NEWS RELEASE

# Athersys Announces Favorable Preclinical Results for MultiStem® Treatment in Defense Department Radiation Countermeasure Studyand Upcoming Webinar to Review Preclinical Research With MultiStem Across Multiple Indications

8/8/2022

CLEVELAND--(BUSINESS WIRE)-- Athersys, Inc. (Nasdaq: ATHX) announces today results of a radiation countermeasure study conducted by the Armed Forces Radiobiology Research Institute (AFRRI), a Department of Defense research laboratory under the leadership of the Uniformed Services University of the Health Sciences, that showed intravenous MultiStem® (invimestrocel) administration provided benefit in an animal model of acute radiation syndrome (ARS). The results demonstrate that the administration of MultiStem cells increased survival in treated animals compared to vehicle treatment (p=0.03), resulted in higher body weights in surviving animals and positive trends in recovery of the hematopoietic system.

“This program represents another positive step in a broader development strategy to investigate the use of MultiStem in addressing severe critical care injuries and diseases,” commented Mr. Dan Camardo, Chief Executive Officer of Athersys.

Athersys has conducted research relevant to ARS over several years. Its initial research focused on hematopoietic stem cell transplant (HSCT) and graft versus host disease (GvHD) areas, including a clinical study demonstrating that MultiStem treatment has the potential to improve survival and neutrophil and platelet recovery and reduce GvHD in HSCT patients. Athersys also completed pilot work on ARS undertaken in collaboration with the National Institute of Allergy and Infectious Diseases (NIAID) and the Armed Forces Radiobiology Research Institute (AFRRI).

In general, this research has demonstrated the potential for MultiStem treatment to improve survival and recovery following radiation injury. The recent countermeasure study builds on this foundation. In summary, 25 mice received two doses of MultiStem cells and 25 received two doses of vehicle, administered intravenously. Survival was evaluated at day 30 from irradiation, with 84% survival of MultiStem-treated rodents compared to 52% survival of vehicle-treated animals ($p=0.03$). Additionally, body weight was significantly different between the groups ($p<0.01$) – higher in the MultiStem group – reflecting reduced weight loss associated with the acute injury and/or accelerated recovery. Further, there were trends towards increased megakaryocytes and bone marrow colony forming units in surviving animals at day 60.

“We are very enthusiastic about the results from this radiation countermeasure study conducted by AFRRI,” commented Dr. Robert W. Mays, Executive Vice President and Head of Regenerative Medicine & Neuroscience Programs of Athersys. “Based on this study and prior research, we believe that MultiStem therapy has the potential to provide benefit to victims of ARS as well as other immune and neurological disorders. We look forward to exploring opportunities to move this important program forward.”

This study is one of several preclinical programs that will be the focus of an upcoming webinar hosted by the Regenerative Medicine team at Athersys titled, Rebalancing the Immune System: The MultiStem® Cellular Platform for Treating Disease and Injury. Preclinical research using MultiStemcells has shown Multipotent Adult Progenitor Cells, or MAPC®, may be beneficial in the treatment of a variety of critical care and difficult to treat inflammatory diseases. On Monday, August 29, 2022, Dr. Robert W. Mays and Dr. Sarah Busch, Vice President, Regenerative Medicine & Head of Nonclinical Development, will be hosting a webinar to provide a comprehensive update on the Company’s preclinical programs.

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| Date | August 29, 2022 |
| Time | 4:00 p.m. (Eastern Time) |
| Live webcast registration | **Webcast link** |

## About Acute Radiation Syndrome

Acute Radiation Syndrome, or ARS, is an acute condition resulting from irradiation of the body by a high dose of

penetrating radiation over a short period of time. ARS may be associated with destructive and irreparable changes in the bone marrow and gastrointestinal (GI) tract, resulting in infection, hemorrhage and dehydration. The condition may also lead to edema, vasculitis and failure of the cardiovascular and central nervous systems. Examples of ARS victims include survivors of the Hiroshima and Nagasaki atomic bombs and the first responders to the 1986 Chernobyl nuclear power plant event. The Syndrome develops in stages as a function of the dose received. At lower doses a period of bone marrow damage lasting weeks which ultimately can be lethal without intervention is expected. At higher doses of radiation, the GI tract would be impacted immediately to shortly after exposure, followed by a period of bone marrow damage lasting weeks, then a period of severe symptoms and illness including further GI involvement, infection and hemorrhage, and then recovery or death depending on the exposure levels and bone marrow recovery.

## About Athersys

Athersys is a biotechnology company engaged in the discovery and development of therapeutic product candidates designed to extend and enhance the quality of human life. The Company is developing its MultiStem® cell therapy product, a patented, adult-derived "off-the-shelf" stem cell product, initially for disease indications in the neurological, inflammatory and immune, and other critical care indications and has several ongoing clinical trials evaluating this potential regenerative medicine product. Athersys has forged strategic partnerships and a broad network of collaborations to further advance MultiStem cell therapy toward commercialization. Investors and others should note that we may post information about the Company on our website at **www.athersys.com** and/or on our accounts on Twitter, Facebook, LinkedIn or other social media platforms. It is possible that the postings could include information deemed to be material information. Therefore, we encourage investors, the media and others interested in the Company to review the information we post on our website at **www.athersys.com** and on our social media accounts. Follow Athersys on Twitter at **www.twitter.com/athersys**. Information that we may post about the Company on our website and/or on our accounts on Twitter, Facebook, LinkedIn or other social media platforms may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. You should not place undue reliance on forward-looking statements contained on our website and/or on our accounts on Twitter, Facebook, LinkedIn or other social media platforms, and we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise.

## About MultiStem ®

MultiStem® (invimestrocel) cell therapy is a patented regenerative medicine product in clinical development that has shown the ability to promote tissue repair and healing in a variety of ways, such as through the production of therapeutic factors in response to signals of inflammation and tissue damage. MultiStem therapy's potential for

multidimensional therapeutic impact distinguishes it from traditional biopharmaceutical therapies focused on a single mechanism of benefit. The therapy represents a unique "off-the-shelf" stem cell product that can be manufactured in a scalable manner, may be stored for years in frozen form, and is administered without tissue matching or the need for immune suppression. Based upon its efficacy profile, its novel mechanisms of action, and a favorable and consistent tolerability demonstrated in clinical studies, we believe that MultiStem therapy could provide a meaningful benefit to patients, including those suffering from serious diseases and conditions with unmet medical need.

## Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. These forward-looking statements relate to, among other things, statements regarding the potential benefits of our MultiStem product candidate; anticipated results of clinical trials involving our MultiStem product candidate; the expected timetable for development of our product candidates, our growth strategy, and our future financial performance, including our operations, economic performance, financial condition, prospects, and other future events. We have attempted to identify forward-looking statements by using such words as “anticipates,” “believes,” “can,” “continue,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “should,” “suggest,” “will,” or other similar expressions. These forward-looking statements are only predictions and are largely based on our current expectations. A number of known and unknown risks, uncertainties, and other factors could affect the accuracy of these statements. The following risks and uncertainties may cause our actual results, levels of activity, performance, or achievements to differ materially from any future results, levels of activity, performance, or achievements expressed or implied by these forward-looking statements: the possibility of unfavorable results from ongoing and additional clinical trials involving MultiStem; the risk that positive results in a clinical trial may not be replicated in subsequent or confirmatory trials or success in an early stage clinical trial may not be predictive of results in later stage or large scale clinical trials; our ability to raise capital to fund our operations in the near term, including, but not limited to, our ability to raise financing and to continue as a going concern; our ability to enter into a partnership for the co-development and co-commercialization of MultiStem; our ability to successfully implement our transformation plan, including our ability to reduce expenses; and the risks mentioned elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2021 under Item 1A, “Risk Factors” and our other filings with the SEC. You should not place undue reliance on forward-looking statements, and we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise.

## Disclaimers

The opinions and assertions expressed herein are those of the author(s) and do not reflect the official policy or

position of the Uniformed Services University of the Health Sciences or the Department of Defense. For the contributors from AFRRI, neither they nor their family members have a financial interest in any commercial product, service, or organization providing financial support for this research.


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