Press Release
28 March 2019
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Regulated Information

Celyad Reports Business Update and Full Year 2018 Financial and Operating Results

Conference call scheduled for Friday, 29 March at 1 p.m. CET / 8 a.m. EDT

- THINK Phase 1 trial (CYAD-01 with no preconditioning) showed a complete response in 40% of patients with AML/MDS
- THINK CyFlu Phase 1 demonstrated CYAD-01 is well-tolerated, with no dose-limiting toxicity or treatment-related grade 3 or above adverse events (AEs) observed
- First data from the shRNA technology platform allowing generation of a novel, next-generation, non-gene-edited allogeneic platform for CAR-T product candidates
- Treasury position[(1)] of €49.7 million ($56.9 million) at year-end

Mont-Saint-Guibert, Belgium - Celyad (Euronext Brussels and Paris, and NASDAQ: CYAD), a clinical-stage biopharmaceutical company focused on the development of CAR-T cell product candidates, today provides a business update and reports full year 2018 consolidated financial results prepared in accordance with IFRS.

Christian Homsy, CEO of Celyad: *"In 2018, we identified several significant opportunities to drive long-term growth by focusing our clinical pipeline on the development of CAR-T cell product candidates. This includes the ongoing program for our lead product candidate CYAD-01 as well as our non-gene edited allogeneic candidate CYAD-101. Following encouraging preliminary data from the THINK trial evaluating CYAD-01 as a monotherapy for the treatment of relpased / refactory acute myeloid leukemia (r/r AML) patients, our clinical hematological program for CYAD-01 now includes multiple approaches for evaluating CYAD-01 including the THINK schedule optimization cohorts as well as our DEPLETHINK trial. We look forward to providing clinical updates from both the Phase 1 THINK and DEPLETHINK trials throughout 2019."*

"In addition, we have advanced our shRNA platform to design novel preclinical CAR-T product candidates including our next-generation NKG2D-based CAR-T, CYAD-02, and our CYAD-200 series of non-gene edited allogeneic CAR-T candidates. We look forward to advancing multiple shRNA-based CAR-T product candidates towards the clinic in 2020."

Full Year 2018 and Recent Business Highlights

- *CYAD-01 – Autologous NKG2D-based CAR-T*
  Hematologic malignancies (r/rAML/MDS)
  THINK Phase 1 trial, evaluating CYAD-01 without preconditioning chemotherapy, showed 40% (four out of ten) of patients with AML/MDS achieved a complete response.
  Further development to assess a more frequent dosing schedule of CYAD-01 without preconditioning chemotherapy for the treatment of r/r AML is ongoing.

Cohort 1 of the DEPLETHINK Phase 1 trial, which is anopen-label, dose-escalation trial with a single injection of CYAD-01 following standard CyFlu preconditioning, demonstrated that CYAD-01 is well-tolerated, with no dose-limiting toxicity or treatment-related grade 3 or above adverse events (AEs) observed in patients with r/r AML.

Solid tumors (mCRC):

The concurrent treatment of CYAD-01 with FOLFOX chemotherapy in the first cohort of the trial was well tolerated, with no occurrence of serious AEs (SAEs) nor increase in the rate of treatment-related AEs. In addition, initial data from the THINK CyFlu cohort (single injection of CYAD-01 following treatment with CyFlu) showed that treatment is well tolerated with no occurrence of SAEs nor an increase in the treatment-related AEs rate. In addition, preliminary translational data suggest an improvement in the cell expansion of CYAD-01 induced by the CyFlu preconditioning.

- *CYAD-101 – Allogeneic NKG2D-based CAR-T*

  In 2018 the Company initiated the open-label, dose escalation alloSHRINK trial evaluating the non-gene edited allogeneic CAR-T therapy, CYAD-101, administered concurrently with FOLFOX chemotherapy in the treatment of patients with unresectable metastatic colorectal cancer (mCRC).

- *Novel, next-generation, shRNA platform*

  In March 2019, Celyad held a Research & Development Day in New York highlighting its pipeline of preclinical CAR-T product candidates candidates for the treatment of hematological malignancies and solid tumors, based on its short hairpin RNA (shRNA) platform

  Autologous settings: CYAD-02 is a next-generation autologous NKG2D-based CAR-T candidate incorporating shRNA technology to target NKG2D ligands MICA/MICB. Preclinical AML models for CYAD-02 show an encouraging increase in *in vitro* proliferation and *in vivo* persistence and anti-tumor activity leading the company to plan to submit an Investigational New Drug (IND) application for CYAD-02 in the first half 2020.

  Allogeneic settings: In vivo data demonstrate that shRNA targeting of CD3ζ by shRNA protects against graft-versus-host disease (GvHD) to a level equivalent to CRISPR-Cas9 based knock-out , as well as a significant increase in persistence of allogeneic T cells using shRNA targeting when compared to CRISPR-Cas9 gene-editing technologies.

  This encouraged the company to develop three disruptive first-in-class non-gene-edited allogeneic CAR-T candidates from the CYAD-200 series leveraging the shRNA SMARTvector platform:

  - CYAD-211: B-cell maturation antigen (BCMA) targeting CAR-T therapy for the treatment of multiple myeloma, which is expected to enter the clinic by mid-2020
  - CYAD-221: CD19 targeting CAR-T therapy for the treatment of B-cell malignancies, which is expected to enter the clinic by late 2020
  - CYAD-231: Dual specific CAR-T targeting NKG2D and an undisclosed membrane protein, which is expected to enter the clinic by early 2021

Expected milestones for 2019

- Additional data from the Phase 1 dose-escalation THINK trial for CYAD-01 in r/r AML or MDS patients, including initial data from the schedule optimization portion of the trial;
- Enrollment completion and initial data from the Phase 1 dose-escalation DEPLETHINK trial evaluating CYAD-01 with preconditioning chemotherapy in r/r AML or MDS patients;
- Acceleration of the development strategy and refinement of the regulatory pathway plan for CYAD-01 for the treatment of r/r AML or MDS patients, including the initiation of a potential Phase 2 clinical trial;
- Advancement towards an IND application with the preclinical development of next-generation NKG2D-based CAR-T, CYAD-02 ; and
- Further pursue the development of the proprietary non-gene edited allogeneic shRNA platform and progress towards IND applications for the CYAD-200 series of shRNA-based CAR-T candidates.

2018 Financial and Operating Results

Selected key financial figures (€ millions)	**Full Year 2018**	**Full Year 2017**
Revenue	3.1	3.5
Research & development expenses	(23.6)	(22.9)
General & administrative expenses	(10.4)	(9.3)
Other income/(expenses)	(7.3)	2.6
Operating loss, excluding non-recurring items	(38.2)	(26.6)
Loss for the year	(37.4)	(56.4)
Net cash used in operations, excluding non-recurring items	(27.2)	(31.2)
Treasury position [1]	**49.7**	**33.9**

The Company's license and collaboration agreements have generated a revenue of €3.1 million in 2018. This includes €2.4 million from the exclusive license agreement signed with Mesoblast Ltd. focused on the development and commercialization of Celyad's intellectual property rights related to C-CathEZ, a proprietary intra-myocardial injection catheter, as well as €0.7 million from the non-clinical supply agreement with ONO Pharmaceutical Co., Ltd. with respect to the product candidate development of CYAD-101 for their licensed territories

Research & Development expenses totaled €23.6 million and €22.9 million for 2018 and 2017, respectively. The increase in 2018 is mainly driven by the key clinical studies on CYAD-01 and CYAD-101.

[1] Treasury position' is determined by adding short-term investments and cash and cash equivalents from the statement of financial position prepared in accordance with IFRS.

General and Administrative expenses increased by €1.1 million, primarily driven by a non-cash expenses associated with the vesting of warrants.

The Company's other expenses amount to €8.4 million and include non-cash expenses of €6.6 million relating to liability reassessment required by International Financial Reporting Standards (IFRS) related to the advancement in the Company's NKG2D-based CAR-T candidates. Overall, non-cash expenses for 2018 totaled €10.2 million.

Therefore, Company's operating loss of recurring operations (REBIT) increased to €38.2 million compared to €26.6 million for the year 2017. Net operational cash burn, which excludes non-cash effects, was €27.2 million in 2018 compared to €31.2 million in 2017.

Loss for the year 2018 amounts to €37.4 million versus a net loss of €56.4 million for 2017.

Cash, cash equivalents and short-term investments totaled €49.7 million as of December 31, 2018 compared to €33.9 million on December 31, 2017. The Company confirms its previous guidance that existing cash, cash equivalents and short-term investments should be sufficient to fund operating expenses and capital expenditure requirements, based on the current scope of activities, until mid-2020.

Annual Report 2018

The Annual Report for the year ended December 31, 2018 is published today, March 28, 2019, on the website of the Company. The statutory auditor, BDO Réviseurs d'Entreprises SCRL, has confirmed that the audit, which is substantially complete, has not to date revealed any material misstatement in the draft consolidated financial statements, and that the accounting data reported in the press release are consistent, in all material respects, with the draft consolidated financial statements from which it has been derived. On March 28, 2019, date of the release of the Annual Report, Celyad published a press release relating to the appointment of Mr. Filippo Petti as Chief Executive Officer of the Company effective on April 1, 2019. As a consequence of this publication, Celyad decided to issue a supplement to the Annual Report in order to keep the Annual Report up to the date of the convening notice to the 2019 annual shareholders' meeting. This supplement will be published on the website of the Company within the next days.

Conference Call Details

A conference call will be held on Friday, 29 March 2019, at 1 p.m. CET / 8 a.m. EDT to review the financial and operating results for full year 2018. Please dial-in five to ten minutes prior to the call start time using the number and conference ID below: Standard International Dial-In Number: +44 (0) 2071 928000; Conference ID: 8745558

Local Call Dial-In Numbers:
Belgium 024009874
France 0176700794
United Kingdom.....08003767922

Netherlands 0207143545
United States.....16315107495
Switzerland.....0315800059

Regulated Information

Consolidated Statement of the Comprehensive Loss

(€'000)	For the year ended 31 December,	
	2018	2017
Revenue	**3,115**	**3,540**
Cost of sales	-	(515)
Gross profit	**3,115**	**3,025**
Research and Development expenses	(23,577)	(22,908)
General & Administrative expenses	(10,387)	(9,310)
Other income	1,078	2,630
Other expenses	(8,399)	(41)
Operating Loss before non-recurring items - REBIT	**(38,170)**	**(26,604)**
Amendment of Celdara Medical and Dartmouth College agreements	-	(24,341)
Write-off C-Cure and Corquest assets and derecognition of related liabilities	-	(1,932)
Operating Loss - EBIT	**(38,170)**	**(52,876)**
Financial income	804	933
Financial expenses	(62)	(4,454)
Loss before taxes	**(37,427)**	**(56,396)**
Income taxes	0	1
Loss for the year [1]	**(37,427)**	**(56,395)**
Basic and diluted loss per share (in €)	(3.36)	(5.86)

[1] For 2018 and 2017, the Group does not have any non-controlling interests and the losses for the year are fully attributable to owners of the parent.

Consolidated Statement of Financial Position

(€'000)	As at 31 December,	
	2018	2017
NON-CURRENT ASSETS	**42,607**	**41,232**
Intangible assets	36,164	36,508
Property, Plant and Equipment	3,014	3,290
Non-current trade receivables	1,743	-
Other non-current assets	1,687	1,434
CURRENT ASSETS	**51,692**	**36,394**
Trade and Other Receivables	367	233
Other current assets	1,585	2,255
Short-term investments	9,197	10,653
Cash and cash equivalents	40,542	23,253
TOTAL ASSETS	**94,299**	**77,626**
EQUITY	**55,589**	**47,535**
Share Capital	41,553	34,337
Share premium	206,149	170,297
Other reserves	25,667	23,322
Accumulated deficit	(217,778)	(180,421)
NON-CURRENT LIABILITIES	**29,063**	**22,146**
Bank loans	229	326
Finance leases	652	482
Recoverable Cash advances (RCA's)	2,864	1,544
Contingent consideration and other financial liabilities	25,187	19,583
Post employment benefits	131	204
Other non-current liabilities	-	7
CURRENT LIABILITIES	**9,647**	**7,945**
Bank loans	281	209
Finance leases	484	427
Recoverable Cash advances (RCA's)	276	226
Trade payables	5,916	4,800
Other current liabilities	2,690	2,282
TOTAL EQUITY AND LIABILITIES	**94,299**	**77,626**

Consolidated Net Cash Burn Rate [2]

(€'000)	For the year ended 31 December,	
	2018	**2017**
Net cash used in operations	(27,249)	(44,441)
Cash expense for amendment of Celdara Medical and Darmouth College agreements	-	13,276
Net cash used in operations, excluding non-recurring items	**(27,249)**	**(31,165)**
Net cash (used in)/from investing activities	(848)	(857)
Net cash (used in)/from financing activities	43,928	605
Effects of exchange rate changes	3	1,120
Net cash burned over the year, excluding non-recurring items	**15,834**	**(30,297)**
Non-recurring cash outs	-	(18,383)
Net cash burned over the year	**15,834**	**(48,680)**

[2] 'Net cash burn rate' is an alternative performance measure determined by the year-on-year net variance in the Group's Treasury position.

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About Celyad

Celyad is a clinical-stage biopharmaceutical company focused on the development of specialized CAR-T cell-based product candidates and utilizes its expertise in cell engineering to target cancer. Celyad's CAR-T cell autologous and allogeneic platforms have the potential to treat a broad range of solid and hematologic tumors. After having demonstrated safety, its lead oncology autologous CAR-T therapy CYAD-01 (CAR-T NKG2D) is now currently being evaluated in several Phase I clinical trials to assess the clinical activity of multiple administrations of autologous CYAD-01 cells in solid cancer (metastatic colorectal cancer) and hematological tumors (acute myeloid leukemia) with or without being concurrently administered with standard-of-care treatments (preconditioning chemotherapy).

Concomitantly, Celyad is developing CYAD-101, first-in-class, investigational, non-gene edited, allogeneic (donor derived) CAR-T therapy co-expressing the CAR-T NKG2D and the novel inhibitory peptide TIM (T cell receptor [TCR] Inhibiting Molecule). The expression of TIM reduces signaling of the TCR complex and could therefore reduce or eliminate Graft versus Host Disease (GvHD). CYAD-101 is being evaluated in a Phase I trial for the treatment of patients with mCRC. Preliminary results are expected in second half of 2019.

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
Filippo Petti, Chief Financial Officer – investors@celyad.com
Anne Moore, Vice President Corporate Strategy – T: +32(0) 10 39 41 87 – **communications@celyad.com**

For Belgium: Comfi
Laure-Eve Montfort – T.: +32 (0)2 290 90 93 – **celyad@comfi.be**

For the U.S.: LifeSci Advisors
Investor Relations: Daniel Ferry – T.: +1 (617) 535 7746 – **daniel@lifesciadvisors.com**
Public Relations: Sara Zelkovic – T:+1 (646) 876 4933 – **sara@lifescipublicrelations.com**

Forward-looking statements

This release may contain forward-looking statements, including statements regarding the safety and efficacy of CYAD-01 and CYAD-101; the ongoing and planned clinical development of CYAD-01 and CYAD-101, including the timing of trials, enrollment, data readouts and presentations; the clinical and commercial potential of CYAD-01 and CYAD-101 and the adequacy of Celyad's financial resources; Celyad's worldwide development and commercialization rights to CYAD-101; the ongoing and planned clinical and commercial potential and development of its shRNA technology; Celyad's financial condition, results of operation and business outlook. 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 data summarized above are preliminary in nature. There is limited data concerning safety and clinical activity following treatment with the CYAD-01 and CYAD-101 drug product candidates. These results may not be repeated or observed in ongoing or future studies involving the CYAD-01 and CYAD-101 drug product candidates. 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 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 and CYAD-101 in the United States and Europe and subsequent commercial success of CYAD-01 and CYAD-101, 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 maintain and 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 product candidates 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.