Celyad Oncology announces the publication of the preclinical and clinical data of CYAD-211 providing proof-of-concept of its miRNA-based shRNA platform

Mont-Saint-Guibert, Belgium; February 18, 2025, 7:00 am CET - Celyad Oncology (Euronext: CYAD) (the "Company"), today announces the publication of the preclinical data of the non-gene edited allogeneic CYAD-211 and clinical data from the Phase I IMMUNICY-1 clinical study which evaluated CYAD-211 in relapsed or refractory (r/r) multiple myeloma (MM) patients. The findings were published in the *International Journal of Molecular Science (IJMS)*.

CYAD-211 is the Company's first allogeneic chimeric antigen receptor (CAR) T-cell candidate, engineered to co-express a B-cell maturation antigen (BCMA)-specific CAR and a microRNA-based single shRNA which interferes with the expression of the CD3ζ component of the T-cell receptor (TCR) complex, evaluated clinically.

The IJMS publication includes preclinical data which showcases the knockdown of CD3ζ efficiently removed the TCR complex from the cell surface, and inhibited TCR mediated activation *in vitro* and *in vivo*. The publication also presents clinical data of the dose-escalation segment of the IMMUNICY-1 phase-I clinical trial (NCT04613557) in patients with r/r MM. Importantly, data highlighted an overall good safety profile and some clinical responses, with no signs of graft-versus-host disease (GvHD), demonstrating the effectiveness and safeness of the technology to abrogate the risk of GvHD.

Overall, these data provides the proof-of-concept of the safe administration of CAR T-cells engineered using a miRNA-based shRNA technology. CYAD-211 is the first allogeneic CAR T-cell candidate using a non-gene edited approach to achieve allogenicity. This differentiated strategy provides key advantages by being easily implemented, safe, efficient, tunable, and with the possibility to modulate multiple target genes simultaneously.

The publication will also be archived under "Scientific Publications" in the Science section of the Company's website located at www.celyad.com.

About Celyad Oncology

Celyad Oncology is a cutting-edge biotechnology company dedicated to pioneering the discovery and advancement of revolutionary technologies for chimeric antigen receptor (CAR) T-cells. Its primary objective is to unlock the potential of its proprietary technology platforms and intellectual property, enabling to be at the forefront of developing next-generation CAR T-cell therapies. By fully leveraging its innovative technology platforms, Celyad Oncology aims to maximize the transformative impact of its candidate CAR T-cell therapies and redefine the future of CAR T-cell treatments. Celyad Oncology is based in Mont-Saint-Guibert, Belgium. For more information, please visit www.celyad.com.

Celyad Oncology Forward-Looking Statement

This release may contain forward-looking statements, including, without limitation, statements regarding beliefs about and expectations for the Company's updated strategic business model, including associated potential benefits, transactions and partnerships, statements regarding the potential value of the Company's IP, and statements regarding the continuation of the Company's existence. The words "will," "potential," "continue," "target," "project," "should" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this release are based on management's current expectations and beliefs and are subject to a number of known and unknown risks, uncertainties and important factors which might cause actual events, results, financial condition, performance or achievements of Celyad Oncology to differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, without limitation, risks related to the material uncertainty about the Company's ability to continue as a going concern; the Company's ability to realize the expected benefits of its updated strategic business model; the Company's ability to develop its IP assets and enter into partnerships with outside parties; the Company's ability to enforce its patents and other IP rights; the possibility that the Company may infringe on the patents or IP rights of others and be required to defend against patent or other IP rights suits; the possibility that the Company may not successfully defend itself against claims of patent infringement or other IP rights suits, which could result in substantial claims for damages against the Company; the possibility that the Company may become involved in lawsuits to protect or enforce its patents, which could be expensive, time-consuming, and unsuccessful; the Company's ability to protect its IP rights throughout the world; the potential for patents held by the Company to be found invalid or unenforceable; and other risks identified in the latest Annual Report and subsequent filings and reports by Celyad Oncology. These forward-looking statements speak only as of the date of publication of this document and Celyad Oncology's actual results may differ materially from those expressed or implied by these forward-looking statements. Celyad Oncology expressly disclaims any obligation to update any such forward-looking statements in this document to reflect any change in its expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based, unless required by law or regulation.

Investor & Media Contact:

David Georges, VP Finance and Administration
investors@celyad.com

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