking statements. Such statements are valid only as of today, and we disclaim any obligation to update this information. These statements are subject to known and unknown risks and uncertainties that may cause actual future experience and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Drug discovery and development involve a high degree of risk. Factors that might cause such a material difference include, among others, uncertainties related to the ability to attract and retain partners for our technologies, the identification of lead compounds, the successful preclinical development thereof, the completion of clinical trials, the FDA review process and other government regulation, our pharmaceutical collaborators' ability to successfully develop and commercialize drug candidates, competition from other pharmaceutical companies, product pricing and third-party reimbursement.

Consulting For Strategic Growth I, Ltd. ("CFSG") has a June 1, 2005, contract to provide Novelos with consulting, business advisory, investor relations, public relations and corporate development services for a three-month period. In connection with these services, CFSG prepares press releases, corporate profiles, and other publications on behalf of the Company. Independent of CFSG's receipt of cash compensation from the Company, CFSG may choose to purchase the common stock of the Company and thereafter liquidate those securities at any time it deems appropriate to do so.