

Celyad Oncology Presents Preclinical Data on Allogeneic CAR T Therapy Program and Highlights KEYNOTE-B79 Clinical Trial Design at the Society for Immunotherapy of Cancer (SITC) 36th Annual Meeting

- *Preclinical data support armoring NKG2D CAR T cells with IL-18 to drive improved anti-tumor activity of the product candidate*
- *Development continues for second-generation multiplexing shRNA scaffold for novel non-gene edited CAR T candidates with desired phenotypes*
- *KEYNOTE-B79 Phase 1b trial evaluating CYAD-101 with KEYTRUDA[®] (pembrolizumab) in patients with microsatellite stable mCRC set to start in fourth quarter 2021*

MONT-SAINT-GUIBERT, Belgium, November 12, 2021 – Celyad Oncology SA (Euronext & Nasdaq: CYAD), a clinical-stage biotechnology company focused on the discovery and development of chimeric antigen receptor T cell (CAR T) therapies for cancer, today announced three poster presentations on the Company's allogeneic CAR T therapy programs at the Society for Immunotherapy of Cancer (SITC) Annual Meeting taking place in Washington D.C. and virtually November 10-14, 2021.

"With these presentations, we demonstrate how we continue to execute on our strategic vision to develop differentiated next generation CAR Ts using our non-gene edited allogeneic approaches which are intended to provide multiple real-world benefits to patients," said David Gilham, Ph.D., Chief Scientific Officer of Celyad Oncology. "We believe our CAR T cells are the only allogeneic CAR T cells currently in human clinical trials that avoid generating double-strand DNA breaks. Combining with multiplexed shRNA and cytokine armoring, we believe this approach provides us with a dynamic platform for the generation of future allogeneic candidates."

Charles Morris, M.D., Chief Medical Officer of Celyad Oncology said, "In addition to the encouraging preclinical data presented, we are also on the cusp of initiating the KEYNOTE-B79 Phase 1b clinical trial in collaboration with MSD. We believe that KEYNOTE-B79 will be the first clinical trial to evaluate an allogeneic CAR T with an anti-PD-1 therapy in solid tumors. We look forward to evaluating whether the expected highly complementary mechanism of actions of CYAD-101 and KEYTRUDA[®] could help to drive important clinical benefit in patients with refractory metastatic colorectal cancer with microsatellite stable disease where a high unmet medical need exists. We look forward to initiating the study in the coming weeks and providing clinical updates to the CYAD-101 program in 2022."

Key Highlights from SITC Annual Meeting

Poster 107 – *Armoring NKG2D CAR T cells with IL-18 improves in vitro and in vivo anti-tumor activity*

- This poster demonstrates the key role of Interleukin-18 (IL-18) in driving increased effector function of the NKG2D CAR T cells.
- These data support the ongoing development of the Company's shRNA-based allogeneic, IL-18-armored CAR T candidate CYAD-203 as well as future allogeneic IL-18-armored CAR T candidates.

Poster 146 – *Evolving multiplexed shRNA to generate tailored CAR T cell therapy*

- Multiplexing short hairpin RNA (shRNA) within a single vector format ensures co-linked expression of the shRNA with therapeutic transgenes.

- We continue to develop second-generation shRNA scaffold using multiplexed technology to produce novel allogeneic clinical candidates with bespoke, desired phenotypes and function produced using methods that avoid the generation of double strand DNA breaks.

Poster 407 – *A Phase 1b KEYNOTE-B79 trial evaluating non-gene edited allogeneic CAR T-cells, CYAD-101, post FOLFOX preconditioning, followed by pembrolizumab, in refractory metastatic colorectal cancer patients*

- Clinical and translational results from the alloSHRINK Phase 1 trial evaluating the TCR Inhibitory Molecule (TIM)-based allogeneic NKG2D CAR T-cell product candidate CYAD-101 (NCT03692429) in patients with metastatic colorectal (mCRC) cancer suggest that treatment with sequential checkpoint inhibition following CYAD-101 with FOLFOX preconditioning could drive more durable clinical responses.
- The KEYNOTE-B79 trial will therefore evaluate the safety and clinical activity of multiple infusions of CYAD-101 administered post FOLFOX preconditioning chemotherapy, followed by treatment with KEYTRUDA® (pembrolizumab) in mCRC patients with microsatellite stable disease, according to a Simon's two stage trial design.
- The KEYNOTE-B79 clinical trial is expected to begin in fourth quarter 2021.

These ePosters will be available on the SITC website starting today at 1 p.m. CET / 7 a.m. ET and in the [Scientific Publications](#) section of Celyad Oncology's website.

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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 safety and clinical activity of Celyad Oncology's pipelines and financial condition, results of operation and business outlook. 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 the timeline and outcomes of our clinical programs, including the Phase 1b KEYNOTE-B79 trial, our development of additional shRNA-based allogeneic candidates from our CYAD-200 series towards clinical trial, and the duration and severity of the COVID-19 pandemic and government measures implemented in response thereto. A further list and description of 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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