Press Release
26 May 2016
7:00 am CET

Celyad successfully completes safety follow-up of the third dose level of its NKR-2 Trial

- The trial is a dose escalation study evaluating safety and feasibility of NKR-2 T-cell therapy in patients with Acute Myeloid Leukemia or Multiple Myeloma.
- No dose limiting toxicity reported in the last patient of the third dose level.
- Process to enroll the first patient of fourth dose cohort has commenced.

Mont-Saint-Guibert, Belgium - Celyad (Euronext Brussels and Paris, and NASDAQ: CYAD), a leader in the discovery and development of engineered cell therapies, with clinical programs in cardiovascular disease and immuno-oncology, today announced the completion of the 21-day safety follow-up of the last patient enrolled in the third dose level cohort in its Phase I/IIa clinical trial evaluating the safety and feasibility of its NKR-2 T-cell therapy using T-cells with NKG2D receptor in Acute Myeloid Leukemia and Multiple Myeloma patients. No safety issues were reported.

Dr. Christian Homsy, CEO of Celyad: *"The study is progressing as planned, with the third dose level successfully completed and the upcoming initiation of the fourth dose level cohort, and no adverse safety signals observed so far for the 9 treated patients. We are now preparing the next dose levels and look forward to the data that are expected in the next few months."*

Dr. Frédéric Lehmann, Head of Immuno-Oncology at Celyad: *"We are pleased that no adverse safety signal has been reported for the patients of the third dose of this first-in-human Phase I/IIa study. This technology has great potential in multiple cancer indications and we look forward to completing this Phase I/IIa and moving to the next stage of our clinical development. I am grateful to our principal investigator who has positioned us so well to complete the fourth dose by mid-2016."*

About Celyad's NKR-T program

NKR stands for Natural Killer Receptor. NKG2D CAR T-cells are now called NKR-2 T-cells and the product development name is NKR-2.

Existing CAR-T cells are engineered using constructs encoding an antibody single chain variable fragment, the signaling domain of CD3 zeta and one or more co-stimulatory domain(s). In contrast to existing CAR-T cells, Celyad's lead immuno-oncology product candidate, NKR-2, is a T-Cell encoded to express the human Natural Killer activating receptor, NKG2D. Using the human Natural Killer cell receptor, unlike traditional CAR technologies, has the potential to:

- Bind to 8 different ligands that are expressed by a vast majority of cancer cells, both hematological and solid malignancies.

- Target and kill tumors as well as the blood vessels that feed them and also express the ligands of the NKG2D receptor.
- Target and kill the inhibitory mechanisms preventing the tumor from evading the immune system.
- Induces adaptive auto-immune response thanks to the creation of a long term cell memory against the targeted tumor.

The research underlying this technology was originally conducted by Dartmouth College Professor Charles Sentman, and has been published in numerous peer-reviewed publications. NKR-2 has an active Investigational New Drug (IND) application with the FDA for a Phase I clinical trial. The full data readout from the Phase I dose escalation trial is expected in mid-2016. The trial is designed to assess the safety and feasibility of NKR-2 in Acute Myeloid Leukemia and Multiple Myeloma patients, with secondary endpoints including clinical activity. The safety follow-up period post-infusion has been decreased to 21 days after approval by the U.S. Food and Drug Administration (FDA) and Institutional Review Board (IRB).

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About Celyad

Founded in 2007, and based in Belgium, Celyad is a leader in engineered cell therapy with clinical programs initially targeting indications in cardiology and oncology. Celyad is developing its lead cardiovascular disease product candidate, C-Cure®, for the treatment of ischemic heart failure, and has completed enrollment of a Phase III trial in Europe and Israel. In addition, the Company is developing a next generation portfolio of CAR T-cell therapies that utilize human Natural Killer cell receptors for the treatment of numerous blood and solid cancers. Its lead oncology product candidate, NKR-2 (NKG2D CAR T-cell), entered a Phase I clinical trial in April 2015.

Celyad's ordinary shares are listed on Euronext Brussels and Euronext Paris under the ticker symbol CYAD and Celyad's American Depositary Shares are listed on the NASDAQ Global Market under the ticker symbol CYAD.

To learn more about Celyad, please visit www.celyad.com

Forward looking statements

In addition to historical facts or statements of current condition, this press release contains forward-looking statements, including statements about the potential safety and feasibility ofNKR-2-cell therapy and C-Cure and the clinical potential of the Company's technology platform generally and the timing of future clinical trials, which reflect our current expectations and projections about future events, and involve certain known and unknown risks, uncertainties and assumptions that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements.

In particular it should be noted that the safety data described in the release are preliminary in nature and the Phase 1 trial is not completed. There is limited data concerning safety and feasibility of NKR-2. These data may not continue for these subjects or be repeated or observed in ongoing or future studies involving our NKR-2 therapy, C-Cure or other product candidates. It is possible that safety issues or adverse events may arise in the future.

These forward-looking statements are further qualified by important factors, which could cause actual results to differ materially from those in the forward-looking statements, including risks associated with conducting clinical trials; the risk that safety, bioactivity, feasibility and/or efficacy demonstrated in earlier clinical or pre-clinical studies may not be replicated in subsequent studies; risk associated with the timely submission and approval of anticipated regulatory filings; the successful initiation and completion of clinical trials, including Phase III clinical trials for C-Cure® and Phase I clinical trial for NKR-2; risks associated with the satisfaction of regulatory and other requirements; risks associated with the actions of regulatory bodies and other governmental authorities; risks associated with obtaining, maintaining and protecting intellectual property, our ability to enforce our patents against infringers and defend our patent portfolio against challenges from third parties; risks associated with competition from others developing products for similar uses; risks associated with our ability to manage operating expenses;, and risks associated with our ability to obtain additional funding to support our business activities and establish and maintain strategic business alliances and business initiatives. A further list and description of these risks, uncertainties and other risks can be found in the Company's Securities and Exchange Commission filings and reports, including in the Company's prospectus filed with the SEC on June 19, 2015 and future filings and reports by the Company. 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. The Company 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.