

Celyad

Allogeneic trial first dose given

The allogeneic version of NRK CAR T-cell therapy, CYAD-101, is underway with the first patient dosed. The study mirrors the current colorectal SHRINK trial in combining NKR CAR cell therapy with FOLFOX chemotherapy. This gives Celyad the lead in a potential high-value mass-market solid cancer where allogeneic therapy is likely to be essential. The indicative value is €1,090m (€89 per share) pending further data.

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.

Leading position in solid cancers and allogeneic cells

Celyad has a dominant position in CAR therapy for solid cancers ([see T-cell cancer therapies](#)). Its NKR CAR T-cell therapy targets 'stressed' cancer cells, for example, after chemotherapy like FOLFOX. As an allogeneic approach, CYAD-101 is a more affordable, rapid-response potential therapy for many thousands of patients. Of allogeneic competitors in the US, only Collectis (UCART123 in AML) and Precision Biosciences (PBCAR0191) are in trials but for haematological cancers. Allogeneic in solid cancers is in preclinical development; UCART19 targets ALL. However, there are many allogeneic trials in China. Celyad has regained its allogeneic therapy rights in key Asian countries from ONO as ONO failed to exercise its option.

AlloSHRINK

Celyad is already evaluating autologous (customised) CYAD-01 with FOLFOX in the open-label [SHRINK](#) trial. The alloSHRINK ([NCT03692429](#)) study mirrors the SHRINK design. Initial results from three SHRINK patients were disclosed in November 2018. Of these, one had a [pathological](#) complete response (CR) and the other two had partial pathological responses. However, cell numbers after infusion were low and no Cy-Flu preconditioning was used. AlloSHRINK is starting its dose escalation phase to test safety and is focusing on any signs of graft vs host disease. A later expansion phase will test the objective response rate. One important secondary endpoint is host vs graft (HvG) response especially after the second and third doses, as HvG could eliminate CYAD-101 cells or block any cell expansion, stopping any therapeutic benefit. The 36-patient trial could compete in late 2021. Celyad holds key patents in allogeneic therapy (licensed by Novartis).

Valuation: Unchanged at €1,090m pending more data

We assign a nominal value of €100m to the allogeneic opportunity; this will be revised as response and safety data emerge. AlloSHRINK open-label data is likely to be reported as the trial progresses. Allogeneic products may come to dominate the valuation. The overall indicative value remains €1,090m, €89 per share. More CYAD-01 data is due on 3 December at ASH.

AlloSHRINK underway

Pharma & biotech

3 December 2018

Price **€24.30**

Market cap **€290m**

\$1.18/€

Cash (€m) at 30 September 2018 55.9

Shares in issue 11.94m

Free float (Edison estimate) 67%

Code CYAD

Primary exchange Euronext Brussels

Secondary exchange NASDAQ

Share price performance



% 1m 3m 12m

Abs 10.4 (6.2) (30.4)

Rel (local) 9.1 (0.6) (20.5)

52-week high/low €38.7 €20.5

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

ASH data 3 December 2018

FY18 results Q119

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Exhibit 1: Financial summary

	€000s	2016	2017	2018e	2019e
Year end 31 December		IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
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
BALANCE SHEET					
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
CASH FLOW					
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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