

Celyad treats first patient in the fourth dose level of its NKR-2 trial

Mont-Saint-Guibert, Belgium - Celyad (Euronext Brussels and Paris, and NASDAQ: CYAD), a leader in the discovery and development of engineered cell therapies, today announced the infusion of the first patient enrolled in the fourth dose level of its Phase I/IIa clinical trial. The study is evaluating the safety and feasibility of its NKR-2 T-cell therapy using T-cells with NKG2D receptor in cancer patients suffering from Acute Myeloid Leukemia (AML) or Multiple Myeloma (MM).

Dr. Christian Homsy, CEO of Celyad, commented: *“We are pleased to have enrolled the first patient in the fourth dose level cohort of this study on track and are encouraged that no adverse safety signals have been observed so far for the nine patients already treated with NKR-2. We are actively working on the recruitment of the two next patients for this new dose level and we look forward to the data that are expected in the next few months”*

Dr. Frédéric Lehmann, Head of Immuno-Oncology at Celyad: *«The infusion of the 10th patient demonstrates good progress in our first-in-human NKR-2 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 in clinical development.”*

About Celyad's NKR-T program

NKR stands for Natural Killer Cell 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 signalling 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 and the signalling domain of CD3 zeta. Using the human Natural Killer cell receptor, unlike traditional CAR technologies, NKR-2 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.
- Act on the immunosuppressive microenvironment within tumors resulting in the inhibition of the mechanisms which enable tumor to evade the immune system.
- Induce adaptive auto-immune response resulting in 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 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.

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For more information, please contact:

For Europe : Consilium Strategic Communications

Amber Fennell, Chris Gardner, Chris Welsh, and Laura Thornton - T: +44 (0)20 3709 5700 - celyad@consilium-comms.com

For France : NewCap

Pierre Laurent and Nicolas Mérieau - T: + 33(0)1 44 71 94 94 - celyad@newcap.eu

For Belgium : Comfi

Gunther De Backer - T.: +32 (0)2 290 90 90 - gunther@comfi.be

Celyad

Christian Homsy, CEO and Patrick Jeanmart, CFO : T : +32 (0)10 39 41 00 investors@celyad.com

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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 of NKR-2 T-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 19th, 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.

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