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NOVELOS THERAPEUTICS WELCOMES FIVE NEW DIRECTORS

MADISON, WI, April 26, 2011 – Novelos Therapeutics, Inc. (OTCBB: NVLTD), a pharmaceutical company developing novel drugs for treatment and diagnosis of cancer, today announced that Dr. Rock Mackie, Mr. John Neis, Dr. John Niederhuber, Dr. Michael Tweedle and Dr. Jamey Weichert joined Novelos' board of directors concurrently with the closing of the recently announced acquisition of Cellectar, Inc.

"We are delighted to welcome these five new directors," said Dr. Stephen Hill, Chairman of the Board of Novelos. "Their expertise and relevant backgrounds speak highly of the potential of our novel cancer-targeted compounds."

Dr. Mackie, Professor of Medical Physics and Human Oncology at the University of Wisconsin, Madison, is a leading figure in the field of radiation therapy and Co-founder, Chairman and Director of Research of TomoTherapy.

Mr. Neis heads the healthcare practice at Venture Investors LLC and brings 23 years of life sciences venture capital experience.

Dr. Niederhuber is a nationally renowned surgeon and researcher who has dedicated his fourdecade career to the treatment and study of cancer – as a professor, director of National Cancer Institute (2005-2010), National Cancer Advisory Board chair, grant reviewer and investigator.

Dr. Tweedle, Professor of Cancer Imaging in Radiology at Ohio State, has over 30 years experience in imaging and diagnostics, senior management and research, including former President of Bracco Research USA and head of diagnostics at Bristol-Myers Squibb.

Dr. Weichert, Novelos' Chief Scientific Officer and Technology Founder, has 25 years of imaging and radiotherapy design experience, and is an Associate Professor of Radiology and Medical Physics at University of Wisconsin, Madison.

About Novelos Therapeutics, Inc. We are a pharmaceutical company developing novel drugs for the treatment and diagnosis of cancer. We currently have three cancer-targeted compounds, which are selectively taken up and retained in cancer cells (including cancer stem cells) versus normal cells. Thus, our therapeutic compounds directly kill cancer cells while minimizing harm to normal cells. This offers the potential for a paradigm shift in cancer therapy – efficacy versus all three major drivers of mortality in cancer: primary tumors, metastases and stem cell-based relapse. LIGHT is a smallmolecule cancer imaging agent. We believe LIGHT has first-in-class potential and expect it to enter Phase 1/2 clinical trials middle of this year. HOT is a small-molecule, broad-spectrum, cancer-targeted radiopharmaceutical that delivers radiation directly and selectively to cancer cells and cancer stem cells. We believe HOT also has first-in-class potential, and we expect it to enter a Phase 1b dose escalation trial in the third quarter of this year and Phase 2 trials in mid-2012 as a monotherapy for solid tumors with significant unmet medical need. COLD, a cancer-targeted chemotherapy that we expect to enter clinical trials late in 2012, works primarily through Akt inhibition. Together, we believe our compounds are able to "find, treat and follow" cancer anywhere in the body in a novel, highly selective way. For additional information please visit www.novelos.com

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