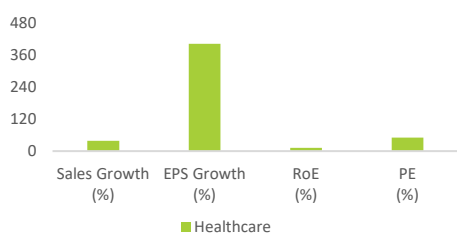


# KRSNAA DIAGNOSTICS

## VISIT NOTE

### KEY DATA

<b>Rating</b>	NA
<b>Sector relative</b>	NA
<b>Price (INR)</b>	534
<b>12 month price target (INR)</b>	NA
<b>Market cap (INR bn/USD bn)</b>	16.7/0.2
<b>Free float/Foreign ownership (%)</b>	54.9/4.4
<b>What's Changed</b>	
<b>Target Price</b>	NA
<b>Rating/Risk Rating</b>	NA

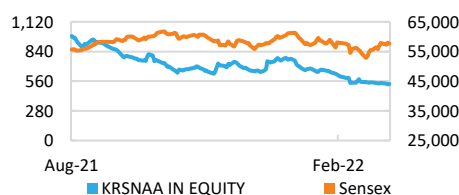


### FINANCIALS

(INR mn)

Year to March	FY18A	FY19A	FY20A	FY21A
Revenue	NA	2,092	2,584	3,965
EBITDA	NA	579	628	938
Adjusted profit	NA	96	135	315
Diluted EPS (INR)	NA	18.6	26.1	48.5
EPS growth (%)	NA	NA	40.6	133.3
RoA/E (%)	NA	-11.3	-6.9	13.6
P/E (x)	NA	174.8	124.3	53.3
EV/EBITDA (x)	NA	29.6	28.1	18.4
Dividend yield (%)	NA	0.0	0.0	0.0

### PRICE PERFORMANCE



#### Explore:



Financial model



Podcast



Corporate access



Video

## Diagnosing growth potential

We recently visited Krsnaa Diagnostics' (Krsnaa) PPP Diagnostic Centres and tele-radiology hub. We note that the management is confident on crucial parameters – growth, margins, RoCEs, new projects, etc. Key takeaways: i) Investments to bear fruit with the belief of achieving 25% RoCE within next year. ii) Targeting the private market in select geographies with quality services at disruptive prices. iii) Perceives least competition impact from aggregators and e-pharmacies, given lower prices and an in-built price escalation clause.

Despite the PPP model, the centres were at par with private players. We believe, Krsnaa is the likely beneficiary of increasing competitive intensity in the diagnostics market. Krsnaa is 'NOT RATED'.

### Investments to fructify; returns/growth confidence higher

Krsnaa RoCEs have remained subdued given a heavy dose of capex incurred over FY18-21. With a capex of ~INR3.4bn over the past four years, the company has pushed the total 'centre' count from 682 in FY18 to 1,830 in FY21, a CAGR of 39%. These centres are likely to show strong volume growth and achieve peak potential. Besides, the in-built price escalation clause also works in Krsnaa's favour. Existing centres, coupled with recently won tenders such as Punjab, Mumbai and Himachal Pradesh, could drive better RoCE/growth. Management believes that with better unit economics, a 25%-plus RoCE is achievable next year.

### Expanding B2C opportunity: Quality services at disruptive prices

The pathology capacity is significantly underutilised and management plans to leverage its existing infrastructure to target private markets. The management plans to open 1000 collection centres in FY23 in select geographies, mainly Maharashtra, Punjab, Himachal Pradesh and Jammu & Kashmir. These franchisee centres would not only serve pathology customers, but also make appointments for radiology tests at Krsnaa's price plus 20%. With increasing awareness of Krsnaa's offerings and prices, management is confident to penetrate this B2C market as well.

### Strong growth prospects, expanding opportunity pie; 'NOT RATED'

Krsnaa is expected to clock one of the best growth among listed peers, driven by 10-15% growth in existing centres, fuelled by new projects and single-digit price increases. Besides, the company plans to participate in upcoming tenders in Assam, Bihar, Rajasthan and Madhya Pradesh. On the private side, Krsnaa is in advance discussions with around three hospitals. Moreover, tele-radiology centres enable it to reach remote locations at significantly low prices given low cost of reporting.

The diagnostics industry is underpenetrated in rural areas. Higher government spend and initiatives are expected to drive the PPP model faster (14-17%), versus the overall diagnostics industry (13-14%). Moreover, an influx of e-pharmacies is ushering in a change in sector dynamics. Krsnaa has an edge here. Its attractive prices coupled with quality offerings will work in Krsnaa's favour. The stock is 'NOT RATED'.

## Financial Statements

### Income Statement (INR mn)

Year to March	FY19A	FY20A	FY21A
Total operating income	2,092	2,584	3,965
Gross profit	1,296	1,552	2,045
Employee costs	183	231	296
Other expenses	533	692	811
EBITDA	579	628	938
Depreciation	256	324	374
Less: Interest expense	196	247	259
Add: Other income	51	130	122
Profit before tax	178	187	427
Prov for tax	-197	-464	1,105
Minority Interest	-	-	-
Share of profit from associate	-	-	-
Reported profit	-581	-1,120	1,849
Less: Excp.item (net)	677	1,255	-1,534
Adjusted profit	96	135	315
Diluted shares o/s	5	5	6
Adjusted diluted EPS	18.6	26.1	48.5
Tax rate (%)	-	-	-

### Balance Sheet (INR mn)

Year to March	FY19A	FY20A	FY21A
Share capital	52	52	65
Reserves	-901	-2,021	2,254
Shareholders funds	-849	-1,970	2,319
Minority interest	-	-	-
Borrowings	1,460	2,150	2,027
Trade payables	417	381	786
Other liabs & prov	4,262	5,739	914
Total liabilities	5,290	6,300	6,045
Net block	2,224	2,736	3,073
Intangible assets	7	15	12
Capital WIP	417	91	37
Total fixed assets	2,647	2,842	3,122
Non current inv	3	3	3
Cash/cash equivalent	1,116	1,273	1,529
Sundry debtors	562	614	725
Loans & advances	56	104	135
Inventory & Othr asset	906	1,464	531
Total assets	5,290	6,300	6,045

### Important Ratios (%)

Year to March	FY19A	FY20A	FY21A
Other exp (% of rev)	25.5	26.8	20.5
Staff exp (% of rev)	8.7	8.9	7.5
Gross margin (%)	62.0	60.1	51.6
EBITDA margin (%)	27.7	24.3	23.7
Net profit margin (%)	4.6	5.2	7.9
Revenue growth (% YoY)	NA	23.5	53.4
EBITDA growth (% YoY)	NA	8.5	49.4
Adj. profit growth (%)	NA	40.6	133.3

### Free Cash Flow (INR mn)

Year to March	FY19A	FY20A	FY21A
Reported profit	-581	-1,120	1,849
Add: Depreciation	256	324	374
Interest (net of tax)	188	239	259
Others	756	1,230	-1,605
Less: Changes in WC	-34	193	-148
Operating cash flow	653	480	1,026
Less: Capex	998	767	688
Free cash flow	-345	-287	337

### Assumptions (%)

Year to March	FY19A	FY20A	FY21A
GDP (YoY %)	7	4.8	-6
Repo rate (%)	3.5	4.4	3.5
USD/INR (average)	73.0	70.7	75.0
Volume gr. (overall)	NA	44.1	-12.0
Pricing gr. (overall)	NA	-14.2	74.3
COGS % of sales (con)	8.3	10.7	21.1
Fees to hospitals (% of rev)	29.8	29.2	27.3
Interest (% of debt)	10.4	9.8	12.8
Dep (% of gross block)	7.8	8.5	10.0

### Key Ratios

Year to March	FY19A	FY20A	FY21A
RoE (%)	-11.3	-6.9	13.6
RoCE (%)	52.9	168.7	13.0
Inventory days	7.0	7.0	7.0
Receivable days	98.0	87.0	67.0
Payable days	73.0	54.0	72.0
Working cap days	33.0	40.0	1.0
Gross debt/equity (x)	1.3	1.4	0.9
Net debt/equity (x)	0.6	0.7	0.2
Interest coverage (x)	1.6	1.2	2.2

### Valuation Metrics

Year to March	FY19A	FY20A	FY21A
Diluted P/E (x)	174.8	124.3	53.3
Price/BV (x)	-4.1	-1.8	1.5
EV/EBITDA (x)	29.6	28.1	18.4
Dividend yield (%)	0.0	0.0	0.0

### Valuation Drivers

Year to March	FY19A	FY20A	FY21A
PAT growth (%)	NA	41	133
RoE (%)	-11	-7	14
EBITDA growth (%)	NA	8	49
Payout ratio (%)	0	0	0

Source: Company and Edelweiss estimates

## Other highlights

### Disruptive Prices

- Prices are benchmarked to CGHS rate. Prices in the Sutar hospital were 6% less than the CGHS rate applicable to patients with prescriptions from government hospital doctors. However, maintaining quality remains topmost priority.
- Usually prices for private walk-ins and public patients are same. However, only in case of PPP in Pune, Krsnaa charges private walk-ins 10% higher.
- Krsnaa offers tests for radiology and pathology at 45%-60% and 40%-80% lower than market rate, respectively.

### Expanding B2C presence

- Currently has 46 processing labs and 491 Collection Centres (CC). Planning to capitalize existing infrastructure since it is significantly underutilised. Capacity utilisation in pathology is less than 50%. Enough idle capacity.
- Looking to launch B2C centers in 4 states in FY23- Maharashtra, Punjab, Himachal Pradesh and Jammu & Kashmir. Plans to open 1000 CC in these states, which will cater to both private and public customers.
- Offer through franchisees at Krsnaa's prices plus 20%. This 20% will act as convenience fees to customers – appointment, booking, etc.
- Designed sickness and wellness packages – prices of which will be available on Krsnaa's app as well as on the aggregators' website such as MFine.

### Public Private Partnership (PPP)

- Parties to contract - National Health Mission (NHM): State Government – 65: 35. For eastern states it is at 90:10. AP&T government not very keen on tender. Rolled out once, but taken back.
- Contracts renewed so far - Rajasthan, Andhra Pradesh, Himachal Pradesh and Tamil Nadu.
- Life of contract: 10+2 years for Radiology; 5 years for Pathology; Tele-radiology 3+2.

**Private hospitals-** 10 year partnership. Prices higher than PP but 20-25% revenue sharing. Hospitals either pay month end or cash.

### Competition

- Listed players will not create disparity in prices between private and public. Krsnaa had replaced SRL and one listed player in some contracts.
- Present in 60 districts out of 760 – there is room for expansion.

### Financials

- Not all centres have achieved peak. Most capex was done between 2018-2021. Volume growth 10% + price growth (escalation clause) 3-7%.
- 25%-plus RoCE in next 1 year.
- 35% business in cash, 65% credit. Debtor days: 60-90. No bad debts reported yet.

- Fees to hospitals has two components - i) private hospital revenue sharing, and ii) local business partners share in Rajasthan, Meghalaya, Manipur – hilly tribal areas.
- Revenue: Key geographies – Maharashtra: INR1bn (33% of revenues), followed by Karnataka and Rajasthan. Believes, Punjab could be a key driver in next year.

## Unit Economics

- Payback – CT: 2-3 years; MRI: 3-5 years.
- Operational breakeven – CT: 6 months; MRI: 6-9 months.
- Machine life – CT: 15 years; MRI: 30-40 years.

## Tele-radiology

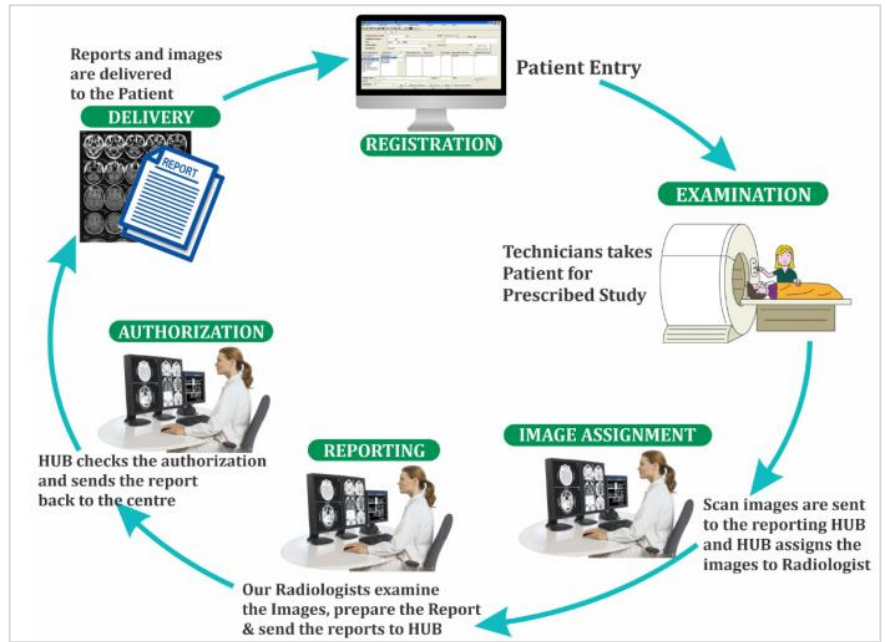
- Claims to be Asia’s largest tele-radiology hub accounting for 10-11% of overall business. First ones to get NABL accreditation for tele-radiology hub in Pune.
- Average turnaround time is 2-2.5 hours, versus government’s allowed time of six hours.
- Tele-radiology centres in rural locations in Assam, Manipur, and Meghalaya where machines are deployed by the government but reporting by Krsnaa.
- Offers tele-radiology services from a 4,578 square facility in Pune, comprising of sections for 80 CT/MRI/X-Ray technologists teams, a 100-member conference room and radiologists reporting area.
- Cost of reporting is very low. Variable model - per scan payment to doctor versus peers who pay fixed salary. Eg: In Assam, the company charges ~INR66 per X-ray; reporting cost i.e. fee to the doctor is only INR15 and INR5 are other costs. For doctor, it takes only a minute to see the X-Ray. Assuming the radiologist does 30,000 scans per month, he is earning INR4,50,000 p.m. Added advantage – they also get to do CTs and MRIs, which are high ticket.
- The team at the tele-radiology hub monitors real-time critical findings of CT/MRI/X-ray modalities and the same is informed to referring physicians. The reporting standards followed aide in accurate diagnosis, which further helps in quicker and better treatment.
- Sufficient capacity to process large volumes in the coming years.

### Exhibit 1: Sufficient capacity to process large volumes in the coming years

Test	Monthly Capacity	FY21 annual volumes	Headroom
CT Scans	1,26,000	4,79,233	3.2x
MRIs	31,500	1,45,116	2.6x
X-Rays	15,00,000	24,29,683	7.4x

Source: Company

Exhibit 2: Tele-radiology process



Source: Company

## Company Overview

Krsnaa Diagnostic has a differentiated model which provides a range of technology-enabled diagnostic services such as imaging (including radiology), pathology/clinical laboratory and tele-radiology services to public and private hospitals, medical colleges and community health centres pan-India. It offers a range of test that includes 1,394 radiology tests (MRI, CT, X-Ray, Mammography, Ultrasound, Colour Doppler, and Bone Densitometry) and 2,544 pathological tests, as of June 30, 2021.

The company offers high-quality services at disruptive prices and is the fastest growing diagnostic chain in India on multiple parameters including operating income, operating profit before depreciation, interest and tax (OPBDIT) and profit after tax between FY17 and FY20 and volume of tests conducted between FY18 and FY21 (among players with revenues exceeding INR1,500mn). (Source: CRISIL report)

### Exhibit 3: Key financial parameters

(INR mn)	FY18	FY19	FY20	FY21	9mFY22	CAGR 18-21
Revenue from operations	906	2092	2584	3965	3472	64%
Gross Profit	721	1296	1552	2045	2164	42%
Margin	79.60%	61.90%	60.00%	51.60%	62.30%	
EBITDA	292	579	628	953	1049	48%
Margin	32.20%	27.70%	24.30%	24.00%	30.20%	
Adjusted PAT	46	96	135	315	505	89%
Margin	5.00%	4.50%	5.00%	7.70%	14.10%	

Source: Company, Edelweiss Research

### Exhibit 4: Radiology accounted for 65% of revenues in FY20

	FY19	%	FY20	%	FY21	%	9mFY22	%
<b>Total</b>	<b>2,092</b>	<b>100%</b>	<b>2,584</b>	<b>100%</b>	<b>3,965</b>	<b>100%</b>	<b>3,472</b>	<b>100%</b>
Radiology	1,094	52%	1,673	65%	1,619	41%	1,835	53%
Pathology	999	48%	911	35%	848	21%	1,243	36%
Covid	-	-	-	-	1,498	38%	394	11%

Source: Company, Edelweiss Research

The business is focused on providing diagnostic services to the mass segment, particularly in tier II and tier III cities and towns in India in addition to its presence in metros and tier I cities. The patient base includes large segments of government employees and their families, including public administrative officials, defence personnel, members of the judiciary and patients covered under the National Health Scheme. In fiscals 2019, 2020 and 2021 and in 9mFY22, the company served 3.25mn, 5.27mn, 5.18mn and 5.66mn patients, respectively.

**Exhibit 5: Key operational parameters (mn)**

	FY19	FY20	FY21	H1FY22
Number of patients	3.25	5.27	5.18	3.69
Average test per patient (nos.)	2.27	2.02	1.81	2.12
Number of tests	7.39	10.65	9.37	7.81
Radiology	1.95	3.48	3.05	1.84
X-Rays	1.53	2.85	2.43	
CT Scans	0.30	0.43	0.48	
MRI Scans	0.12	0.19	0.15	
Pathology	5.44	7.18	6.32	5.97
Non-covid	5.44	7.18	5.42	5.31
Covid	-	-	0.90	0.66
Average realisation per test (gross)	283	243	423	308
Radiology	561	481	530	648
Pathology	183	127	371	204
Non-covid	183	127	156	175
Covid	-	-	1,664	433

Source: Company, Edelweiss Research

## Disruptive pricing

Krsnaa offers radiology tests 45–60% lower and pathology tests 40–80% lower than market rates. In other words, Krsnaa Diagnostics offers high quality diagnostics services at disruptive prices. Despite lower prices, the company delivered one of the highest OPBDIT margins in FY20 driven by its efficient operating cost structure.

**Exhibit 6: Radiology tests 45%-60% lower and pathology tests 40%-80% lower than market rates**

Segment	Test	Player 1	Player 2	Player 3	Krsnaa	% from minimum price
Radiology	CT Brain	4500	4500	3500	2000	-43%
Radiology	MRI Brain	8000	8250	7000	3500	-50%
Pathology	CBC	250	250	200	146	-27%
Pathology	Blood Sugar	85	80	70	26	-63%
Pathology	Thyroid	500	550	550	216	-57%
Pathology	Vitamin D	1500	1250	1450	595	-52%
Pathology	Vitamin B12	1000	1100	1300	243	-76%
Pathology	HbA1C	550	440	400	141	-65%

Source: Company

## Partner for public health agencies; select tie-ups in private segment

The company focuses on the public private partnership (“PPP”) diagnostics segment and has the largest presence in the diagnostic PPP segment. PPP agreements are typically long term in nature and ensure predictability of their revenues from operations. The continued focus on this segment has led it to become a preferred partner for public health agencies, resulting in, since commencement of operations, winning 77.59% of all tenders (by number) it has bid for.

The PPP segment of healthcare services is a large target market, representing a market opportunity of INR95–100bn in FY21. Going forward, this market is expected

to expand at a CAGR of 14–17% over FY21–23 to INR125–135bn on the back of higher government spending in the PPP segment. (Source: CRISIL report)

## Exhibit 7: Track record of faster PPP expansion; 67% contribution to revenues

Revenue from operations (Rs mn)	FY18	FY19	FY20	FY21
Public Health	578	1,507	1,884	2,675
Private	328	586	700	1,289
Private contribution	36%	28%	27%	33%
<b>Centers</b>				
Public Health	670	1,222	1,311	1,783
Private	12	14	17	20

Source: Company, Edelweiss Research

### Key highlights:

- As on 31 December 2021, the company had 1,905 dedicated centres under the PPP model across 14 states.
- 67% contribution to FY21 revenue.
- It is a scalable and agile business model with 100% qualification rate on technical grounds and bid-win rate of 77.6%.
- Annual price escalation of 2–5% is generally in-built into PPP contracts.
- Efficient working capital management and no bad debts to date under any PPP contract. Monthly invoices are sent to government agencies, and receivables days range from 60–90.

Krsnaa Diagnostics is selectively forming strategic tie-ups with leading private health players. It has 26 centres under the private model across two states, which contributed 33% to its FY21 revenue. While the prices are slightly higher than prices under the PPP model, it involves revenue sharing in the range of 20–30%. Private hospitals benefit from Krsnaa Diagnostics's high-quality infrastructure, accurate diagnosis and quicker turnaround of reports capitalising on its tele-radiology reporting hub.

## New projects

Krsnaa Diagnostics won five PPP and private contracts to commission 29 CT scanners and eight MRI machines.

### 1. Punjab Radiology and Pathology contract – 23 CTs and six MRIs

The Punjab government will allocate vacant space to establish diagnostic centres in 24 government hospitals in Punjab involving deployment of 23 CT scanners and six MRI machines. It would also establish pathology diagnostic centres (30 centres and 94 collection centres).

The contract has an escrow arrangement, under which, in the event any payments are delayed by more than 15 days, payments are released directly from the escrow account.

### 2. Himachal Pradesh Radiology contract – Two CT scanners

Hospitals in Solan and Bilaspur will provide vacant space on their premises for establishing diagnostic centres: a CT scan centre each in both cities.



### 3. Karnataka Radiology contract – One CT scanner, one MRI machine

Hospitals in Ramanagara and Udupi will provide space and other utilities on their premises. The company would be required to set up one spiral CT scan centre in a hospital located in the Ramanagara district and one MRI centre in a hospital located in Udupi.

### 4. Maharashtra MCGM contract – Three CT scanners and one MRI machine

MCGM hospitals will provide space and utilities on their premises to set up diagnostic centres. The company would establish: a CT scan centre at Pandit Madan Mohan Malviya Shatabdi Municipal General Hospital, Govandi; an MRI and CT scan centre at Rajawadi Hospital, Ghatkopar; and a CT scan centre at Bhabha Hospital, Kurla.

### 5. KJ Somaiya Hospital – Mumbai Private Radiology

Establishing, managing and maintaining a diagnostic centre at K.J. Somaiya Hospital & Research Centre, Sion.

### Recent projects awarded in February 2022

Krsnaa Diagnostics has also won three PPP contracts to commission eight CT scanners, one MRI machine and a pathology contract.

### 6. Uttar Pradesh Radiology Project – Eight CT

The Department of Medical Health & Family Welfare, Government of Uttar Pradesh, has awarded a tender for providing CT Scan Services in eight district Hospitals in the state of Uttar Pradesh to the company. The nature of this project will be a Built and Operate Model at allocated locations.

The Company would have to ensure the commencement of operation and issuance of Notice to Proceed within a period of 120 days (approximately four months) from the date of handing over of the locations designated for setting up of the facilities under the project. The initial tenure of contract will be seven years from the date of signing. The same is extendible for further three years.

### 7. Punjab Radiology Project

Health Department, U.T., Chandigarh has awarded a tender for Development, Operation and Maintenance of a Radiology Imaging Diagnostic Centre in The Government Multi Speciality Hospital, Sector 16, Chandigarh (GMSH-16) on a Public Private Partnership (PPP) basis. The initial tenure of the contract will be five years from the date of signing. The same is extendible for further five years. The company would have to ensure the commencement of operation within a period of 120 days (approximately four months) from the date of signing.

### 8. Himachal Pradesh Pathology Project

The Government of Himachal Pradesh has awarded a tender for providing diagnostic / laboratory services in H.P. Government Health Institutions in the entire state of Himachal Pradesh to the company through a hub-and-spoke model. The tenure of the contract is up to five years from date of signing of the contract. The company would have to ensure the commencement of operation within a period of three months from the date of signing.

## Network

Krsnaa Diagnostics has centres across India with a presence in 14 states. As of December 31, 2021, the company had set up 1,905 diagnostic centres pursuant to

PPP agreements with public health agencies. In addition to the PPP segment, the company has been growing its collaboration with private healthcare providers to operate diagnostic centres within their respective facilities, and has expanded such operations from 14 diagnostic centres, as of March 31, 2019 to 20 as of March 31, 2021 and to 26 diagnostic centres as of December 31, 2021.

**Exhibit 8: Network and equipments**

	FY19	FY20	FY21	As on 31 Dec 2021
<b>Diagnostic Centers</b>				
Radiology	833	897	1,365	1,433
Pathology	440	455	465	537
Collection centers	409	422	425	491
Processing centers	31	33	40	46
<b>Equipments</b>				
X-Ray	804	860	876	NA
CT	44	53	62	62
MRI	18	23	26	27

Source: Company, Edelweiss Research

**Exhibit 9: Krsnaa's presence across India**



Source: Company

## Equipment

*Suppliers:* The company's key suppliers are manufacturers of imaging equipment, automated analysers, reagents and diagnostic kits. The company maintains strong relationships with equipment vendors that ensure quicker deployment of machinery, advantageous asset pricing and fleet-wide maintenance.

As per CRISIL, the company is the largest customer of Wipro GE in Asia. The following table lists some examples of the high-quality and high-throughput machines used by the company. The reagent supply agreements typically include minimum purchase levels for each month that the company is required to meet, and suppliers provide volume discounts from time to time.

### Exhibit 10: Throughput of some high-quality machines used by Krsnaa Diagnostic

Sr. No.	Equipment	Throughput (Scans/Day or Tests/Day)
<b>Radiology</b>		
1	MRI	50
2	CT	100
3	X-Ray/CR	35
<b>Pathology</b>		
1	Immunoassay Analyser	240
2	Biochemistry Analyser	800
3	Electrolyte Analyser	60
4	Automated culture and sensitivity system	40 positions

Source: Company

*Maintenance:* Purchased equipment typically has a 12–36-month supplier warranty for any defects, malfunctions and any repairs required. The company enters into comprehensive maintenance contracts with equipment vendors, and the manufacturer or dealer is responsible for maintenance and repair of the equipment.

## Employees

As of June 30, 2021, the team comprised 2,053 permanent employees. The company also had 984 employees on a contractual basis as on June 30, 2021. Furthermore, it engaged 220 contractual labourers as on June 30, 2021.

### Exhibit 11: Number of total workforce

Sr. No.	Function	Employees
1	Radiologists	190
2	Pathologists	30
3	Clinicians (Microbiologist)	8
4	Lab Technicians (Includes Phlebotomist)	838
5	X-Ray Technicians	349
6	CT/MRI Technicians	254
7	Other Support Functions	1,588
Total		3,257

Source: Company

## Tele-radiology

The company offers tele-radiology services from a 4,578 square facility in Pune comprising sections for 80 CT/MRI/X-Ray technologists teams, a 100-member conference room and radiologists reporting area. The hub is operated by a panel of expert and qualified radiologists; as of June 30, 2021, it had a team of 190 in-house

and tele-reporting radiologists reporting on CT/ MRI / X-ray studies from India and various countries of the world.

## Key benefits

- Scalable business model and enables wider penetration into tier II and tier III cities.
- Analog images get converted into digital format and sent to hub for examining and preparing report. Addresses the shortage of full-time doctors and staff in the diagnostics industry.
- The team at the tele-radiology hub monitors real-time critical findings of CT/ MRI/ X-ray modalities and the same is informed to referring physicians. The reporting standards followed aide in accurate diagnosis, which further helps in quicker and better treatment.
- Sufficient capacity to process large volumes in coming years.

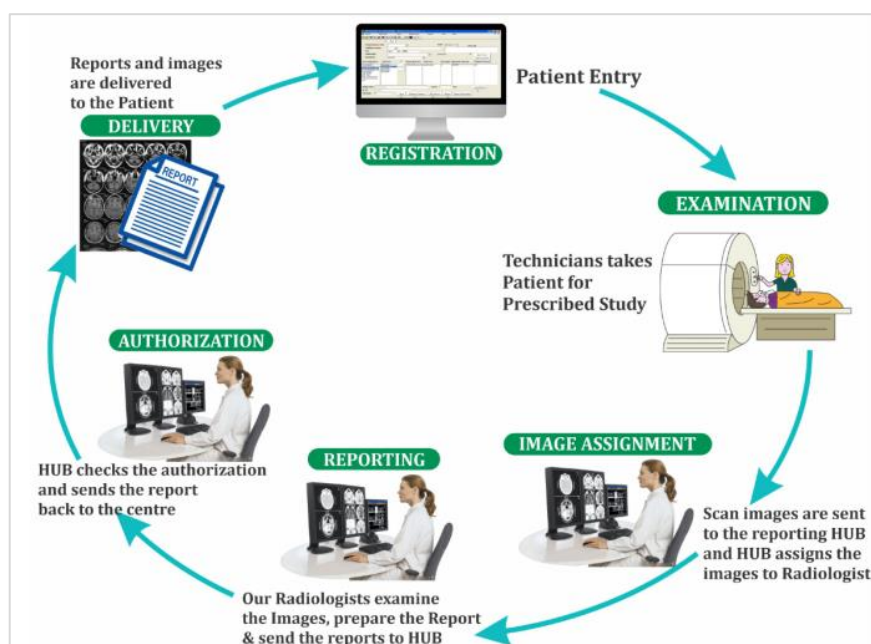
**Exhibit 12: Sufficient capacity to process large volumes in the coming years**

Test	Monthly Capacity	FY21 annual volumes	Headroom
CT Scans	1,26,000	4,79,233	3.2x
MRIs	31,500	1,45,116	2.6x
X-Rays	15,00,000	24,29,683	7.4x

Source: Company

Interconnectivity between tele-radiology hub and diagnostic centres through a 100MBPS leased line ensures seamless transmission of images between diagnostic centres and the hub. There is uninterrupted connectivity between diagnostic centres and the hub, with 24/7 power backup. The tele-radiology hub provides round-the clock services.

**Exhibit 13: Tele-radiology process**



Source: Company

## Competitive Landscape

### Presence of players in PPP model

Krsnaa is one of the leading players in the PPP model, with a presence across 14 states of the country. Approximately 67.5% of the company's revenues in FY21 come from various PPP tie-ups, which Krsnaa has entered into.

Among other pan-India large players, SRL is involved in PPP with centres in Jharkhand, Himachal Pradesh and Tirupati (pilgrimage centre in Andhra Pradesh). Another player Metropolis is involved in a PPP with NACO for viral load tests while DLPL is empanelled by Indo-Tibetan Border Police Force ('ITBPF') to provide pathology services (at CGHS rates) to its retired and serving employees as well as their dependents on company-owned PAN India network of DLPL.

Exhibit 14: Presence of players in PPP model

Sr. No.	States	Name of the service provider									
		Krsnaa Diagnostics	Medall Healthcare	Spandan Diagnostics	Healthmap Diagnostics	HLL Lifecare	SRL L.td.	Sanya Diagnostics	Teresa Diagnostics	Midnapore Diagnostics	Suraksha Diagnostics
1.	Andhra Pradesh	✓	✓								
2.	Assam	✓		✓							
3.	Gujarat			✓							
4.	Haryana				✓						
5.	Himachal Pradesh	✓					✓				
6.	Jammu & Kashmir	✓									
7.	Jharkhand		✓		✓		✓				
8.	Karnataka	✓									
9.	Madhya Pradesh	✓						✓			
10.	Maharashtra	✓				✓					
11.	Manipur	✓									
12.	Meghalaya	✓									
13.	Odisha	✓			✓						
14.	Punjab	✓									
15.	Rajasthan	✓									
16.	Tamil Nadu	✓	✓								
17.	Telangana		✓								
18.	Tripura								✓		
19.	Uttar Pradesh	✓				✓					
20.	West Bengal			✓		✓				✓	✓

Source: Company

### Fastest growing diagnostic chain in India on multiple parameters

Krsnaa is the fastest growing diagnostic chain in India on multiple parameters, including operating income, operating profit before depreciation, interest and tax (OPBDIT), and profit after tax between FY17 and FY20 and volume of tests conducted between FY18 and FY21 (among players with revenues exceeding INR1,500mn). (Source: CRISIL report)

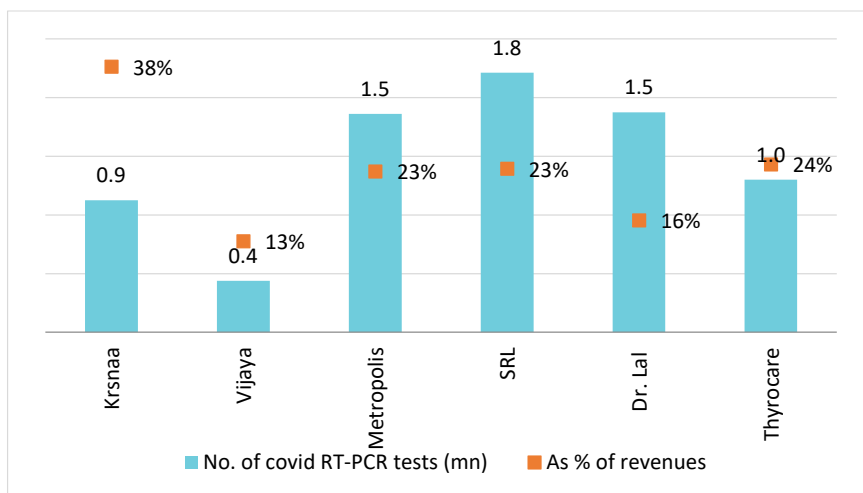
**Exhibit 15: Key financial parameters – Peer comparison**

	Krsnaa*	Vijaya	Thyrocare	Metropolis	SRL	DLPL
<b>Revenues</b>						
Revenue FY21 (INR mn)	2883	3767	4,729	9978	10,351	15813
Revenue growth FY21	58%	11%	19%	17%	2%	19%
Revenue growth FY17-20 CAGR	48%	15%	12%	16%	3%	13%
Test Volume CAGR FY18-20	41%	NA	8%	11%	-10%	17%
Geography wise breakup FY21	North: 11% East: 10% South: 19% <b>West: 60%</b>	<b>South: 96%</b> Others: 4%	North: 12% East: 18% South: 18% <b>West: 32%</b> Cloud: 20%	North: 28% East: 26% South: 11% <b>West: 33%</b> Others: 2%	North: 10% East: 5% South: 24% <b>West: 58%</b> Others: 4%	<b>North: 66% (of which Delhi NCR 37%)</b> East: 17% South: 5% <b>West: 10% (24% post Suburban)</b> Others: 2%
<b>Profitability ratio and margin</b>						
Gross margin	71%	85%	66%	74%	71%	75%
EBITDA FY21 (INR mn)	943	1,660	1,701	2,880	1,746	4364
EBITDA growth FY21	49%	25%	2%	24%	-1%	27%
EBITDA growth FY17-20 CAGR	64%	18%	13%	14%	0%	13%
EBITDA margin	33%	44%	36%	29%	17%	28%
Adjusted PAT margin	11%	23%	25%	18%	13%	19%

Source: Company, Edelweiss Research

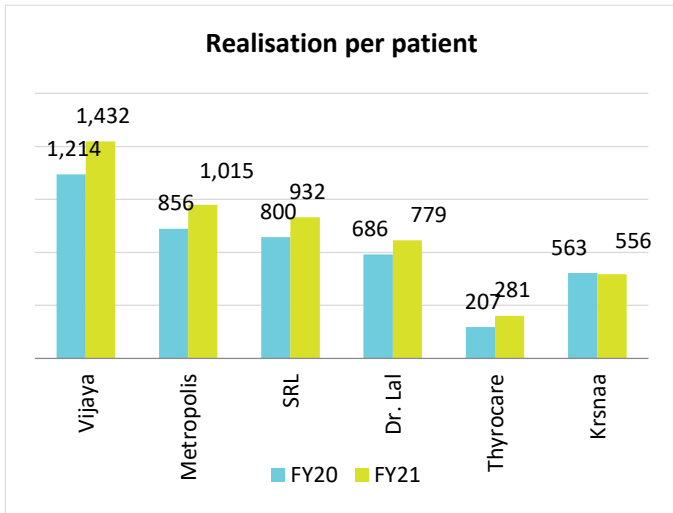
\*Net revenue from operations considered which is equal to gross revenues less revenue shared with hospitals and others

**Exhibit 16: Krsnaa derived a higher share of revenue from Covid tests (FY21)**



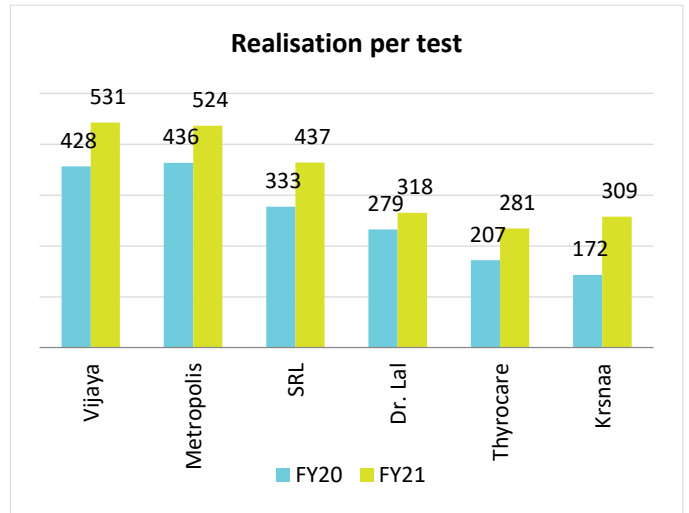
Source: Company, Edelweiss Research

**Exhibit 17: Disruptive prices leading to lower realisations**



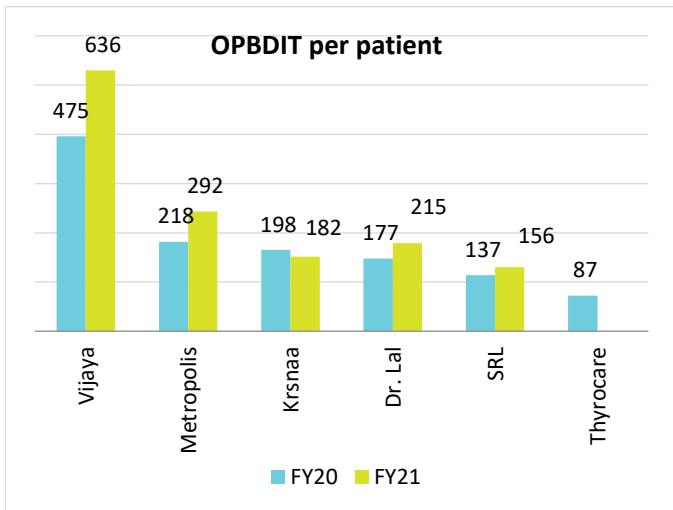
Source: Company, Edelweiss Research

**Exhibit 18: Realisation per test also lower for Krsnaa...**



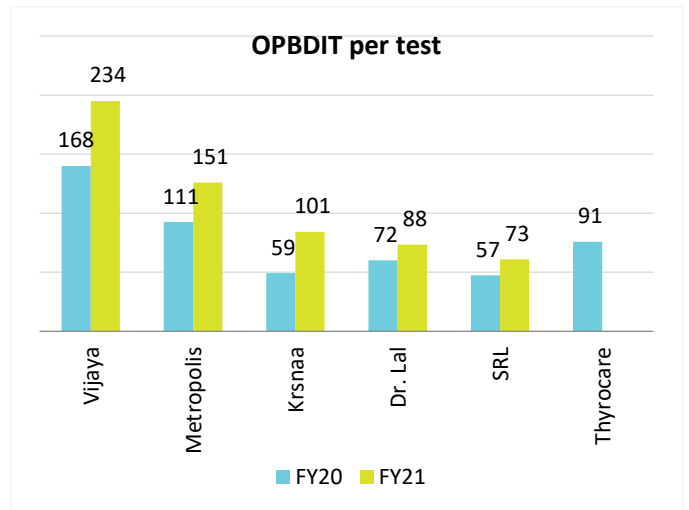
Source: Company, Edelweiss Research

**Exhibit 19: ...but fares better than peers on OPBDIT/patient**



Source: Company, Edelweiss Research

**Exhibit 20: ...as well as OPBDIT/test**



Source: Company, Edelweiss Research

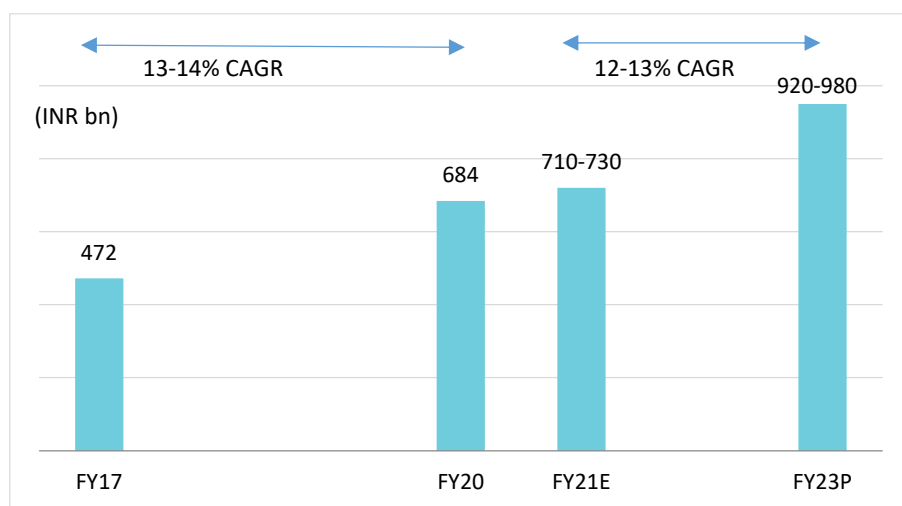
## Industry Overview

### Diagnostics industry in India

Diagnostics services currently have a share of 8–14% in the overall healthcare spending in the country. It achieved a healthy CAGR of 13–14% from FY17–20, tracking growth of healthcare delivery services. However, in FY21, CRISIL Research estimated the industry’s growth rate would sharply decelerate to approximately 4% year-on-year to INR710–730bn owing to the fallout of covid-19 pandemic.

The industry is expected to return to a healthy trajectory of 12–13% CAGR, thereby touching INR920–980bn over FY20–23. The industry is, however, expected to achieve a higher CAGR of 14–16% between FY21 and FY23 on account of low growth in FY21 due to the covid-19 pandemic.

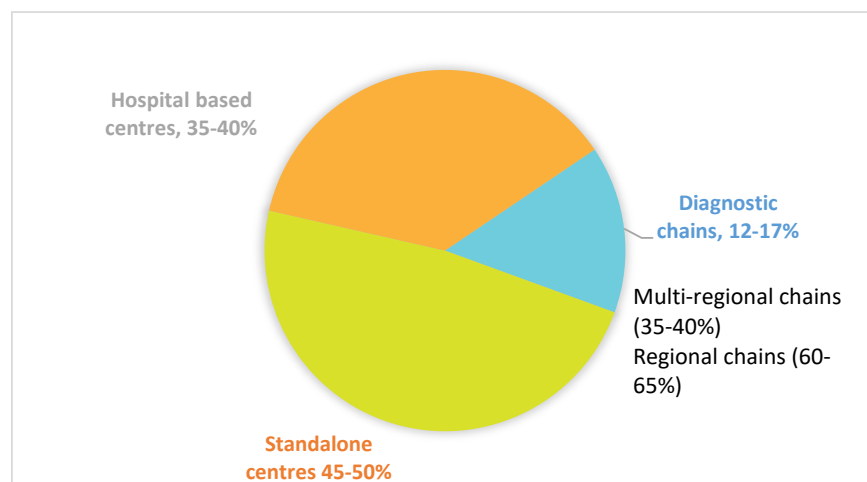
**Exhibit 21: Diagnostics market size in India**



Source: CRISIL

E: Estimated; P: Projected

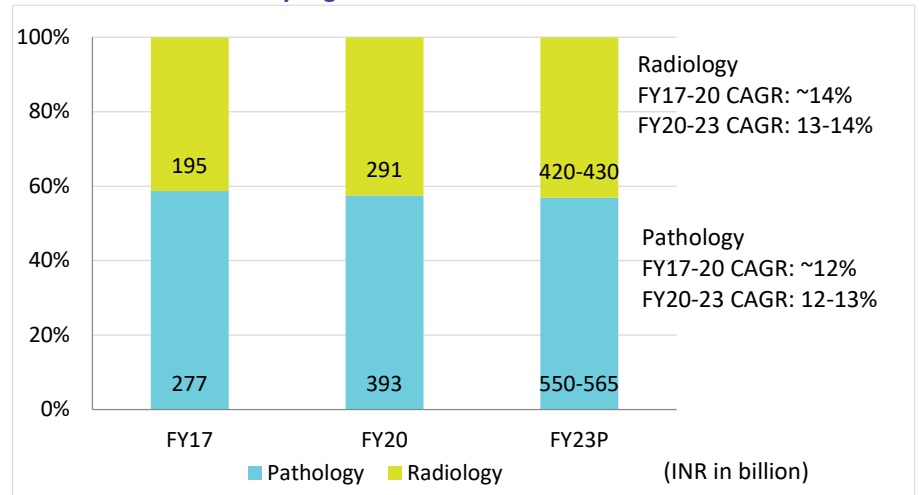
**Exhibit 22: Diagnostics business models in India**



Source: CRISIL



**Exhibit 23: Breakdown by segment**

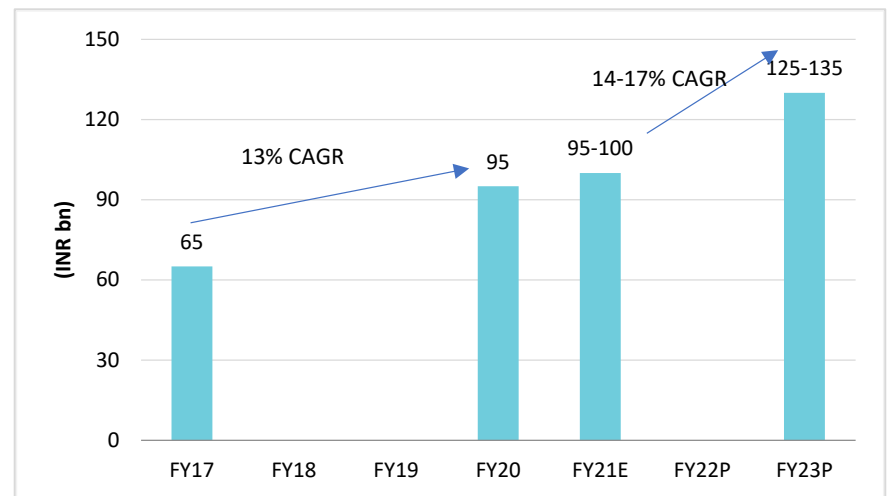


Source: CRISIL

The share of radiology testing services in the diagnostic services increased from nearly 41% in FY17 to approximately 43% in FY20, posting a 14% CAGR; CRISIL expects the share to be maintained at 43–44% in FY23.

## Huge potential for PPP model in underpenetrated rural diagnostics

**Exhibit 24: PPP market size in India**



Source: CRISIL

The PPP segment of healthcare services is a large target market, representing a market opportunity of INR95bn – INR100bn in FY21. Going forward, this market is expected to expand at a CAGR of 14% and 17% between FY21 and FY23 to INR125bn and INR135bn on the back of higher government spending in the PPP segment.

### Main strengths of PPP model

1. PPP model allows leveraging existing health infrastructure and upgrading their services across Tier I and Tier II and rural cities. This not only helps reduce the need to travel, but also helps in reducing their out-of-pocket expenditure.
2. Enhances penetration of quality services at remote and underpenetrated locations.
3. Quality services at costs that are nearly 50–60% lower than private facilities.

4. Price escalation is in-built into contracts for PPP players. An assessment of players in the out-of-hospital diagnostics industry reveals that revenues are driven mainly by volumes. On the other hand, prices for tests have remained stable or increased only marginally in the range of 0–2% for most players during fiscals 2017 and 2020 due to competition and added pressure as growth in revenue per test has been declining.

However, in case of a player who is engaged in PPP contracts with the government, price escalation is already part of the contract. PPP models provide for a yearly price escalation of 3–7% in their contracts. Yet, with the base prices being 50–60% cheaper than private players, PPP players are in a strong position to attract larger volumes.

5. Eases hospitals' management scope and stress pertaining to diagnostic facilities.

## Additional Data

### Management

Chairman and Senior Executive	Mr. Rajendra Mutha
MD	Mr. Rajendra Mutha
Executive Director	C.A. Yash Mutha
COO	Dr. Ravindar Sethi
Auditor	MSKA & Associates

### Holdings – Top 10\*

	% Holding		% Holding
Tata AIA	3.70	HSBC Holding	2.09
Aditya Birla Sun Life I	3.45	Nomura	1.30
ICICI Pru AMC	3.06	Aditya Birla AMC	0.85
HDFC Life	2.90	IDFC	0.73
Tata AMC	2.52	SBI MF	0.72

\*Latest public data

### Recent Company Research

Date	Title	Price	Reco

### Recent Sector Research

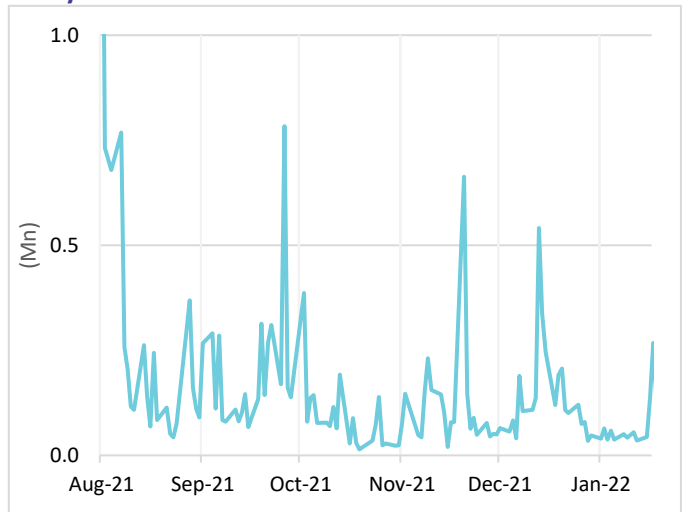
Date	Name of Co./Sector	Title
16-Feb-22	Thyrocare	Charting a new course ; <i>Result Update</i>
15-Feb-22	Fortis Healthcare	Good show continues; <i>Result Update</i>
15-Feb-22	Healthcare Global	Pushing the right levers; <i>Result Update</i>

### Rating Interpretation



Source: Bloomberg, Edelweiss research

### Daily Volume



Source: Bloomberg

### Rating Distribution: Edelweiss Research Coverage

	Buy	Hold	Reduce	Total
Rating Distribution*	192	55	17	266
	>50bn	>10bn and <50bn	<10bn	Total
Market Cap (INR)	233	43	8	284

\*2 stocks under review

### Rating Rationale

Rating	Expected absolute returns over 12 months
Buy:	>15%
Hold:	>15% and <-5%
Reduce:	<-5%

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Aditya Narain

Head of Research

Aditya.Narain@edelweissfin.com

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