MEDICAL DATA VISION CO., LTD (3902 JP)
MID-TERM GROWTH OF CAGR 16% WILL COME SOLELY FROM EXISTING BUSINESS.

FY22 Q3 RESULTS SUMMARY

Medical Data vision [MDV] reported FY22 Q3 (Dec year-end) results that came in line with company guidance, with recurring profit [RP] of ¥1,159mil (+11.9% YoY) on sales of ¥4,327mil. Due to the introduction of the new revenue recognition method from FY22, which affects the sales recognition of the Data Utilisation Service segment, YoY comparisons were not given with the Q3 earnings. However, on a like-for-like basis with the cumulative FY21 Q1~Q3 performance, FY22 Q1~Q3 sales would have expanded +9.5% YoY.

In Q3 alone, the firm reported RP of ¥382mil (+20.6% YoY / +21.3% QoQ) on sales of ¥1,470mil (+11.7% YoY / +9.3% QoQ). While cumulative FY22 Q1~Q3 sales achieved 68.7% of the full-year FY22 forecast, RP slightly surpassed the firm's expectation with a progress rate of 72.4% to ¥1,600mil, thanks to an improved sales mix.

MDV (3902 JP): Earnings Summary (Cumulative)								
(¥mil)	FY20	FY21			FY22			
	FY	1H	Q3	FY	Q1	1H	Q3	YoY (%)
Sales	4,579	2,635	3,952	5,672	1,511	2,856	4,327	9.5
GP	3,882	2,150	3,219	4,643	1,259	2,360	3,549	10.3
GPM (%)	84.8	81.6	81.5	81.9	83.3	82.6	82.0	+0.5ppt
SG&A	2,736	1,430	2,181	3,049	789	1,575	2,381	9.2
SG&A / Sales (%)	59.8	54.3	55.2	53.8	52.2	55.1	55.0	-0.2ppt
OP	1,146	720	1,037	1,594	470	785	1,168	12.6
OPM (%)	25.0	27.3	26.3	28.1	31.1	27.5	27.0	+0.7ppt
RP	1,148	719	1,036	1,592	461	776	1,159	11.9
RPM (%)	25.1	27.3	26.2	28.1	30.5	27.2	26.8	+0.6ppt
NP*	700	484	699	1,087	313	522	776	10.9
Dividend (¥)	3.6	N/A	N/A	5.6	N/A	N/A	N/A	N/A

Source: Nippon-IBR based on MDV's FY21 & FY22Q3 earnings results material
* NP attributed to the parent's shareholders

PERFORMANCE BY SEGMENT

MDV's business portfolio is largely divided into two business segments:

(1) Data Network Services: With a one-off installation fee and a monthly subscription fee thereafter, the Data Network Service business provides data solutions to DPC hospitals – i.e., those with a Diagnosis Procedure Combination / Per Diem Payment System [DPC / PDPS] fee payment system, hereinafter referred to as DPC – to support their data management needs.

MDV also has permission to reuse anonymised patient information (payment, age, prescription, medical treatment, etc), which supports its other key business:

EXECUTIVE SUMMARY

- Medical Data vision [MDV] reported FY22 Q3 (Dec year-end) results that came in line with company guidance, with recurring profit [RP] of ¥1,159mil (+11.9% YoY) on sales of ¥4,327mil. While cumulative Q1~Q3 sales achieved 68.7% of the full-year FY22 forecast, RP slightly surpassed the firm's expectation with a progress rate of 72.4% to ¥1,600mil, thanks to an improved sales mix.

- FY22 Q1~Q3 Data Network Service Segment sales and gross profit [GP] fell -4.8% YoY to ¥966mil and +0.3% YoY to ¥1,506mil, respectively

- On a like-for-like comparison to the FY22 cumulative Q1~Q3 performance, the Data Utilisation Segment reported FY22 Q1~Q3 GP of ¥2,583mil (+17.2% YoY) on sales of ¥2,821mil (+15.1% YoY). This resulted in a GPM of 91.6% thanks to expanding demand for MDV's analysis services from pharmaceutical companies. In Q3 alone, segment GP was ¥849mil (+7.7% QoQ) on sales of ¥936mil (+13.9% YoY / +8.2% QoQ).

- MDV's FY22 guidance – GP of ¥5,029mil (+8.3% YoY), RP of 1,600mil (+0.4% YoY) on sales of ¥6,300mil (+11.1% YoY) – is unchanged from the previous report. RP growth is much lower than that of sales as the firm plans to increase R&D by 34.5% YoY to ¥425mil for the future growth.

- MDV announced its first medium-term management plan that lasts three years from FY23~FY25. The final target is for RP of ¥2,500mil+ (CAGR of 16.1%+) on sales of ¥10,000mil (CAGR 16.7% or more) solely from organic growth of the existing businesses.

- MDV plans to (1) allocate 5~8% of sales to R&D, (2) increase human resources every year by 20~30 people, and (3) pay 20%+ of net profit as dividend.

(2) Data Utilisation Services: Here, MDV provides data and research analysis services for pharmaceutical companies and medical research institutions.

Data Network Service Segment

FY22 Q1~Q3 Data Network Service Segment sales rose +0.3% YoY to ¥1,506mil while gross profit [GP] fell -4.8% YoY to ¥966mil. In Q3 alone, segment sales were ¥535mil (+8.3% YoY / +11.2% QoQ), thanks to a recovery in sales of subsidiaries Doctorbook and System Be Alpha, as well as stable revenue growth of the parent's data network business.

The business trends of each of the three sub-segments are outlined below:

Flow revenue (initial fees etc)

The flow revenue from initial fees, which is earned when a hospital takes on the firm's legacy data solution EVE, was ¥33mil (-23.3% YoY / -50.7% QoQ) in Q3 alone. The drop in initial fee revenue was within management's expectation, as MDV shifted its focus to increase the number of users of the cloud-based service MDV-Act, a part of whose function, MDV Act Story, is provided to customers for free.

Currently, the firm offers MDV Act Main Story, a function offered as part of the MVD Act application, for free and assumes that in FY22, 1) the number of DPC hospitals that use EVE will remain stable between 750~770, and 2) that the number of hospitals that use MDV Act will increase to 1,000 hospitals from 558 in FY21. In addition, the firm reckons that data other than DPC data also needs to be accumulated – hence the development of MDV Act, ten years after the launch of EVE.

Key KPIs for the segment are (1) the actual numbers of patients in its data bank, Sakura Data Bank, which reached 41.20mil acute patients as of Q3, and (2) the number of hospitals that permit the firm to reuse patients' anonymised data through subscription to EVE (currently 748 hospitals), or use cloud-based services including MDV Act (897 hospitals subscribe the cloud-based services, of which 863 hospitals subscribe MDV Act as of Q3).

MDV is now looking to build out data from all patients – so those not just with chronic illnesses, but those with less serious illnesses, as well as healthy people – through accumulating data from health insurance firms that are used not only by large DPC hospitals (who are the main subscribers of EVE) but also by smaller hospitals that are not DPC hospitals. To increase access to such data, the firm started MDV Act, a cloud-based application that hospitals can use to (1) access to their main performance indicators at a single glance, and (2) enables hospitals to analyse their performance more accurately if used in combination with EVE and Medical Code – a solution that supports more efficient management of a hospital by linking EVE.

MDV provides the basic functions of MDV Act for free because its ultimate purpose is to accumulate data which the firm can monetise in the Data Utilisation Segment. Moreover, while there is no fixed subscription rate for users of the Main Story function, as MDV continues to launch add-ons, customers can choose the services that they will require, resulting in an increase in ARPU per customer.

Recurring revenue (monthly subscription fees)

Recurring revenue is generated from monthly subscription fees from hospitals using MDV's DPC data solution packages. In FY22 Q3 alone, revenue was ¥221mil (flat YoY / +0.5% QoQ). The flattish YoY and QoQ numbers indicate that ARPU by existing EVE users (who pay the subscription fees) has improved, despite a decline in number of EVE users.

New Business (Subsidiaries)

FY22 Q3 subsidiaries revenues improved to ¥280mil (+22.3% YoY / +45.8% QoQ) as 1) sales System Be Alpha, which provides software solutions to manage health checks, improved, and 2) sales of Doctorbook, which distributes training and educational video contents to dentists, improved

Data Network Service New Sales Breakdown (Cumulative)

(¥mil)	FY20				FY21				FY22			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	YoY (%)
Data Network Total	404	762	1,136	1,602	552	1,007	1,501	2,061	490	971	1,506	0.3
Flow Revenue (initial fees)	65	109	145	220	68	107	151	252	67	135	168	11.3
Recurring Revenue (monthly subscription fees)	236	463	685	909	220	443	665	886	222	443	664	0.0
New Businesses (subsidiaries)	102	189	304	472	262	455	684	922	200	393	673	-1.6

Source: Nippon-IBR Based on MDV's FY21, FY22Q1~Q3 earnings results materials

Data Network Service New Sales Breakdown (Quarterly)

(¥mil)	FY20				FY21				FY22				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	YoY (%)	QoQ (%)
Data Network Total	404	358	373	465	552	454	494	560	490	480	535	8.3	11.5
Flow Revenue (initial fees)	65	43	36	74	68	39	43	101	67	67	33	-23.3	-50.7
Recurring Revenue (monthly subscription fees)	236	227	221	223	220	222	221	220	222	220	221	0.0	0.5
New Businesses (subsidiaries)	102	87	114	167	262	192	229	238	200	192	280	22.3	45.8

Source: Nippon-IBR Based on MDV's FY21, FY22Q1~Q3 earnings results materials

Data Utilisation Service

MDV's Data Utilisation Service model focuses on providing various analytical services based on information collected through its Data Network Service solutions. The segment's FY22 revenue is affected by the change in revenue recognition of Medical Data Survey Analysis (ad-hoc services).

Under the new method, annual revenue from the service will be evened out into 12 equal payments, instead of an upfront payment at the beginning of an annual contract. Based on a like-for-like comparison to the FY22 cumulative Q1~Q3 performance, the segment reported FY22 Q1~Q3 GP of ¥2,583mil (+17.2% YoY) on sales of ¥2,821mil (+15.1% YoY). This resulted in a high GPM of 91.6% thanks to increasing demand for MDV's analysis services from pharmaceutical companies. In Q3 alone, segment GP was ¥849mil (+7.7% QoQ) on sales of ¥936mil (+13.9% YoY / +8.2% QoQ).

KPIs of this segment include the number of companies using the service and ARPU growth.

The segment offers two key services:

Medical Data Survey Analysis (ad-hoc services)

With the data MDV has been given permission to collect and reuse, the firm provides pharmaceutical companies ad-hoc research and analysis services. FY22 Q1~Q3 Ad-hoc service sales rose 12.1% YoY to ¥2,240mil. In Q3 alone, sales of this service were ¥746mil (+14.4% YoY / +11.7% QoQ) to reach a Q3 record. Since pharmaceutical companies' medical representatives [MRs] cannot market any drugs without evidence under the industry's compliance guidelines, nor can they visit hospitals freely due to COVID restrictions which are still in place in Japan, demand for MDV's services, especially custom-made research analysis that can be presented to doctors who decide which treatment to be used, have risen.

MDV analyzer

This is a web-based system which analyses numbers of patients, prescription trends and dosing periods in DPC hospitals. Pharmaceutical companies can access the system for an annual subscription fee of ¥20mil. The number of MDV analyzer subscribers edged up to 43 in Q3 from 40 in Q2. FY22 Q1~Q3 revenues from this service rose 36.2% YoY to ¥549mil. In Q3 alone, MDV analyzer sales were¥176mil (+12.1% YoY / -5.4% QoQ).

As noted above, MDV's data bank now has DPC data for 41.20mil patients' (up from 40.16mil as of the end of FY22 Q2). Additionally, through alliance with DeNA (2432 JP), data from insurance associations surged from7.8mil individuals in Q2 to some 17.8mil in Q3.

Data Utilisation Service Segment: Sales Breakdown by Service (Quarterly)

(¥mil)	FY20				FY21				FY22				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	YoY (%)	QoQ (%)
Data Utilisation Total	**638**	**645**	**733**	**960**	**877**	**750**	**822**	**1,159**	**1,020**	**865**	**935**	**13.7**	**8.1**
MDV analyzer	96	94	98	111	114	130	157	175	186	186	176	12.1	-5.4
Ad-Hoc	509	539	622	836	738	606	652	974	826	668	746	14.4	11.7
Subsidiaries	31	12	12	12	23	13	12	10	7	10	12	0.0	20.0

Source: Nippon-IBR Based on MDV's FY21, FY22Q1~Q3 earnings results materials

FY22 OUTLOOK AND BUSINESS STRATEGY

MDV's FY22 guidance, which calls for GP of ¥5,029mil (+8.3% YoY) and RP of 1,600mil (+0.4% YoY) on sales of ¥6,300mil (+11.1% YoY), is unchanged from the previous report. RP growth is much lower than that of sales as the firm plans to increase R&D by 34.5% YoY to ¥425mil for the future growth. Of the ¥628mil rise expected in absolute sales, COGS will likely rise ¥241mil, primarily due to an increase in subcontractor costs for product development, and a ¥183mil rise in personnel cost included in SG&A, to hire in-house IT engineers.

Future growth relies on how successfully MDV can secure engineers who, ideally, have knowledge in healthcare and develop solutions that improves the company's proposals to customers. Although hiring of in-house engineers has not been progressing as planned, MDV's R&D capability has been sufficiently supported with alliance subcontractors.

Data Network Service

MDV is guiding for Data Network Service GP of ¥1,270mil (-7.5% YoY) on sales of ¥2,068mil (+0.3% YoY). KPIs for this segment are (1) the number of hospitals using EVE and (2) those using MDV Act. Patient data gathered from hospitals using these services, and for which MDV has been given permission to store in its own database and use itself, plays a vital role in the firm's Data Utilisation Service business.

Furthermore, the firm will roll out a cloud-based online health check and follow-up service, Alpha Salus, in FY22. The number of hospitals using Alpha Salus will become another KPI for the segment. Data extracted from Alpha Salus will also add the data of healthy people that will enhance the accuracy of the sample data.

Data Utilisation Service

MDV is guiding for FY22 Data Utilisation Service GP of ¥3,758mil (+14.9% YoY) on sales of ¥4,231mil (+17.2% YoY). The firm assumes that both KPIs – 1) the number of users of the firm's services, and 2) ARPU per customer – will be met as a) the number of pharmaceutical companies using MDV analyzer is expected to rise from 44 in FY21 to 50 in FY22, along with the number of clients that use its ad-hoc services rising from 118 in FY21 to 130 in FY22, and b) by increasing the frequency of use by customers. For example, the firm assumes revenue from its top ten customers will increase from ¥1,667mil in FY21 to ¥1,800mil in FY22 as they use the service more frequently.

THE FY23~FY25MEDIUM-TERM MANAGEMENT PLAN

MDV announced its first medium-term management plan that is over three years from FY23 until FY25. The final year target is for RP of ¥2,500mil+ (CAGR of 16.1%+) on sales of ¥10,000mil (CAGR of 16.7%+) solely from organic growth of the firm's existing businesses. During the three years between FY20~FY22, the firm enjoyed CAGR of approx. 15~16% while investing on developing cloud systems, increasing subsidiaries, proactively forming alliances with companies in other sectors such as SBI Holdings (8473 JP) and DeNA (2432 JP)'s insurance subsidiaries, and hiring engineers.

MDV set KPI for both segments during the plan's three-year tenure. Those KPIs are:

- **Data Network Service KPI:** Targeting the number of hospitals that deploy MDV Act to over 1,200 hospitals and to promote Alpha Salus, a cloud-based health check data system, to 300 health check centres.
- **Data Utilisation Service KPI:** Maintaining sales CAGR of 16%. Currently, MDV has a market share of 32%. Some 80%of the medical big data analysis service is generated from providing services to pharmaceutical companies. To capture growth, MDV plans to tap the insurance market by obtaining an extra data from the alliance with DeNA.

Over the next three years, MDV aims to plant steppingstones for the long-term growth while solidifying the existing businesses. The firm reckons that the numerical target can be achieved by the following three strategies:

- **Shifting to a cloud-based database and promoting health check to enhance variety of data:** Management sees the need for these existing services to become cloud-based as an important step to develop further solutions. As such, MDV's Sakura Databank is fully cloud-based, enabling its services to have data links with other service providers and create new services. The firm is expanding its customer base from hospitals to associated health check centres which cater for individuals. By linking the health check information to Karteco, an information interface that is used by individuals, MDV will extend its services to BtoC.

- **Maintaining market share in the evidence-based medicine [EBM] data market:** According Fuji Keizai Group's report *"Current state and the future prospects of medical AI and medical big data markets 2022"*, the part of medical big data market that MDV's Data Utilisation services target is estimated to grow to ¥19,000mil (13.5%CAGR over the three years) in Japan in 2025, from estimated market size of ¥13,000mil in 2022. To maintain its 30~40% market share, the firm will need to expand its Data Utilisation services not only to pharmaceutical companies but to insurance firms, and potentially to overseas customers as well.

- **Investing on healthcare BtoC data businesses:** MDV reckons that the next growth area will be in the healthcare BtoC businesses. In 2015, MDV started providing its personal health record [PHR] service Karteco, an app which can be used by patients for free to access their health records. Under the medium-term management plan, the firm will redefine Karteco and launch the health check data and vital data analysis services which will form important parts of preventive medicine and healthcare markets.

  According to Fuji Keizai Group's report "*Trends in the data health planning, health management, and PHR-related market and cutting-edge health insurance, 2021*", the health check data, vital data and lifestyle data analysis markets together have an estimated size of ¥13,170mil, which is estimated to grow to ¥16,070mil (CAGR of 6.9%over three years). Although MDV's exposure to this market is currently marginal, the firm aims to monetise Karteco through a subscription and potentially increase ARPU per user by connecting various services to the Karteco platform. However, any potential revenue from Karteco is currently not included in the next medium-term plan. After creating an open alliance on the Karteco platform, the next step will likely be a BtoBtoC data utilisation infrastructure via blockchain. In FY22, MDV will invest ¥167mil on the HMV business, whose main feature will be to provide a data utilisation infrastructure via its proprietary blockchain PadBlock. The firm believes that a blockchain infrastructure is necessary to achieve a society connected via various data. MDV aims to link not only medical and healthcare data through PadBlock but also other data such as insurance, fitness, a life improvement app, and merchandise, etc. Through the data infrastructure, the firm will be able to cultivate a B2B2C data service value chain. However, it is premature to expect any revenue from PadBlock during the next three years.

GROWTH INVESTMENTS AND SHAREHOLDER RETURN

There are primarily three areas to which the firm's financial resources will be allocated:

1) **Human resources:** MDV plans to hire 20~30 new staff members every year between FY23~FY25. Management think it is crucial to hire engineers to realise the medical data infrastructure that will be attractive for other companies to participate in. The firm does not limit the human resources by nationality, gender and age and tries to hire those with a variety of skills and expertise.

2) **R&D:** MDV plans to spend approx. 5~8% of sales every year on R&D and will concentrate funds on MDV Act and health check system-related fields during FY23~FY24. In FY22, the firm will invest ¥125mil (-42.1% YoY) on existing businesses – ¥167mil on AI blockchain platform and ¥132mil on others (including new businesses and minor investments that will lead to an alliance). FY22 R&D/sales ratio will be 6.7%, 1.1ppt higher than that of FY21. The firm has not yet announced detailed figures on R&D for the new medium-term plan.

3) **Shareholder returns:** MDV's shareholders return policy offers an annual dividend pay-out ratio of 20%+. Over the past two fiscal years, the firm also implemented share buybacks of ¥589mil in FY20 and ¥889mil in FY21, which saw total shareholder returns of 104.5% and 101.8%, respectively. In FY22, the firm plans to maintain a pay-out of approx. 20%⁺ of net profit as an annual cash dividend. For the medium-term plan, MDV has not yet detailed the shareholder return policy.

Earnings Guidance Revision				
(¥mil)	FY20	FY21	FY22	
	FY	FY	FYCE	YoY (%)
Sales	4,579	5,672	6,300	11.1
OP	1,146	1,594	1,599	0.3
RP	1,148	1,592	1,600	0.4
RPM (%)	25.1	28.1	25.4	-2.7ppt
NP	700	1,087	1,098	1.1
Dividend (¥)	3.6	5.6	6.0	7.1
Source: Nippon-IBR based on MDV's FY21 earnings results material				

R&D Breakdown		
(¥mil)	FY21	FY22
Existing Business (Evidence-based Medicine [EBM] function development, MDV Act, Alpha Salus etc.)	216	125
HMV Business (AI Blockchain Platform, Diabetes AI etc)	99	167
Others (new businesses, reserve fund)	0	132
Total	316	425
Source: Nippon-IBR based on MDV's Medium-term Management Plan presentation material		

GENERAL DISCLAIMER AND COPYRIGHT

For further enquiry, please contact:

Nippon Investment Bespoke Research UK Ltd
118 Pall Mall
London SW1Y 5EA
TEL: +44 (0)20 7993 2583
Email: enquiries@nippon-ibr.com

Research Beyond Horizons
Japanese Equity Specialist