Media Advisory

Lonza Collaborates with Cristal Therapeutics and McSAF to Expand Bioconjugates Offering

- Cristal Therapeutic CliCr® technology and McSAF Inside® technology will be integrated into the Lonza Bioconjugation Toolbox
- Collaborations further the development of an end-to-end offering to support Lonza's bioconjugates customers in overcoming a range of development and manufacturing challenges

Basel, Switzerland, 17 January 2023 – Lonza, a global manufacturing partner to the pharma, biotech and nutrition industries, today announced two new collaborations with McSAF and Cristal Therapeutics to expand its bioconjugates offering.

The collaborations will enable the integration of two novel conjugation platforms, McSAF Inside® and CliCr®, into the Lonza Bioconjugation Toolbox. The Lonza Bioconjugation Toolbox comprises a range of tailored solutions for the technology selection, development and manufacturing of bioconjugates to advance the development of novel bioconjugate-based therapies.

Cristal Therapeutic CliCr® technology is a novel class of versatile and highly reactive bioorthogonal reagents that supports the straightforward and highly-efficient generation of a large range of bioconjugates. The CliCr® technology relies on metal-free click chemistry and provides improved yields and broad applicability compatible with biochemically-relevant reaction conditions.

McSAF Inside® Technology allows for the fast and efficient generation of homogeneous and stable antibody-drug conjugates (ADCs) from native antibodies. The technology relies on a set of unique reagents for the site-specific conjugation of a linker-payload to previously reduced interchain cysteines of a native antibody. Compared to conventional methods, McSAF Inside® produces ADCs of high purity and stability and can support novel bioconjugates, based on antibody fragments or other therapeutic proteins that contain an accessible disulfide bond.

Through the new agreements, Cristal Therapeutics and McSAF will gain access to Lonza's integrated bioconjugates offering and will be able to leverage Lonza's expertise in developing and manufacturing bioconjugates. At the same time, the collaborations build additional capabilities into Lonza's service portfolio, furthering the development of an end-to-end bioconjugates offering that can support customers in overcoming a range of development and manufacturing challenges.

Iwan Bertholjotti, Senior Director Commercial Development, Bioconjugates, Lonza, commented: "CliCr® and McSAF Inside® are great additions to the Lonza Bioconjugation Toolbox, allowing us to extend our portfolio of technologies for drug developers involved in developing novel bioconjugates/ADCs. These collaborations are

creating a unique industry network to facilitate the development of novel bioconjugates with potential to treat life-threatening diseases."

Marie-Claude Viaud-Massuard, Co-Founder and Chief Scientific Officer, McSAF said: "The robustness, scalability and broad compatibility of McSAF's technology enabled a successful transfer to the Lonza team. Choosing McSAF's technology provides a high degree of flexibility, allowing the combination of multiple proteins and linker-payloads in order to optimize and select the best candidate. In addition, customers will mitigate the risk associated with CMC stages through Lonza's expertise and their understanding of McSAF know-how."

Werner Cautreels, CEO, Cristal Therapeutics added: "CliCr® is a powerful metal-free click chemistry technology for the life science industry which offers shorter reaction times and greater yields and hence attractive CoG than comparative reagents on the market. Our collaboration with Lonza will help to extend the impact of this innovative technology for use in straightforward bioconjugation in a plethora of important applications in therapeutic or diagnostic products. "

Additional Information

To learn more about Lonza's bioconjugation offering, visit: https://www.lonza.com/biologics/bioconjugates

About Cristal Therapeutic CliCr® Technology

The CliCr® technology comprises a novel class of versatile, highly reactive and hydrophilic bioorthogonal reagents for the highly versatile generation of a large diversity of bioconjugates. The CliCr® copper-free reagents meet all demands of the life science industry in terms of bio-orthogonal reactivity, hydrophilicity and biocompatibility. The versatility of the platform has been illustrated by fast and efficient bioconjugation of CliCr® derivatives with small molecules, including fluorescent dyes, peptides, nucleotides, proteins and nanoparticles. Accordingly, CliCr® is a broadly applicable technology for a wide variety of diagnostic or therapeutic applications within the life science products area.
https://cristaltherapeutics.com/technology/clicr-copper-free-click-chemistry-reagent/

About McSAF Inside® Technology

McSAF has developed a suite of versatile reagents to build homogeneous and stable ADCs from native antibodies in a process that is fast, simple and efficient. McSAF's technology is based on a trifunctionalized di(bromomethyl)pyridine scaffold that allows the conjugation of a linker-payload to previously reduced interchain cysteines of a native antibody, resulting in disulfide rebridging. The resulting ADCs display high purity and stability compared to ADCs based on conventional cysteine-maleimide chemistry.
Bioconjugation technology platforms | McSAF

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