

Celyad announces collaboration with Institut Curie for the development of its immuno-oncology program NKR-T

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 a strategic partnership with the Inserm "Cancer and Immunity" Unit (Sebastian Amigorena, PhD) of Institut Curie in Paris, France, to further develop its NKR-T pipeline in cellular immunotherapies for cancer.

Academic research collaborations are integral to bringing Celyad science and product candidates to patients and their families. Celyad is seeking to build on this foundation of partnerships and collaborations.

Through this partnership, Celyad and Institut Curie will pool their expertise to progress Celyad immuno-oncology pipeline aimed at bringing novel cellular immunotherapies to cancer patients. The partnership will build on Institut Curie first-in-class expertise and state of the art translational, preclinical and clinical know-how in cancer biology and immunology, and Celyad well recognized cell therapy and cell manufacturing capabilities.

At Institut Curie, the collaboration will be under the supervision of Sebastian Amigorena, PhD, head of the future Center for Cancer Immunotherapy.

Dr. Christian Homsy, CEO of Celyad: *"We are proud of our partnership with Institut Curie which is one of the most important oncology research centers worldwide. Our NKR-T program has a great potential for cancer treatment and we want to develop it according the highest standards. This collaboration shows that our technology is raising the interest of the top scientific community. We look forward to working with the team led by Sebastian Amigorena".*

Sebastian Amigorena, PhD, Head of the Cancer and Immunity Unit of the Institut Curie: *"Our collaboration with Celyad is particularly timely in the context of the future launching of the Center for Cancer Immunotherapy of Institut Curie coming in autumn 2016. Celyad is well positioned to become a global leader in cell therapies for cancer treatment and we are looking forward to strengthening our expertise in this field. This collaboration could lead to a real clinical benefit for cancer patients".*

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 signalling domain of CD3 zeta and one or more co-stimulatory domain(s). Celyad's lead immuno-oncology product candidate, NKR-2, is a T-Cell encoded to express the Natural Killer activating receptor, NKG2D. The technology developed by Celyad uses a human Natural Killer cell (NK cell) receptor which, unlike traditional CAR technologies, targeting the CD19 antigen, has the potential to:

- Bind to 8 different ligands that are generically expressed by a vast majority of cancer cells, both hematological and solid malignancies (around 80% of cancer types).
- 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 such as *Journal of Immunology* in 2009, *Cancer Research* in 2006, and *Blood* in 2005. NKR-2 has an active Investigational New Drug (IND) application with the FDA for a Phase I clinical trial in certain hematologic cancers. Celyad also acquired another receptor in the same NK receptor based CAR, using the Nkp30 NK cell activating receptor. Nkp30 is therefore very similar to NKG2D although using a different set of ligands. B7H6 is a more traditional antibody based CAR (using an antibody and not a receptor of NK cells), but it is the ligand of Nkp30 and is present also on many different cancers. NKR-2 entered a Phase I clinical trial in April 2015. 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 efficacy. 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). Data readouts from the first 12 patients treated in the Phase I portion are expected in mid-2016, once a recommended dose is determined.

About Institut Curie

Institut Curie is a foundation of public interest. Founded in 1909 on a model devised by Marie Curie and still at the cutting edge: "from fundamental research to innovative treatments". It specializes in research in oncology and patient care. Institut Curie has 3,400 researchers, physicians, clinicians, technicians and administrative staff. More information at www.institut-curie.org

About Sebastian Amigorena

Sebastian Amigorena received his Ph.D. in Immunology and is Head of the Cancer and Immunity Unit of the Institut Curie, Paris, France. He is also Leader of the Dendritic Cells (DC) Antigen Presentation research group. His main scientific contributions in the last 10 years relate to antigen presentation in dendritic cells and immunotherapy. His laboratory is interested in the mechanisms involved in antigen presentation by DC, mainly related to cross presentation. Sebastian Amigorena contributes to the understanding of endoplasmic reticulum recruitment and its participation in antigen uptake and cross presentation as well as in the endosome migration and maturation.

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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-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.



Press Release

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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.

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