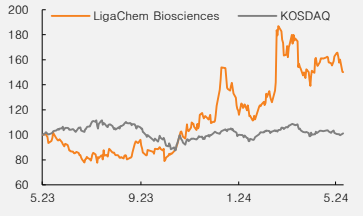
MIRAE ASSET Securities

Equity Research
May 29, 2024

(Initiate)	**Buy**
Target price	**W86,000**
Current price (5/28/24)	W63,400
Upside	35.6%

OP (24F, Wbn)	4
Consensus OP (24F, Wbn)	-39
EPS growth (24F, %)	-
Market EPS growth (24F, %)	76.0
P/E (24F, x)	116.9
Market P/E (24F, x)	11.1
KOSDAQ	851.01
Market cap (Wbn)	2,293
Shares (mn)	36
Free float (%)	69.6
Foreign ownership (%)	7.9
Beta (12M)	1.59
52-week low (W)	32,800
52-week high (W)	79,000

(%)	1M	6M	12M
Absolute	-3.2	38.0	60.7
Relative	-2.5	32.4	59.2



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141080 KQ · Pharma/Biotech

LigaChem Biosciences

Swinging to profitability

Initiate coverage with Buy and TP of W86,000

We initiate our coverage of LigaChem Biosciences (LigaChem) with a Buy rating and target price of W86,000 (35.6% upside). Our target price is based on our 2024-30 estimates (three new drugs expected to be released by 2030) and a discounted cash flow (DCF) model with a weighted average cost of capital (WACC) of 8.2% and perpetual growth rate of 1%. Among biotech stocks, we believe LigaChem stands out for its undemanding valuation (2025F P/E of 14.6x) and profitability. In contrast, Daiichi Sankyo, the co-developer of Enhertu, is trading at a 2025F P/E of 34x, while Seagen and ImmunoGen were reporting operating losses before their acquisitions despite having commercialized items in their product portfolios.

Investment points

1) Growing platform value: Following its 2015 licensing agreement with China's Fosun Pharma for its HER2-targeting antibody-drug conjugate (ADC), the company has entered into a total of 10 licensing agreements for its ADC platform and drug candidates. This strong performance is attributable to its proprietary drug-linker and payload technologies (essential to ADC drugs). The value of technology transfer deals has also increased over time, from W151.6bn in 2019 (Takeda) to W321bn in 2022 (Amgen).

2) Ability to finance clinical trials: In January, the company announced a third-party allotment of new shares and the sale of existing shares. Following the completion of these deals, Pan Orion became the largest shareholder with a 25.73% stake (W548.5bn invested). We believe the additional funding has helped ease the cost burden associated with clinical trials, giving LigaChem sufficient resources to finance the development of four to five drug candidates annually and secure a pipeline of 10 clinical trials within the next five years.

3) LCB14 nearing commercialization: In 2H24, we expect the company to submit a conditional approval application for LCB14 (HER2-targeting ADC). In China, approval applications for anti-cancer drugs used as third-line treatments can be submitted after the completion of phase 1 trials. As such, we believe an approval application for LCB14 could be submitted as early as the end of this year. If approved, LCB14 would likely hit the market in 2025, becoming the firm's first commercialized item. As a lack of commercialized items has been a factor weighing on valuation, we believe the commercialization of LCB14 would allow the stock to garner a valuation on par with Seagen and ImmunoGen (acquired by major companies in 2023).

(Dec.)	2022	2023	2024F	2025F	2026F
Revenue (Wbn)	33	34	127	316	207
OP (Wbn)	-50	-81	4	193	74
OP margin (%)	-151.5	-238.2	3.1	61.1	35.7
NP (Wbn)	-45	-74	19	159	82
EPS (W)	-1,650	-2,634	542	4,347	2,251
ROE (%)	-20.5	-40.1	4.8	22.1	9.8
P/E (x)	-	-	116.9	14.6	28.2
P/B (x)	5.4	12.1	3.6	2.9	2.6
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0

Notes: Under non-consolidated K-IFRS; NP is attributable to owners of the parent
Source: Company data, Mirae Asset Securities Research estimates

I. Investment points

Growing platform value

LigaChem holds ADC platform technology as well as several ADC drug candidates. Following its 2015 licensing agreement with China's Fosun Pharma for its HER2-targeting ADC, the company has entered into a total of 10 licensing agreements for its ADC platform and drug candidates. We believe this strong performance is attributable to its proprietary drug-linker and payload technologies (essential to ADC drugs). The value of technology transfer deals has also increased over time, from W151.6bn in 2019 (Takeda; per target) to W321bn in 2022 (Amgen; per target).

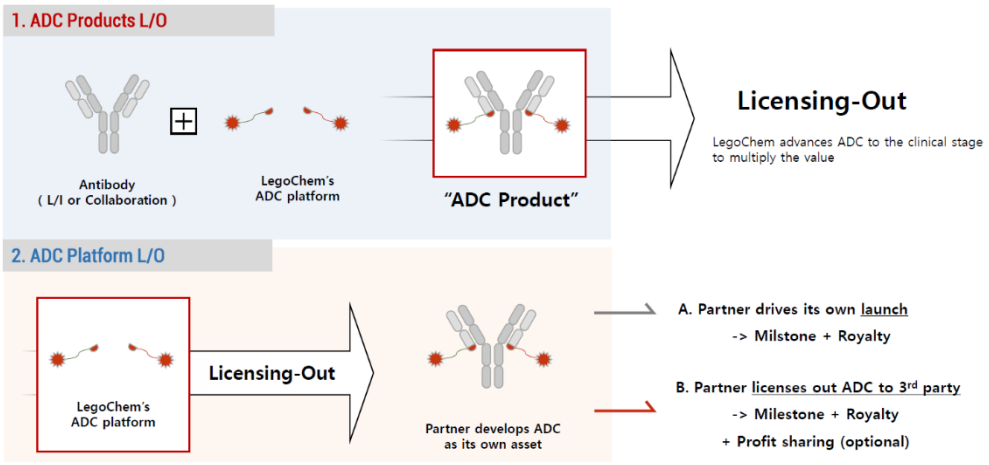
In Dec. 2023, the firm licensed LCB84 (Trop2 ADC) to Janssen for W2.2tr, which marked Korea's biggest-ever licensing deal for a single candidate. We believe the value of LigaChem's platform technology is growing thanks to its strong track record (nine deals in eight years) and favorable safety data from clinical trials involving humans. We also find it positive that the company can out-license both the platform itself and individual candidates. We expect the value of licensing deals to continue to increase going forward.

Table 1. LigaChem: Licensing agreements (Wbn)

Platform		Date	Partner	Pipeline	Value
ADC	Candidate	8/24	Fosun Pharma	LCB14 (HER2-MMAF)	20.8
		5/20	Iksuda	LCB73 (CD19-pPBD)	278.4
		10/20	CStone	LCB71 (ROR1-pPBD)	409.9
		12/20	Pyxis	LCB67 (DLK1-MMAE)	325.5
		12/21	Iksuda	LCB14 (HER2-MMAF)	1,186
		12/23	Janssen	LCB84 (Trop2-MMAE)	2,246
	Platform	3/19	Takeda	ADC platform (linkers for three targets)	454.8
		6/21	Iksuda	ADC platform (linker/toxin for six targets)	920
		11/21	Sotio	ADC platform (five targets)	1,213
		12/22	Amgen	ADC platform (five targets)	1,605
Synthetic drugs		6/09	Green Cross/Lee's Pharma	Nokxaban	Undisclosed
		12/16	Haihe Biopharma	Delpazolid	240
		5/17	Bridge Biotherapeutics	BBT-877	300

Source: Company data, Mirae Asset Securities Research

Figure 1. Out-licensing of ADC products vs. platform



Source: Company materials, Mirae Asset Securities Research

Table 2. LigaChem: ADC pipeline

Classification	Project	Indication/target	Clinical stage	Antibody	Licensee
ADC platform	LCB69	Solid tumors, blood cancer	Candidate	Takeda	Takeda (global)
	LCB85 (CanAg-pPBD)	Solid tumors, blood cancer	Candidate	Iksuda	Iksuda (global)
	LCB20A	Undisclosed	Candidate	Sotio	Sotio (global)
	LCB42A	Undisclosed	Candidate	Amgen	Amgen (global)
	LCB19A	Undisclosed	Candidate	Antengene	Antengene
ADC products	LCB14 (HER2-MMAF)	Breast cancer	Phase 1	Herceptin biosimilar	Fosun (China)
		Breast cancer (vs. Kadcyla)	Phase 3	Herceptin biosimilar	Fosun (China)
		Solid tumors/stomach cancer	Phase 2	Herceptin biosimilar	Fosun (China)
		Breast cancer	Phase 1	Herceptin biosimilar	Iksuda (ex- China/ Australia)
	LCB71 (ROR1-pPBD)	Solid tumors, blood cancer	Phase 1	ABL Bio	CStone (global)
	LCB73 (CD19-pPBD)	Blood cancer	Phase 1	Light Chain	Iksuda (global)
	LCB84 (Trop2-MMAE)	Solid tumors, blood cancer	Phase 1	Mediterranea	LigaChem

Source: Company data, Mirae Asset Securities Research

LCB14 nearing commercialization

LCB14 could rival Enhertu

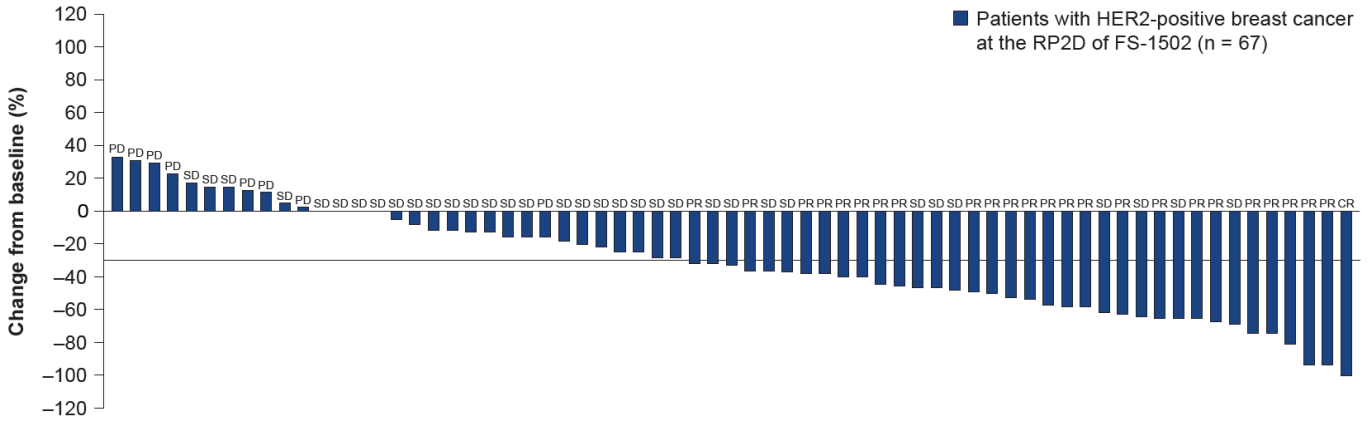
At the 2023 American Society of Clinical Oncology (ASCO) meeting (Jun. 23), LigaChem released interim analysis results from a phase 1 trial of LCB14 (HER2-targeting ADC) involving 67 breast cancer patients. LCB14 showed an overall response rate (ORR) of 53.7% with median progression-free survival (mPFS) of 15.5 months. While a direct comparison is not possible, we note that LCB14 showed a similar level of efficacy as Enhertu (ORR of 54.3% for the same indication).

Grade 3 or higher adverse events included neutropenia (5.6%), thrombocytopenia (7%), and hypokalemia (18.3%). The payload used by LCB14 is monomethyl auristatin F (MMAF), which belongs to the auristatin class and functions as a microtubule synthesis inhibitor; the agent is known to cause ocular toxicity. Among FDA-approved ADCs, only GSK's Blenrep (multiple myeloma treatment) uses MMAF as a payload. Blenrep was granted accelerated approval by the FDA, but it comes with a black box warning for ocular toxicity.

Unlike Blenrep, however, LCB14 did not show grade 3 or higher ocular toxicity, which we believe is attributable to the superior stability of LigaChem's proprietary linker technology. A stable linker ensures that the payload is released at the target cells rather than in the bloodstream, minimizing adverse effects. If LCB14 shows similar safety in the final phase 1 results, we think it is likely to be approved for sale in China. In China, approval applications for anti-cancer drugs used as third-line treatments can be submitted after the completion of phase 1 trials. As such, we believe an approval application could be submitted as early as the end of this year based on phase 1 data.

Meanwhile, in an abstract presented at the 2024 ASCO meeting (May 23), the company released interim analysis results from a phase 2 trial of LCB14 for gastric cancer. The trial enrolled 46 patients, including 35 HER2-positive patients. Cohort 1, consisting of 16 patients who had received at least two prior treatments, showed an ORR of 37.5%, mPFS of 4.3 months, and overall survival (OS) of 10 months (Enhertu's DESTINY-Gastric06 results: ORR of 35.6%, mPFS of 5.7 months, and OS of 10.2 months). Cohort 2, consisting of 19 patients who had only received first-line treatment, showed an ORR of 52.6%, mPFS of 4.4 months, and OS of 14.6 months (Enhertu's DESTINY-Gastric02 results: ORR of 42.0%, mPFS of 5.6 months, and OS of 12.1 months). While the trial did not directly compare LCB14 with Enhertu, the encouraging results suggest it could rival Enhertu.

Figure 2. Phase 1 trial of LCB14 (HER2-targeting ADC): ORR of 53.7%



Source: Fosun Pharma (ASCO 2023), Mirae Asset Securities Research

Figure 3. LCB14 (HER2-targeting ADC): Adverse events (phase 1)

TRAE, n (%)	Patients with HER2-positive breast cancer at the RP2D of FS-1502 (n = 71)
Any TRAEs	69 (97.2)
TRAEs of CTCAE grade ≥ 3	27 (38.0)
Most common TRAEs occurring in ≥ 25%	
Aspartate aminotransferase increased	54 (76.1)
Alanine aminotransferase increased	29 (40.8)
Hypokalemia	48 (67.6)
Proteinuria	33 (46.5)
Blood lactate dehydrogenase increased	25 (35.2)
Dry mouth	28 (39.4)
Platelet count decreased	23 (32.4)
Amylase increased	17 (23.9)
Keratitis	23 (32.4)
Anemia	20 (28.2)
Hypercholesterolemia	19 (26.8)
Hyperuricemia	19 (26.8)
Hypertriglyceridemia	18 (25.4)
Conjunctivitis	18 (25.4)
TRAEs of CTCAE grade ≥ 3 in ≥ 5%	
Hypokalemia	13 (18.3)
Platelet count decreased	5 (7.0)
Neutrophil count decreased	4 (5.6)

Source: Fosun Pharma (ASCO 2023), Mirae Asset Securities Research

Figure 4. Blenrep: Black box warning for ocular toxicity

FULL PRESCRIBING INFORMATION

WARNING: OCULAR TOXICITY

BLENREP caused changes in the corneal epithelium resulting in changes in vision, including severe vision loss and corneal ulcer, and symptoms, such as blurred vision and dry eyes *[see Warnings and Precautions (5.1)]*.

Conduct ophthalmic exams at baseline, prior to each dose, and promptly for worsening symptoms. Withhold BLENREP until improvement and resume, or permanently discontinue, based on severity *[see Dosage and Administration (2.3), Warnings and Precautions (5.1)]*.

Because of the risk of ocular toxicity, BLENREP is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the BLENREP REMS *[see Warnings and Precautions (5.2)]*.

Source: FDA, Mirae Asset Securities Research

Table 3. Comparison of HER2-targeting ADCs

	Kadcyla	Enhertu	LCB14	XMT-1522
Company	Roche	Daiichi Sankyo	LigaChem	Mersana
Payload (DAR)	DM1 (3.4)	DX-8951 (7.7)	MMAF (2)	Auristatin D (15)
MED (JIMT-1)	> 20mg/kg	> 10mg/kg	1mg/kg	1mg/kg
HNSTD	30mg/kg	30mg/kg	12mg/kg	2.5mg/kg
Therapeutic index	< 6	< 12	48	10
Clinical stage	Commercialization	Commercialization	Phase 3	Phase 1 (halted)

Notes: MED = minimum effective dose; HNSTD = highest non-severely toxic dose
Source: Company data, Mirae Asset Securities Research

Candidates show encouraging safety and efficacy

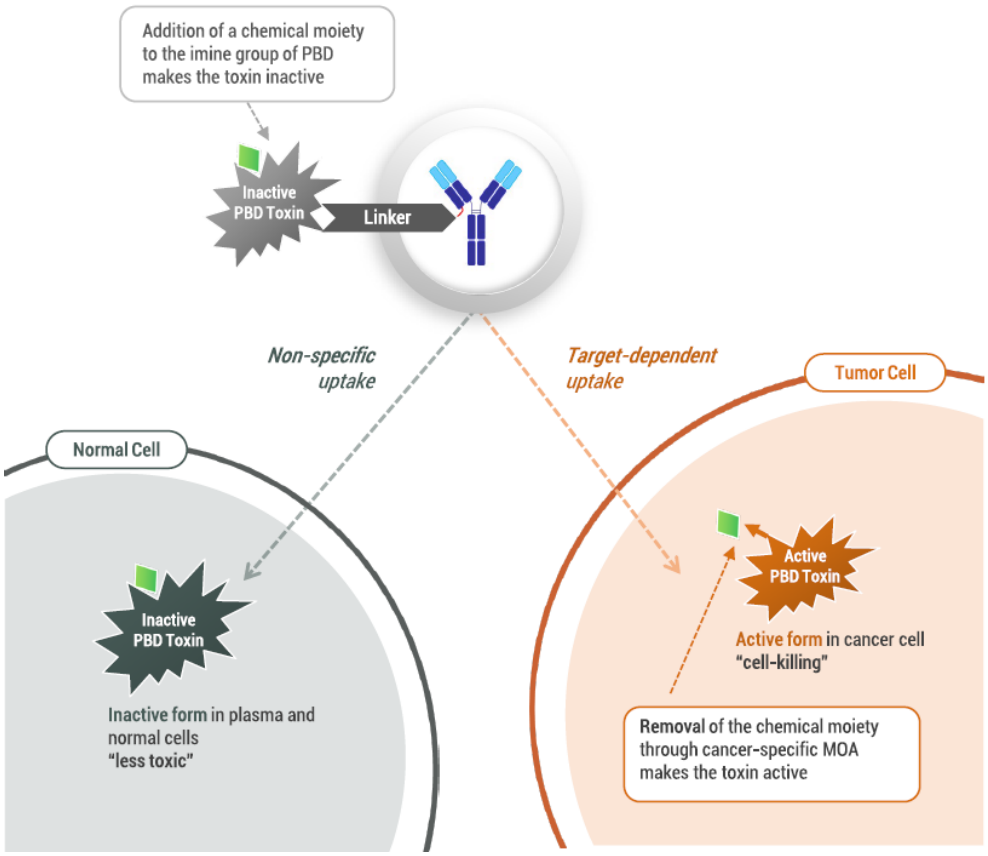
Pipeline of ADCs using PBD as payload

LigaChem owns drug candidates that use pyrrolobenzodiazepine (PBD) as a payload, including LCB71 (ROR1 ADC) and LCB73 (CD19 ADC). In Mar. 2024, partner CStone disclosed interim phase 1 data on LCB71 (also known as CS5001) showing preliminary anti-tumor activity in both solid tumors (e.g., non-small cell lung cancer, pancreatic cancer) and hematologic malignancies (e.g., diffuse large B-cell lymphoma, Hodgkin's lymphoma) from dose level 5 and above. Furthermore, no dose-limiting toxicity was seen with escalation to dose level 9 (156 μg/kg), and the maximum tolerated dose was not yet reached. In addition, no serious treatment-related adverse events (grades 4-5) were observed. (Phase 1a dose escalation remains ongoing.)

In addition, LCB71 showed lower rates of thrombocytopenia, neutropenia, and anemia compared with two similar drugs (same payload or target antigen). Existing ADCs using PBD as the payload are generally unsuitable for the treatment of solid tumors, as their half-life often needs to be reduced to address high toxicity. If LCB71 continues to demonstrate high safety, we think it has the potential to be used to treat solid tumors. We expect phase 2 dosage levels to be finalized in 1H24 and phase a 1b/2 trial to commence by end-2024. Of note, CStone is set to present additional phase 1 data on LCB71 at the ASCO meeting in June; according to the abstract, the ORR was 55.6% for Hodgkin's lymphoma and 50% for diffuse large B-cell lymphoma, and partial responses were observed in solid tumors.

Of note, on Apr. 24, Ipsen licensed STRO-003 (ROR1 ADC) from Sutro Biopharma for a total of US$900mn. And back in 2020, Merck acquired VelosBio (which held ROR1 ADC candidates) for US$2.75bn. These deals point to the value of ROR1 ADCs.

Figure 5. PBD prodrugs' mechanism of action



Source: Company materials, Mirae Asset Securities Research

Table 4. LigaChem's PBD-ADCs vs. conventional PBD-ADCs

	Efficacy	Toxicity	Therapeutic index	Productivity
Conventional PBD-ADCs	High	High	Low	Low
LigaChem's PBD-ADCs	High	Low	High	High

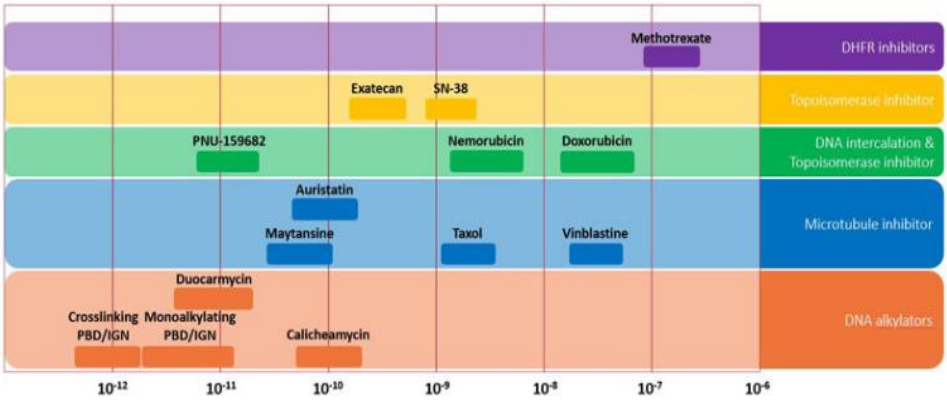
Source: Company data, Mirae Asset Securities Research

Table 5. Comparison of competing CD19-PBD ADCs

	Zynlonta	SGN-CD19B	LCB73
Company	ADC Therapeutics	Seagen	LigaChem
Estimated HNSTD (cyno)	0.6mg/kg	0.25mg/kg	> 1mg/kg
MED in murine study	1.0mg/kg	0.33mg/kg	0.33mg/kg
Therapeutic index	2.4	3	> 12.0
Clinical stage	Marketed	Phase 1 (halted)	Preclinical

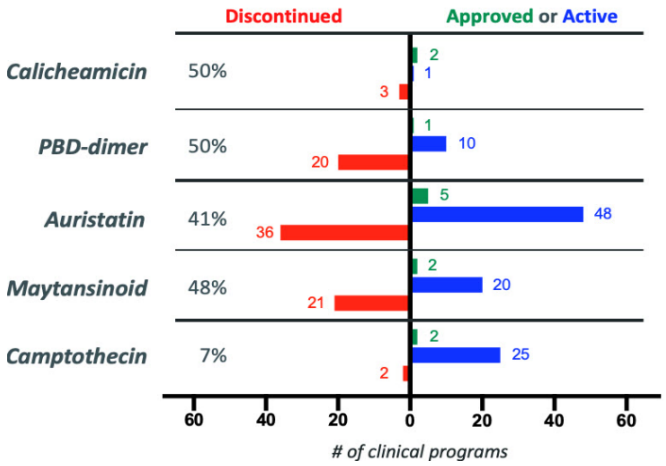
Notes: MED = minimum effective dose; HNSTD = highest non-severely toxic dose
Source: Company data, Mirae Asset Securities Research

Figure 6. Candidate materials used as payloads: Toxicity comparison



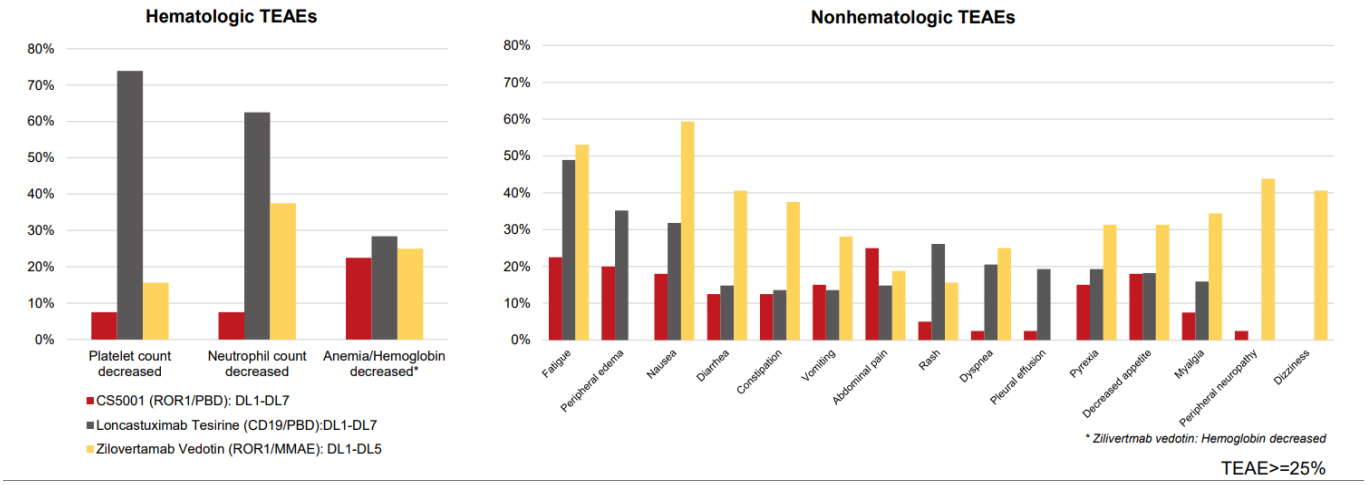
Note: IC50 in M units
Source: Company data, Mirae Asset Securities Research

Figure 7. Types of payloads for candidate ADC materials



Note: As of Oct. 2022
Source: Company data, Mirae Asset Securities Research

Figure 8. Interim results from phase 1 study of LCB71 (ROR1 ADC)



Source: CStone, Mirae Asset Securities Research

Janssen licenses Trop2 ADC

LCB84 consists of a Trop2 antibody with a payload of monomethyl auristatin E (MMAE) and a linker from LigaChem. As Trop2 receptors are expressed in both cancerous and normal cells, few Trop2 targeting ADC candidates utilize highly toxic payloads. Gilead Science's Trodelvy, which has received FDA approval, is also a Trop2-targeting ADC, but it uses the topoisomerase-1 inhibitor SN-38 as its payload, which is less toxic than the MMAE payload used by LCB84.

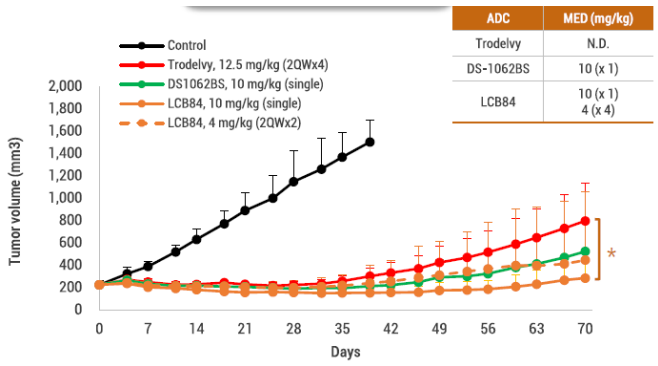
While a more potent payload may lead to higher efficacy, potential side effects are a concern if normal cells are targeted. Thus, it is crucial to examine the safety profile of LCB84 in clinical trials; if trials involving humans demonstrate higher efficacy and reduced side effects compared to Trodelvy and Dato-DXd, LCB84 could become a best-in-class drug. In Dec. 2023, in a phase 1 clinical trial, LCB84 was administered to a human patient for the first time. In the same month, the candidate was licensed to Janssen for W2.2tr. LigaChem received an up-front payment of W130bn and could receive an additional W260bn if Janssen exercises an option during a phase 1/2 trial.

Table 6. Trop2 ADC comparison

	Dato-DXd	Trodelvy	LCB84
Company	Daiichi Sankyo	Immunomedics/Gilead Sciences	LigaChem
Clinical stage	Phase 3	Marketed	Phase 1
Payload (DAR)	DXd (4)	SN-38 (7.6)	MMAE (4)
MED (pancreatic cancer)	3 mg/kg (QWx2)	12.5mg/kg (2QWx4)	2mg/kg (QDx1), up to 1mg/kg (2QWx2)
MED (breast cancer)		12.5mg/kg (Q4dx4)	2mg/kg (single dose)
MED (stomach cancer)		> 17.5mg/kg (2QWx4)	4mg/kg (single dose)

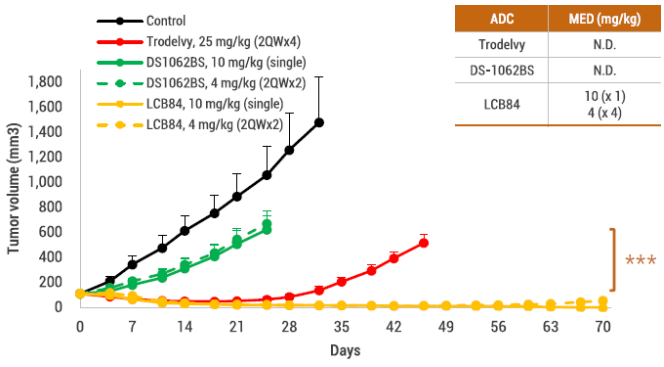
Note: MED = minimum effective dose
Source: Company data, Mirae Asset Securities Research

Figure 9. LCB84 (Trop2-MMAE) efficacy in non-small cell lung cancer



Source: Company data, Mirae Asset Securities Research

Figure 10. LCB84 (Trop2-MMAE) efficacy in non-small cell lung cancer



Source: Company data, Mirae Asset Securities Research

Ability to finance clinical trials

In January, the company announced a third-party allotment of new shares and the sale of existing shares. Following the completion of these deals, Pan Orion became the largest shareholder with a 25.73% stake (W548.5bn invested). We believe the additional funding has helped ease the cost burden associated with clinical trials, giving LigaChem sufficient resources to finance the development of four to five drug candidates annually and secure a pipeline of 10 clinical trials within the next five years. We believe the company's value could increase rapidly if it invests in more clinical trials and speeds up pipeline development.

The key advantage of being part of a conglomerate group is financial stability. Risks such as unexpected stock sell-offs by major shareholders (which have plagued Korean biotech firms in the past) are likely to ease for LigaChem.

Table 7. Share transfer agreement (→ change in ownership)

Acquirer	Pan Orion
No. of shares (mn)	1.4
Seller	Kim Yong-zu (1.2mn shares), Park Se-jin (0.2mn shares)
Value (Wbn)	78.6
Price per share (W)	56,186

Source: Company data, Mirae Asset Securities Research

Table 8. LigaChem's third-party allotment

Acquirer	Pan Orion
No. of shares	7,963,283
Price of newly issued shares (W)	59,000
Premium over previous day's closing price	5%
Value (Wbn)	469.8

Source: Company data, Mirae Asset Securities Research

Table 9. Fund utilization plans

Costs for conducting five or more phase 1-2 clinical trials		W500-600bn
Securing growth drivers for the future	**Securing antibodies**	W100-200bn
	Research in AIC/ADIC fields	W100bn
	New modalities	W100bn

Source: Company data, Mirae Asset Securities Research

II. Valuation

We initiate our coverage of LigaChem with a Buy rating and target price of W86,000 (35.6% upside). Our target price is based on our 2024-30 estimates (three new drugs expected to be released by 2030) and a DCF model with a WACC of 8.2% and perpetual growth rate of 1%. .

Among biotech stocks, we believe LigaChem stands out for its undemanding valuation (2025F P/E of 14.6x) and profitability. In contrast, Daiichi Sankyo, the co-developer of Enhertu, is trading at a 2025F P/E of 34x, while Seagen and ImmunoGen were reporting operating losses before their acquisitions by major companies despite having commercialized items in their product portfolios.

1) LCB14 (HER2-targeting ADC): In our valuation, we assumed that the company will start booking LCB14 royalties from Fosun Pharma in 2025 (under conditional approval in China) and from Iksuda in 2028 (US market). Other assumptions include peak revenue of US$3.58bn, a 20% share of the current Enhertu market, and a 50% probability of clinical trial success.

2) LCB84 (Trop2-targeting ADC): We assumed that Janssen will exercise its option under the licensing agreement in 2025, ahead of the commencement of a phase 2 trial (allowing LigaChem to recognize the option exercise fee of US$200mn). We also assumed a post-commercialization royalty rate of 15%. Following its anticipated launch in 2029, we expect the drug to capture up to 40% of the combined market share of Trodelvy and Dato-DXd, assuming that it succeeds in a lung cancer trial (where Trodelvy failed). We see a 30% probability of clinical success.

3) LCB71 (ROR71-targeting ADC; Hodgkin's lymphoma treatment): LCB71 is currently in a phase 1 clinical trial and will likely be released in the US in 2030. We assumed 15% royalties from CStone following the US launch and a 30% probability of clinical trial success.

A lack of commercialized items has been a weakness of LigaChem. With LCB14 having the potential to be released in China as early as 2025 following conditional approval, we think the stock could garner a higher valuation than Pyxis and Iksuda. Of note, Seagen and ImmunoGen (both of which have commercialized items) were acquired by Pfizer and AbbVie, respectively, in 2023.

Table 10. LigaChem: TP calculation (DCF) (Wbn)

	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Revenue	104	290	64	92	119	208	428
YoY		179%	-78%	42%	30%	75%	105%
HER2 ADC	-	0.3	0.4	1	3	7	11
Trop2 ADC	8	22	-	6	-	9	20
ROR1 ADC	-	-	5	-	6	-	2
OP	4	1,93	23	50	74	162	377
YoY		5163%	-88%	114%	49%	120%	132%
OP margin	4%	66%	36%	54%	62%	78%	88%
EBIT/OP + D&A	4	193	23	50	74	162	377
Tax	- 0	- 0.6	5	10	15	33	75
Tax rate	0%	0%	20%	20%	20%	20%	20%
NOPAT	40	193	19	40	59	130	302
+Depreciation expenses	0.3	0.3	0.2	0.3	0.3	0.3	0.3
+Amortization expenses	1	1	1	1	1	1	1
-Capex	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
-Chg. in working capital	- 9	7	3	3	8	8	8
FCF	14	187	16	38	52	123	295
NPV (current value)	14	173	14	30	38	83	184
Terminal value	4,138						
PV of terminal value	2,579						
Total value	3,114						
Target price (W)	86,000						
Current price (W)	63,400						
Upside	35.6%						

Source: Mirae Asset Securities Research

Table 11. Peer valuation table: ADC players

Company		ADC Therapeutics	Daiichi Sankyo	Pyxis	Mersana	LigaChem
Ticker		ADCT US	4568 JP	PYXS US	MRSN US	141080 KS
Market cap		350.3	67,235.7	225.0	302.2	1,760.8
2023	Revenue (US$mn)	69.6	11,061.6	0.0	36.9	26.1
	OP (US$mn)	(166.0)	1,461.7	(82.2)	(179.7)	(61.9)
	EBITDA (US$mn)	(164.8)	1,889.1	(77.6)	(174.3)	(58.3)
	NP (US$mn)	(240.1)	1,392.5	(73.8)	(171.7)	(56.4)
	EPS (US$, JPY)	(2.9)	0.7	(1.9)	(1.5)	(2.0)
	P/E (x)	-	45.6	-	-	-
	P/B (x)	-	5.4	0.6	7.6	12.3
	ROE (%)	-	12.8	(51.5)	(266.2)	(40.2)
	EV/EBITDA (x)	-	35.3	-	-	-
	P/S (x)	2.0	5.7	-	7.3	54.1
2024F	Revenue (US$mn)	77.7	11,333.4	10.6	38.2	96.0
	OP (US$mn)	(138.3)	1,526.5	(66.8)	(82.0)	(1.5)
	EBITDA (US$mn)	(136.0)	1,957.1	-	(90.7)	1.4
	NP (US$mn)	(170.3)	1,301.5	(55.8)	(79.4)	3.5
	EPS (US$, JPY)	(1.8)	0.7	(1.1)	(0.6)	0.2
	P/E (x)	-	51.9	-	-	273.7
	P/B (x)	-	6.3	-	-	4.7
	ROE (%)	110.4	12.0	-	(990.5)	3.6
	EV/EBITDA (x)	-	-	-	-	898.7
	P/S (x)	4.5	5.9	21.3	7.9	18.2

Note: As of May 23, 2024
Source: Bloomberg, Mirae Asset Securities Research

LigaChem Biosciences (141080 KQ)

Income statement (summarized)

(Wbn)	2023	2024F	2025F	2026F
Revenue	**34**	**127**	**316**	**207**
Cost of revenue	**16**	**16**	**17**	**19**
GP	**18**	**111**	**299**	**188**
SG&A expenses	**99**	**107**	**106**	**114**
OP (adj.)	**-81**	**4**	**193**	**74**
OP	**-81**	**4**	**193**	**74**
Non-operating profit	**5**	**16**	**14**	**17**
Net financial income	5	11	14	17
Net income from associates	1	0	0	0
Pretax profit	-76	20	207	91
Income tax	-2	1	48	9
Profit from continuing operations	-74	19	159	82
Profit from discontinued operations	0	0	0	0
NP	**-74**	**19**	**159**	**82**
Attributable to owners	-74	19	159	82
Attributable to minority interests	0	0	0	0
Total comprehensive income	**-74**	**18**	**159**	**82**
Attributable to owners	-74	18	159	82
Attributable to minority interests	0	0	0	0
EBITDA	-76	8	197	78
FCF	-64	31	155	80
EBITDA margin (%)	-223.5	6.3	62.3	37.7
OP margin (%)	-238.2	3.1	61.1	35.7
Net margin (%)	-217.6	15.0	50.3	39.6

Balance sheet (summarized)

(Wbn)	2023	2024F	2025F	2026F
Current assets	**135**	**635**	**789**	**868**
Cash & equivalents	63	464	646	771
AR & other receivables	18	24	15	13
Inventory	0	1	0	0
Other current assets	54	146	128	84
Non-current assets	**55**	**80**	**50**	**44**
Investments in associates	8	29	8	5
PP&E	25	23	20	18
Intangible assets	7	6	5	4
Total assets	**190**	**715**	**840**	**911**
Current liabilities	**37**	**70**	**36**	**27**
AP & other payables	12	11	10	7
Short-term financial liabilities	12	13	12	12
Other current liabilities	13	46	14	8
Non-current liabilities	**4**	**6**	**6**	**4**
Long-term financial liabilities	1	0	0	0
Other non-current liabilities	3	6	6	4
Total liabilities	**41**	**76**	**42**	**31**
Equity attributable to owners	**148**	**639**	**798**	**880**
Capital stock	14	18	18	18
Capital surplus	98	563	563	563
Retained earnings	31	48	207	289
Minority interests	**0**	**0**	**0**	**0**
Shareholders' equity	**148**	**639**	**798**	**880**

Cash flow statement (summarized)

(Wbn)	2023	2024F	2025F	2026F
Operating cash flow	**-62**	**31**	**155**	**80**
NP	-74	19	159	82
Non-cash income/expenses	10	-4	38	-4
Depreciation	3	3	3	2
Amortization	2	1	1	1
Other	5	-8	34	-7
Chg. in working capital	-2	7	-7	-5
Chg. in AR & other receivables	-7	3	0	4
Chg. in inventory	0	0	0	0
Chg. in AP & other payables	0	0	0	-2
Income tax	-1	-1	-48	-9
Cash flow from investing activities	**9**	**-82**	**6**	**43**
Chg. in PP&E	-1	0	0	0
Chg. in intangible assets	-1	0	0	0
Chg. in financial assets	10	-81	6	43
Other	1	-1	0	0
Cash flow from financing activities	**-2**	**471**	**-1**	**0**
Chg. in financial liabilities	0	0	-1	0
Chg. in equity	4	470	0	0
Dividends	0	0	0	0
Other	-6	1	0	0
Chg. in cash	**-55**	**401**	**182**	**125**
Beginning balance	118	63	464	646
Ending balance	63	464	646	771

Key valuation metrics/ratios

	2023	2024F	2025F	2026F
P/E (x)	-	116.9	14.6	28.2
P/CF (x)	-	151.6	11.8	29.8
P/B (x)	12.1	3.6	2.9	2.6
EV/EBITDA (x)	-	210.1	7.8	18.7
EPS (W)	-2,634	542	4,347	2,251
CFPS (W)	-2,272	418	5,392	2,128
BPS (W)	5,387	17,665	22,012	24,263
DPS (W)	0	0	0	0
Dividend payout ratio (%)	0.0	0.0	0.0	0.0
Dividend yield (%)	0.0	0.0	0.0	0.0
Revenue growth (%)	2.2	270.9	149.5	-34.6
EBITDA growth (%)	-	-	2,303.3	-60.5
OP growth (%)	-	-	5,162.5	-61.4
EPS growth (%)	-	-	701.4	-48.2
AR turnover (x)	2.5	9.4	26.2	20.9
Inventory turnover (x)	172.6	286.4	717.7	1,295.8
AP turnover (x)	2.3	2.3	2.4	3.2
ROA (%)	-33.3	4.1	20.4	9.4
ROE (%)	-40.1	4.8	22.1	9.8
ROIC (%)	-211.1	11.9	616.6	260.5
Debt-to-equity ratio (%)	27.9	11.9	5.2	3.6
Current ratio (%)	363.1	913.7	2,219.3	3,171.8
Net debt-to-equity ratio (%)	-65.3	-89.8	-94.6	-95.3
Interest coverage ratio (x)	-153.0	6.2	312.0	124.1

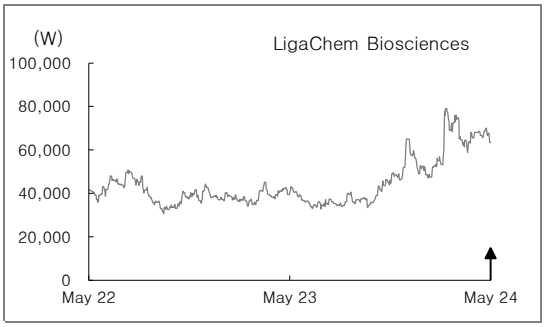
Source: Company data, Mirae Asset Securities Research estimates

Appendix 1

Important disclosures and disclaimers

Two-year rating and TP history

Company	Date	Rating	TP (W)
LigaChem Biosciences (141080)	05/29/24	Buy	86,000



Stock ratings	
Buy	Expected 12-month performance: +20% or greater
Trading Buy	Expected 12-month performance: +10% to +20%
Hold	Expected 12-month performance: -10% to +10%
Sell	Expected 12-month performance: -10% or worse

Sector ratings	
Overweight	Expected to outperform the market over 12 months
Neutral	Expected to perform in line with the market over 12 months
Underweight	Expected to underperform the market over 12 months

Rating and TP history: Share price (—), TP (▬), Not Rated (■), Buy (▲), Trading Buy (■), Hold (●), Sell (♦)
* Our investment rating is a guide to the expected return of the stock over the next 12 months.
* Outside of the official ratings of Mirae Asset Securities Co., Ltd., analysts may call trading opportunities should technical or short-term material developments arise.
* The TP was determined by the research analyst through valuation methods discussed in this report, in part based on estimates of future earnings.
* TP achievement may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Ratings distribution and investment banking services

	Buy	Trading Buy	Hold	Sell
Ratings distribution	85.36%	9.15%	5.49%	0%
Investment banking services	80.96%	9.52%	9.52%	0%

* Based on recommendations in the last 12-months (as of March 31, 2024)

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