EDISON

Clal Biotechnology Industries

Financial update

Full-year financial results

Pharma & biotech

Clal Biotechnology Industries' (CBI's) portfolio of investments continues to advance on multiple fronts. MediWound recently reported positive top-line data from its US Phase III study of NexoBrid, and if all goes according to plan, the company expects to file a BLA application with the FDA in H219. Additionally, according to Gamida Cell, its cash balance should provide a runway through March 2020, which is roughly in line with company expectations for delivering top-line NiCord Phase III data.

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 Phase III meets primary endpoint

In January, MediWound (35% owned by CBI) announced positive top-line results from its 175-patient NexoBrid Phase III study investigating the treatment of thermal burns. 93% of patients treated with NexoBrid achieved complete debridement versus only 4% of patients who received gel vehicle (placebo). Moreover, the trial reached its safety endpoint with statistical significance, which was non-inferior time to complete wound closure with NexoBrid versus standard of care (SOC).

Gamida Cell looks to 2019 and 2020

Gamida Cell (12% owned by CBI) has set clear milestones for the next few years. According to the company, its current cash position of $60.7m will provide a runway through March 2020, which is roughly in line with company expectations for delivering top-line NiCord data. Provided that these Phase III data are positive, Gamida Cell plans to submit a BLA filing for NiCord for the treatment of haematological malignancies in H220.

Anchiano completes $30.5m IPO on the NASDAQ

Anchiano Therapeutics recently closed its initial public offering (IPO) of 2.6m of its American depositary shares (ADSs) (each representing five ordinary shares of Anchiano) at $11.50 per ADS, resulting in proceeds of $30.5m. Following this offering, CBI owns 19% of the company (previously 31%). According to Anchiano, these proceeds should fund operations to H220.

Valuation: NIS850m or NIS5.27 per share

We have decreased our valuation of CBI to NIS850m or NIS5.27 per share, from NIS888m or NIS5.51 per share, primarily driven by CBI's reduced stake in Anchiano Therapeutics (from 31% to 19%) following its $30.5m IPO on the NASDAQ. These changes were compounded by the increase in unconsolidated net debt and the decrease in strength of the US dollar (NIS3.62/US$), partially offset by rolling forward our NPVs.

15 April 2019

Price*	**NIS2.91**
Market cap	**NIS469m**

*Priced at 10 April 2019

	NIS3.62/US$
Net debt (NISm, unconsolidated) at 31 December 2018	13.9
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	8.2	8.7	0.6
Rel (local)	4.4	1.6	(9.2)

52-week high/low	NIS3.7	NIS2.5

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 54%. It also has five indirect investments through its 50% stake in the Anatomy Fund, which it manages.

Next events

MediWound EscharEx Phase III initiation	H219
MediWound to file BLA for NexoBrid	H219
Gamida Cell NiCord Phase III top-line data	H120

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MediWound reports positive top-line data from DETECT

On 22 January 2019, MediWound announced positive top-line results from its US NexoBrid Phase III (DETECT) trial at 44 burn centers. One hundred and seventy-five patients with deep partial thickness (DPT) and full thickness (FT) thermal burns were randomised to receive either NexoBrid, SOC or gel vehicle (placebo) at a ratio of 3:3:1, respectively. The study achieved the primary endpoint, which was incidence of complete debridement, with statistical significance, as well as several 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.

Exhibit 1: Phase III DETECT study results

	NexoBrid	Placebo	SOC	p-value
Primary endpoint				
Incidence of complete debridement	93% (70/75)	4% (1/25)	N/A	P<0.0001
Secondary endpoints				
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)	14.2 ml	N/A	814.5 ml	P<0.0001
Safety endpoint				
Non-inferiority in time to complete wound closure		N/A		P=0.0003

Source: MediWound

MediWound plans to schedule a pre-BLA meeting with the FDA to request submission of the BLA based on these acute primary, secondary and safety data, and then further supplement the application with 12-month follow-up data during FDA review. If the meeting goes according to plan, the company expects to file a BLA in H219, which would imply a potential H220 approval. However, if the FDA does not permit BLA submission with only acute data, the company expects its timelines to be delayed by about three to four quarters (to allow the firm to collect and submit 12-month data).

Enrolment is ongoing for the 160-patient paediatric Phase III study of NexoBrid (CIDS), which is fully funded by the US Biomedical Advanced Research and Development Authority (BARDA), for debridement in hospitalised children in the US and EU. MediWound recently announced that the Study Data Safety Monitoring Board suggested lowering the study inclusion criterion age, in order to include paediatric patients from new-born to one year of age based on early data from 50 paediatric patients aged one to 18 years. The company intends to discuss including paediatric patients aged from new-born to 18 years with Institutional Review Boards (IRBs) at the participating clinical sites. Regarding EscharEx, the company submitted the Phase III protocol to the FDA and, with consensus on the primary endpoint, expects to initiate the program in H219 (previously H119).

MediWound (NASDAQ: MDWD; market capitalisation of $138.1m) recently reported its full-year financial results. Revenues, which are based on NexoBrid sales in the EU, were $3.4m, up 36% from FY17. The company reported a post-tax loss of $1.1m in FY18, which is down significantly from the year prior (FY17 post-tax loss: $22.2m). This decrease is largely attributed to the one-time revenue of $12.1m attributed to the settlement with Teva regarding PolyHeal as well as the increase in participation from BARDA, which supports the development of NexoBrid. Gross R&D expenditure was $17.9m for the year, $13.8m of which was contributed by BARDA. As of 31 December 2018, the company had $23.6m in cash (including equivalents and short-term deposits) and according to the company, it plans to concentrate these resources on progressing the EscharEx development program while NexoBrid becomes a self-funded product via BARDA backing. According to the company, the BARDA contract is valued at up to $132m for the development, manufacturing and procurement of NexoBrid. Under the terms of the agreement, BARDA agreed to fund $56m of the development costs needed to obtain approval in the US, including the CIDS trial for the paediatric

indication, with the option to fund another $10m for development activities for other potential indications. Moreover, BARDA has also committed $16.5m for the procurement of NexoBrid contingent on US FDA Emergency Use Authorisation and/or FDA marketing authorization. Furthermore, MediWound's advanced discussions with a few third parties regarding a potential strategic transaction remain ongoing. At this time, MediWound has confirmed that this short group of potential suitors has narrowed. As a reminder, the exact nature of these proposed transactions was not disclosed but could include anything from a product out-licensing to the acquisition of all of MediWound. However, we are unsure how the upcoming changes to executive leadership, specifically Gal Cohen stepping down as CEO, will affect the likelihood of securing a potential transaction.

Gamida Cell sets clear milestones 2019–20

Gamida Cell's 120-patient Phase III study of NiCord in patients with haematological malignancies is ongoing. NiCord, which is the company's lead asset, expands umbilical cord blood (UCB) cell graft 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 registrational trial is investigating the ability of NiCord 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. The use of UCB for bone marrow transplantation (BMT) is limited by the minimal number of stem and progenitor cells. The use of the NiCord 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 out of six HLA biomarkers). Enrolment is on track for completion in H219 with top-line data expected in H120. Provided that these Phase III data are positive, Gamida Cell plans to submit a BLA filing for NiCord for the treatment of haematological malignancies in H220.

The company is also investigating NiCord for the treatment of severe aplastic anaemia (SAA) in an ongoing Phase I/II study. Gamida Cell recently presented data on three patients included in the first cohort (Exhibit 2) with SAA and severe neutropenia who previously failed immunosuppressive therapy at the annual Transplantation & Cellular Therapy (TCT) Meetings of American Society for Blood and Marrow Transplantation and Center for International Blood and Marrow Transplant Research in Houston in February 2019.

Exhibit 2: NiCord Phase I/II study design in SAA

Cohort	No. patients	Notes
1	Three to six	Single NiCord-expanded unit combined with 3 × 10^6 CD34+ cells/kg from a haploidentical donor as a stem cell backup
2	Up to 20	*Transplant with NiCord-expanded unit alone

Source: Gamida Cell. Notes: Patients conditioned with cyclophosphamide (60mg/kg × 2), horse ATG (40mg/kg × 4), fludarabine (25 mg/m^2 × 5), and 200cGy of TBI and graft-versus-host-disease prophylaxis with tacrolimus and MMF. *Once adequate cord engraftment is established, which is defined as three of the first three to four patients, four of six patients with ANC>500 cells/µl by day 29 and cord ANC >500 cells/µl by day 42 sustained at day 100. ANC: absolute neutrophil count.

From 2017 to 2018, three SAA patients (age/gender: 22 male, 45 female, 22 female), who had all previously failed immunosuppressive therapy, with a pre-transplant absolute neutrophil count (ANC) ≤ 500 cells/µl, successfully underwent a single 5/8 or 6/8 HLA-matched NiCord-expanded UCBT (UCB transplant) combined with haploidentical CD34+ cells from a haploidentical donor as a stem

cell backup. For the three NiCord-expanded transplants, the median time to neutrophil and platelet recovery was six days (range six to seven) and 31 days (range 15–40), respectively. All three patients achieved cord engraftment (ANC>500 cells/µl) at a median of six days, which was sustained at day 100. Moreover, these patients were alive and free of graft-versus-host disease at a median follow-up of 11 months (range four to 18 months). It is important to note these findings are based on only a small number of patients and significant variability between subjects was observed. According to the company, patient inclusion in cohort one is complete and it expects to proceed with cohort two to evaluate engraftment and transplantation outcomes with the NiCord-expanded unit alone (in other words, without a haploidentical donor) in 20 patients with SAA.

NAM-NK cells

Gamida Cell is also developing donor-derived natural killer (NK) cells for blood and solid cancers. 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 lymphomas and multiple myeloma (MM). In February, preliminary data from 14 patients (Exhibit 3) were presented at the TCT annual meeting.

Exhibit 3: Patient and disease characteristics

Disease	No. patients (n=14)
MM	8
Follicular lymphoma	3
Transformed lymphoma	2
DLBCL	1
Disease status	
Relapsed	10
Refractory	4

Source: Gamida Cell.

The objective of this Phase I study is to determine the maximum tolerated dose of NAM-NK. NAM-NK was generally well tolerated with no dose-limiting toxicities or infusion toxicity. However, several grade 3/4 hematologic toxicities were observed as well as low-grade non-haematological toxicities. The maximum target dose (MTD) of 2×10^8 cells/kg was achieved. Clinical activity was observed in six patients with lymphomas and an additional six patients with MM who were evaluable for response (Exhibit 4). The trial remains ongoing and additional patients will be treated at the MTD to continue to evaluate safety and clinical activity. Gamida Cell expects to initiate a multi-centre Phase I/II study of NAM-NK in patients with blood cancers in 2020.

Exhibit 4: Clinical activity observed in 12 evaluable patients

Disease	No. patients	Clinical response
Non-Hodgkin's lymphomas (n=6)	3	CR
	1	PR
	2	PD
MM (n=6)	1	CR
	2	SD
	3	PD

Source: Gamida Cell. Notes: CR: complete response; PR: partial response; PD: progressive disease; SD: stable disease.

Also in February 2019, Gamida Cell announced an agreement with Editas Medicine, a genome-editing company, to evaluate the potential use of its CRISPR technology to edit Gamida's NAM-NK cells. The two companies will engage in joint research focused on improving the tumour-killing properties of NAM-NK cells with CRISPR editing technology.

Gamida Cell (NASDAQ: GMDA, market capitalisation of $237.5m) recently reported its full-year financial results. The company reported a post-tax loss of $52.9m in FY18. R&D expenditure was

$22.0m for FY18, which is up roughly 47% from FY17 ($15.0m), primarily attributed to the increase in clinical activities related to the advancement of the NiCord Phase III clinical programme in haematological malignancies and the initiation of the NAM-NK clinical programme. R&D spending is expected to increase substantially as the company advances its product candidates through clinical development. According to Gamida Cell, its current cash position of $60.7m (including cash and equivalents, available-for-sale financial assets and short-term deposits) will provide a runway through March 2020, which is roughly in line with company expectations for delivering top-line NiCord data. The company foresees the need for significant financing in the future.

Anchiano completes $30.5m IPO on NASDAQ

On 14 February 2019, Anchiano Therapeutics (19% owned by CBI) closed its IPO of 2.6m of its American depositary shares (ADSs) (each representing five ordinary shares of Anchiano) at $11.50 per ADS, resulting in proceeds of $30.5m. Oppenheimer & Co acted as the sole book-running manager, while Ladenburg Thalmann and LifeSci Capital acted as lead-manager and co-manager, respectively. In mid-March, Anchiano announced its plans to de-list from the TASE. Accordingly, the last day the ordinary shares will trade on the TASE will be on 13 June 2019 and they will subsequently be de-listed on 17 June 2019.

In December 2018, the company initiated the first of two registrational trials for its lead programme, inodiftagene vixteplasmid (BC-819), a recombinant DNA plasmid, in non-muscle invasive bladder cancer (NMIBC). The single-arm, open-label pivotal Phase II study (Codex) will enrol 140 patients with NMIBC who are unresponsive to BCG (Bacillus Calmette-Guerin) therapy and the primary endpoint is durable response rate (either partial or complete) at 12 months. Inodiftagene vixteplasmid monotherapy (20mg/50mL) will be administered via intravesical instillation into the urinary bladder for 10 weekly treatments, with maintenance treatment every three weeks for up to 84 weeks. According to CBI, interim analysis on the first 35 patients from the Codex trial is expected in Q419. Moreover, the second registrational trial, which was previously granted special protocol assessment (SPA) by the FDA, will be an open-label pivotal Phase III trial (Leo) in approximately 495 patients of inodiftagene vixteplasmid in combination with BCG versus BCG alone. The primary endpoint is median time to recurrence, and we expect the results to elucidate the clinical value of inodiftagene vixteplasmid for NMIBC as this is the first comparative study. According to the company, the Leo trial is expected to initiate in Q419, with enrolment beginning in H120.

Additionally, Anchiano (NASDAQ and TASE: ANCN; market capitalization $47.9m) recently reported its full-year financials. The company reported a post-tax loss of $13.3m, primarily attributed to R&D expenditure, which was $7.6m for the year. As of 31 December 2018, Anchiano had $7.5m in cash and equivalents and, according to the company, the $30.5m raised in the February IPO should fund operations to H220.

Neon initiates a seven-arm study in melanoma

In December 2018, Neon Therapeutics (4% owned by CBI) announced that the first patient was dosed in its NT-003 Phase Ib trial investigating the safety and immunogenicity of NEO-PV-01, a personalised cancer vaccine, and Bristol-Myers Squibb's Opdivo (nivolumab), a PD-1 immune checkpoint inhibitor, in combination with other agents for the treatment of advanced or metastatic melanoma. One arm of the roughly seven-arm study will evaluate NEO-PV-01 in combination with Opdivo and Apexigen's APX005M, an investigational CD40 agonist. The company expects to report immune monitoring data from this trial in H120.

In addition, Neon recently presented interim data relating to its ongoing NT-001 Phase Ib clinical trial at the American Association for Cancer Research (AACR) Annual Meeting. NT-001 is a single-arm trial investigating the safety and immunogenicity of NEO-PV-01 in combination with Opdivo (nivolumab) for the treatment of metastatic melanoma, smoking-related NSCLC and bladder cancer. According to the company, 52-week data from the NT-001 trial are expected in mid-2019.

Moreover, Neon (NASDAQ: NTGN; market capitalization $188.0m) recently reported its full-year financial results. The company reported a post-tax loss of $76.9m in FY18. R&D expenditure was $60.4m for FY18, which is up roughly 62% from FY17 ($37.2m), primarily attributed to the increased costs related to the advancement of NEO-PV-01. As of 31 December 2018, Neon had $103.3m in cash (including equivalents and marketable securities), which the company expects will support operating expenses and capital expenditure into Q220 based on its current operating plan.

Biokine: BL-8040 triple-arm combo in Phase II study

On 11 December 2018, Biokine's (27% owned by CBI) partner BioLineRx (NASDAQ: BLRX; market capitalization $61.3m) initiated the triple combination arm of the Phase IIa COMBAT/KEYNOTE-202 study in metastatic pancreatic adenocarcinoma to investigate the safety, tolerability and efficacy of BL-8040, Keytruda (pembrolizumab, Keytruda) and chemotherapy focused on second-line pancreatic cancer patients. Patients will receive BL-8040 monotherapy (priming treatment) for five days, followed by ongoing cycles of the combination of chemotherapy (Onivyde/5-fluorouracil/ leucovorin), Keytruda, and BL-8040 until progression. The triple combination arm of the trial is expected to include approximately 40 patients and the primary endpoint is objective response rate (ORR) assessed by RECIST criteria. This follows previous studies that showed that BL-8040 induced an increase in the number of total immune cells in peripheral blood while reducing the frequency of peripheral blood regulatory cells that may impede the anti-tumour immune response. Top-line results from the triple arm combination are expected in early 2020. BioLineRx previously presented top-line safety and efficacy data at the European Society for Medical Oncology (ESMO) in October 2018 from the dual combination of BL-8040 with Keytruda from 29 evaluable patients.

BioLineRx recently presented engraftment data from the lead-in period of the Phase III trial (GENESIS) for BL-8040 and granulocyte colony-stimulating factor (G-CSF) in the mobilization of hematopoietic stem cells (HSCs) for autologous transplantation in patients with multiple myeloma (MM) at the Meeting of European Society for Blood and Marrow Transplantation in Germany. Data from the first 11 patients participating in the lead-in portion (part I of the trial) showed that nine out of 11 patients (or 82%) achieved the primary endpoint, which is defined as the proportion of subjects mobilizing ≥6.0 x 10^6 CD34 cells/kg, while seven out of 11 patients (64%) reached the primary endpoint in four or less apheresis days. Moreover, for the nine out of 11 patients with evaluable data demonstrated successful engraftment with BL-8040 mobilized HSCs was observed, with time to engraftment and graft durability comparable to SOC mobilization regimens. The placebo-controlled portion of the multi-center trial will include 177 patients and will evaluate the potential superiority of a single dose of BL-8040 in combination with G-CSF versus placebo and G-CSF in the mobilization of HSCs in preparation for autologous stem cell transplant in patients with MM.

Additionally, BioLineRx announced in early February 2019 that the FDA granted orphan drug designation to BL-8040 for the treatment of pancreatic cancer (note this is in addition to prior orphan drug designations received for BL-8040 in acute myeloid leukaemia [AML] and stem cell mobilization). We do not currently include pancreatic cancer in our model, so any positive data from the trial could provide upside to our valuation for Biokine. As a reminder, BioLineRx owns 80% of BL-8040 and Biokine (owns the remaining 20%) is also entitled to receive up to $5m in future milestone payments.

Cadent appoints new CEO to run the show

On 14 February 2019, Cadent Therapeutics (16% owned by CBI) appointed Jodie Morrison as CEO, bringing over 20 years of leadership experience to the company. Michael Curtis, PhD, who served as the CEO and president, will remain as president and head of R&D at Cadent.

Cadent is developing CAD-1883, which is a positive allosteric modulator of calcium-sensitive potassium (SK) channels. CAD-1883 increases the sensitivity of SK channels, which play an essential role in regular cerebellar neuronal firing with the intent to restore regularity and improve motor function for the potential treatment of spinocerebellar ataxia, an orphan genetic disorder characterised by cerebellum dysfunction or degeneration that causes difficulty coordinating movements, and essential tremor, a neurological disorder characterised by involuntary and rhythmic shaking, most commonly of the hands and forearms. The company intends to initiate two Phase II trials in essential tremor and spinocerebellar ataxia.

Update on the rest of the portfolio

In early December CBI announced that Pi-Cardia (owned by CBI via its 50% stake in the Anatomy Fund) raised $3m from a foreign investment fund with an option for an additional $5.1m in another investment round under the agreed terms. Later in December, Sight Diagnostics (also owned by CBI via its 50% stake in the Anatomy Fund) signed an agreement to raise $28m from several investors. CBI did not participate in either of the funding rounds so its ownership in these assets is diluted.

On 31 March 2019, eXIthera entered into a licensing and investment agreement with Sichuan Haisco Pharmaceuticals, a Chinese company. As per the agreement, Sichuan Haisco will invest $6m in eXIthera in exchange for an exclusive license to develop, manufacture, and market eXIthera's drug in the IV sector in China. Sichuan Haisco will be 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. Following this transition, CBI's stake in eXIthera has decreased to 45% (from 54%).

Exhibit 5: CBI's key investments

Investment	Technology	% held	Founded	Status	Advantages	Targets
MediWound*	Enzyme technology for severe burns and chronic wounds	35	2001	NexoBrid: launched in Europe; in Phase III development in the US. EscharEx: Phase II complete.	Reduces time to successful eschar removal, reduces need for surgery and need for grafting. Positive Phase III results.	File a BLA in H219.
Gamida Cell*	Cord stem cell transplant for haematologic diseases	12	1998	NiCord: enrolling Phase III for. haematological malignancies and two ongoing Phase I/II trials; NK cells: initiated Phase I.	UCB for transplantation only requires partial matching and nicotinamide technology increases the limited population and quality of stem and progenitor cells. NiCord received FDA breakthrough therapy designation.	Enrolment underway for a Phase III study of NiCord and on track for completion in H219 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 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 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.	Third arm of Phase II pancreatic cancer results in H219.

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 6: CBI's direct holdings

Investment	Technology	% held	Founded	Status	Advantages	Targets
eXIthera	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 2019. 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 H219.
Neon	Personalised neoantigen therapeutics for cancer	4	2015	Phase I: NEO-PV-01 and OPDIVO combination therapy Phase I: NEO-PV-01 and combination with KEYTRUDA and chemotherapy.	Initial results published in *Nature*. Several collaborations in the pipeline with large pharma, academic institutions, and other clinical-stage biopharmaceutical companies. Recently completed a $106m crossover Series B financing.	NEO-PV-01 and OPDIVO combination results expected H119; NEO-PV-01 and KEYTRUDA combination results expected 2020.
Cadent	Treatment of CNS disorders by targeting calcium-sensitive SK channels and NMDA receptor modulation	16	2010	Phase I: NMDAR2B NAM molecule for treatment of treatment-resistant depression out-licensed to Novartis Phase I: CD-1883 for spinocerebellar ataxia and essential tremor	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 two Phase II trials in essential tremor and spinocerebellar ataxia.

Source: Clal Biotechnology Industries. Notes: 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 7: CBI's indirect holdings through 50% stake in Anatomy

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	Point-of-care full complete blood count system. Completed $28m financing.	OLO: Pivotal clinical trial complete in Q418; 510k approval mid-2019; CLIA waiver in 2020.
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.	Initiation of a new pivotal clinical trial in H219.
MinInvasive	Device for arthroscopic rotator cuff repair	1.6	2011	Market	Needle-based shoulder tendon repair device that eliminates the need for suture anchors. FDA cleared - initiated limited/soft launch in the US.	MicroPort was granted with exclusive rights to distribute device in China.
Pi-Cardia*	Non-implant based technology for aortic valve stenosis	1.6	2009	Clinical	Developed a low-profile catheter to treat aortic stenosis without replacing the valve.	Clinical validation.
Total, including $1.5m in additional investments		**8.5****				

Source: Clal Biotechnology Industries. Note: *As of year-end 2017. **Pi-Cardia is also held directly (21% stake includes direct costs of CBI and 50% stake in Anatomy).

Valuation

We have decreased our valuation of CBI to NIS850m or NIS5.27 per share, from NIS888m or NIS5.51 per share. This decrease was primarily driven by CBI's reduced stake in Anchiano Therapeutics (from 31% to 19%) following its $30.5m IPO on the NASDAQ as well as its reduced stake in Biokine (from 27% to 26%). These changes were further compounded by an increase in unconsolidated net debt and the decrease in strength of the US dollar (NIS3.62/US$), and partially offset by rolling forward our NPVs.

Exhibit 8: CBI valuation breakdown

Product	Setting	Status	Launch	Peak sales ($m)	Probability of success	Royalty rate	rNPV ($m)	% owned by Clal B	Clal B rNPV ($m)
MediWound	Burns	Market and Phase III ready	NexoBrid: Market, EscharEx: Phase III	375	NexoBrid US 80%, Europe 100%, EscharEx 50%	NexoBrid: 100% EscharEx: 20%	239	35%	83.5
Gamida Cell	Leukaemia (AML, ALL, CML, CLL)	Phase III	2020	437	50%	100%	477	12%	57.3
Biokine	AML	Phase II	2023	1,286	30%	40% of what BioLineRx receives from a sublicense (assume 20%)	48	26%	12.6
Anchiano Therapeutics	Bladder cancer	Phase II and Phase III ready	2022	530	30%	100%	169	19%	32.0
Neon							334	4%	13.3
Elicio (formerly Vedantra)								35%	9.1
ExlThera								45%	10.3
Cadent								16%	12.0
Anatomy portfolio									8.5
Portfolio total ($m)									239
Net cash (debt), unconsolidated (As of 31 December 2018) ($m)									(3.8)
Overall valuation									235
Shekel/dollar conversion rate									3.6
Overall valuation in shekels (NISm)									**850**
Shares outstanding (m)									161.2
Per share (NIS)									**5.27**

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 NIS103.8m in cash, cash equivalents and bank deposits as of 31 December 2018. CBI's cash position at the corporate level (excluding consolidation) was NIS12m, at the end of the year, with NIS25.9m in debt attributed to loans from a controlling shareholder (due in 2025).

Total consolidated revenues of NIS12.8m were primarily generated through the sales of MediWound's NexoBrid in Europe, Israel, and Argentina, licensing agreements and rent for the year, which is down roughly 71% from FY17. The company also reported NIS21.5m in revenue as a realized gain from the decrease in equity interest of associates during the year. Moreover, CBI booked NIS51.0m in revenue from realized profit from the loss of control of subsidiaries, which is primarily attributed to the decrease in stake of Elicio Therapeutics (formerly Vedantra) in Q318.

Substantial investment was made into the development of underlying technologies and products of CBI's material assets as indicated by R&D spend of NIS26.2m for the year. General and administrative costs, which include payroll and related expenses, management fees, and marketing and advertising expenses on a consolidated basis were NIS54.4m.

Exhibit 9: Financial summary

NIS000s	2015	2016	2017	2018
Year end 31 December	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS				
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	(54,094)	(42,011)	(32,644)	(26,218)
SG&A expenses	(82,747)	(81,107)	(61,679)	(54,349)
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
BALANCE SHEET				
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
CASH FLOW				
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

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