MOVING TOWARDS XENO-FREE CELL CULTURE MEDIA: HUMAN PLATELET LYSATE OUTPERFORMS FBS

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The use of fetal bovine serum (FBS) as a cell culture medium is widely spread since it provides a broad spectrum of molecules known to support cell attachment and growth. However, the cruelty of FBS extraction from living bovine foetuses (prohibited in the EU), the lack of traceability of FBS manufacturing and the loose legal regulation of animal welfare and the use of animal-derived products in science have raised strong concerns. Human Platelet Lysate (HPL) is a promising solution for FBS-related concerns. HPL is produced from expired human thrombocyte concentrates, which are clinically tested transfusion products manufactured by certified blood donation centres. Repeated freezing and thawing of thrombocytes result in a highly enriched cocktail of essential growth factors and chemokines.

We as PL BioScience have developed a new HPL-based platform called ELAREM™, which consists of cell culture media that promote growth of many different animal- and human-derived cell types. Our products guarantee high reproducibility due to large batch pools consisting of several hundred platelet donations. Furthermore, our ELAREM™ technology bridges the gaps between academic research, pre-clinical research and cell therapy, as we provide HPL in three different product lines: ELAREM™ Prime, ELAREM™ Perform and ELAREM™ Ultimate.