

# CLAL Biotechnology

## MediWound updates development plans

Earnings update

Pharma & biotech

4 September 2019

**Price\*** **NIS1.62**

**Market cap** **NIS261m**

NIS3.54/US\$

\*Priced at 2 September 2019

Net debt (NISm, unconsolidated) at 30 June 2019 16.1

Shares in issue 161.2m

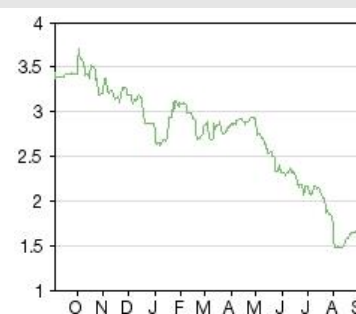
Free float 37.2%

Code CBI

Primary exchange TASE

Secondary exchange N/A

### Share price performance



% 1m 3m 12m

Abs 9.2 (30.4) (52.5)

Rel (local) 11.9 (33.2) (51.9)

52-week high/low NIS3.71 NIS1.47

### Business description

Clal Biotechnology Industries is a healthcare investment company focused on investing in a variety of therapeutic, diagnostic and medical device companies covering a full range of development phases from preclinical to post-market. The company holds nine direct investments, with interests ranging between 4% and 45%. It also has five indirect investments through its 50% stake in the Anatomy Fund, which it manages.

### Next events

MediWound EscharEx trial initiation Q419

Gamida Cell omidubicel Phase III top-line data H120

### Analysts

Maxim Jacobs +1 646 653 7027

Nathaniel Calloway +1 646 653 7036

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

[Edison profile page](#)

Clal Biotechnology Industries (CBI) recently published its Q219 update. Notably, MediWound (35% owned by CBI) announced that following a meeting to discuss the submission of a biologics licensing application (BLA) with the FDA, it expects to file for approval for NexoBrid in Q220. The submission needs to wait for the 12-month follow-up results from the Phase III DETECT study (acute data were released in January). MediWound expects to initiate a 174-patient Phase II study of EscharEx to treat venous leg ulcers in Q419 with an interim look by the end of 2020 and completion of the trial by the end of 2021.

Year end	Revenue (NISm)	PBT* (NISm)	EPS* (NIS)	DPS (NIS)	P/E (x)	Yield (%)
12/15	55.8	(209.4)	(1.44)	0.0	N/A	N/A
12/16	30.5	(454.1)	(2.89)	0.0	N/A	N/A
12/17	73.6	(54.2)	(0.15)	0.0	N/A	N/A
12/18	85.3	(40.9)	(0.18)	0.0	N/A	N/A

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

## MediWound: NexoBrid BLA filing in Q220

Following a recent pre-BLA meeting with the FDA, the company announced it plans to file for approval for NexoBrid in Q220 as it will be including the 12-month results from the Phase III DETECT study in the submission package (acute data were released in January). Previously, an H219 filing was thought possible if the initial submission only required the acute data.

## MediWound: EscharEx development plan announced

MediWound also announced its development plans for EscharEx. The company expects to initiate a Phase II study of EscharEx in 174 patients suffering from venous leg ulcers in Q419. It believes that, if positive, this study could be one of two pivotal studies needed by the FDA for approval. An interim look is expected at the end of 2020 with full completion of the study by the end of 2021.

## Gamida Cell Phase III data next year

Gamida Cell (9% owned by CBI, down from 12% previously) is on track to complete enrolment for its Phase III trial of NiCord (now called omidubicel) in haematological malignancies by the end of 2019 (previously H219) with data expected in H120. If these Phase III data are positive, Gamida Cell plans to submit a biologic licence application (BLA) filing for omidubicel in H220.

## Valuation: NIS540m or NIS3.35 per share

We have decreased our valuation of CBI to NIS540m or NIS3.35 per share from NIS736m or NIS4.56 per share, primarily due to delayed timelines for NexoBrid and EscharEx as well as the dilution of CBI's stake in Gamida Cell following a \$40.3m offering by that company. We have also delayed omidubicel's launch from 2020 to 2021 to be more conservative on timing. Additionally, we have lowered the value of the Neon asset due to its recent stock performance.

## MediWound approval and development timelines

MediWound announced it recently had a pre-BLA meeting with the FDA to discuss the regulatory submission plan for NexoBrid. Originally, the company hoped to submit the BLA based on the positive efficacy results and short term safety data from its Phase III DETECT study then supplement the application with 12-month follow-up safety data during FDA review. Following the meeting, it will be including the 12-month results in the submission, with the filing now expected in Q220 (an H219 submission was thought possible previously). If approved, we expect the product to launch in 2021 (previously 2020).

As a reminder, on 22 January 2019, MediWound announced positive top-line results from its US NexoBrid Phase III (DETECT) trial at 44 burn centres. A total of 175 patients with deep partial thickness and full thickness thermal burns were randomised to receive NexoBrid, standard of care (SOC) or gel vehicle (placebo) at a ratio of 3:3:1. The study achieved the primary endpoint, which was incidence of complete debridement, with statistical significance, as well as all secondary endpoints (Exhibit 1). Additionally, the trial reached its safety endpoint with statistical significance, which was non-inferior time to complete wound closure with NexoBrid versus SOC.

<b>Exhibit 1: Summary Phase III DETECT study results</b>				
	<b>NexoBrid</b>	<b>Placebo</b>	<b>SOC</b>	<b>p value</b>
<b>Primary endpoint</b>				
Incidence of complete debridement	93% (70/75)	4% (1/25)	N/A	p<0.0001
<b>Secondary endpoints</b>				
Incidence of surgical eschar removal	4% (3/75)	N/A	72% (54/75)	p<0.0001
Time to achieve complete eschar removal (median)	1.0 days	N/A	3.8 days	p<0.0001
Blood loss (mean volume)	14.2ml	N/A	814.5ml	p<0.0001
<b>Safety endpoint</b>				
Non-inferiority in time to complete wound closure		N/A		p=0.0003
Source: MediWound				

MediWound also announced its development plans for EscharEx, its enzymatic topical debridement for chronic wounds. The company expects to initiate a Phase II study of EscharEx in 174 patients suffering from venous leg ulcers in Q419. Patients will be randomised 1:1:1 to receive EscharEx, gel vehicle placebo or non-surgical SOC of either Santyl or Hydrogel with three months follow-up. An interim assessment for futility and potential sample size adjustment will be conducted after the trial has achieved approximately 50% enrolment and is expected to be carried out at the end of 2020. Full trial completion is expected by the end of 2021. The primary endpoint will be incidence of complete debridement compared to gel vehicle placebo. Secondary endpoints will include reduction of pain, time to achieve complete debridement, reduction of wound area, granulation tissue and quality of life, and will be compared with both gel vehicle placebo and non-surgical SOC. Incidence and time to achieve wound closure will be assessed as a safety measurement. The company believes that, if positive, this study could be one of two pivotal studies needed by the FDA for approval. The second pivotal study would start after the completion of this study. Based on this, we now expect EscharEx approval in 2024 (previously 2021).

MediWound also reported Q219 results. Revenues totalled \$20.7m, including a \$17.5m upfront payment and \$2.3m in development services, both from Vericel, which recently licensed NexoBrid. Product sales, based on NexoBrid sales in the EU, were \$0.9m, down 9% from Q218. As of 30 June 2019, the company had \$38.7m in cash (including equivalents and short-term deposits) and expects cash use in H219 to be \$6–8m.

## Gamida Cell Phase III to complete enrolment by YE19

---

Gamida Cell's 120-patient [Phase III study](#) of omidubicel (formerly NiCord) in patients with haematological malignancies is ongoing. Omidubicel, which is the company's lead asset, expands umbilical cord blood (UCB) cell grafts ex vivo and enriches the specific subpopulation of stem and progenitor cells to treat haematological malignancies such as leukaemia and lymphoma. Essentially, CD133+ cells selected from a single unit of UCB are cultured for 21 days in nicotinamide resulting in a c 100-fold expansion of dose stem and progenitor cells, which are then cryopreserved until they are transplanted into the intended patients. This expansion is expected to provide a substantial advantage over a single UCB graft. The use of UCB for bone marrow transplantation (BMT) is limited by the minimal number of stem and progenitor cells. The omidubicel process seeks to provide a more viable alternative to BMT in cancer patients and only partial genetic matching is needed (ie a minimum requirement of four of six human leukocyte antigen biomarkers). The registrational trial is investigating the ability of omidubicel to provide a graft with an ample number of cells that have fast and vigorous in vivo neutrophil- and platelet-producing potential to improve transplantation outcomes (as low cell dose is associated with delayed engraftment and poor outcomes). The primary endpoint for the trial is time to neutrophil engraftment following transplantation (on or before the 42nd day post-transplant) compared to a non-manipulated cord blood unit. Enrolment is on track for completion by year end with top-line data expected in H120. Provided these Phase III data are positive, Gamida Cell plans to submit a BLA filing for omidubicel for the treatment of haematological malignancies in H220.

The company is also investigating omidubicel for the treatment of severe aplastic anaemia (SAA) in an ongoing Phase I/II study. With patient inclusion in cohort one complete (with encouraging data presented on those first cohort patients at the annual Transplantation and Cellular Therapy meeting earlier this year), enrolment into cohort two began in June. Cohort two will evaluate engraftment and transplantation outcomes with the omidubicel-expanded unit alone (in other words, without a haploidentical donor) in up to 20 patients with SAA.

Gamida Cell is also developing donor-derived natural killer (NK) cells for blood and solid cancers in its GDA-201 programme. NK cells are a type of lymphocyte, or white blood cell, that play a central role in lysing infected or transformed cells and therefore offer an innovative approach to cancer treatment. The company previously initiated a 24-patient [Phase I trial](#) with the University of Minnesota evaluating the safety and activity of nicotinamide (NAM)-NK cells in patients with non-Hodgkin's lymphoma and multiple myeloma with additional data expected by the end of the year. The company is working on a cryopreserved version of GDA-201 to enable a multi-centre, multi-dose study in non-Hodgkin's lymphoma patients in 2020.

The company ended Q219 with \$37.1m in cash and raised \$40.3m in gross proceeds in July. Gamida Cell has guided for a \$35–40m in cash outflow for operating activities over 2019 and expects its current resources to fund its operations into Q420.

## Neon data in multiple cancers

---

In July, Neon announced data from the NT-001 Phase Ib for NEO-PV-01, a personal neo-antigen cancer vaccine, in combination with Bristol-Myers Squibb's OPDIVO (nivolumab), a PD-1 immune checkpoint inhibitor in advanced or metastatic melanoma, non-small cell lung cancer (NSCLC) and bladder cancer patients. There was at least 12 months of median follow-up in all three subsets of patients. It is important to note this is a combination trial, so it is unclear how much of the efficacy is from Neon's product and how much is from OPDIVO. According to historical data (see Exhibit 2), the response rates seen in this trial are approximately in line with prior PD1 monotherapy data but there does seem to be a possible benefit in progression-free survival (PFS).

**Exhibit 2: NEO-PV-1 Phase Ib data in combination with OPDIVO (NT-001 trial)**

	Metastatic melanoma (N=34)	Metastatic non-small cell lung cancer (N=27)	Metastatic bladder cancer (N=21)
NEO-PV-01 + OPDIVO median PFS (months)	Not yet reached (12-month PFS = 56%)	5.6	5.6
PD1 historical median PFS (months)	3.1–6.9	2.3–4.2	2.1–2.8
NEO-PV-01 + OPDIVO objective response rate	47%	22%	24%
PD1 historical objective response rate	27–44%	18–26%	21–24%
Phase Ib prior systemic therapy %	41%	67%	71%

Source: Neon Therapeutics reports

The company plans to initiate a randomised Phase II clinical trial in combination with a PD-1 in first-line metastatic melanoma patients in 2020. Biomarker data from the Phase Ib trial will help in the design of the upcoming Phase II. The company is awaiting the results of its Phase 1b clinical trial (NT-002) evaluating NEO-PV-01 in combination with KEYTRUDA (pembrolizumab) and chemotherapy in first-line patients with untreated advanced or metastatic NSCLC prior to moving forward in that indication. Data from that trial are expected in Q320. The company also believes the data in bladder cancer support continued development but has not announced a specific development plan for that indication.

## Update from the rest of the portfolio

On 31 March 2019, eXIthera entered into a licensing and investment agreement with Sichuan Haisco Pharmaceuticals, a Chinese company; the agreement has now closed. As per the agreement, Sichuan Haisco invested \$6m in eXIthera in exchange for an exclusive licence to develop, manufacture and market eXIthera's drug in the intravenous sector in China. Sichuan Haisco is responsible for all development costs including trials, registration and production in China in return for royalties on any future sales of eXIthera's EP-7041, a Factor XIa inhibitor for anticoagulation.

**Exhibit 3: CBI's key investments**

Investment	Technology	% held	Founded	Status	Advantages	Targets
MediWound*	Enzyme technology for debridement of severe burns and chronic wounds	35	2001	NexoBrid: launched in Europe; Positive Phase III results in US pivotal trial EscharEx: Phase II	Reduces time to successful eschar removal, reduces need for surgery and need for grafting.	File a BLA in Q220 for NexoBrid in the US. Initiate large Phase II in Q419 with EscharEx.
Gamida Cell*	Cord stem cell transplant for haematologic diseases	9	1998	Omidubicol: enrolling Phase III for haematological malignancies and ongoing Phase I/II trial in aplastic anemia; GDA-201 (formerly: NAM NK): initiated Phase I.	UCB for transplantation only requires partial matching and nicotinamide technology increases the limited population and quality of stem and progenitor cells. Omidubicol received FDA breakthrough therapy designation.	Enrolment underway for a Phase III study of omidubicol and on track for completion by end of 2019 with top-line results expected in H120 and BLA filing in H220.
Anchiano Therapeutics*	Inodiftagene vixteplasmid is a DNA plasmid for non-muscle invasive bladder cancer	19	2004	Initiated inodiftagene vixteplasmid pivotal trial (Codex) in Q418.	Inodiftagene vixteplasmid is a 4.5kb recombinant DNA plasmid containing H19 regulatory sequences that drive expression of the potent diphtheria toxin A and inhibit protein translation in malignant bladder cells. Monotherapy clinical studies demonstrated promising efficacy rates.	Interim analysis on the first 35 patients from the Codex trial is expected in Q419. Initiate second (in combination with BCG) pivotal clinical trial in 2020.
Biokine	Cyclic peptide inhibitor of CXCR4 for AML and other malignancies	26	2000	Phase III 'GENESIS' trial in stem cell mobilisation. Phase II in relapsed/refractory AML with BioLineRx; Phase Ib/II: collaboration with Genentech, combination BKT-140/BL-8040 and Tecentriq (atezolizumab) for multiple oncology indications.	Phase I/II trials showed vigorous mobilisation of CD34+ stem and progenitor cells from the bone marrow, inducing cell death and sensitising the malignant cells to anti-cancer therapies. Positive engraftment data from the lead-in period of Phase III GENESIS trial.	Top line Phase II readout of BL-8040 + Keytruda in Pancreatic cancer, YE19. Survival results mid-2020. Top-line results from Phase III GENESIS trial in H220.

Source: Clal Biotechnology Industries. Notes: \*Material assets according to CBI. All key investments included in our rNPV; BCG= Bacillus Calmette-Guerin; SAA= severe aplastic anaemia.

**Exhibit 4: CBI's direct holdings**

Investment	Technology	% held	Founded	Status	Advantages	Targets
eXlthera	Factor XIa inhibition to prevent thrombosis and stroke	45	2012	Phase I: Safety, tolerability, PK, PD of parenteral EP-7041	Positive Phase I dose escalation readout showed EP-7041 was safe and well tolerated in healthy volunteers and also demonstrated positive PK and PD data.	Phase II initiation in early 2020. In process of selecting an oral candidate.
Elicio (Formerly Vedantra)	Cancer and infectious disease immunotherapy	35	2011	Preclinical	Engineering a molecular vaccine that possesses both hydrophilic and hydrophobic properties (amph-vaccine) to exploit albumin to transport small payloads to the lymph node to initiate effective T- and B-cell responses.	Amphiphile technology-based vaccines targeting mutant KRAS oncogenes for the treatment of pancreatic cancer expected in the clinic in 2020.
Neon	Personalised neoantigen therapeutics for cancer	4	2015	Three Phase I trials of NEO-PV-01 with OPDIVO or KEYTRUDA in solid tumours, some in combination with other biologicals or chemotherapy; FDA clearance of IND for Phase I trial of shared antigen vaccine NEO-SV-01 in breast cancer.	The ability to predict the most immune-stimulating neoantigens as well as recent interim clinical data suggesting a PFS benefit in patients using the vaccine.	NEO-PV-01 and KEYTRUDA combination results in NSCLC expected Q320. Melanoma Phase II to be initiated in 2020.
Cadent	Treatment of CNS disorders by targeting calcium-sensitive SK channels and NMDA receptor modulation	16	2010	Phase II: NMDAR2B NAM molecule for treatment of treatment-resistant depression out-licensed to Novartis Phase II: CD-1883 for essential tremor – trial ongoing	CAD-1883 increases the sensitivity of SK channels that play an essential role in regular neuronal firing with the intent to restore regularity and improve motor function.	Potential Nasdaq listing in 2019. Initiate additional Phase II trial in spinocerebellar ataxia.

Source: Clal Biotechnology Industries. Notes: PK = pharmacokinetics, PD = pharmacodynamics, DIPG = diffuse intrinsic pontine glioma, CXCR4 = CXC-chemokine receptor-4 pathway, AML = acute myeloid leukaemia, NMDAR = N-methyl-D-aspartate receptor subtype 2B, NAM = negative allosteric modulator.

**Exhibit 5: CBI's indirect holdings through 50% stake in Anatomy Fund**

Investment	Technology	Anatomy investments at fair value to CBI (\$m)	Founded	Status	Advantages	Targets
FDNA	Genetic disease diagnostics with facial recognition	1.1	2011	Market	Combines computer vision, machine learning and artificial intelligence to analyse facial features, genomic data, and patient symptoms.	Innovation needs to be linked to clinical outcomes.
Sight Diagnostics	Computer vision point-of-care blood diagnostics system	1.0	2011	Parasight: Market; OLO: CE mark, pivotal trial in US completed	Point-of-care full complete blood count system. Completed \$28m financing.	OLO: 510k approval late-2019.
Colospan	Developing bypass device (CG-100) for colorectal surgery	1.6	2010	CE approved in Europe	Prevents life-threatening leakage and makes it possible to cut down the use of stomas. Positive initial clinical results.	GC-100 FDA approval H220
MinInvasive	Device for arthroscopic rotator cuff repair	1.6	2011	MicroPort was granted with exclusive rights to distribute device in China	Needle-based shoulder tendon repair device that eliminates the need for suture anchors. FDA cleared – initiated limited/soft launch in the US.	Strategic partner for the US market
Pi-Cardia*	Non-implant based technology for aortic valve stenosis	1.6	2009	Leaflex: First in-human study shows significant improvement in aortic valve function	Developed a low-profile catheter to treat calcification-related aortic stenosis without replacing the valve.	Additional clinical data for Leaflex, early 2020.
<b>Total, including \$1.5m in additional investments</b>		<b>8.5**</b>				

Source: Clal Biotechnology Industries. Note: \*As of year-end 2018. \*\*Pi-Cardia is also held directly (21% stake includes direct costs of CBI and 50% stake in Anatomy Fund).

## Valuation

We have decreased our valuation of CBI to NIS540m or NIS3.35 per share from NIS736m or NIS4.56 per share, primarily due to delayed timelines for NexoBrid and EscharEx as well as the dilution of CBI's stake in Gamida Cell from 12% to 9% following a \$40.3m offering by that company. We have also delayed omidubicel's launch from 2020 to 2021 to be more conservative on timing. Additionally, we lowered the value of the Neon asset due to its recent stock performance as that valuation is based on the value of the publicly traded shares.

**Exhibit 6: CBI valuation breakdown**

Product	Setting	Status	Launch	Peak sales (\$m)	Probability of success	Royalty rate	rNPV (\$m)	% owned by Clal B	Clal B rNPV (\$m)
MediWound	Burns	NexoBrid: Market (EU), BLA (US); EscharEx: Phase II/III	NexoBrid: Market (EU), 2021 (US), EscharEx: 2024	193	NexoBrid US 80%, Europe 100%, EscharEx 50%	NexoBrid: 8-12% EscharEx: 20%	112	35%	39.3
Gamida Cell	Leukemia (AML, ALL, CML, CLL)	Phase III	2021	370	50%	100%	346	9%	31.1
Biokine	AML	Phase II	2023	1,286	30%	40% of what BioLineRx receives from a sublicense (assume 20%)	48	26%	12.6
Anchiano Therapeutics	Bladder cancer	Phase II and Phase III ready	2022	530	30%	100%	169	19%	32.0
Neon							145	4%	2.8
Elicio								35%	9.1
ExlThera								45%	10.3
Cadent								16%	12.0
Anatomy portfolio									8.5
Portfolio total (\$m)									158
Net debt, unconsolidated (as of 30 June 2019) (\$m)									4.5
Overall valuation									153
Shekel/Dollar Conversion rate									3.5
Overall valuation in Shekels (NISm)									540
Shares outstanding (m)									161.2
Per share (NIS)									3.35

Source: Company reports, Edison Investment Research

## Financials

Due to significant ownership stakes, CBI consolidates the financials of several of its investments (MediWound, CureTech and the Anatomy Fund) and, on this basis, it had NIS151.0m in cash, cash equivalents and bank deposits as of 30 June 2019. CBI's cash position at the corporate level (excluding consolidation) was NIS9.7m at the end of the quarter, with NIS25.7m in debt attributed to loans from a controlling shareholder (due in 2025).

Total consolidated revenues of NIS74.4m in the quarter were primarily due to MediWound booking the upfront payment from Vericel. The company also reported NIS5.7m in revenue as a realised gain from the decrease in equity interest of associates during the quarter.

Total consolidated R&D spend was NIS0.6m for the quarter, down 94% compared to the same quarter last year as MediWound's net R&D expenses have fallen both due to the less clinical activity and outside funding (namely, BARDA and the Israel innovation authority). General and administrative costs including payroll and related expenses, management fees and marketing and advertising expenses on a consolidated basis were NIS12.0m, down 11% compared to Q218.

We outline historical financials in Exhibit 7; however, we are not providing forecasts at this time.



**Exhibit 7: Financial summary**

	NIS'000s	2015	2016	2017	2018
Year end 31 December		IFRS	IFRS	IFRS	IFRS
<b>PROFIT &amp; LOSS</b>					
Revenue		55,759	30,484	73,635	85,318
Cost of Sales		(42,549)	(46,967)	(32,433)	(17,600)
Gross Profit		13,210	(16,483)	41,202	67,718
R&D expenses		(42,011)	(9,954)	(32,644)	(26,218)
SG&A expenses		(81,107)	(13,525)	(61,679)	(54,369)
EBITDA		(175,382)	(434,812)	(103,330)	(54,021)
Operating Profit (before amort. and except.)		(179,999)	(451,764)	(103,633)	(54,318)
Intangible Amortisation		0	0	0	0
Exceptionals		0	0	0	0
Operating Profit		(179,999)	(451,764)	(103,633)	(54,318)
Other		(35,553)	(11,850)	(31,078)	(36,546)
Net Interest		6,197	9,510	80,478	49,997
Profit Before Tax (norm)		(209,355)	(454,104)	(54,233)	(40,867)
Profit Before Tax (FRS 3)		(209,355)	(454,104)	(54,233)	(40,867)
Tax		14,023	60,104	31,795	12,001
Profit After Tax (norm)		(195,332)	(394,000)	(22,438)	(28,866)
Profit After Tax (FRS 3)		(195,332)	(394,000)	(22,438)	(28,866)
Average Number of Shares Outstanding (m)		135.8	136.2	149.4	158.5
EPS- normalised (NIS) (attributable to shareholders of the company)		(-0.87)	(-1.57)	(-0.19)	(-0.28)
EPS - normalised (NIS)		(1.44)	(2.89)	(0.15)	(0.18)
EPS - FRS 3 (NIS)		(1.44)	(2.89)	(0.15)	(0.18)
Dividend per share (NIS)		0.0	0.0	0.0	0.0
<b>BALANCE SHEET</b>					
Fixed Assets		1,225,127	927,359	849,112	876,968
Intangible Assets		1,035,753	741,543	626,342	641,062
Tangible Assets		17,077	16,536	14,854	7,786
Other		172,297	169,280	207,916	228,120
Current Assets		307,645	191,351	185,228	139,113
Stocks		6,691	3,248	6,539	6,307
Debtors		18,784	16,415	13,612	29,036
Cash		256,105	171,022	165,077	103,770
Other		26,065	666	0	0
Current Liabilities		(66,785)	(68,277)	(31,182)	(23,681)
Creditors		(14,782)	(8,507)	(7,975)	(10,567)
Short term borrowings		0	0	0	0
Short term leases		0	0	0	0
Other		(52,003)	(59,770)	(23,207)	(13,114)
Long Term Liabilities		(373,520)	(297,938)	(194,962)	(124,781)
Long term borrowings		0	0	0	0
Long term leases		0	0	0	0
Other long term liabilities		(373,520)	(297,938)	(194,962)	(124,781)
Net Assets		1,092,467	752,495	808,196	867,619
<b>CASH FLOW</b>					
Operating Cash Flow		(156,274)	(52,529)	(59,400)	(74,980)
Net Interest		23,298	0	0	0
Tax		(14,023)	(60,104)	(32,005)	(12,001)
Capex		0	0	0	0
Acquisitions/disposals		27,971	(395)	(3,876)	(47,298)
Financing		22,499	23,123	80,611	15,953
Dividends		0	0	0	0
Other		146,116	5,447	18,978	54,671
Net Cash Flow		49,587	(84,458)	4,308	(63,655)
Opening net debt/(cash)		(207,517)	(256,105)	(171,022)	(165,077)
HP finance leases initiated		0	0	0	0
Other		(999)	(625)	(10,253)	2,348
Closing net debt/(cash)		(256,105)	(171,022)	(165,077)	(103,770)

Source: Clal Biotechnology Industries reports



---

## General disclaimer and copyright

This report has been commissioned by TASE and prepared and issued by Edison, in consideration of a fee payable by TASE. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

**Accuracy of content:** All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

**Exclusion of Liability:** To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out of or in connection with the access to, use of or reliance on any information contained on this note.

**No personalised advice:** The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

**Investment in securities mentioned:** Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

**Copyright:** Copyright 2019 Edison Investment Research Limited (Edison). All rights reserved FTSE International Limited ("FTSE") © FTSE 2019. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.

---

## Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

---

## New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

---

## United Kingdom

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person.

---

## United States

The Investment Research is a publication distributed in the United States by Edison Investment Research, Inc. Edison Investment Research, Inc. is registered as an investment adviser with the Securities and Exchange Commission. Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.

---

## Israel

Disclosure regarding the scheme to enhance the awareness of investors to public companies in the technology and biomed sectors that are listed on the Tel Aviv Stock Exchange and participate in the scheme (hereinafter respectively "the Scheme", "TASE", "Participant" and/or "Participants"). Edison Investment Research (Israel) Ltd, the Israeli subsidiary of Edison Investment Research Ltd (hereinafter respectively "Edison Israel" and "Edison"), has entered into an agreement with the TASE for the purpose of providing research analysis (hereinafter "the Agreement"), regarding the Participants and according to the Scheme (hereinafter "the Analysis" or "Analyses"). The Analysis will be distributed and published on the TASE website (Maya), Israel Security Authority (hereinafter "the ISA") website (Magna), and through various other distribution channels. The Analysis for each participant will be published at least four times a year, after publication of quarterly or annual financial reports, and shall be updated as necessary after publication of an immediate report with respect to the occurrence of a material event regarding a Participant. As set forth in the Agreement, Edison Israel is entitled to fees for providing its investment research services. The fees shall be paid by the Participants directly to the TASE, and TASE shall pay the fees directly to Edison. Subject to the terms and principals of the Agreement, the Annual fees that Edison Israel shall be entitled to for each Participant shall be in the range of \$35,000-50,000. As set forth in the Agreement and subject to its terms, the Analyses shall include a description of the Participant and its business activities, which shall inter alia relate to matters such as: shareholders; management; products; relevant intellectual property; the business environment in which the Participant operates; the Participant's standing in such an environment including current and forecasted trends; a description of past and current financial positions of the Participant; and a forecast regarding future developments in and of such a position and any other matter which in the professional view of the Edison (as defined below) should be addressed in a research report (of the nature published) and which may affect the decision of a reasonable investor contemplating an investment in the Participant's securities. To the extent it is relevant, the Analysis shall include a schedule of scientific analysis of an expert in the field of life sciences. An "equity research abstract" shall accompany each Equity Research Report, describing the main points addressed. The full scope reports and reports where the investment case has materially changed will include a thorough analysis and discussion. Short update notes, where the investment case has not materially changed, will include a summary valuation discussion. The Agreement with TASE regarding the participation of Edison in the scheme for the research analysis of public companies does not and shall not constitute an approval or consent on the part of TASE or the ISA or any other exchange on which securities of the Company are listed, or any other securities' regulatory authority which regulates the issuance of securities by the Company to the content of the Report or to the recommendation contained therein. A summary of this report is also published in the Hebrew language. In the event of any contradiction, inconsistency, discrepancy, ambiguity or variance between the English Report and the Hebrew summary of said Report, the English version shall prevail; and a note to this effect shall appear in any Hebrew summary of a Report. Edison is regulated by the Financial Conduct Authority. According to Article 12.3.2, Chapter 12 of the Conduct of Business Sourcebook, Edison, which produces or disseminates non-independent research, must ensure that it: 1) is clearly identified as a marketing communication; and 2) contains a clear and prominent statement that (or, in the case of an oral recommendation, to the effect that) it: a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research; and b) is not subject to any prohibition on dealing ahead of the dissemination of investment research. The financial promotion rules apply to non-independent research as though it were a marketing communication.

Frankfurt +49 (0)69 78 8076 960  
Schumannstrasse 34b  
60325 Frankfurt  
Germany

London +44 (0)20 3077 5700  
280 High Holborn  
London, WC1V 7EE  
United Kingdom

New York +1 646 653 7026  
1,185 Avenue of the Americas  
3rd Floor, New York, NY 10036  
United States of America

Sydney +61 (0)2 8249 8342  
Level 4, Office 1205  
95 Pitt Street, Sydney  
NSW 2000, Australia

Tel Aviv +44 (0)20 3734 1007  
Azrieli Centre, Triangle Building  
38th Floor, Tel Aviv, 4676652  
Israel