

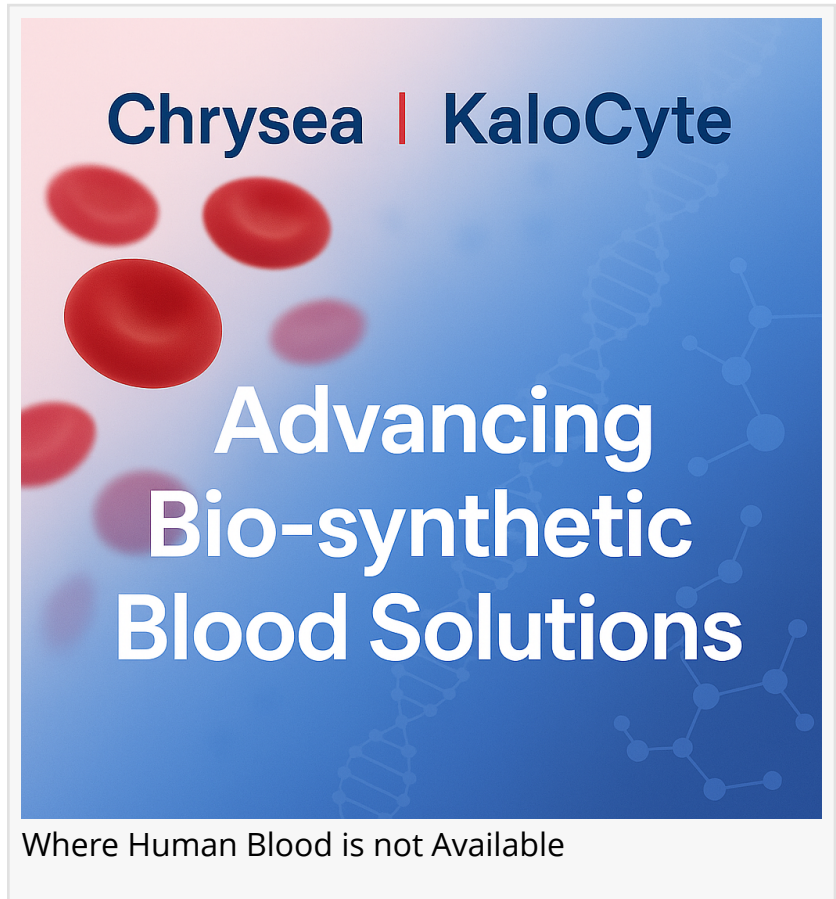
Biosynthetic Blood Breakthrough: Chrysea and KaloCyte Enter into Exclusive Alliance to Transform Medical Emergency Care

Where human Blood is not Available: combining Chrysea's synthetic biology expertise with KaloCyte's innovative red blood cell technology.

CANTANHEDE, PORTUGAL, BALTIMORE, USA, DUBLIN, IRELAND, September 30, 2025 /EINPresswire.com/ -- Highlights:

- Chrysea and KaloCyte have entered into an exclusive license agreement, forging a global partnership that combines Chrysea's [synthetic biology](#) expertise in production of biosynthetic hemoglobin with KaloCyte's innovative artificial red blood cell technology.
- The collaboration will accelerate the development and commercialization of an advanced version of ErythroMer™ a dried, nanoparticle-encapsulated [hemoglobin-based blood substitute](#) for [use in emergencies when natural blood is unavailable](#).
- By uniting their capabilities, the two companies aim to expand hemoglobin supply to revolutionize trauma care and advance a new standard in life- saving solutions for both civilian and military medicine.

Chrysea, a leading synthetic biology company focused on advancing breakthrough bioprocesses for health and longevity, today announced that it has entered into an exclusive licensing agreement with KaloCyte, Inc., a U.S. based biotechnology company developing innovative blood substitute solutions.



Under this landmark deal, Chrysea grants KaloCyte exclusive rights to its proprietary human hemoglobin production technology, enabling KaloCyte to expand the development and commercialization of its synthetic red blood cell, ErythroMer™ - a bioinspired, nanoparticle-encapsulated dried red blood cell substitute designed for life-threatening blood loss, where natural blood is unavailable. Both companies retain rights to further innovation and mutually support ongoing research and development

This collaboration combines Chrysea's expertise in innovative strain engineering and precision fermentation and bioprocess engineering with KaloCyte's pioneering work in trauma care and transfusion medicine.

"We are very pleased to support KaloCyte's mission to address the urgent need for safe, effective, and readily available blood substitutes," said Pedro de Noronha Pissarra, CEO of Chrysea. "This licensing deal underscores Chrysea's strategy to partner with leading innovators worldwide, where our technology can accelerate the translation of science into impactful life-saving solutions."

"KaloCyte is excited to integrate Chrysea's hemoglobin process technology into our development pipeline to expand our supply and reduce reliance on donor blood," said Elaine Haynes, President and CEO of KaloCyte. "This agreement strengthens our position in advancing ErythroMer™ at scale as a next-generation oxygen carrier blood substitute with the potential to transform emergency transfusion medicine."

The agreement underscores Chrysea's commitment to expanding its precision fermentation platform beyond its core domains of nutrition, blue economy and healthy aging, applying its proven synthetic biology technologies, capabilities and expertise to broader health applications through strategic partnerships.

About Chrysea

Chrysea is a biotechnology company revolutionizing the healthcare and wellness industry with precision healthy-lifespan interventions. Leveraging tools of Synthetic Biology and Data Analytics we have unlocked the potential to manufacture products of unparalleled purity at scale, introducing solutions previously inaccessible to industry. Our approach integrates these advanced tools seamlessly into our operations, enabling us to establish a vertically integrated, sustainable business model that spans from laboratory research directly to the consumer. Chryseas products are backed by rigorous science-backed clinical research, ensuring pure, safe, functional ingredients and brands that consumers can trust. Join the movement towards a healthier future with Chrysea.

For more information visit www.chrysealabs.com or email info@chrysealabs.com

About KaloCyte

KaloCyte, Inc., based in Baltimore, Maryland, USA, is a pre-clinical biotech therapeutic startup company developing ErythroMer, a bioengineered artificial red blood cell (RBC) substitute that can be freeze-dried for long-term storage and is envisioned for pre-hospital treatment of traumatic hemorrhage when stored blood is unavailable or undesirable. ErythroMer is a universal option for all blood types and has potential for accelerated regulatory pathways to address a critical unmet need serving a \$7B U.S. market. To date, KaloCyte has demonstrated proof of concept, safety, and efficacy in animal models. Funded by \$19M in grants from DARPA, NIH, DoD and others, and over \$5M investor funding, we are currently focused on de-risking and scale up, armed with confirmation of our IND approach following a successful pre-IND meeting with FDA.

For more information visit <https://kalocyte.com/> or email info@kalocyte.com

Dr Pedro de Noronha Pissarra

Chrysea Labs

pnf@chrysealabs.com

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