CELLO Q&A

About CELLO

BOTTOM LINE UP FRONT:

Q1: What is CELLO?

A1: CELLO is a biotechnology company using stem cell technology to revolutionize medical safety testing and create new markets with its work on horseshoe crabs. CELLO is able to produce amebocytes that are biologically identical to those found in horseshoe crab blood without bleeding thousands of crabs. These amebocytes are used to make Limulus amebocyte lysate (LAL).

Q2a: What is LAL and why is it important?

A2a: The global market for injectable medicines and implantable medical devices, all depend on LAL. LAL is the gold standard for detecting bacterial endotoxins from living or dead organisms before they enter the human body and cause harm or even death. Until now, the only source of LAL has been from the blood of horseshoe crabs. Amebocyte cells circulate in the crab's blood are uniquely capable of detecting endotoxins and are the only known source of this kind of identification to science.

Q2b: **Are there alternatives to LAL to detect endotoxins?**
A2b: Other available tests, like a 'Culture Test' are not as reliable, may take days to perform and require that the bacteria are alive to provide a meaningful result.

Q3: Why should you invest in CELLO?
A3: The global supply of LAL is currently limited to what can be bled from about 600,000 horseshoe crabs annually. The scarcity of horseshoe crabs globally and environmental impact of the current process make this method extremely costly. CELLO enables the production of an unlimited supply of uniform, high quality LAL without impacting the environment. This allows CELLO to supply existing global LAL demand, open new markets and applications for their lifesaving potential, and prevent the overharvesting of the horseshoe crab to extinction.

GIVE ME THE DETAILS:

Q4: What is CELLO's technology?
A4: CELLO applies its unique Mygote™ Process to produce amebocytes. The Process uses a sample of somatic cells from the horseshoe crab and then safely, with no application of foreign organisms, gene sequences or chemicals, reverts the cells to their most capable state—a totipotent Mygote™. The Mygote is then cultured to differentiate into an amebocyte - the specialized cell that enables the production of LAL and its lifesaving benefits. The cells are expanded until enough amebocytes can be harvested and provided for industry use. CELLO's amebocytes are produced quickly, reliably, and without quantity limitations.

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Many other industries including healthcare, food safety, cosmetics, environmental, public water systems would significantly benefit from a consistent, reliable supply of amebocyte-derived LAL products, and CELLO can meet this need.

Q5: What is CELLO's Mission?
A5: CELLO's mission is to produce horseshoe crab amebocytes and other cell-based products to support global LAL testing and to reduce pressure on horseshoe crab populations around the world.

Q6: What is CELLO's Vision?
A6: CELLO will deconstrain the global supply of amebocytes and open new markets for industrial, healthcare, pharmaceutical, research, medical device, and at-home use.

CELLO will be the world leader deconstraining the global supply of LAL and will positively impact global horseshoe crab populations

Q7: How are OTHER COMPANIES obtaining amebocytes from horseshoe crabs?
A7: The current "industry standard" process of obtaining amebocytes is archaic. Horseshoe crabs are harvested, bled, and then returned to their habitat with the hope they will survive. There is no reliable mechanism for tracking the health of the crabs, but the status of the crab population is monitored by various natural resource associations and conservationists who project mortality rates of up to 30%. In addition to mortality, the bleeding of horseshoe crabs potentially diminishes their ability to reproduce, thus affecting their long-term survival.

Horseshoe crabs being bled at Charles River Laboratory in Charleston, South Carolina (Timothy Fadek / Corbis / Getty)

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Q8: How does CELLO obtain amebocytes?
A8: CELLO's uses a breakthrough technology, the Mygote™ process, to culture tissue **from a single crab** and generate bioidentical amebocytes in volumes well beyond the supply produced from removing and bleeding hundreds of thousands of crabs from their native environment each year.

Amebocytes produced by CELLO are biologically identical to traditionally derived amebocytes from the horseshoe crab. Due to a strictly controlled laboratory process, CELLO amebocytes are reliably consistent and of extremely high quality.

CONTACT FOR QUESTIONS:

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