Celyad Oncology Announces First Patient Dosed in KEYNOTE-B79 Phase 1b Trial

- *KEYNOTE-B79 Phase 1b trial will evaluate CYAD-101 and KEYTRUDA® (pembrolizumab) in patients with microsatellite stable (MSS) metastatic colorectal cancer (mCRC)*
- *ASCO-GI conference abstract accepted that highlights KEYNOTE-B79 clinical trial design*

MONT-SAINT-GUIBERT, Belgium, December 15, 2021 – Celyad Oncology SA (Euronext & Nasdaq: CYAD) ("the Company"), a clinical-stage biotechnology company focused on the discovery and development of chimeric antigen receptor T cell (CAR T) therapies for cancer, today announced the first patient was dosed in the KEYNOTE-B79 Phase 1b trial (NCT04991948).

The KEYNOTE-B79 trial is part of a collaboration with MSD, a tradename of Merck & Co., Inc., Kenilworth, NJ, USA, through a subsidiary. The trial will evaluate the Company's lead developmental candidate, its TCR Inhibitory Molecule (TIM)-based allogeneic NKG2D CAR T cell investigational therapy CYAD-101, with MSD's anti-PD-1 therapy, KEYTRUDA® (pembrolizumab), in patients with refractory metastatic colorectal cancer (mCRC) with microsatellite stable (MSS)/mismatch-repair proficient disease.

"Dosing the first patient in this Phase 1b trial represents an important step toward understanding any potential role of CYAD-101 for mCRC patients with an MSS background," said Dr. Charles Morris, Chief Medical Officer of Celyad Oncology. "We are evaluating CYAD-101 in combination with KEYTRUDA in hope of identifying a new option to target patients' tumors. Preclinical data and translational data from our prior phase 1 study of CYAD-101 suggest that there may be an additive benefit with pembrolizumab as an anti-PD-1 checkpoint inhibitor when combined with CYAD-101 in colorectal cancer and we look forward to studying that in the clinic. We are grateful to MSD for collaborating with us on this trial and expect to share preliminary data next year."

The Company also reported the KEYNOTE-B79 study will be the subject of a presentation at the American Society of Clinical Oncology (ASCO) Gastrointestinal Cancers Symposium being held in person in San Francisco, California and virtually from January 20-22, 2022.

ASCO GI 2022 Presentation Details:

The following abstract will be available on the ASCO GI website on January 18, 2022 at 5 p.m. EST. Following the presentation at the meeting, the poster will be available in the Scientific Publications section of Celyad Oncology's website.

Abstract Number: TPS227
Abstract Title: KEYNOTE-B79 phase 1b trial to evaluate the allogeneic CAR T-cells CYAD-101 and pembrolizumab in refractory metastatic colorectal cancer patients.
Session Information: Trials in Progress Poster Session C: Cancers of the Colon, Rectum, and Anus

KEYTRUDA® is a registered trademark of Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

About Celyad Oncology SA
Celyad Oncology SA is a clinical-stage biotechnology company focused on the discovery and development of chimeric antigen receptor T cell (CAR T) therapies for cancer. The Company is developing a pipeline of allogeneic (off-the-shelf) and autologous (personalized) CAR T cell therapy candidates for the treatment of both hematological malignancies and solid tumors. Celyad Oncology was founded in 2007 and is based in Mont-Saint-Guibert, Belgium and New York, NY. The Company has received funding from the Walloon Region (Belgium) to support the advancement of its CAR T cell therapy programs. For more information, please visit https://celyad.com/.

Forward-Looking Statement
This release may contain forward-looking statements, within the meaning of applicable securities laws, including the Private Securities Litigation Reform Act of 1995. Forward-looking statements may include statements regarding: the Phase 1b KEYNOTE-B79 trial, outcomes of the collaboration with MSD and the safety and tolerability of CYAD-101 in combination with pembrolizumab, Forward-looking statements may involve known and unknown risks and uncertainties which might cause actual results, financial condition, performance or achievements of Celyad Oncology to differ materially from those expressed or implied by such forward-looking statements. Such risk and uncertainty includes these risks, uncertainties and other risks can be found in Celyad Oncology's U.S. Securities and Exchange Commission (SEC) filings and reports, including in its Annual Report on Form 20-F filed with the SEC

on March 25, 2021 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.

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