

First US Patent Covering Allogeneic Chimeric Antigen Receptor T Cells ("CAR-T") Modified to Reduce Immunogenicity is Awarded to Celyad

Fundamental IP has potential broad applicability for development of TCR deficient CAR-T therapies

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 immune-oncology today announced the issuance of United States Patent No. 9,181,527 ("US Patent 9,181,527") relating to allogeneic human primary T-Cells that are engineered to be T-Cell Receptor (TCR)-deficient and express a Chimeric Antigen Receptor (CAR).

The US 9,181,527 Celyad Allogeneic Patent significantly strengthens Celyad's patent portfolio in the CAR T-Cell field and its leadership in engineered cell therapy since the granted product claims are not limited to specific CARs or specific methods of generating allogeneic CAR T-Cells, such as genome editing or genetic engineering. The patented products are applicable for use in treating various human disease conditions such as cancer, chronic infectious diseases, and autoimmunity.

Allogeneic technology has the potential to broaden the therapeutic applications of CAR T-Cell immunotherapies by enabling the development and manufacturing of "off-the-shelf" treatments.

Dr. Christian Homsy, CEO of Celyad, commented: "We are pleased to have obtained the 9,181,527 Patent from the United States Patent and Trademark Office (USPTO) for allogeneic T-Cells engineered to express a CAR, and we are pursuing patents in other geographies as well. To our knowledge, this is the very first patent covering TCR-deficient CAR T-Cells. The Company intends to maximize the significant therapeutic potential of our allogeneic CAR-T technology platform, either on our own or potentially through one or more strategic collaborations."

Dr. Frederic Lehmann, VP Immuno-Oncology, added: "Our current autologous NKG2D oncology clinical trial is going well and we look forward to potentially following this with an allogeneic platform into the clinic. This technology has applications beyond cancer and allows us to explore other diseases such as autoimmune disorders and chronic infections."



Celyad currently has pre-clinical studies underway to develop allogeneic cancer therapies by using a TCR Inhibitory Molecule, or "TIM", in combination with a next generation CAR construct that incorporates a natural killer receptor. This proprietary process results in an off-the-shelf "weaponized" TCR-deficient NK CAR T-Cell aimed at eliminating or greatly reducing graftversus-host-disease (GVHD).

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About CAR-NKG2D

Celyad's lead immuno-oncology product candidate, CAR-NKG2D, is a chimeric antigen receptor (CAR) T-Cell autologous therapy to treat cancer. The CAR technology developed by Celyad uses human natural killer cell (NK cell) receptors which, unlike traditional CAR technologies such as those targeting the CD19 antigen, has the potential to target ligands present on a broad range of solid tumors and blood cancers.

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. CAR-NKG2D has an active Investigational New Drug (IND) application with the FDA for a Phase I clinical trial in certain hematologic cancers.

CAR-NKG2D 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 NKG2D CAR T-cell in certain acute myeloid leukemia and multiple myeloma patients as primary endpoints, with secondary endpoints including clinical efficacy.

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 novel 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, 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 coverage of the US Patent. No 9,181,527, the safety and efficacy of Celyad's product candidates, the potential clinical and commercial potential of these product candidates, potential future product candidates and the timing of future clinical trials, which reflect our current expectations and projections about future events, and involve certain known and $unknown\ risks, uncertainties\ and\ assumptions\ that\ could\ cause\ actual\ results\ or\ events\ to\ differ\ materially\ from\ those\ expressed\ or\ events\ ev$ implied by the forward-looking statements.

In particular it should be noted that there are risks and uncertainties associated with strength of the Company's intellectual property portfolio, including the US Patent No 9,181,527. Third parties may challenge the validity, enforceability, or scope of our patents, including the US Patent No 9,181,527, which may result in such patents being narrowed, invalidated, or held unenforceable. Furthermore, even if these patents are unchallenged, our patents may not adequately cover our products or prevent others from designing their products to avoid being covered by our claims.

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 DSMB's $\frac{1}{2}$ determination not to discontinue the Phase III clinical trials for C-Cure® on the basis of non-futility is not a determination as to the likelihood of success and is not a quarantee that the trial will be successful; the risk that safety, bioactivity and 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 NKG2D CAR T-cell; 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

C3BS-CQR-1, C-Cure, NKG2D CAR T-cell, C-Cathez TM, OnCyte, Celyad, Cardio3 BioSciences and the Cardio3 BioSciences, Celyad, C-CathezTM, CHART-1, CHART-2 and OnCyte logos are signs internationally protected under applicable Intellectual Property Laws. Mayo Clinic holds equity in Celyad as a result of intellectual property licensed to the Company.