



Neumedicines' HemaMax™ Proves Efficacious in a GLP, Blinded, Non-human Primate Study in Acute Radiation Syndrome

Single Injection of Low-dose HemaMax™ Following Lethal Radiation Exposure Showed ~40% Survival Benefit

PASADENA, Calif. (December 1, 2012) – Neumedicines Inc., a privately held company developing therapies based on Interleukin-12 (IL-12) as a radiation medical countermeasure and for the treatment of chemotherapy-induced thrombocytopenia, announces that results from a large-scale, blinded efficacy study conducted under Good Laboratory Practices (GLP) indicate that HemaMax™ (rHuIL-12) administered at a single, low dose increased survival in non-human primates with the hematopoietic syndrome of acute radiation syndrome (HSARS).

The study included 90 male and female rhesus monkeys (1 non-treated group and 4 groups treated with different HemaMax™ doses with 18 animals per group) exposed to a lethal dose of radiation, which was fatal in 90% of monkeys in the non-treated group. HemaMax™ was administered as a single dose in a range from 50-500 ng/kg at 24 hours post-exposure. All HemaMax™ doses were efficacious ($p < 0.04$) yielding increased survival rates from 22-39% and mean increased survival times from 12-17 days above the untreated group. This survival benefit was accompanied by higher neutrophil, platelet, lymphocyte and reticulocyte counts during nadir and significantly lower incidences of neutropenia and thrombocytopenia. Treatment with HemaMax™ was also associated with a significant decrease in the incidence of severe infections compared to non-treated animals.

“These study results demonstrate an up to a 40% survival benefit in animals exposed to a highly lethal level of radiation and treated only with a single, low-dose of HemaMax™ compared with untreated animals. Moreover, this result was obtained in the complete absence of supportive care—no blood product, fluids or antibiotics. Given these results, it is possible that in a radiation disaster affecting 100,000 victims, up to 40,000 lives could potentially be saved with a single dose of HemaMax™,” said Lena Basile, J.D., Ph.D., President and Chief Executive Officer of Neumedicines.

“Additionally, severe thrombocytopenia, which typically requires a platelet transfusion, was reached by only 19% of HemaMax™-treated monkeys, compared to 59% of the untreated animals ($p=0.005$). Consistent with the decreased incidences of thrombocytopenia in HemaMax™-treated animals, a protective effect of HemaMax™ on hemorrhage was also demonstrated at all tested HemaMax™ dose levels. Importantly, the dose of HemaMax™ shown to be effective in the non-human primate study was within the therapeutic range shown to be safe and well-tolerated in two healthy human volunteer safety studies, indicating that HemaMax™ has an excellent risk/benefit profile.”

Dr. Basile continued, “These and other results from our HemaMax™ studies are directly applicable to our planned clinical program in chemotherapy-induced thrombocytopenia (CIT), a potentially life-threatening condition that occurs in certain cancer patients treated with aggressive chemotherapies. “The study results also showed multi-lineage recovery of neutrophils, lymphocytes and reticulocytes in addition to platelets in HemaMax™-treated animals. This is significant as HemaMax™ may have potential in tri-lineage supportive care,

which could expand indications in cancer treatment as well as in outcomes related to recovery of bone marrow stem and progenitor cells. There is no known competition in tri-lineage care.”

HemaMax™ is being developed by Neumedicines under the U.S. Food and Drug Administration’s Animal Rule to treat HSARS that could result from a nuclear or radiological weapon, or from a nuclear accident. This approval pathway requires demonstration of efficacy in representative animal models, as well as safety, pharmacokinetic and pharmacodynamic clinical studies in diverse healthy human populations.

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About HemaMax™ (rHuIL-12)

HemaMax™ (NMIL12-1) is based on rHuIL-12 (recombinant human interleukin–12). Scientists from Neumedicines discovered the previously unexplored hematological properties of IL-12 by demonstrating the potent survival effects of single, low-dose IL-12 on hematopoietic recovery following lethal radiation. HemaMax™ is a new therapeutic that is predicted to be administered to humans in very low, nanogram per kilogram doses to achieve potent radiomitigation effects. To date, Neumedicines has demonstrated that HemaMax™ can increase survival in mice and non-human primates who receive the therapeutic in single, low doses 24 hours after lethal radiation exposure.

About Neumedicines Inc.

Neumedicines Inc. is developing protein therapeutics that address unmet clinical and societal needs in the fields of oncology, hematology and immunology. The company’s lead product candidate is HemaMax™ (recombinant human interleukin-12, or rHuIL-12), which functions by targeting multiple pathways of hematopoiesis and innate immunity. HemaMax™ is being developed as a biodefense radiation medical countermeasure and for indications in oncology, initially for chemotherapy-induced thrombocytopenia. Neumedicines is committed to developing and maximizing the scientific, clinical and commercial potential of its product pipeline. For more information, please visit www.neumedicines.com or follow the Company on Twitter @Neumedicines.

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