

Arsenal Medical Secures Funding from U.S. Army to Advance ResQFoam™ Trauma Product through Regulatory Approval

Watertown, Mass., December 9, 2015 – Arsenal Medical today announced that it has been granted a contract of more than \$14 million to complete clinical and manufacturing development and the U.S. regulatory submission process to support product approval for its lead product candidate, ResQFoamTM.

ResQFoam, a biocompatible, self-expanding biomaterial, is designed to be administered at the point of injury to stop massive blood loss in patients with severe internal bleeding within the abdomen due to life-threatening trauma such as automobile crashes, severe falls, explosions, gunshot wounds or stab wounds. The material fills and conforms to the abdominal cavity to control bleeding before being removed at the time of surgery. ResQFoam may provide a life-saving bridge to surgical care for those who may otherwise die before reaching a hospital.

The latest funding comes from U.S. Army Medical Research and Materiel Command. Together with previous funding from Defense Advanced Research Projects Agency (DARPA) and the Army Research Office, the Department of Defense has provided more than \$35 million in total support to date.

"ResQFoam is designed to be a life-saving intervention that will stabilize a traumatic injury victim with severe internal bleeding, buying valuable time to transport that victim to a qualified trauma center," said David R. King, M.D., F.A.C.S., an attending trauma surgeon in the Division of Trauma, Emergency Surgery and Surgical Critical Care at Massachusetts General Hospital. "The majority of people with massive abdominal bleeding die before they reach the hospital. Many of these deaths could be prevented if we were able to temporarily stabilize a patient long enough to reach a trauma center. ResQFoam could enable first responders to slow internal bleeding in even the most severely injured patients, and substantially increase their chance of survival."

Arsenal, in collaboration with Dr. King, has demonstrated preclinical proof of concept for ResQFoam. In a multi-center cadaver study, the foam was shown to effectively fill the abdominal cavity and conform to human tissue when injected through the navel.

"The strong governmental support we have received for this program has allowed Arsenal to complete a comprehensive and carefully executed development program that was ideally tailored to create a novel, life-sustaining product of this kind," said Upma Sharma, Ph.D., senior director of research and development at Arsenal. "We look forward to working with the U.S. Food and Drug Administration (FDA) to ensure the timely review and availability of this critically important product for both civilian and military trauma care."

Beyond abdominal bleeding, Arsenal Medical is exploring additional applications for this innovative self-expanding foam system. A collaboration with Dr. King and the Massachusetts General Hospital will explore the ability of foam to treat severe pelvic bleeding, which currently results in extremely high mortality. Arsenal, through subsidiary Arsenal AAA, is also developing

a proprietary foam for the treatment of abdominal aortic aneurysms in a program funded by a strategic partner.

About Arsenal Medical

Arsenal Medical, a privately held company in Watertown, Massachusetts, is developing advanced biomaterials to improve medical care. The company is advancing multiple therapeutic programs based on its proprietary therapeutic foam technology. Arsenal Medical's investors include Polaris Partners, North Bridge Venture Partners and Intersouth Partners.