

PL BioScience Raises the Bar in Cell Culture Technology with First Artificial Human Platelet Lysate Worldwide

- Worldwide first artificial Human Platelet Lysate (HPL) solution a key ingredient for the research & production of cell-based pharmaceuticals developed based on artificial platelet technology from Korean partner DewCell Biotherapeutics
- Donor-derived, natural HPL already outperforms animal-derived cell culture supplements in safety and sustainability; artificial HPL unlocks a fully lab-made, scalable source
- Artificial HPL produced with PL BioScience's proprietary method and additives enhances cell performance compared to natural HPL while further increasing safety and consistency
- Presentation today at 6:15 pm CDT at the International Society for Cell & Gene Therapy (ISCT) conference in New Orleans

Aachen, Germany, 8 May 2025 – PL BioScience GmbH, a German life science company specializing in the production and development of Human Platelet Lysate (HPL) for cell expansion, today announced the first-ever production of an artificial HPL cell culture solution. In partnership with the Korean biotech DewCell Biotherapeutics (DewCell), the first company to generate artificial platelets from stem cells in a reactor, PL BioScience has developed a proprietary method to transform these lab-grown platelets into a powerful cell culture supplement. Produced in Germany with raw material from DewCell, this new technology offers a scalable, safe, and animal-free alternative to Fetal Calf/Bovine Serum (FCS/FBS) and donor-derived, natural HPL for regenerative medicine, cell therapy, and biopharma applications. A patent for the process has been filed.

"Cell culture innovation is crucial for advancing modern medicine, drug discovery, and understanding complex biological systems," said **Dr. Hatim Hemeda, Chief Executive Officer of PL BioScience**. "We are proud to contribute to the field with the very first, scalable artificial HPL solution that, in the mid-term, can be produced in a nearly unlimited supply to meet the growing biopharmaceutical industry needs."

"We are confident that the combination of DewCell's innovative technology and our cell culture expertise will usher in a new era in the field of regenerative medicine and cell therapy manufacturing," he added.

Dr. Hemeda will present the innovative new technology in an oral presentation at the International Society for Cell & Gene Therapy (ISCT) conference in New Orleans: Innovating A Xeno-Free Revolution for Cell Therapies – Human Platelet Lysate May 8, 2025, 6:15 PM CT, Global Showcase Theater B

HPL is a safe, high-performance cell culture supplement that can be used as an alternative to FBS/FCS. HPL is manufactured from donated human blood platelets that are outdated and no longer safe for transfusion, making them a sustainable but limited source to produce HPL. With its proprietary technology for the synthetic production of HPL in conjunction with DewCell's artificial platelet technology, PL BioScience can overcome this limitation and provides a fully scalable, high-performing cell culture supplement for biopharmaceutical applications.



About Human Platelet Lysate:

Human Platelet Lysate (HPL) is an innovative, human-derived cell culture supplement used to support the growth and expansion of cells in research and clinical development, particularly in cell therapy, stem cell, and regenerative medicine applications. Natural HPL is produced from donated human blood platelets that are no longer suitable for transfusion and would otherwise be discarded – making it a sustainable yet limited alternative to animal-derived cell culture supplements. A next-generation, fully artificial alternative made from lab-grown platelets has been developed by PL BioScience to secure the future supply.

In cell culture, HPL provides essential growth factors and nutrients that promote healthy, robust cell proliferation. Compared to conventional products such as Fetal Bovine Serum (FBS), which is harvested from unborn calves, HPL delivers more consistent results in cell growth, is free from animal-derived pathogens, and aligns with the increasing demand for animal-free and ethically responsible laboratory practices.

ELAREM[™], PL BioScience's line of xeno-free HPL products, can be used from early-stage research to the production of cell-based therapies under Good Manufacturing Practice (GMP) conditions for the treatment of patients.

About PL BioScience:

PL BioScience GmbH, a life science company located in Aachen, Germany, specializes in the production and development of Human Platelet Lysate (HPL). The Company has pioneered proprietary technology to produce fully artificial HPL allowing for a fully lab-made, scalable supply of HPL in the future.

PL BioScience currently offers a comprehensive portfolio of donor-derived, natural HPL products tailored for a range of applications. From academic and preclinical research to cell therapy and biopharmaceutical manufacturing, ELAREM[™] ensures seamless translations of regenerative medicine breakthroughs – from the lab to patients in need. With ELAREM[™] Ultimate-FD PLUS, PL BioScience produces the only globally patented gamma-irradiated HPL product.

For more information on PL BioScience and the ELAREM[™] product offerings, visit: <u>https://www.pl-bioscience.com/</u>

Contact:

Dr. Hatim Hemeda, CEO PL BioScience GmbH +49(0)24195719-100 info@pl-bioscience.com

Media contact:

MC Services AG Raimund Gabriel, Dr. Regina Lutz +49 (0)89 210 228 0 **US:** Catherine Featherston +1-203-444-4393 E-Mail: <u>plbioscience@mc-services.eu</u>