ORYZON GENOMICS

BUY

TARGET PRICE : 8.8€ +156%

COMPANY UPDATE

ALICE PROVIDES ENCOURAGING PRELIMINARY RESULTS

ORYZON GENOMICS presented preliminary results from the Phase 2 ALICE study at the EHA 2019, which included the results from the first 6 patients. ALICE is evaluating company's LSD1 selective inhibitor, iadademstat, in combination with chemotherapy (azacitidine) in elderly patients with AML. The presented clinical update defined the recommended dose of iadademstat, as well as showed manageable safety profile and encouraging clinical activity of the drug. We reiterate our BUY rating and TP of €8.8.

Olga Smolentseva, PhD
+33 1 44 88 88 09
osmolentseva@invest-securities.com

Thibaut Voglimacci - Stephanopoli
+33 1 44 88 77 95
tvoglimacci@invest-securities.com

Manageable safety profile supports further clinical development

The company presented clinical update from its Phase 2 ALICE study of iadademstat in elderly patients with AML. Recall, iadademstat (ORY-1001) is a selective inhibitor of lysine-specific demethylase 1 (LSD1), an enzyme that is involved in the epigenetic mechanisms of gene regulation. The open-label ALICE study is assessing the efficacy of the drug in combination with a chemotherapy agent azacitidine (aza) as first-line therapy in older patients with acute myeloid leukemia (AML). AML is predominantly a disease of elderly with the median age at diagnosis of approximately 70 years. Older patients with AML have significant comorbidities, and only about 30% are eligible for conventional intensive chemotherapy. ALICE was designed as a two-part study to define the dosing of iadademstat in this patient population during the Part 1 and to show the clinical activity of the combination in the Part 2. Preliminary results from Part 1 of the study were presented at the annual meeting of the European Hematology Association (EHA 2019) on June 14, 2019.

The clinical update form the first 6 patients defined the recommended dose of iadademstat (90 ug/m^2), as well as showed the first signs of safety and efficacy of the drug. On the safety side (n=6), serious adverse events (AE) were associated with myelosuppression and included: 50% anemia (Grade 3), 50% neutropenia (Grade 4), 50% thrombocytopenia (Grade 4) (Exhibit 1). Such hematologic AE were in-line with our expectations, as iadademstat is an epigenetic drug and AML itself is associated with myelosuppression. In the previously reported studies, treatment with aza alone also led to Grade 3/4 hematologic AE: febrile neutropenia (28%), neutropenia (26%), thrombocytopenia (24%), anemia (16%). Additionally, recently approved Venclexta, a Bcl2 inhibitor from ABBVIE, in combination with aza showed comparable safety profile, including 32% neutropenia (Grade 4), 41% thrombocytopenia (Grade 4), 5% anemia (Grade 3), with 1 case (5%) of Grade 5 sepsis. We believe that the reported safety profile of iadademstat is in agreement with its mechanism of action and bodes well for the future clinical development.

in € / share	2018e	2019e	2020e
Adjusted EPS	-0.03	-0.11	-0.26
chg.	*n.s.*	*n.s.*	*n.s.*
estimates chg.	*n.s.*	*n.s.*	*n.s.*

au 31/12	2018e	2019e	2020e
PE	n.s.	n.s.	n.s.
EV/Sales	n.s.	n.s.	n.s.
EV/EBITDA	n.s.	n.s.	n.s.
EV/EBITA	n.s.	n.s.	n.s.
FCF yield*	n.s.	n.s.	n.s.
Div. yield (%)	n.s.	n.s.	n.s.

* After tax op. FCF before WCR

key points	
Share price (€)	3.4
Number of Shares (m)	39.1
Market cap. (€m)	134
Free float (€m)	93
ISIN	ES0167733015
Ticker	ORY-ES
DJ Sector	Health Technology

	1m	3m	Ytd
Absolute perf.	-18.9%	-5.9%	+58.7%
Relative perf.	-19.5%	-7.7%	+37.9%

Source : Factset, Invest Securities estimates

Exhibit 1: Iadademstat-related adverse events

Study-drug related TEAEs (ADRs) by SOC and PT (n= 6)				
Number of Patients (%) Event Count				
System Organ Class Preferred Term (SOC) Preferred Term(PT)	Grade 1	Grade 2	Grade 3	Grade 4
Blood and lymphatic system disorders				
Anaemia	2(33.3)5	2(33.3)7	3(50.0)8	0(0.0)0
Neutropenia	2(33.3)2	3(50.0)5	4(66.7)5	3(50.0)5
Thrombocytopenia	0(0.0)0	1(16.6)3	3(50.0)5	3(50.0)9
Gastrointestinal disorders				
Constipation	0(0.0)0	1(16.6)1	0(0.0)0	0(0.0)0
Vomiting	1(16.6)1	0(0.0)0	0(0.0)0	0(0.0)0
Gingival bleeding	0(0.0)0	1(16.6)1	0(0.0)0	0(0.0)0
General disorders and administration site conditions				
Asthenia	1(16.6)3	1(16.6)2	1(16.6)1	0(0.0)0
Hepatobiliary disorders				
Hyperbilirubinaemia	1(16.6)	1(16.6)	0(0.0)0	0(0.0)0
Investigations				
Platelet count decreased	0(0.0)0	0(0.0)0	0(0.0)0	1(16.6)1
Metabolism and nutrition disorders				
Decreased appetite	2(33.3)3	0(0.0)0	0(0.0)0	0(0.0)0
Hypomagnesaemia	1(16.6)1	0(0.0)0	0(0.0)0	0(0.0)0
Hyponatraemia	2(33.3)2	0(0.0)0	0(0.0)0	0(0.0)0
Nervous system disorders				
Dysgeusia	2(33.3)4	0(0.0)0	1(16.6)1	0(0.0)0
Respiratory, thoracic and mediastinal disorders				
Dyspnea	0(0.0)0	1(16.6)1	0(0.0)0	0(0.0)0

Source: Company's presentation at EHA, 2019

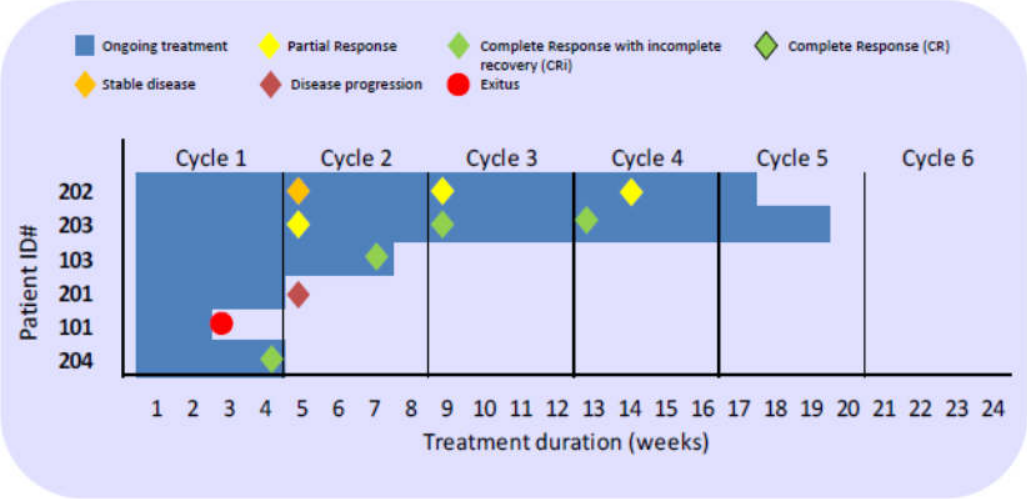
ALICE could strengthen iadademstat's position as an antileukemic therapy

Importantly, 3 out of 5 evaluable AML patients had morphologic complete remission with incomplete blood count recovery (CRi) and 1 patient had a partial response (Exhibit 2), leading to overall response rate (ORR) of 80% and CRi of 60%. In the previous studies in elderly patients with AML, aza alone showed CR/CRi of only 28% (n=241): complete remission (CR) of 20% and CRi of 8%. In the same patient population, Venclexta in combination with aza achieved CR/CRi of 59% (n=22): CR of 27% and CRi of 32%. We note that many clinical trials include CRi, a CR with incomplete hematologic recovery (< 5% bone marrow blasts with residual neutropenia or thrombocytopenia), as a part of a composite response endpoint in clinical trials. Albeit in the retrospective studies AML patients with CR had better relapse-free and overall survival rates than patients with CRi, patients with CRi still had significantly better outcomes than non-responders. While iadademstat plus aza so far achieved only CRis, we see a strong indication of the drug's clinical activity when compared to aza alone. Additionally, the mechanism of action of iadademstat was confirmed mechanistically by the observed blast differentiation. We also note a short time to response, achieved by iadademstat plus aza combination, which was also comparable to Venclexta plus aza (1.5 vs 1.2 months, respectively).

Overall, while it is difficult to draw any conclusions on such limited number of patients (n=5), we are encouraged by the presented iadademstat's data. We note that the preliminary clinical results were comparable to Venclexta, which set a relatively high bar for efficacy in AML. The Part 2 of ALICE study, is expected to recruit additional 18 elderly patients with AML (36 in total for Part 1 and Part 2) and we believe that the next clinical update could be available at the annual meeting of the American Society of Hematology (ASH) in December 2019.

73, bd Haussmann - 75008 Paris
T : +33 (0)1 80 97 22 01
invest-securities.com

Exhibit 2: Iadademstat plus aza shows efficacy in elderly AML patients



Source: Company's presentation at EHA, 2019

Update from CLEPSIDRA could further strengthen iadademstat program

Additionally, iadademstat is being evaluated in CLEPSIDRA trial in combination with platinum-etoposide chemotherapy in patients with relapsed, extensive-stage small cell lung cancer (SCLC), who are positive for predictive biomarkers. SCLC patients respond well to chemotherapy at first, but the disease would eventually progress in the majority of patients (the relapsed SCLC population). Similarly to ALICE, CLEPSIDRA was designed to include 2 parts and we are expecting preliminary results from CLEPSIDRA to mostly cover the dose-finding part at the annual meeting of the European Society for Medical Oncology (ESMO) in September 2019. Albeit, the first preliminary results could also provide an interim look into the signs of activity and the biomarker-depended response. We currently expect topline results from CLEPSIDRA trial in 1Q21. We currently project iadademstat to reach the market for AML and rSCLC in 2024 in the US and the EU, generating risk-adjusted revenues of €24M and growing to €176M by 2031.

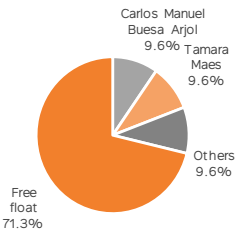
73, bd Haussmann - 75008 Paris
T : +33 (0)1 80 97 22 01
invest-securities.com

INVESTMENT CASE

ORYZON is a Spanish biotech specializing in the treatment of neurodegenerative diseases and cancer. In all its development programs, the company identifies biomarkers through its genetic and proteomic platforms in order to develop small molecule drugs. Looking ahead of multiple clinical updates, we believe that Oryzon's lead programs could significantly advance in 2019.

FINANCIAL DATA

Shareholders



Share Information	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
Published EPS (€)	-0.19	-0.15	-0.03	-0.11	-0.26	-0.43	0.53	0.44	0.76
Adjusted EPS (€)	**-0.19**	**-0.15**	**-0.03**	**-0.11**	**-0.26**	**-0.43**	**0.53**	**0.44**	**0.76**
Diff. I.S. vs Consensus	*+12.5%*	*-0.3%*	*-14.1%*	*-38.6%*					
Dividend									

Valuation ratios	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
P/E	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	6.4x	7.8x	4.5x
EV/Sales	111.47x	8265.92x	n.s.	n.s.	n.s.	n.s.	2.93x	5.06x	1.11x
VE/EBITDA	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	4.3x	6.2x	2.6x
VE/EBITA	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	4.3x	6.2x	2.6x
Op. FCF bef. WCR yield	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	11.1%	9.3%	24.9%
Op. FCF yield	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	11.1%	9.3%	24.9%
Div. yield (%)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

NB : valuation based on annual average price for past exercise

Entreprise Value (€m)	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
Share price in €	*3.0*	*4.6*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*
Market cap.	85	156	117	156	156	156	156	156	156
Net Debt	-3	-17	-23	-11	-2	6	-10	-23	-49
Minorities	0	0	0	0	0	0	0	0	0
Provisions/ near-debt	0	0	0	0	0	0	0	0	0
+/- Adjustments	0	0	0	0	0	0	0	0	0
Entreprise Value (EV)	**82**	**139**	**95**	**146**	**155**	**163**	**146**	**134**	**107**

Income statement (€m)	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
Sales	0.7	0.0	0.0	0.0	0.0	0.0	50.0	26.5	96.3
chg.	*n.s.*	*n.s.*	*n.s.*	*n.s.*	*n.s.*	*n.s.*	*n.s.*	*n.s.*	*n.s.*
EBITDA	-4	-4	-3	-4	-10	-17	34	21	41
EBITA	**-4**	**-4**	**-3**	**-4**	**-10**	**-17**	**34**	**21**	**41**
chg.	***n.s.***	***n.s.***	***n.s.***	***n.s.***	***n.s.***	***n.s.***	***n.s.***	***-36.9%***	***+89.7%***
EBIT	-4.9	-4.7	-3.3	-5.3	-11.6	-19.0	31.7	18.9	37.8
Financial result	-1	-1	-1	0	0	0	0	0	0
Corp. tax	0	0	3	0	0	0	-9	0	-5
Minorities+affiliates	0	0	0	0	0	0	0	0	0
Net attributable profit	-5.4	-5.2	-1.2	-5.0	-11.3	-18.7	23.3	19.2	33.1
Adjusted net att. profit	**-5.4**	**-5.2**	**-1.2**	**-5.0**	**-11.3**	**-18.7**	**23.3**	**19.2**	**33.1**
chg.		***n.s.***	***n.s.***	***n.s.***	***n.s.***	***n.s.***	***n.s.***	***-17.8%***	***+72.5%***

Cash flow statement (€m)	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
EBITDA	-4.1	-3.9	-3.1	-4.0	-10.0	-17.0	34.0	21.5	40.7
Theoretical Tax / EBITA	0.0	0.1	2.5	0.0	0.0	0.0	-8.7	0.0	-5.1
Capex	-7.1	0.6	-7.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0
Operating FCF bef. WCR	**-11.2**	**-3.2**	**-7.6**	**-13.0**	**-19.0**	**-26.0**	**16.3**	**12.5**	**26.7**
Change in WCR	-0.1	-0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Operating FCF	**-11.3**	**-3.4**	**-7.3**	**-13.0**	**-19.0**	**-26.0**	**16.3**	**12.5**	**26.7**
Acquisitions/disposals	0.7	5.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Capital increase/decrease	0.3	16.9	11.9	1.3	10.0	18.0	0.0	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other adjustments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Published FreeCash Flow	**-10.2**	**18.5**	**4.7**	**-11.7**	**-9.0**	**-8.0**	**16.3**	**12.5**	**26.7**

Balance Sheet (€m)	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
Assets	21	25	32	40	47	55	62	69	75
Intangible assets/GW	19	22	29	37	45	52	59	66	73
WCR	-1	-8	-9	-9	-9	-9	-9	-9	-9
Group equity capital	23	34	45	41	40	40	63	82	115
Minority shareholders	0	0	0	0	0	0	0	0	0
Provisions	0	0	0	0	0	0	0	0	0
Net financial debt	**-2.6**	**-17.2**	**-22.6**	**-11.0**	**-2.0**	**6.0**	**-10.3**	**-22.7**	**-49.4**

Financial ratios	2016	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e
EBITDA margin	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	68.0%	81.1%	42.3%
EBITA margin	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	68.0%	81.1%	42.3%
Adjusted Net Profit/Sales	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	46.6%	72.5%	34.3%
ROCE	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	64.4%	36.1%	61.8%
ROE adjusted	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	37.1%	23.4%	28.7%
Gearing	n.s.	n.s.	n.s.	n.s.	n.s.	15.3%	n.s.	n.s.	n.s.
ND/EBITDA (in x)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-0.3x	-1.1x	-1.2x

Source : company, Invest Securities Estimates

73, bd Haussmann - 75008 Paris
T : +33 (0)1 80 97 22 01
invest-securities.com

ORYZON GENOMICS

SWOT ANALYSIS

STRENGTHS

- Epigenetic platform
- Numerous clinical development programs
- Solid cash position

WEAKNESS

- No partnership
- Numerous failures in lead indication (AD)
- Tight competition in oncology indications

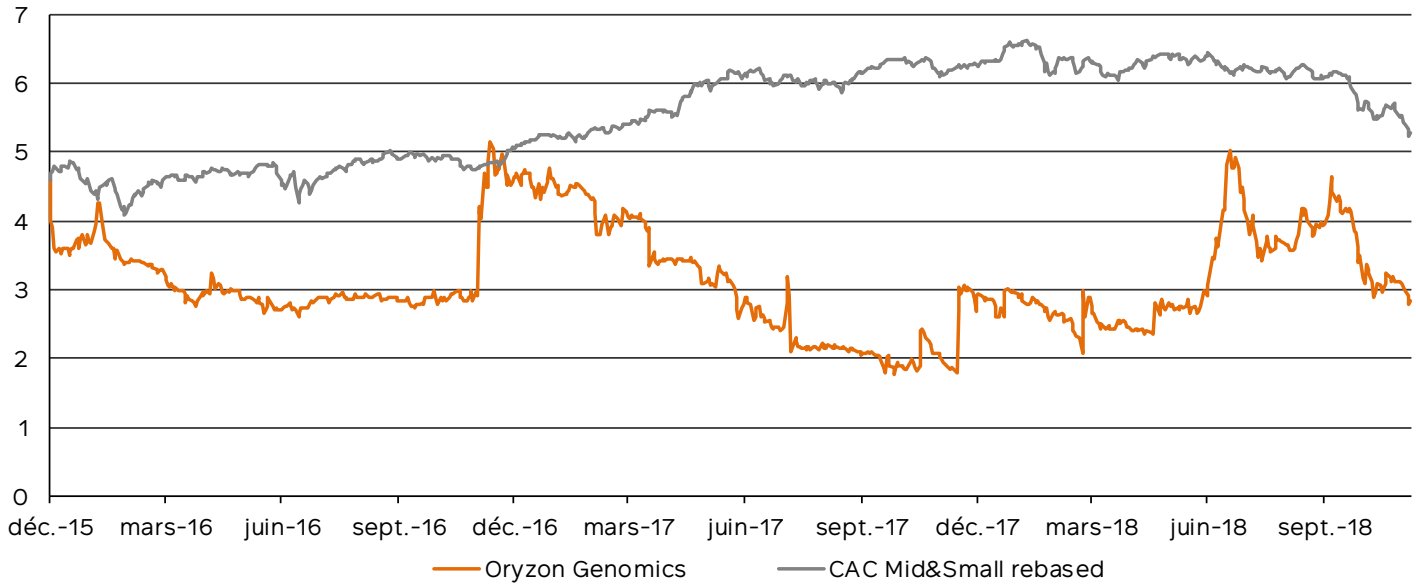
OPPORTUNITIES

- Potential partnership agreement
- Expansion indications for clinical programs
- Preclinical programs to move into clinic

THREATS

- Clinical and regulatory risks
- Commercial risks
- Legal risks

SHARE PRICE CHANGE FOR 5 YEARS



DETECTION OF CONFLICTS OF INTEREST

	Corporate Finance	Détention capitalistique de l'émetteur	Communication préalable à l'émetteur	Intérêt personnel de l'analyste	Contrat de liquidité	Listing Sponsor	Contrat d'analyse
Oryzon Genomi	Non	Non	Oui	Non	Non	Non	Oui

DISCLAIMER

73, bd Haussmann - 75008 Paris
T : +33 (0)1 80 97 22 01
invest-securities.com

MANAGEMENT

Marc-Antoine Guillen
CEO
+33 1 44 88 77 80
maguillen@invest-securities.com

Jean-Emmanuel Vernay
Managing Director
+33 1 44 88 77 82
jevernay@invest-securities.com

Anne Bellavoine
Managing Director
+33 1 55 35 55 75
abellavoine@invest-securities.com

Pascal Hadjedj
Deputy Managing Director
+33 1 55 35 55 61
phadjedj@invest-securities.com

EQUITY RESEARCH

Maxime Dubreil
Head of Equity Research
+33 1 44 88 77 98
mdubreil@invest-securities.com

Johann Carrier
Stock-Picking
+33 1 44 88 77 88
jcarrier@invest-securities.com

Bruno Duclos
Real Estate
+33 1 73 73 90 25
bduclos@invest-securities.com

Benoit Faure-Jarrosson
Real Estate
+33 1 44 88 77 88
bfaure-jarrosson@invest-securities.com

Christian Guyot
Consumer Goods
+33 1 80 97 22 01
cguyot@invest-securities.com

Matthieu Lavillunière, CFA
Technology
+33 1 73 73 90 34
mlavilluniere@invest-securities.com

Ludovic Martin, CFA
Consumer Goods
+33 1 73 73 90 36
lmartin@invest-securities.com

Vladimir Minot
Real Estate
+33 1 73 73 90 25
vminot@invest-securities.com

Thibault Morel
Technology
+33 1 44 88 77 97
tmorel@invest-securities.com

Jean-Louis Sempé
Automotive
+33 1 73 73 90 35
jlsempe@invest-securities.com

Olga Smolentseva
Biotechs
+33 1 44 88 88 09
osmolentseva@invest-securities.com

Thibaut Voglimacci
Medtechs / Biotechs
+33 1 44 88 77 95
tvoglimacci@invest-securities.com

TRADING FLOOR

François Habrias
Institutional Sales
+33 1 55 35 55 70
fhabrias@invest-securities.com

Dominique Humbert
Sales trading
+33 1 55 35 55 64
dhumbert@invest-securities.com

Bertrand Le Mollé-Montanguon
Institutional Sales
+33 1 55 35 55 74
blmm@invest-securities.com

Ralph Olmos
Institutional Sales
+33 1 55 35 55 72
rolmos@invest-securities.com

Kaspar Stuart
Institutional Sales
+33 1 55 35 55 65
kstuart@invest-securities.com

Renaud Vallette Viallard
Institutional Sales
+33 1 72 38 26 32
rvv@invest-securities.com

Frédéric Vals
Institutional Sales
+33 1 55 35 55 71
fvals@invest-securities.com

CORPORATE BROKING & ISSUER MARKETING

Thierry Roussilhe
Head
+33 1 55 35 55 66
troussilhe@invest-securities.com

Claude Bouyer
Senior Advisor
+33 1 44 88 88 02
cbouyer@invest-securities.com

73, bd Haussmann - 75008 Paris
T : +33 (0)1 80 97 22 01
invest-securities.com