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A new generation of technology platform for biosimilars production: Available, affordable, sustainable

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The biopharmaceutical industry faces huge production limitations in terms of volume and cost. The strong growth rate of biosimilars, the need to serve the Global Southern markets (LMIC countries) and the occurrence of pandemics, require production of large volumes of biotherapeutics, at ever lower costs than currently available <u>biosimilars</u> and in compliance with sustainable development objectives. The investments needed to create new bioproduction units using mammalian cell cultures (CHO) cannot meet this global health challenge.

As the ultimate objective is to give access to essential medicines to larger populations of patients, the production paradigm has to drastically evolve, using what nature has given us as the best bioreactor, namely leveraging the natural secretion of large amount of proteins in the milk of dairy animals.

Bio-Sourcing changes the Bioproduction design by developing a disruptive technology platform (BioMilk[®]) using dedicated and specialized transgenic goats and thanks to the company expertise in several breakthrough technologies which includes genome editing (CRISPR) and Nuclear Transfer (SCNT).

The Bio-Sourcing innovative approach leads to a drastic reduction in capital requirements and production costs, especially for large volumes (over several hundred Kg), as well as an improvement in the quality/efficiency of <u>biopharmaceuticals</u> through better glycosylation.

The technological approach developed by Bio-Sourcing has already given rise to biotherapeutics approved by regulatory bodies (FDA, EMA).

An additional benefit of this technology is a strong contribution to sustainable development, drastically reducing the carbon footprint.

Bio-Sourcing is already currently in the industrialization phase and has the potential to offer producers of biosimilars the possibility, in a context of cost pressure, to produce essential <u>bioproteins</u> for global unmet medical needs.

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Biography

Bertrand Merot is Founder & CEO of Bio-Sourcing. He has done his PhD in Genetics and MBA; he worked previously for LFB <u>Biotechnologies</u>. Oncodesign, Meristem Therapeutics, Limagrain where he held several managerial positions (CEO, CSO, Vice President). He has also been Board Member of France Biotech.

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