Celyad Highlights Safety and Clinical Activity of CYAD-101, a First-In-Class, Non-Gene Edited Allogeneic CAR-T Therapy for mCRC, from SITC 34th Annual Meeting

- Results from ongoing, dose-escalation alloSHRINK Phase 1 trial demonstrate absence of graft-versus-host disease for first-in-class, non-gene edited allogeneic CAR-T candidate, CYAD-101, when administered concurrently with FOLFOX chemotherapy
- Best overall response in alloSHRINK trial in refractory metastatic colorectal cancer (mCRC) patients who had previously received prior oxaliplatin-based chemotherapy, which includes two patients with partial response (PR) and seven patients with stable disease (SD), with 50 percent (6 out of 12) of patients experiencing a decrease in tumor burden
- Enrollment completed in dose-escalation segment of alloSHRINK trial with additional results expected in first half 2020; expansion segment of trial anticipated to begin in mid-2020

Mont-Saint-Guibert, Belgium - Celyad (Euronext Brussels and Paris, and Nasdaq: CYAD), a clinical-stage biopharmaceutical company focused on the development of CAR-T cell therapies, today announced highlights from the company’s NKG2D-based CAR-T clinical candidates for the treatment of metastatic colorectal cancer (mCRC), including its novel, off-the-shelf cell therapy CYAD-101 and alloSHRINK dose-escalation Phase 1 trial. Results were presented at the Society for Immunotherapy of Cancer (SITC) 34th Annual Meeting, held in Washington D.C. from November 6-10, 2019.

Dr. Frédéric Lehmann, VP of Clinical Development & Medical Affairs at Celyad, commented, “We are encouraged by the latest results from the alloSHRINK trial in metastatic colorectal cancer patients previously exposed to oxaliplatin- and irinotecan-based chemotherapies, including the tolerability profile and early antitumor activity of CYAD-101 with prior FOLFOX preconditioning chemotherapy. In particular, the lack of clinical and laboratory evidence of graft-versus-host-disease for CYAD-101, which incorporates our proprietary T-cell receptor inhibitory molecule to reduce signaling of the TCR complex, establishes proof-of-concept for this industry-leading, off-the-shelf CAR-T approach. In addition, any host-versus-graft reaction against the allogeneic CAR-T product candidate appears to be controlled by the non-myeloablative FOLFOX chemotherapy. Overall, these encouraging data from the alloSHRINK trial warrant further evaluation of CYAD-101.”

Filippo Petti, CEO of Celyad, stated, “Treatment of advanced metastatic colorectal cancer patients beyond the second line of metastatic chemotherapy remains a high unmet medical need. Our confidence in CYAD-101 has continued to build as data from the alloSHRINK trial have emerged over the past year. We look forward to the planned expansion segment of the alloSHRINK trial to further
evaluate the CAR-T product candidate for refractory mCRC patients as we continue to execute on the company’s vision for the treatment of patients with advanced solid tumors with allogeneic CAR-T therapies."

**alloSHRINK Phase 1 Trial Update**

**Safety and Tolerability**

- To date, a total of 12 patients with relapsed/refractory mCRC who progressed after previous treatment with oxaliplatin or irinotecan have been enrolled in the ongoing dose-escalation Phase 1 alloSHRINK trial evaluating three consecutive dose levels of CYAD-101 administered concurrently with FOLFOX chemotherapy. The number of prior therapies received by patients enrolled in the trial ranged from one to six with a mean of three.

- No clinical evidence of graft-versus-host disease (GvHD) has been observed following 35 injections of CYAD-101. These data continue to support the ability of the company’s novel inhibitory peptide T cell receptor (TCR) inhibiting molecule (TIM) to reduce signaling of the TCR complex through a non-gene edited approach.

- Treatment with CYAD-101 in association with FOLFOX chemotherapy was well-tolerated, with no report of dose-limiting toxicity. Six of 12 patients enrolled in the trial reported at least one treatment-related adverse event (AE), however all AEs reported were grade 1 or 2 including one patient who experienced cytokine-release syndrome (grade 1). No patient discontinued treatment due to AEs.

**Clinical Activity**

- Encouraging anti-tumor activity was observed in the trial with two patients who achieved a confirmed partial response (PR) according to RECIST 1.1 criteria and five patients achieved stable disease (SD) of more than or equal to three months of duration. Tumor burden decrease was observed in six out of 12 patients in total.

**Cell Kinetics**

- Host-versus-graft (HvG) reaction against the allogeneic CYAD-101 cells appears to be controlled by the non-myeloablative FOLFOX chemotherapy as evidenced by similar levels of CYAD-101 cell engraftment following the second and third infusions of the allogeneic cell product candidate.

- Following administration of FOLFOX chemotherapy, CYAD-101 cells demonstrate similar kinetics as the autologous NKG2D-based CAR-T therapy CYAD-01 as evaluated in the Phase 1 SHRINK trial.

**Next Steps**

- An additional three patients have been enrolled at dose level three (one billion cells per infusion) of the trial for a total of nine patients in the cohort, as planned per protocol. Preliminary results from the completed dose-escalation segment of the alloSHRINK trial are expected in first half 2020.
Based on the encouraging data observed to date for the Phase 1 alloSHRINK trial, the Company plans to expand the trial to further evaluate CYAD-101 with prior FOLFOX chemotherapy in refractory mCRC patients. Enrollment in the expansion segment of the trial is expected to begin in mid-2020 following the production of additional CYAD-101 cells planned during first half 2020.

About CYAD-101 and alloSHRINK Trial
CYAD-101 is an investigational, non-gene edited, allogeneic (healthy donor derived) CAR-T therapy engineered to co-express a chimeric antigen receptor (CAR) based on NKG2D, a receptor expressed on natural killer (NK) cells that binds to eight stress-induced ligands and the novel inhibitory peptide TIM (T cell receptor [TCR] Inhibitory Molecule). The expression of TIM reduces signalling of the TCR complex, which is responsible for GvHD.

alloSHRINK is an open-label, dose-escalation Phase 1 trial assessing the safety and clinical activity of three consecutive administration of CYAD-101 every two weeks administered concurrently with FOLFOX (combination of 5-fluorouracil, leucovorin and oxaliplatin) chemotherapy in patients with refractory mCRC.

About Colorectal Cancer
Colorectal cancer is the third most common type of cancer among both men and women worldwide and is the fourth in terms of mortality. In 2018, approximately 1.8 million people were diagnosed with colorectal cancer with about 140,000 and 500,000 diagnoses in the United States and Europe, respectively. According to data from the American Society of Clinical Oncology (ASCO), approximately 40% of patients are diagnosed with early-stage, localized-stage disease. The five-year survival rate of localized disease is approximately 90%. In patients where the cancer has spread to distant parts of the body, as in metastatic colorectal cancer, the five-year survival rate drops to approximately 15%.

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About Celyad
Celyad is a clinical-stage biopharmaceutical company focused on the development of specialized CAR-T cell-based product candidates and utilizes its expertise in cell engineering to target cancer. Celyad’s CAR-T cell platform has the potential to treat a broad range of solid and hematologic tumors. The company’s lead clinical candidate, CYAD-01, an autologous NKG2D-based CAR-T therapy, is currently being evaluated in several Phase 1 clinical trials to assess safety and clinical activity for the treatment of hematological malignancies, such as acute myeloid leukemia, and solid cancers, such as metastatic colorectal cancer. Celyad is also developing CYAD-101, an investigational, non-gene edited, allogeneic (donor derived) NKG2D-based CAR-T therapy, which is currently being evaluated in a Phase 1 trial for the treatment of patients with metastatic colorectal cancer. Celyad was founded in 2007 and is based in Mont-Saint-Guibert, Belgium, and New York, NY. Celyad’s ordinary shares are listed on the Euronext Brussels and Euronext Paris exchanges, and its American Depository Shares are listed on the Nasdaq Global Market, all under the ticker symbol CYAD.

For more information, please contact:
Forward-looking statements

This release may contain forward-looking statements, including statements regarding: the safety and clinical activity of CYAD-01, CYAD-101 and CYAD-02; statements regarding the ongoing and planned clinical development of CYAD-01, CYAD-101 and CYAD-02, including the timing of trials, enrolment, data readouts and presentations; the clinical and commercial potential of CYAD-01, CYAD-101 and CYAD-02; and our mAb manufacturing processes. Forward-looking statements may involve known and unknown risks, uncertainties and other factors which might cause actual results, financial condition and liquidity, performance or achievements of Celyad, or industry results, to differ materially from those expressed or implied by such forward-looking statements. In particular it should be noted that the data summarized above are preliminary in nature. There is limited data concerning safety and clinical activity following treatment with the CYAD-01, CYAD-101 and CYAD-02 drug product candidates. Our therapeutic candidates manufactured using our OptimAb process have not yet been evaluated in clinical trials. Prior clinical and preclinical results may not be repeated or observed in ongoing or future clinical studies involving the CYAD-01 and CYAD-101 drug product candidates. These forward-looking statements are further qualified by important factors and risks, which could cause actual results to differ materially from those in the forward-looking statements, including statements about: the initiation, timing, progress and results of our preclinical studies and clinical trials, and our research and development programs; our ability to advance drug product candidates into, and successfully complete, clinical trials; our ability to successfully manufacture drug product for our clinical trials, including with our OptimAb manufacturing process and with respect to manufacturing drug product with the desired number of T cells under our clinical trial protocols; our reliance on the success of our drug product candidates, including our dependence on the regulatory approval of CYAD-01, CYAD-101 and CYAD-02 in the United States and Europe and subsequent commercial success of CYAD-01, CYAD-101 and CYAD-02, both of which may never occur; the timing or likelihood of regulatory filings and approvals; our ability to develop sales and marketing capabilities; the commercialization of our drug product candidates, if approved; the pricing and reimbursement of our drug product candidates, if approved; the implementation of our business model, strategic plans for our business, drug product candidates and technology; the scope of protection we are able to establish and maintain for intellectual property rights covering our drug product candidates and technology; our ability to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights and proprietary technology of third parties; cost associated with enforcing or defending intellectual property infringement, misappropriation or violation; product liability; and other claims; regulatory development in the United States, the European Union, and other jurisdictions; estimates of our expenses, future revenues, capital requirements and our needs for additional financing; the potential benefits of strategic collaboration agreements and our ability to maintain and enter into strategic arrangements; our ability to maintain and establish collaborations or obtain additional grant funding; the rate and degree of market acceptance of our drug product candidates, if approved; our financial performance; developments relating to our competitors and our industry, including competing therapies and statements regarding future revenue, hiring plans, expenses, capital expenditures, capital requirements and share performance. A further list and description of these risks, uncertainties and other risks can be found in Celyad’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 April 5, 2019 and subsequent filings and reports by Celyad. Given these uncertainties, the reader is advised not to place any undue reliance on such forward-looking statements. These forward-looking statements speak only as of the date of publication of this document and Celyad’s actual results may differ materially from those expressed or implied by these forward-looking statements. Celyad 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.