

# Celyad

## Developing a sophisticated clinical strategy

Clinical update

Pharma & biotech

Celyad has reached the potentially crucial three billion natural killer receptor (NKR) CAR T-cell dose (CYAD-01) in acute myeloid leukaemia (AML) with the first patient showing no signs of toxicity. If responses are seen in several patients, an expansion phase could start; a strong response was seen in November at the 300 million cell dose. Interim data are promised by Celyad in late 2018, probably at ASH. There are now several studies running or starting including using two courses of CYAD-01 in AML (after an initial response), evaluation of conditioning therapy with AML and combinations of CYAD-01 with chemotherapy in colorectal cancer. The indicative value remains at €1,040m, €84 per share.

| Year end | Revenue (€m) | PBT* (€m) | EPS* (€) | DPS (€) | P/E (x) | Yield (%) |
|----------|--------------|-----------|----------|---------|---------|-----------|
| 12/16    | 8.52         | (20.00)   | (2.09)   | 0.0     | N/A     | N/A       |
| 12/17    | 3.54         | (26.80)   | (2.79)   | 0.0     | N/A     | N/A       |
| 12/18e   | 0.00         | (27.25)   | (2.43)   | 0.0     | N/A     | N/A       |
| 12/19e   | 0.00         | (28.50)   | (2.38)   | 0.0     | N/A     | N/A       |

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

## A sophisticated clinical programme in AML

In 2017, an AML patient given three doses of  $3 \times 10^8$  NKR CAR T-cells (CYAD-01) over 28 days had a near complete response; the [case report](#) has been published. This encouraging response with strong blood cell recovery levels and reduction in cancer cells (blasts) is being developed in three ways. First, the planned  $3 \times 10^9$  CYAD-01 dose is now being tested in the [THINK](#) study and this may enable a trial expansion to assess efficacy. Second, multiple CYAD-01 28-day courses are being tested, initially at the  $1 \times 10^9$  dose when a patient shows an initial response; this indicates that responses are being seen. A second course may enhance overall responses as no preconditioning is used in THINK so no cell expansion is seen. Third, the [DEPLETHINK](#) study will test a non-myeloablative preconditioning regimen plus CYAD-01 in AML /MDS patients to test for CYAD-01 expansion.

## Leading position in solid cancers and allogeneic cells

The generalised targeting of its NKR CAR approach gives Celyad a potentially dominant position in solid cancers, an area other CAR approaches find hard to access ([see detailed report](#)). Dose escalation of CYAD-01 in solid cancers in THINK is ongoing. Importantly, Celyad is evaluating CYAD-01 in combination with FOLFOX in the [SHRINK](#) trial; the first patient was enrolled in May in Belgium. The Belgium [LINK](#) study tests direct hepatic injection of CYAD-01 to treat metastatic CRC. An allogeneic NKR CAR trial could start; Celyad holds key patents.

## Valuation: €84 per share pending fresh data

The valuation is focused on AML at 25% probability and colorectal cancer at 20%. The unchanged indicative value is €1,040m, €84 per share. Management states that the May 2018 placing proceeds, €46.1m gross, could fund Celyad through H220. Value progression depends on THINK data especially in AML.

21 June 2018

**Price** €23.40

**Market cap** €279m

\$1.18/€

Cash (€m) at 31 December 2017 34

Shares in issue (at 23 May 2018) 11.94m

Free float (Edison estimate) 67%

Code CYAD

Primary exchange Euronext Brussels

Secondary exchange NASDAQ

### Share price performance



% 1m 3m 12m

Abs (0.4) (22.5) (45.2)

Rel (local) 3.3 (18.7) (42.9)

52-week high/low €54.0 €22.9

### Business description

Celyad is developing an innovative natural killer receptor (NKR) CAR T-cell immune-oncology platform. Celyad has a leading position in CAR for AML and solid tumours and is exploring the use of NKR CAR with chemotherapy. It holds a key granted patent in allogeneic CAR technology.

### Next events

Q218 update Q318

THINK interim data Q418

### Analysts

Dr John Savin MBA +44 (0)20 3077 5735

Dr Daniel Wilkinson +44 (0)20 3077 5734

[healthcare@edisongroup.com](mailto:healthcare@edisongroup.com)

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**Exhibit 1: Financial summary**

|  | €000s | 2016     | 2017     | 2018e    | 2019e    |
|--|-------|----------|----------|----------|----------|
| Year end 31 December                         |       | IFRS     | IFRS     | IFRS     | IFRS     |
| <b>PROFIT &amp; LOSS</b>                     |       |          |          |          |          |
| Revenue                                      |       | 8,523    | 3,540    | 0        | 0        |
| Cost of Sales                                |       | (53)     | (515)    | (500)    | (500)    |
| Gross Profit                                 |       | 8,470    | 3,025    | (500)    | (500)    |
| EBITDA                                       |       | (21,246) | (22,317) | (26,500) | (27,750) |
| Operating Profit (before amort. and except.) |       | (22,006) | (23,283) | (27,500) | (28,750) |
| Intangible Amortisation                      |       | (756)    | (748)    | (750)    | (750)    |
| Other income and charges                     |       | 0        | (26,273) | 0        | 0        |
| Share-based payments                         |       | (2,847)  | (2,569)  | (2,600)  | (2,600)  |
| Operating Profit                             |       | (25,609) | (52,873) | (30,850) | (32,100) |
| Net Interest                                 |       | 1,997    | (3,521)  | 250      | 250      |
| Profit Before Tax (norm)                     |       | (20,009) | (26,804) | (27,250) | (28,500) |
| Profit Before Tax (FRS 3)                    |       | (23,612) | (56,394) | (30,600) | (31,850) |
| Tax  |       | 6        | 1        | 0        | 0        |
| Profit After Tax (norm)                      |       | (20,003) | (26,803) | (27,250) | (28,500) |
| Profit After Tax (FRS 3)                     |       | (23,606) | (56,393) | (30,600) | (31,850) |
| Average Number of Shares Outstanding (m)     |       | 9.3      | 9.6      | 11.2     | 12.0     |
| EPS - normalised (c)                         |       | (209)    | (279)    | (243)    | (238)    |
| EPS - (IFRS) (c)                             |       | (253)    | (586)    | (273)    | (267)    |
| Dividend per share (c)                       |       | 0.0      | 0.0      | 0.0      | 0.0      |
| Gross Margin (%)                             |       | N/A      | N/A      | N/A      | N/A      |
| EBITDA Margin (%)                            |       | N/A      | N/A      | N/A      | N/A      |
| Operating Margin (before GW and except) (%)  |       | N/A      | N/A      | N/A      | N/A      |
| <b>BALANCE SHEET</b>                         |       |          |          |          |          |
| Fixed Assets                                 |       | 53,440   | 41,232   | 40,492   | 39,752   |
| Intangible Assets                            |       | 49,566   | 36,508   | 35,768   | 35,028   |
| Tangible Assets                              |       | 3,563    | 3,290    | 3,290    | 3,290    |
| Investments                                  |       | 311      | 1,434    | 1,434    | 1,434    |
| Current Assets                               |       | 85,366   | 36,393   | 50,659   | 22,149   |
| Stocks                                       |       | 0        | 0        | 0        | 0        |
| Debtors                                      |       | 1,359    | 233      | 233      | 233      |
| Cash (cash plus deposits)                    |       | 82,587   | 33,905   | 48,171   | 19,661   |
| Other  |       | 1,420    | 2,255    | 2,255    | 2,255    |
| Current Liabilities                          |       | (11,275) | (7,944)  | (7,944)  | (7,944)  |
| Creditors                                    |       | (9,960)  | (7,509)  | (7,509)  | (7,509)  |
| Deferred revenue                             |       | 0        | 0        | 0        | 0        |
| Walloon loans and bank loan                  |       | (1,315)  | (435)    | (435)    | (435)    |
| Long Term Liabilities                        |       | (36,646) | (22,146) | (22,146) | (22,146) |
| Loans (non-current) Bank and Walloon         |       | (7,866)  | (1,870)  | (1,870)  | (1,870)  |
| Other long term liabilities                  |       | (28,780) | (20,276) | (20,276) | (20,276) |
| Net Assets                                   |       | 90,885   | 47,535   | 61,061   | 31,811   |
| <b>CASH FLOW</b>                             |       |          |          |          |          |
| Operating Cash Flow                          |       | (26,695) | (46,027) | (26,514) | (27,471) |
| Net Interest                                 |       | 1,997    | (3,521)  | 264      | (29)     |
| Tax  |       | 0        | 0        | 0        | 0        |
| Capex  |       | (1,782)  | (858)    | (1,010)  | (1,010)  |
| Acquisitions/disposals                       |       | (1,561)  | 0        | 0        | 0        |
| Financing                                    |       | 0        | 625      | 46,140   | 0        |
| Dividends                                    |       | 0        | 0        | 0        | 0        |
| Other  |       | 3,109    | 1,099    | (4,614)  | 0        |
| Net Cash Flow                                |       | (24,932) | (48,682) | 14,266   | (28,510) |
| Opening net debt/(cash)                      |       | (96,131) | (73,406) | (31,600) | (45,866) |
| HP finance leases initiated                  |       | 0        | 0        | 0        | 0        |
| Loan and finance movements                   |       | 2,207    | 6,876    | (0)      | 0        |
| Closing net debt/(cash)                      |       | (73,406) | (31,600) | (45,866) | (17,356) |

Source: Edison Investment Research estimates, Celyad reports and announcements

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