COMPANY ANALYSIS

[Korea] Pharma/Biotech

May 31, 2022

Daewoong Pharmaceutical

(069620 KS)

Margins set to improve

Buy
(Initiate)

TP: W220,000
Upside: 26.4%

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Recommendation and valuation

Initiate coverage with Buy and TP of W220,000

- Our valuation of Daewoong Pharmaceutical represents the sum of the company's operating value (W2.4tr) and the value of its HanAll Biopharma equity holdings (W300bn), minus net debt (W280bn).
- We derived the company's operating value by applying an EV/EBITDA of 15.6x to our 12-month forward EBITDA estimate of W154.4bn.
- We based the value of the company's equity holdings on HanAll Biopharma's three-month average market cap and an equity stake of 31.5%.

Investment points

Nabota, fexuprazan, and enavogliflozin to drive margin improvements

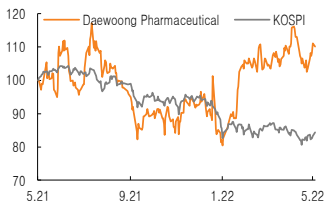
- Internally developed products are critical for margin improvement.
- We expect the overseas advance of Nabota (botulinum toxin) to gather traction. The company's partner Evolus has guided 2022 revenue of US$143mn to US$150mn and is forecast to generate revenue of over US$500mn by 2028.
- Fexuprazan, a potassium-competitive acid blocker (P-CAB) intended for the treatment of gastroesophageal reflux disease (GERD), is set to be domestically released in 3Q22. We expect the drug to rapidly gain ground in the domestic market. Notably, P-CABs are likely to compete with and replace proton pump inhibitors (PPIs), rather than compete against each other.
- Enavogliflozin, a sodium-glucose cotransporter-2 (SGLT-2) inhibitor intended for the treatment of diabetes, is expected to be domestically launched in 2023. We think the drug has the potential to become a blockbuster in Korea, given its novel mechanism and the company's sales/marketing capabilities.

Full-year earnings forecasts

Solid revenue/operating profit growth expected in 2022 and 2023

- For 2022, we forecast revenue of W1.15tr (+8.9% YoY) and operating profit of W114.7bn (+20.1% YoY).
- For 2023, we forecast revenue of W1.28tr (+11.2% YoY) and operating profit of W138.1bn (+20.4% YoY).
- We expect top-line growth and margin gains to continue, backed by: 1) the full-fledged growth of Nabota exports; 2) fexuprazan's release in 2022 and growth in 2023; and 3) the launch of enavogliflozin in 2023.

Key data



Current price (5/30/22, W)	174,000	Market cap (Wbn)	2,016
OP (22F, Wbn)	115	Shares outstanding (mn)	12
Consensus OP (22F, Wbn)	118	Free float (%)	38.3
EPS growth (22F, %)	107.7	Foreign ownership (%)	7.5
P/E (22F, x)	27.1	Beta (12M)	1.27
Market P/E (22F, x)	10.1	52-week low (W)	127,000
KOSPI	2,669.66	52-week high (W)	185,000

Share performance

(%)	1M	6M	12M
Absolute	-4.9	31.3	10.1
Relative	-4.0	39.7	31.5

Earnings and valuation metrics

(Dec.)	2019	2020	2021	2022F	2023F	2024F
Revenue (Wbn)	1,005	945	1,055	1,149	1,278	1,428
OP (Wbn)	31	13	95	115	138	169
OP margin (%)	3.1	1.4	9.0	10.0	10.8	11.8
NP (Wbn)	20	3	36	74	95	154
EPS (W)	1,746	271	3,089	6,416	8,240	13,315
ROE (%)	3.7	0.6	6.0	11.5	13.1	18.3
P/E (x)	78.8	609.1	47.9	27.1	21.1	13.1
P/B (x)	2.7	3.2	2.7	2.9	2.6	2.2
Div. yield (%)	0.4	0.4	0.4	0.3	0.3	0.3

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

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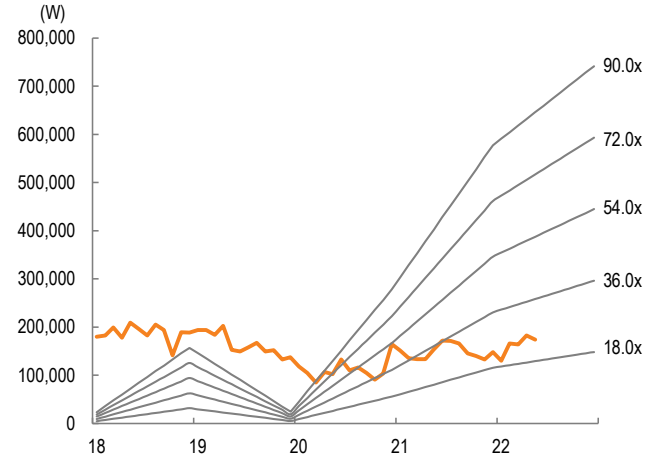
I. Initiate coverage with TP of W220,000

Table 1. Valuation (Wbn, x)

	Value	Notes
12MF EBITDA	154	
Target EV/EBITDA	15.6	Avg. multiple of six domestic pharmas
Operating value	2,409	
Total debt	439	2022F
Cash & cash equivalents	156	2022F
Net debt	283	
Equity stake in HanAll Biopharma	303	Three-month avg. market cap, 31.5% equity stake
Fair value	2,429	
No. of shares ('000)	11,069	
Fair price (W)	219,400	TP: W220,000
Current price (W)	174,000	
Upside	26.1%	

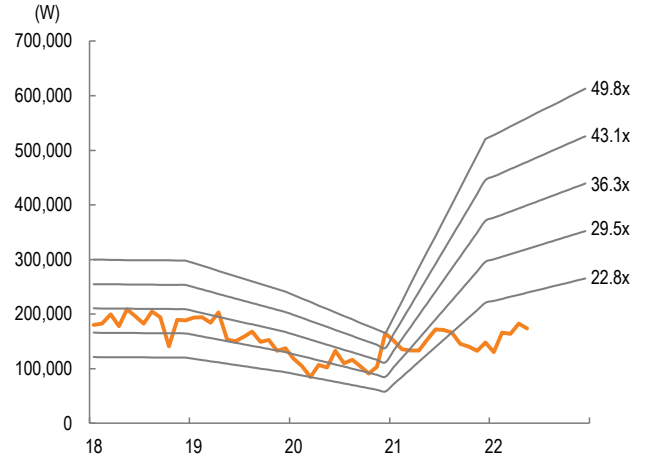
Source: Mirae Asset Securities estimates

Figure 1. 12-month forward P/E band chart



Source: Mirae Asset Securities Research estimates

Figure 2. 12-month forward EV/EBITDA band chart



Source: Mirae Asset Securities Research estimates

Table 2. Peer valuation table (Wbn, %, x)

Company	Market cap (Wtr)	Revenue		OP		OP margin		NP		ROE		P/E		P/B		EV/EBITDA		P/S	
		22F	23F	22F	23F	22F	23F	22F	23F	22F	23F	22F	23F	22F	23F	22F	23F	22F	23F
Yuhan	4.1	1,834	2,038	63	111	3.4	5.5	98	156	5.1	7.4	42.8	27.4	2.2	2.0	35.5	24.3	2.4	2.2
Hanmi	3.8	1,302	1,388	137	152	10.5	10.9	88	102	9.5	9.8	46.4	40.7	4.4	4.0	19.2	17.8	3.0	2.8
Chong Kun Dang	1.1	1,451	1,558	108	123	7.4	7.9	75	90	12.1	12.8	14.5	12.3	1.8	1.6	8.6	7.4	0.8	0.7
Dong-A ST	0.5	640	683	38	54	5.9	7.8	32	49	5.9	8.4	17.4	11.2	1.0	0.9	13.2	10.2	0.9	0.8
Green Cross	2.2	1,695	1,744	113	194	6.7	11.1	84	148	5.5	5.8	31.9	28.4	1.7	1.6	15.6	13.5	1.3	1.3
Daewoong	1.9	1,212	1,318	116	144	9.5	10.9	77	99	12.2	14.0	25.8	20.1	3.1	2.8	15.0	12.4	1.7	1.5
HK inno.N	1.2	827	899	69	87	8.4	9.6	37	54	-	-	33.0	22.6	-	-	14.0	11.2	1.5	1.4
Avg.						7.4	9.1			8.4	9.7	30.3	23.2	2.4	2.2	17.3	13.8	1.6	1.5

Source: FactSet, Mirae Asset Securities Research estimates

II. Investment points

1. Internally developed products critical for margin improvement

One of the biggest differences between global big pharmas and top domestic drugmakers lies in their exposure to internally developed novel drugs. Many global pharmas enjoy high margins because they sell original drugs. With gross margins averaging around 70-80%, these companies can spend around 20% on SG&A expenses and 20% on R&D and still maintain annual OP margins of 30-40%.

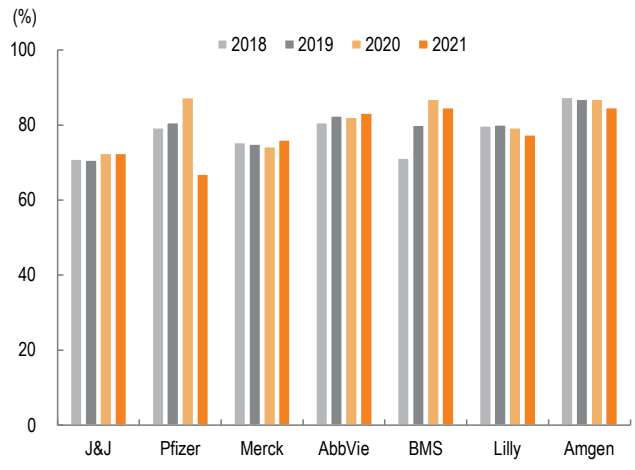
Domestic drug companies, on the other hand, have limited exposure to internally developed drugs. Instead, most companies sell generic versions of original drugs whose patents have expired or in-license original drugs from big pharmas. This leads to a high cost of sales and low margins. With gross margins averaging around 40%, domestic companies typically see their OP margins drop to the single digits after spending 20% on SG&A expenses and 10% on R&D. And given that there are minimal differences in products across companies (unless they are original drugs), it is also difficult to reduce SG&A expenses.

Ultimately, the only way for domestic drugmakers to improve their margins is to sell internally developed drugs. Among domestic companies, Hanmi Pharmaceutical and HK inno.N have relatively high margins, mainly because they generate more revenue from in-house developed products than from licensed products.

Daewoong Pharmaceutical has recorded annual gross margins of around 40% in recent years. Looking ahead, we expect margins to gradually improve, driven by: 1) the growth of Nabota, an in-house developed botulinum toxin; 2) the launch of fexuprazan (GERD), an in-house developed P-CAB; and 3) the rollout of enavogliflozin (diabetes), an in-house developed SGLT-2 inhibitor.

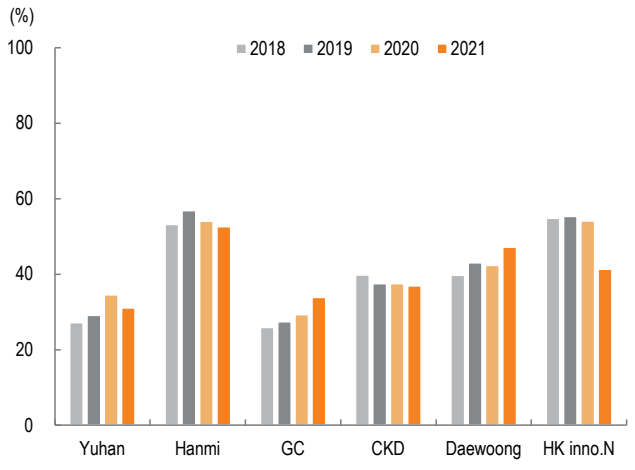
Nabota is a novel drug that has been newly added to Daewoong Pharmaceutical's existing portfolio, while fexuprazan and enavogliflozin are internally developed novel drugs that will replace Nexium and Farxiga, which the company has licensed from AstraZeneca.

Figure 3. Gross margins of global big pharmas



Note: On a non-GAAP basis
Source: FactSet, Mirae Asset Securities Research estimates

Figure 4. Gross margins of top domestic drugmakers



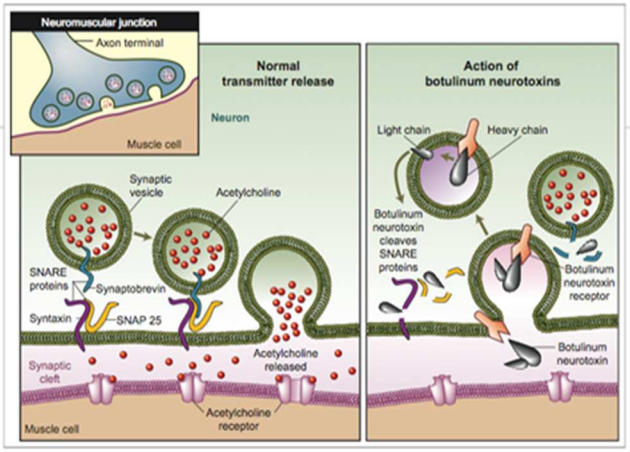
Source: QuantiWise, Mirae Asset Securities Research estimates

2. Nabota's overseas advance to gather traction

Botulinum toxin is a drug made from neurotoxins produced by the bacterium botulinum. While mainly known for its cosmetic uses (wrinkle reduction through temporary muscle paralysis), it can also be used to treat medical conditions such as spasticity, blepharospasm, bladder disorders, and migraines. The global botulinum toxin market is led by AbbVie's Botox (onabotulinumtoxinA), which generates global sales of US$4.7bn (as of 2021).

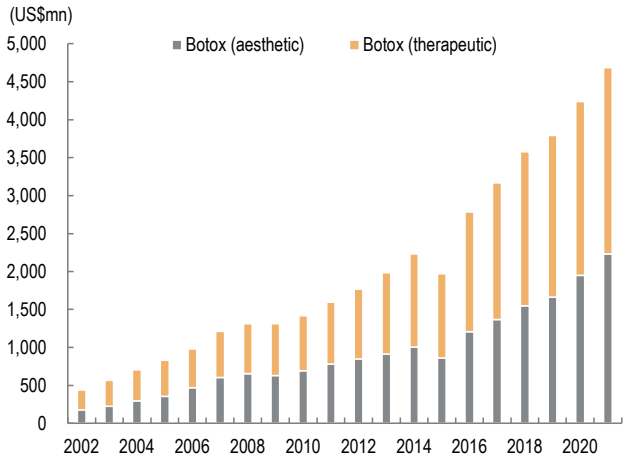
Nabota is a botulinum toxin developed by Daewoong Pharmaceutical. A global phase 3 trial showed that Nabota had non-inferiority to Botox, with 87.2% of patients having a Glabellar Line Scale (GLS) score of 0 or 1 (vs. 82.8% for the Botox patient group). Nabota is directly sold by the company in the domestic market but is marketed through partners in overseas markets. Daewoong Pharmaceutical's biggest overseas partner is US-based Evolus (EOLS US), which entered into an agreement with the company in 2013 to obtain the rights to the drug in the US, Europe, Canada, Australia, Russia, South Africa, and Japan. Evolus gained US FDA approval for Jeuveau (Nabota's US brand name) in 2019. Other overseas partners include Probiomed and Moksha8, which hold the rights in Mexico and Brazil, respectively.

Figure 5. Mechanism of action of botulinum toxin



Source: ACS Chemical Biology, Mirae Asset Securities Research

Figure 6. AbbVie's annual Botox revenue

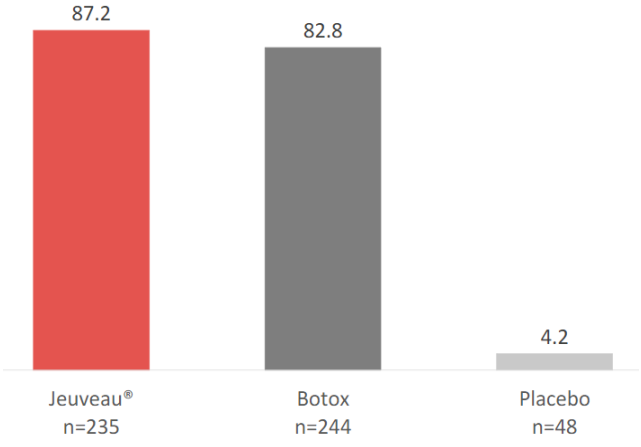


Source: AbbVie, Allergan, Mirae Asset Securities Research

Figure 7. Daewoong's Nabota and Evolus's Jeuveau

Source: Company materials, Evolus, Mirae Asset Securities Research

Figure 8. Phase 3 study primary efficacy endpoint was GLS score of 0 or 1



Source: Evolus, Mirae Asset Securities Research

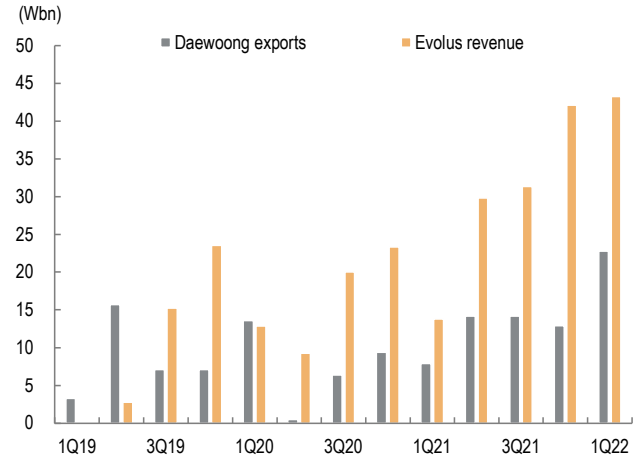
We expect Nabota's overseas advance to gather traction. Nabota has two major advantages: 1) it is the only 900-kDa toxin (i.e., the same molecular weight as Botox) aside from Botox approved in major developed markets like the US and Europe; and 2) it is more price-competitive than Botox. (The US price of Nabota is 75-80% that of Botox.)

Evolus launched Jeuveau in the US in 2019, but the company's marketing and sales were disrupted by the subsequent outbreak of COVID-19. The company was further hit by a sales ban resulting from a lawsuit filed by Medytox. However, with the pandemic now transitioning to an endemic phase and the Medytox lawsuit having been settled, sales are beginning to pick up steam. In 1Q22, Evolus's revenue jumped 178% YoY to US$33.9mn. The company has guided 2022 revenue of US$143mn to 150mn and is forecast to generate revenue of over US$500mn by 2028.

Elsewhere, Daewoong Pharmaceutical is expected to gain approval for Nabota in China this year after submitting a Biologics License Application (BLA) late last year. Meanwhile, Evolus is anticipated to roll out Jeuveau in Europe during 3Q22 and has filed BLAs in Australia and four Middle Eastern countries (including Saudi Arabia). We expect Nabota to begin delivering positive results outside of the US in 2023.

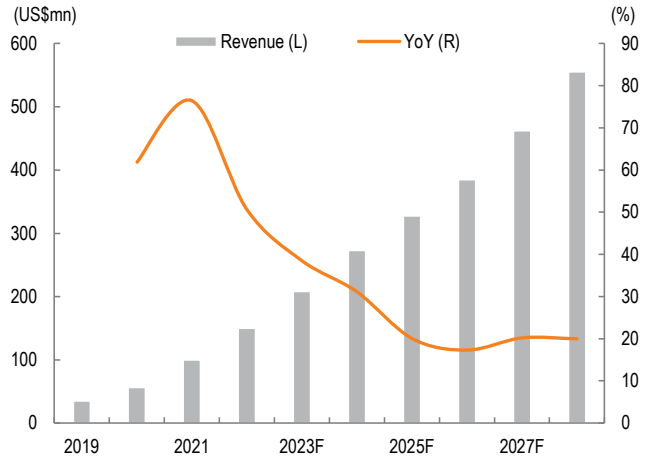
We forecast Daewoong Pharmaceutical's Nabota exports to reach roughly W80bn in 2022. Including domestic sales, we forecast Nabota's overall revenue to be around W110bn. Notably, Nabota has very high margins. We estimate gross margin is around 60-70%, far above the company-wide level of 46%. Driven by the growth of Nabota, we expect overall margins to continue to improve.

Figure 9. Evolus's Jeuveau revenue and Daewoong's exports (quarterly)



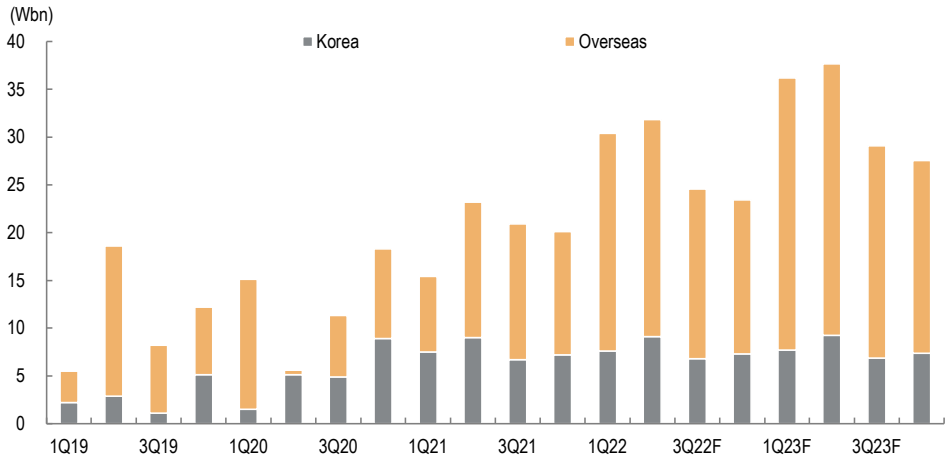
Source: FactSet, Mirae Asset Securities Research estimates

Figure 10. Evolus's annual revenue trend and forecasts



Note: Based on FactSet consensus
Source: FactSet, Mirae Asset Securities Research estimates

Figure 11. Nabota's quarterly domestic and overseas revenue



Source: Mirae Asset Securities Research estimates

Table 3. Timeline of Daewoong Pharmaceutical-Medytox legal battle

Date	Description
Mar. 2006	Medytox releases Meditoxin in Korea
Apr. 2014	Daewoong Pharmaceutical releases Nabota in Korea
Sep. 2014	US FDA approves Nabota's Investigational New Drug Application (IND) for a phase 3 study
Jun. 2016	Medytox files lawsuit against Daewoong Pharmaceutical in the US for allegedly stealing its bacterial strain
Oct. 2016	Medytox files lawsuit against Daewoong Pharmaceutical with the Seoul Central District Court
Nov. 2016	Medytox reveals the genome sequence of its strain at a press conference
Jan. 2017	Medytox sues Daewoong Pharmaceutical for allegedly violating the Korean Unfair Competition Prevention and Trade Secret Protection Act
Dec. 2017	Medytox files a petition requesting the FDA to reject Nabota's BLA to block its US sale
Apr. 2018	The US court dismisses the case, citing ongoing proceedings in Korea
Jan. 2019	Medytox and Allergan file a complaint with the ITC alleging that Daewoong Pharmaceutical misappropriated trade secrets
Feb. 2019	FDA rejects Medytox's petition
Feb. 2019	FDA approves Nabota's US sale
Mar. 2019	ITC initiates investigation into Daewoong Pharmaceutical and its partner Evolus
May 2019	Jeuveau (US brand name of Nabota) is released in the US
May 2019	A former Medytox employee files a report claiming the company used unapproved ingredients
May 2019	USITC orders Daewoong Pharmaceutical to submit Nabota's strain
Jul. 2019	USITC orders Medytox to explain how trade secrets were misappropriated
Aug. 2019	A court-ordered test confirms that Daewoong Pharmaceutical's strain formed spores
Sep. 2019	Medytox submits Daewoong Pharmaceutical's test report to ITC
Jun. 2020	Korea's MFDS revokes approval of three Medytox products, including Meditoxin
Jun. 2020	Medytox asks the Daejeon District Court to stop the MFDS order
Jun. 2020	The court accepts Medytox's request and grants a stay of the MFDS order until Jul. 14
Jul. 2020	USITC issues initial determination in favor of Medytox
Nov. 2020	USITC final determination is delayed to Dec. 16
Dec. 2020	USITC issues final determination in favor of Medytox and orders a 21-month ban on Jeuveau imports
Feb. 2021	Medytox, Allergan, and Evolus settle legal dispute
May 2021	Medytox files another lawsuit against Daewoong Pharmaceutical in the US
May 2021	USITC announces Daewoong Pharmaceutical's appeal to the Court of Appeals for the Federal Circuit to reverse the import ban on Jeuveau, and the ITC's final determination is moot
Oct. 2021	USITC vacates its final determination, including its Jeuveau import ban
Feb. 2022	The Seoul Central District Prosecutors' Office clears Daewoong Pharmaceutical of charges that the company violated the Korean Unfair Competition Prevention and Trade Secret Protection Act

Source: Company data, Medytox press releases, Mirae Asset Securities estimates

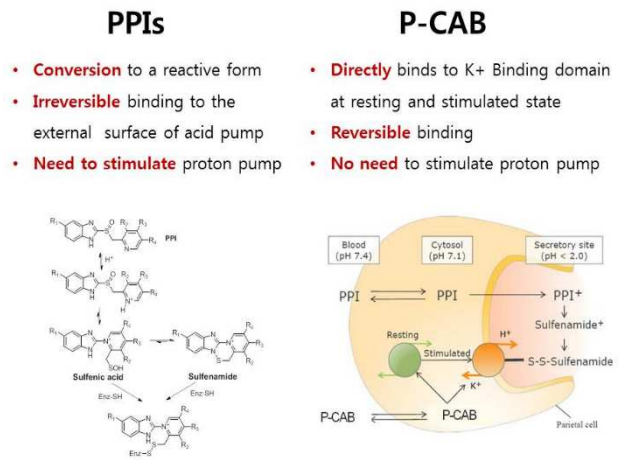
3. P-CAB-based drug fexuprazan poised for commercial success

P-CABs are used for the treatment of GERD. Compared to PPIs (conventional GERD therapy), P-CABs have a faster onset of action and can be taken without food. Helped by such advantages, P-CABs are rapidly penetrating the PPI market. AstraZeneca's Nexium is a PPI original, while Takeda Pharmaceutical's Takecab and HK inno.N's K-Cab are P-CAB originals. Nexium had annual peak sales of around US$5bn, and Takecab brought in revenue of US$1bn in 2021.

Fexuprazan is a P-CAB being developed by Daewoong Pharmaceutical. A domestic phase 3 study on the drug showed positive data, with a mucosal healing rate of 99% at week 8. The drug also demonstrated superior effects in heartburn relief compared to the PPI esomeprazole (Nexium). At day 3, 30.8% of patients in the fexuprazan group reported heartburn relief during the day and at nighttime, compared to 23.4% in the esomeprazole group. For patients with moderate to severe symptoms, the difference was even greater: 22.5% in the fexuprazan group vs. 7.9% in the esomeprazole group.

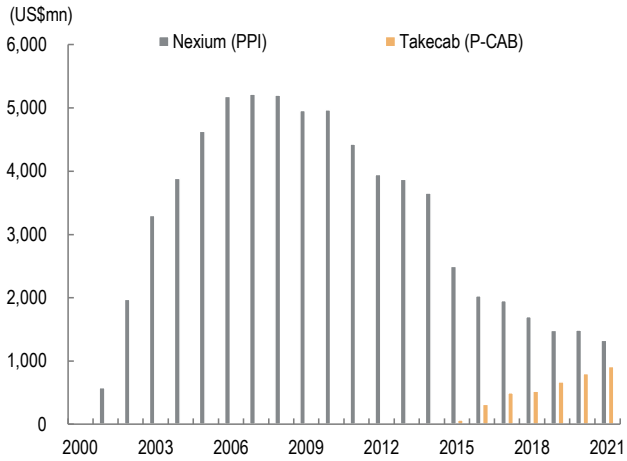
In Korea, fexuprazan received regulatory approval (under the brand name Fexclu) in Dec. 2021 and is scheduled to be released in 3Q22. The company's US partner Neurogastrx plans to initiate a US phase 3 study this year. Other partners include Moksha8 (Mexico), EMS (Brazil), Shanghai Haini (China), and Biopas (Colombia, Peru, Ecuador, and Chile).

Figure 12. Mechanism of action: PPI vs. P-CAB



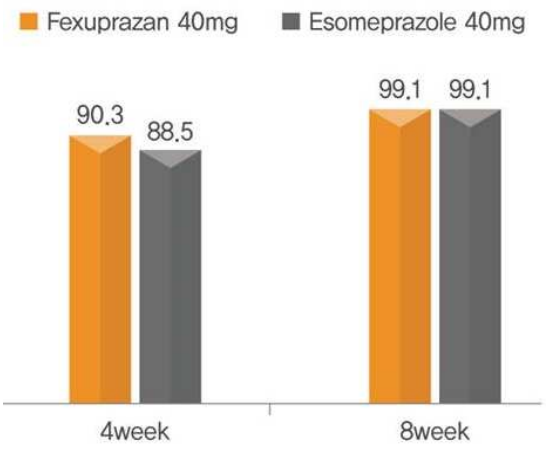
Source: EndoTODAY, Mirae Asset Securities Research

Figure 13. Annual revenue trends: Nexium vs. Takecab



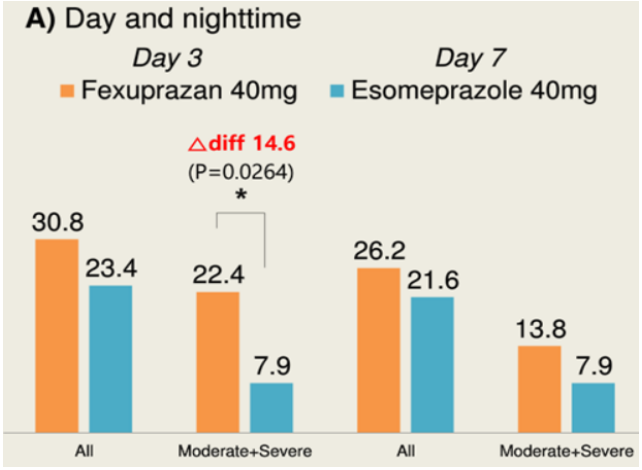
Source: AstraZeneca, Takeda, Mirae Asset Securities Research estimates

Figure 14. Fexuprazan's mucosal healing rate



Source: Company data, Mirae Asset Securities Research

Figure 15. Greater heartburn relief from fexuprazan compared to Nexium



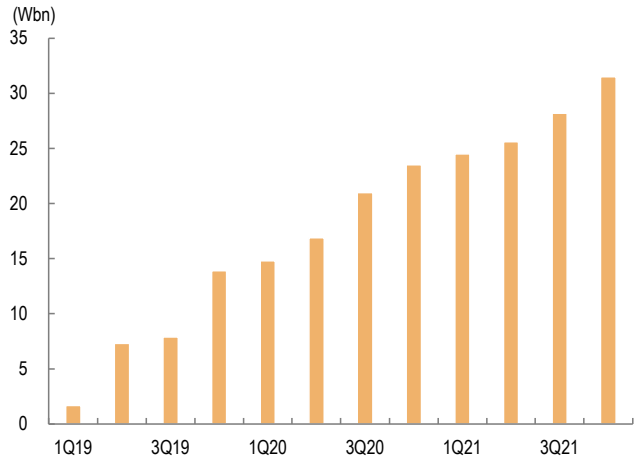
Source: Digestive Disease Week, Mirae Asset Securities Research

We expect fexuprazan to rapidly gain ground in the domestic market. There are currently two P-CABs available in Korea: Takeda Pharmaceutical's Takecab (domestic brand name Vocinti) and HK inno.N's K-Cab. In particular, K-Cab generated over W100bn in domestic prescriptions in 2021, making it the fastest-growing drug in the domestic market. We believe this suggests that the P-CAB class (which is based on a novel mechanism of action) is likely to supplant the PPI market and underscores the huge growth potential of fexuprazan.

The domestic GERD treatment market is estimated to be around W1tr, with PPIs representing 74% and P-CABs 11%. With key advantages like faster onset of action and food independence, P-CABs should rapidly take over the GERD market, led by HK inno.N's K-Cab and Daewoong Pharmaceutical's fexuprazan. Initially, we anticipate competition to be between P-CABs and PPIs rather than among P-CABs, as aggressive marketing by HK inno.N/Chong Kun Dang and Daewoong Pharmaceutical is likely to increase the preference for P-CABs among physicians.

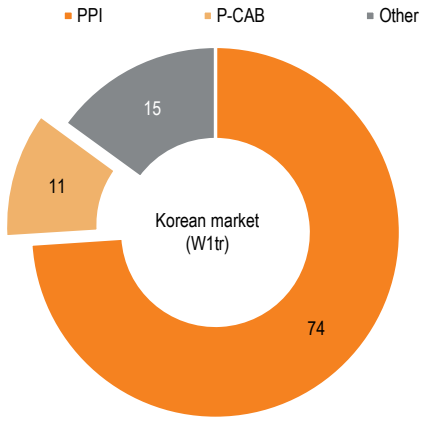
We forecast fexuprazan to bring in revenue of around W15bn in 2022. We believe the drug will become a domestic blockbuster, with revenue reaching W50bn in the third year of its release. Daewoong Pharmaceutical boasts strong marketing/sales capabilities in the GERD treatment market, as it already sells AstraZeneca's Nexium PPI, generating annual sales of around W46bn. Meanwhile, we estimate fexuprazan's gross margin at over 50%, higher than the company-wide level of 46%. As such, the growth of fexuprazan should lead to overall margin gains.

Figure 16. Quarterly prescriptions of HK inno.N's K-Cab



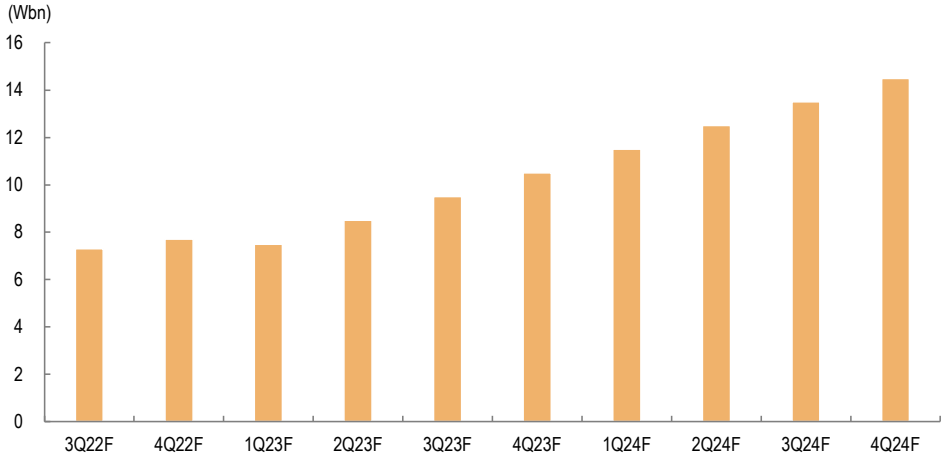
Source: UBIST, Mirae Asset Securities Research estimates

Figure 17. Domestic GERD market share by agent



Source: UBIST, Mirae Asset Securities Research estimates

Figure 18. Fexuprazan: Quarterly revenue est.



Source: Mirae Asset Securities Research estimates

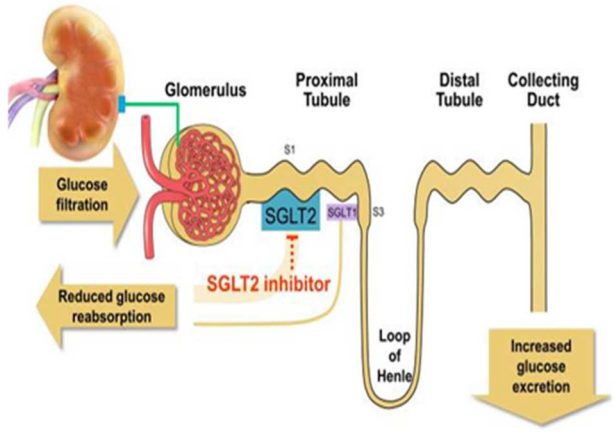
4. SGLT-2 inhibitor enavogliflozin to be released

SGLT-2 is a protein responsible for reabsorbing glucose filtered by the kidney and releasing it into the blood. SGLT-2 inhibitors treat diabetes by selectively suppressing the SGLT-2 protein to prevent the reabsorption of glucose and instead remove it through urine. In addition to lowering blood sugar, SGLT-2 inhibitors are believed to be effective in reducing weight and blood pressure. SGLT-2 inhibitors currently available in the market include J&J's Invokana, AstraZeneca's Farxiga, and Eli Lilly's Jardiance. All three drugs are global blockbusters, generating annual sales of US$0.6bn, US$3bn, and US$1.5bn, respectively.

Enavogliflozin is an SGLT-2 inhibitor being developed by Daewoong Pharmaceutical, which licensed it from Green Cross in 2016. A domestic phase 3 trial found the drug to be safe and effective in lowering blood glucose levels. In a monotherapy study, the treatment showed meaningful glucose-lowering effects, with a 0.96%p improvement over placebo in the change of glycated hemoglobin (HbA1c). As a combination therapy with metformin and gemigliptin (DPP-4 inhibitor), the treatment established non-inferiority to dapagliflozin (Farxiga). We expect enavogliflozin to be domestically launched in 2H23.

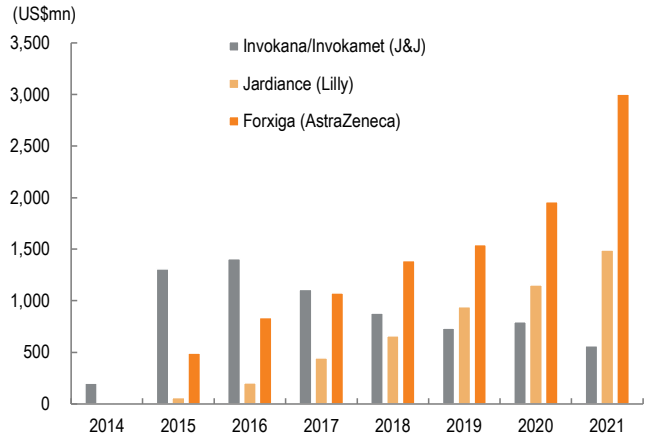
Daewoong Pharmaceutical also has outstanding sales/marketing capabilities when it comes to diabetes treatments. In 2021, the company brought in roughly W150bn in sales from diabetes drugs, including W37bn from metformin (domestic brand name Diabex), W73bn from SGLT-2 inhibitor Farxiga, and W31.4bn from DPP-4 inhibitor Zemiglo. We think the company has the potential to turn enavogliflozin into a domestic blockbuster drug. The likely replacement of SGLT-2 inhibitor Farxiga (currently marketed by the company) with the internally developed enavogliflozin should also provide a boost to margins.

Figure 19. Mechanism of action of SGLT-2 inhibitors



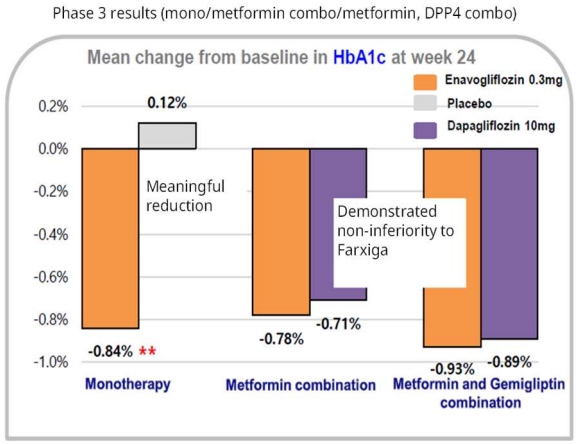
Source: Chemistry, Mirae Asset Securities Research

Figure 20. Annual sales trends: Invokana, Farxiga, and Jardiance



Source: Company data, Mirae Asset Securities Research estimates

Figure 21. Top-line data from enavogliflozin's phase 3 trial



Note: ** P-value < 0.0001
Source: Company data, Mirae Asset Securities Research estimates

Figure 22. Enavogliflozin's advantages over conventional drugs

	ENAVO	A company	Y company
Commercial dose	0.3mg	5 / 10mg	100 / 300mg
UGE in healthy subjects	55g	38g	33 / 47g
Glucose-lowering effects	-0.96%	-0.66%	-0.74%
Tablet size	5mm	10mm	20mm
Duration of action	3 ~ 7 days	1 ~ 2 days	1 ~ 2 days

Source: Company data, Mirae Asset Securities Research estimates

III. Earnings and forecasts

For 2022, we forecast Daewoong Pharmaceutical to deliver revenue of W1.15tr (+8.9% YoY) and operating profit of W114.7bn (+20.1% YoY; OP margin of 10%). We expect top line to expand and margins to improve, driven by: 1) the full-fledged growth of Nabota exports; 2) the domestic release of fexuprazan in 2H22; and 3) a decline in litigation expenses related to the Medytox dispute.

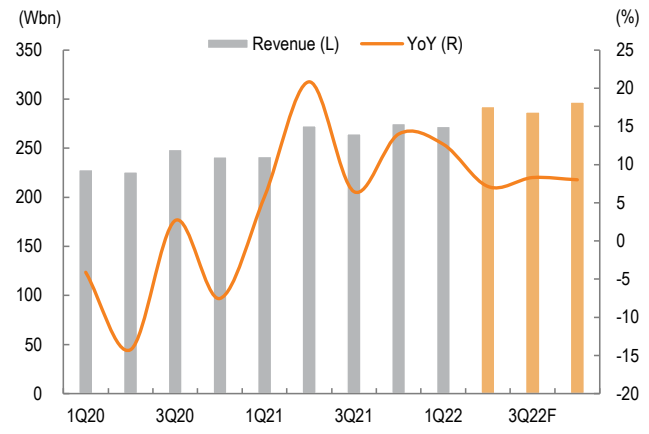
For 2023, we look for revenue of W1.28tr (+11.2% YoY) and operating profit of W138.1bn (+20.4% YoY; OP margin of 10.8%). We expect top-line growth and margin expansion to continue, supported by: 1) the sustained growth of Nabota exports; 2) the full-fledged growth of fexuprazan; and 3) the launch of enavogliflozin. That said, if the company's Farxiga contract with AstraZeneca ends ahead of enavogliflozin's release, this could limit top-line growth.

Table 4. Quarterly and annual earnings (Wbn, %)

	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22F	3Q22F	4Q22F	2020	2021	2022F	2023F
Revenue	242	273	265	275	272	293	287	297	945	1,055	1,149	1,278
YoY	5.8	20.8	6.5	14	12.7	7.1	8.3	8	-6	11.7	8.9	11.2
ETC	181	195	197	205	198	210	214	223	710	778	845	944
YoY	11.7	8.8	4.1	14.6	9.2	7.8	8.5	8.9	-0.1	9.7	8.6	11.7
Nabota	15	23	21	20	30	32	25	23	50	80	110	131
YoY	2	314.3	85	9.2	97.4	37.2	17.4	16.5	13.3	57.9	38.4	18.4
OTC	26	29	30	29	30	32	34	33	113	114	129	149
YoY	1.1	-3.4	3.1	2.8	12.5	12.4	13.4	13.6	1.3	0.9	13	15.1
Global	10	10	7	10	4	7	5	7	15	37	23	14
YoY	300	157.9	86.8	116.7	-63.5	-30	-30	-30	-73.3	149.3	-38.7	-38.7
CMO/other	9	16	10	10	11	11	10	10	57	46	43	41
YoY	-59	114.5	-34.8	-3.7	19.4	-30	-3	-3	-31.5	-18.6	-8	-3
GP	111	129	119	127	130	144	133	136	390	487	542	629
YoY	15.2	38.3	23.3	23.1	16.8	11.3	11.5	6.7	-5.7	24.9	11.4	15.9
Gross margin	46.1	47.3	45.1	46.1	47.7	49.2	46.4	45.5	41.3	46.2	47.2	49.2
OP	20	27	24	25	27	32	29	27	13	96	115	138
YoY	1514	-661.9	240.5	171.5	32.6	19	20.4	10.8	-59.8	656.4	20.1	20.4
OP margin	8.4	9.8	9	9	9.8	10.9	10	9.2	1.3	9.1	10	10.8
EBITDA	29	35	32	33	35	40	37	36	46	128	149	174
YoY	203.1	913.6	109.9	87.7	22.4	15.3	16.2	10.4	-27.8	181.5	15.8	16.8
EBITDA margin	11.8	12.8	12.1	11.9	12.8	13.8	13	12.2	4.8	12.2	12.9	13.6
NP	-23	15	15	30	18	41	30	-14	3	36	74	96
Net margin	-9.7	5.3	5.5	11	6.4	13.9	10.5	-4.7	0.3	3.4	6.5	

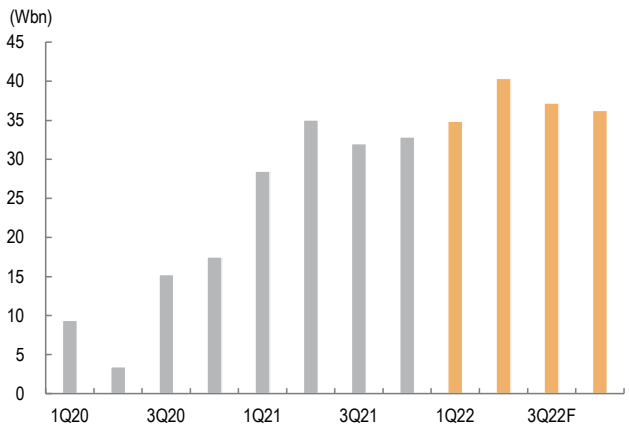
Source: Mirae Asset Securities Research estimates

Figure 23. Quarterly revenue trend



Source: Mirae Asset Securities Research estimates

Figure 24. Quarterly EBITDA trend



Source: Mirae Asset Securities Research estimates

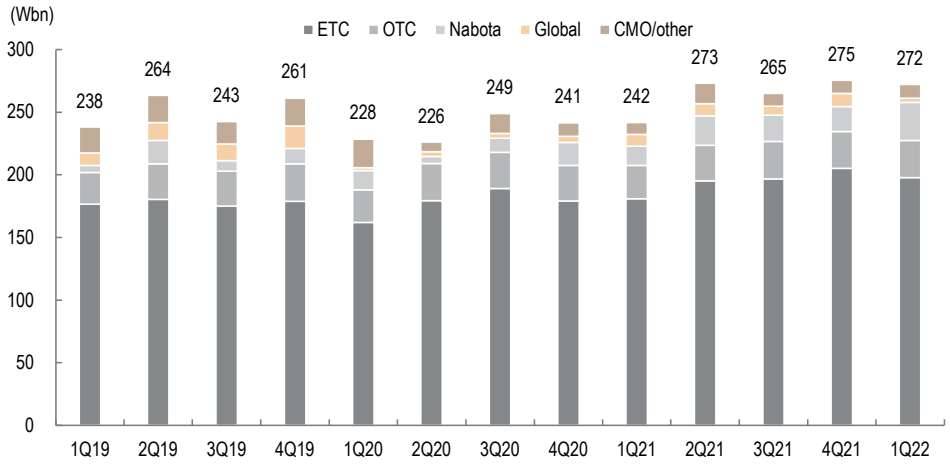
IV. Company overview

Daewoong Pharmaceutical is a drug company focused on the development of toxins and novel drugs. Its two main businesses are ETC and OTC. The company was formally established on Oct. 2, 2002 through a split from Daewoong Holdings and went public on Nov. 1, 2002. As of 1Q22, the ETC division accounted for 73% of revenue, while the OTC division and Nabota each made up 11%. Nabota exports have been on the rise, fueled by an increase in indications and entry into overseas markets.

The company's new drug pipeline includes: 1) fexuprazan, a P-CAB intended for the treatment of GERD; 2) enavogliflozin, an SGLT-2 inhibitor in development as a treatment for endocrine disorders; and 3) DWN12088, a prolyl-tRNA synthetase (PRS) inhibitor in development as a treatment for idiopathic pulmonary fibrosis. In 2021, the company invested W111.2bn in R&D (10.5% of revenue).

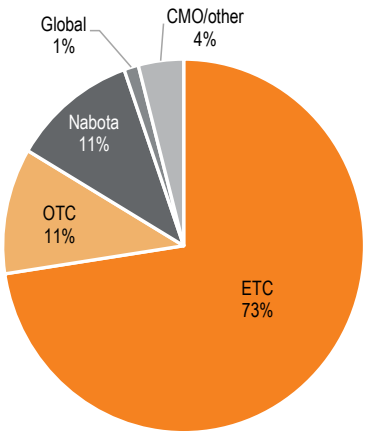
In May 2015, Daewoong Pharmaceutical acquired HanAll Biopharma for W104.6bn (30.2% stake) for the development of new biologics. iN Therapeutics, which was spun off from the company (58% stake), is studying iN1011-N17 as a treatment for osteoarthritis. AffyXell Therapeutics is a joint venture in which the company owns a 64% stake, and its lead candidates include AFX-001 and AFX-002 (cell therapies).

Figure 25. Quarterly revenue by product



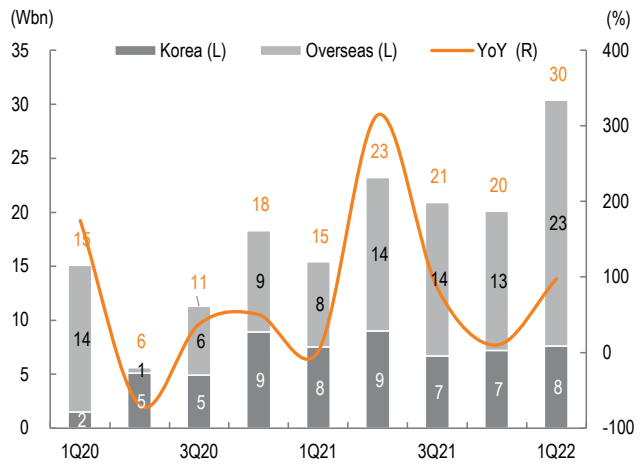
Source: Company data, Mirae Asset Securities Research estimates

Figure 26. Revenue breakdown (1Q22)



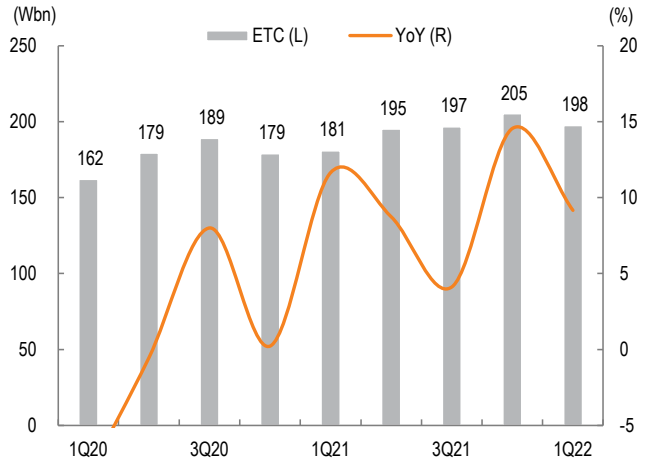
Source: Company data, Mirae Asset Securities Research estimates

Figure 27. Nabota's quarterly domestic and overseas revenue



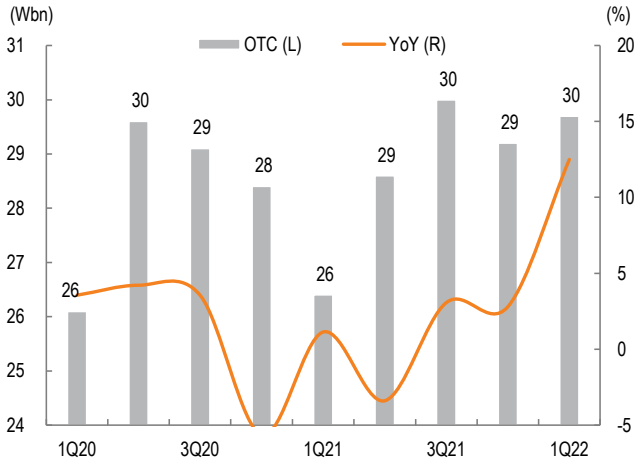
Source: Company data, Mirae Asset Securities Research estimates

Figure 28. ETC: Quarterly revenue



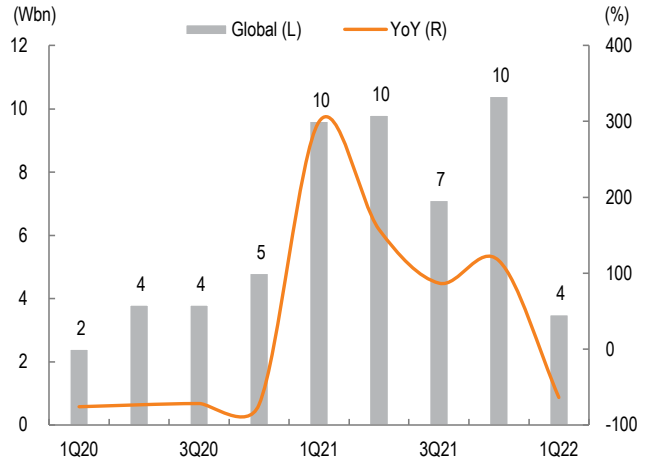
Source: Company data, Mirae Asset Securities Research estimates

Figure 29. OTC: Quarterly revenue



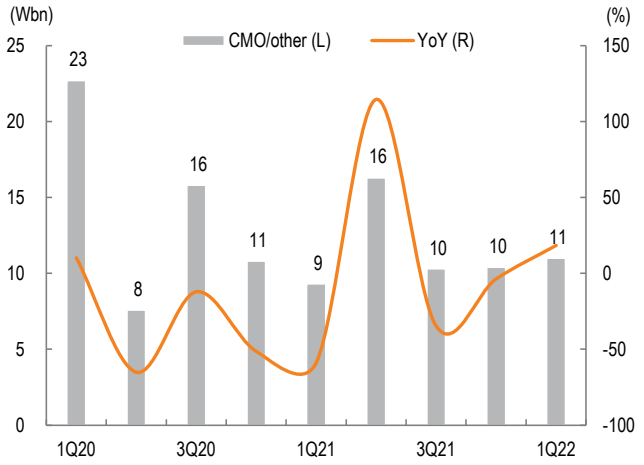
Source: Company data, Mirae Asset Securities Research estimates

Figure 30. Global: Quarterly revenue



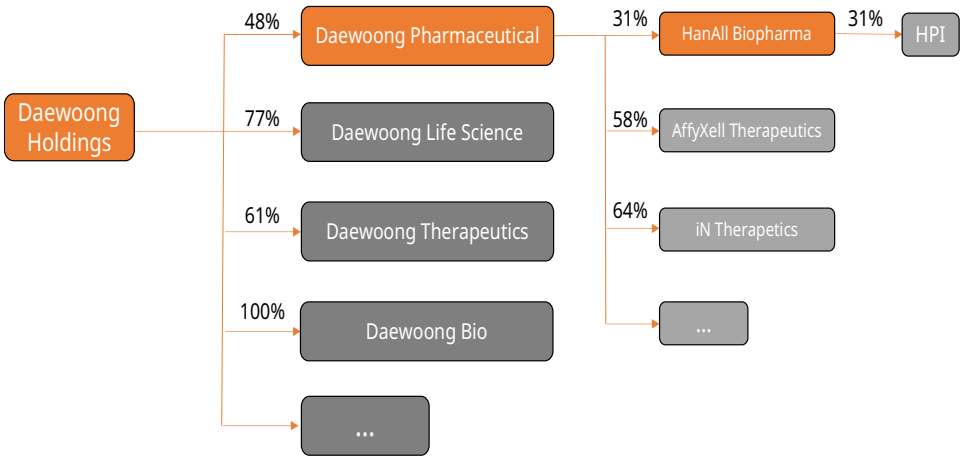
Source: Company data, Mirae Asset Securities Research estimates

Figure 31. CMO: Quarterly revenue



Source: Company data, Mirae Asset Securities Research estimates

Figure 32. Group structure



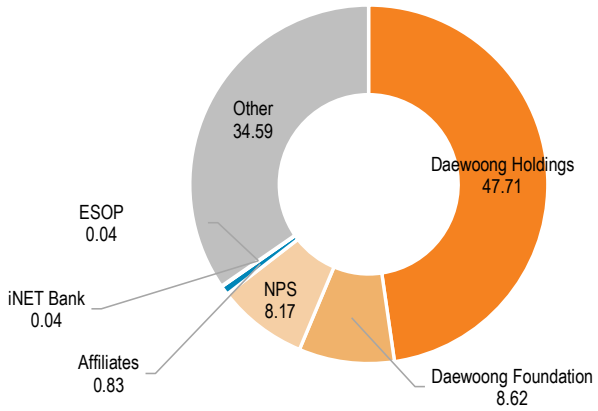
Source: Company data, Mirae Asset Securities Research

Table 5. Pipeline status

	Code name/ active ingredient	Type	Indication	Clinical stage	Notes
NME	Fexuprazan	P-CAB	GERD	NDA submission	Licensed to Neurogastrx (Jun. 2021); set for domestic release in 3Q22 and targeted for release in China/US in 2025
	Enavogliflozin	SGLT-2 inhibitor	Type 2 diabetes	Phase 3	In partnership with Green Cross; domestic phase 3 trial completed; targeted for release in 2023
	DWN12088	PRS inhibitor	IPF	Phase 2	Designated an orphan drug for systemic sclerosis
	DWP305401	Pellino-1 inhibitor	Ulcerative colitis	Phase 2	In partnership with Bridge Biotherapeutics
	DWP17061	Nav1.7 inhibitor	Osteoarthritis pain	Phase 1	In development by iN Therapeutics
	DWP213388	ITK/BTK dual inhibitor	Autoimmune disease	Phase 1	
	DWP212525	JAK3/TFK dual inhibitor	Autoimmune disease	Preclinical	
	DWN12088	PRS inhibitor	SSc-ILD	Preclinical	In partnership with Oncocross
	DWJ215	-	Hearing loss	Research	In development by iN Therapeutics
	DWP216	(First-in-class target)	Oncology	Research	
	DWP217	(First-in-class target)	Oncology	Research	
	DWP218	ITK/BTK dual inhibitor	Autoimmune disease	Research	
Biologics	HL036/tanfanercept	TNFα inhibitor	Dry eye	Phase 3	HanAll Biopharma
	HL161/batoclimab	Anti-FcRn mAb	MG, TED, WAIHA	Phase 2	HanAll Biopharma
	DWP706	EGF	Corneal abrasion	Phase 1	
	DWP457	Insulin	Long-acting insulin	Preclinical	
	HL186	TIM-3 inhibitor	Immuno-oncology	Research	HanAll Biopharma
	HL187	TIGIT inhibitor	Immuno-oncology	Research	HanAll Biopharma
	DWP700	-	Stroke	Research	
Gene/cell therapies	Furestem-RA	UCB-MSC	Rheumatoid arthritis	Phase 2	Kangstem Biotech
	Furestem-CD	UCB-MSC	Crohn's disease	Phase 1	Kangstem Biotech
	DWP820S001	hES-MSC	Dementia/Alzheimer's	Preclinical	
	DWP820S009	-	Severe acute pancreatitis	Preclinical	
	DWP458	-	Osteoporosis	Research	Kangstem Biotech

Source: Company data, Mirae Asset Securities Research

Figure 33. Ownership breakdown



Source: Company data, Mirae Asset Securities Research

Daewoong Pharmaceutical (069620 KS)

Income statement (summarized)

(Wbn)	2021	2022F	2023F	2024F
Revenue	**1,055**	**1,149**	**1,278**	**1,428**
Cost of revenue	**568**	**607**	**649**	**715**
GP	**487**	**542**	**629**	**713**
SG&A expenses	**391**	**428**	**491**	**543**
OP (adj.)	**95**	**115**	**138**	**169**
OP	**95**	**115**	**138**	**169**
Non-operating profit	**-69**	**-22**	**-19**	**-15**
Net financial income	-8	-7	-5	-3
Net income from associates	0	0	0	0
Pretax profit	26	93	119	154
Income tax	-10	19	24	0
Profit from continuing operations	36	74	95	154
Profit from discontinued operations	0	0	0	0
NP	**36**	**74**	**95**	**154**
Attributable to owners	36	74	95	154
Attributable to minority interests	0	0	0	0
Total comprehensive income	**11**	**74**	**95**	**154**
Attributable to owners	11	74	95	154
Attributable to minority interests	0	0	0	0
EBITDA	128	149	174	205
FCF	28	103	125	181
EBITDA margin (%)	12.1	13.0	13.6	14.4
OP margin (%)	9.0	10.0	10.8	11.8
Net margin (%)	3.4	6.4	7.4	10.8

Balance sheet (summarized)

(Wbn)	2021	2022F	2023F	2024F
Current assets	**371**	**453**	**565**	**733**
Cash & equivalents	33	85	156	275
AR & other receivables	147	160	178	199
Inventory	143	156	173	193
Other current assets	48	52	58	66
Non-current assets	**888**	**891**	**889**	**894**
Investments in associates	217	237	263	294
PP&E	301	273	240	210
Intangible assets	147	158	162	167
Total assets	**1,260**	**1,344**	**1,454**	**1,627**
Current liabilities	**437**	**461**	**490**	**523**
AP & other payables	123	134	149	166
Short-term financial liabilities	253	263	273	284
Other current liabilities	61	64	68	73
Non-current liabilities	**208**	**200**	**193**	**186**
Long-term financial liabilities	186	176	166	155
Other non-current liabilities	22	24	27	31
Total liabilities	**645**	**662**	**683**	**709**
Equity attributable to owners	**614**	**682**	**771**	**918**
Capital stock	29	29	29	29
Capital surplus	133	133	133	133
Retained earnings	501	569	658	805
Minority interests	**0**	**0**	**0**	**0**
Shareholders' equity	**614**	**682**	**771**	**918**

Cash flow statement (summarized)

(Wbn)	2021	2022F	2023F	2024F
Operating cash flow	**48**	**98**	**116**	**172**
NP	36	74	95	154
Non-cash income/expenses	43	60	65	38
Depreciation	25	23	23	22
Amortization	8	11	13	14
Other	10	26	29	2
Chg. in working capital	-19	-11	-15	-18
Chg. in AR & other receivables	-23	-10	-14	-16
Chg. in inventory	-13	-13	-17	-20
Chg. in AP & other payables	11	6	8	10
Income tax	-3	-19	-24	0
Cash flow from investing activities	**-100**	**-20**	**-12**	**-15**
Chg. in PP&E	-20	5	9	8
Chg. in intangible assets	-41	-22	-17	-19
Chg. in financial assets	-11	-3	-4	-5
Other	-28	0	0	1
Cash flow from financing activities	**33**	**-7**	**-7**	**-7**
Chg. in financial liabilities	0	0	0	0
Chg. in equity	22	0	0	0
Dividends	-6	-7	-7	-7
Other	17	0	0	0
Chg. in cash	**-19**	**52**	**71**	**119**
Beginning balance	52	33	85	156
Ending balance	33	85	156	275

Key valuation metrics/ratios

	2021	2022F	2023F	2024F
P/E (x)	47.9	27.1	21.1	13.1
P/CF (x)	21.8	15.0	12.6	10.5
P/B (x)	2.7	2.9	2.6	2.2
EV/EBITDA (x)	16.2	15.7	13.0	10.4
EPS (W)	3,089	6,416	8,240	13,315
CFPS (W)	6,783	11,575	13,842	16,634
BPS (W)	54,600	60,442	68,110	80,852
DPS (W)	600	600	600	600
Dividend payout ratio (%)	18.6	8.9	7.0	4.3
Dividend yield (%)	0.4	0.3	0.3	0.3
Revenue growth (%)	11.6	8.9	11.2	11.7
EBITDA growth (%)	178.3	16.4	16.8	17.8
OP growth (%)	630.8	21.1	20.0	22.5
EPS growth (%)	1,039.9	107.7	28.4	61.6
AR turnover (x)	9.5	9.7	9.8	9.8
Inventory turnover (x)	7.4	7.7	7.8	7.8
AP turnover (x)	8.7	8.6	8.3	8.2
ROA (%)	2.9	5.7	6.8	10.0
ROE (%)	6.0	11.5	13.1	18.3
ROIC (%)	22.8	15.2	18.4	28.4
Debt-to-equity ratio (%)	105.1	97.0	88.7	77.1
Current ratio (%)	84.9	98.2	115.2	140.1
Net debt-to-equity ratio (%)	60.2	46.2	31.1	12.5
Interest coverage ratio (x)	9.9	11.8	14.3	17.4

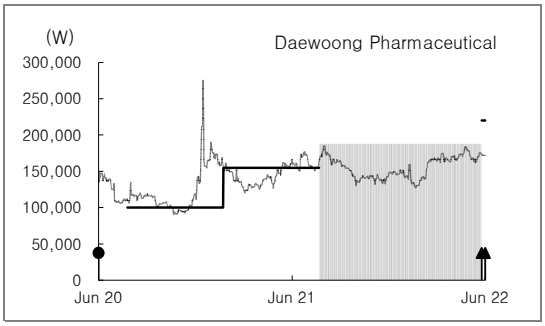
Source: Company data, Mirae Asset Securities Research estimates

Appendix 1

Important disclosures and disclaimers

Two-year rating and TP history

Company	Date	Rating	TP (W)
Daewoong Pharmaceutical (069620)	05/31/22	Buy	220,000
	07/29/21	No Coverage	
	01/29/21	Hold	155,000
	07/31/20	Hold	100,000
	07/31/19	Hold	



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	82.90%	8.50%	7.80%	0.80%
Investment banking services	75.00%	15.00%	10.00%	0%

* Based on recommendations in the last 12-months (as of March 31, 2022)

Disclosures

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