

## Celyad Announces Exclusive Agreement for Horizon Discovery's shRNA Platform to Develop Next-Generation Allogeneic CAR-T Therapies

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*In vivo study results to be presented at the 2018 SITC Annual Meeting*

**Mont-Saint-Guibert, Belgium** - Celyad (Euronext Brussels and Paris, and NASDAQ: CYAD), a clinical-stage biopharmaceutical company focused on the development of specialized CAR-T cell-based therapies, today announced an exclusive agreement with Horizon Discovery Group plc (LSE: HZD), for the use of its shRNA technology to generate Celyad's second non-gene-edited allogeneic platform.

Celyad recently announced its first-in-class non-gene edited allogeneic CAR-T candidate, CYAD-101 a non-gene-edited allogeneic NKG2D-based CAR using the TIM (TCR Inhibiting Molecule). As a result of the agreement with Horizon Discovery, Celyad now also has access to a novel shRNA-based platform.

Data from preclinical studies demonstrating the versatility of the shRNA platform in the allogeneic setting, will be presented at the upcoming 2018 Society for Immunotherapy of Cancer (SITC) Annual Meeting in Washington, D.C., November 7<sup>th</sup> – 11<sup>th</sup>. These promising preclinical data will pave the way for the next steps in the development of Celyad's differentiated non-gene edited allogeneic approach to CAR-T cell therapy.

*"We are excited to have the opportunity to leverage Horizon's shRNA platform to further advance our pioneering approach to non-gene edited allogeneic CAR-T cells", said **Dr. Christian Homsy, CEO of Celyad.** "Celyad is committed to rapidly advancing its allogeneic program based on highly promising preclinical data which will be presented at SITC. These data provide proof of concept for our shRNA based non-gene-edited allogeneic approach. In addition to very promising preclinical data, our allogeneic approach is also strengthened by Celyad's strong patent estate in the U.S., which broadly covers the use of allogeneic CAR-T using cells that are TCR inhibited or suppressed by any means."*

**Jon Moore, CSO of Horizon Discovery** added: *"The high performance shRNA technology licensed by Celyad is the same as that deployed in our range of SMARTvector products and is designed to deliver efficient target knock down with high specificity. Horizon's collaboration with Celyad is designed to let Celyad find a highly effective solution for its needs. Horizon sees its shRNA technology as a serious rival to gene editing approaches for delivering enhanced performance to therapeutic cell products. We see enormous promise in cell therapies and are*



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*committed to develop and supply innovative technologies that allow our partners to bring transformative cell therapies to the clinic and fulfil unmet clinical needs."*

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## **About Celyad**

Celyad is a clinical-stage biopharmaceutical company focused on the development of specialized CAR-T cell-based therapies. Celyad 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. Its lead oncology candidate, CYAD-01 (CAR-T NKG2D), is currently evaluated in a Phase I dose escalation clinical trial to assess the safety and clinical activity of multiple administrations of autologous CYAD-01 cells in seven refractory cancers including five solid tumors (colorectal, ovarian, bladder, triple-negative breast and pancreatic cancers) and two hematological tumors (acute myeloid leukemia and multiple myeloma). The safety and clinical activity of the CYAD-01 therapy concurrently administered with standard-of-care treatments or preconditioning chemotherapy is also assessed in a full clinical development program focused on acute myeloid leukemia and 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:**

### **Celyad**

[investors@celyad.com](mailto:investors@celyad.com)

Filippo Petti, Chief Financial Officer

[Communications@celyad.com](mailto:Communications@celyad.com)

Carri Duncan, VP Corporate Development & Communications - T: +32(0) 10 39 41 87

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### **For Belgium: Comfi**

Sabine Leclercq - T.: +32 (0)2 290 90 91 – [celyad@comfi.be](mailto:celyad@comfi.be)

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### **For France: NewCap**

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

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### **For the U.S.: LifeSci Advisors**

Daniel Ferry – T.: +1 (617) 535 7746 – [daniel@lifesciadvisors.com](mailto:daniel@lifesciadvisors.com)

Public Relations: Allison Blum – T:+1 (646) 627 8383 - [allison@lifescipublicrelations.com](mailto:allison@lifescipublicrelations.com)

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**About Horizon Discovery Group plc [www.horizondiscovery.com](http://www.horizondiscovery.com)**

Horizon Discovery Group plc (LSE: HZD) ("Horizon") is a world leader in gene editing and gene modulation technologies. Horizon designs and engineers cells using its translational genomics platform, a highly precise and flexible suite of DNA editing tools (rAAV, ZFN, CRISPR and Transposon) and, following the acquisition of Dharmacon, Inc., its functional genomics platform comprising gene knockdown (RNAi) and gene expression (cDNA, ORF) tools, for research and clinical applications that advance human health. Horizon's platforms and capabilities enable researchers to alter almost any gene or modulate its function in human or mammalian cell lines.

Horizon offers an extensive range of catalogue products and related research services to support a greater understanding of the function of genes across all species and the genetic drivers of human disease and the development of personalized molecular, cell and gene therapies. These have been adopted by over 10,000 academic, drug discovery, drug manufacturing and clinical diagnostics customers around the globe, as well as in the Company's own R&D pipeline.

Horizon is headquartered in Cambridge, UK, and is listed on the London Stock Exchange's AIM market under the ticker "HZD."

**For further information from Horizon Discovery Group plc, please contact:**

Zyme Communications (Trade and Regional Media)

Katie Odgaard

Tel: +44 (0)7787 502 947

Email: [katie.odgaard@zymecommunications.com](mailto:katie.odgaard@zymecommunications.com)

Horizon Discovery Group plc

Terry Pizzie, Chief Executive Officer

Richard Vellacott, Chief Financial Officer

Tel: +44 (0) 1223 655 580



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## **Forward-looking statements**

This release may contain forward-looking statements, including statements regarding the safety and efficacy of CYAD-01 and the new mAb manufacturing method used to manufacture this drug product candidate; statements concerning the ongoing and planned clinical development of CYAD-01, including the timing of data readouts and presentations; the clinical and commercial potential of CYAD-01 and the adequacy of Celyad's financial resources; Celyad's financial condition, results of operation and business outlook; and Celyad's expected cash burn. 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 interim data summarized above are preliminary in nature. There is limited data concerning safety and clinical activity following treatment with the CYAD-01 drug product candidate. These results may not be repeated or observed in ongoing or future studies involving the CYAD-01 drug product candidate. 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 new mAb 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 in the United States and Europe and subsequent commercial success of CYAD-01, 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 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 6, 2018 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.