ADS Biotechnology Corp. was created to take an invention developed by a group of UT researchers from the laboratory to the market.

Michael Glembourt, president and CEO of ADS Biotechnology, signed a licensing agreement with UT officials to develop and market the company's pharmaceutical product. Glembourt has 20 years of business and product development experience in the pharmaceutical industry.

The invention is a polyethylene glycol (PEG)-modified albumin, a new liquid compound designed to prevent blood vessels from leaking fluid into surrounding tissue during acute hemorrhagic trauma and major burn cases. PEG works with the albumin, a protein found in blood, to expand the blood's volume so it does not escape through holes in the vessels.

Three UT faculty members credited with the product's creation are Dr. Joseph Shapiro, professor and chair of the Department of Medicine and associate dean for business development; Dr. Ragheb Assaly, director of the UTMC Medical Intensive Care Unit; and Dr. J. David Dignam, professor of biochemistry and cancer biology.

“We're very excited to complete this licensing agreement with the university,” Glembourt said. “This discovery has great potential in the marketplace and more importantly may give physicians a much-needed tool to help desperately ill trauma, burn and sepsis patients.”

The development of the product will include ongoing work in Dignam's lab at UT in preparation for a clinical trial with humans. Such clinical tests would begin about two years after funding is secured, Glembourt said.

“While the solution may seem simple, it will take significant time and resources to maneuver through the process of earning approval of the U.S. Food and Drug Administration. ADS Biotechnology will help us make that a reality,” Shapiro said.

“The creation of this corporation represents a great deal of work, collaboration and passion in an effort to help prevent millions of deaths that occur around the globe as a result of those types of leaks,” Shapiro said.

Glembourt said the company would set up shop in Northwest Ohio and is seeking start-up funding through venture capital funds or angel investors or both. It will require $3 million to $5 million for work leading up to and including the clinical trials.

The company submitted an application and business plan to the Rocket Ventures Fund through the Regional Growth Partnership (RGP) in Toledo. Glembourt said he met with Greg Knudson and his staff at the RGP when he was in town to sign the licensing agreement.
ADS Biotechnology is incorporated in Ohio, but will not have a physical location for a year or more while it operates as a virtual company, said Glembourtt, who is based in the San Francisco Bay Area.

Shapiro contacted a venture capital firm in the Bay Area where Glembourtt served as a consultant. Glembourtt worked with the inventors and the intellectual property and technology transfer office at UT on the licensing agreement.

ADS Biotechnology is the 11th spin-off company developed through that office. The most notable firm is Xunlight, the Toledo-based company formed to produce thin-film solar materials for alternative energy uses.

“UT is proactively working with faculty inventors to develop spin-off businesses that could have a positive impact on the diversification of the regional economy,” said Daniel Kory, director of the tech transfer office.

Kory said he meets regularly with the RGP to keep it informed to assist in the rapid development of businesses based on research and technology developed at UT.

“We are tremendously excited by the potential for this invention,” said UT President Dr. Lloyd Jacobs. “Efforts like this can help to transform the economic climate in Toledo, while improving the human condition through medical innovation.”