

Dr Lal Pathlabs | HOLD

Covid-led beat; medium-term growth drivers now priced in

Dr Lal's better-than-expected 1QFY21 performance came on the back of a marginal beat in non-Covid volumes, Covid-led higher realizations and tight cost control. Revenue/EBITDA/PAT of INR 2660 mn/ 483 mn/ 284 mn were -21%/-49%/-52% YoY and were +21%/+40%/+54% vs our estimates. Patient volume (including Covid volumes of c.0.2 mn) declined by 28% YoY to 3.5 mn (10% beat). Realization per patient improved by 11% YoY to INR 760 (10% beat) and was primarily aided by Covid testing (21% of revenue). While we were building in patient footfall in line with pre-Covid levels from 2Q, the management commentary indicates a more subdued near-term outlook with a complete recovery in non-Covid volumes now unlikely before 3Q with Covid volumes, too, softening in July. The fragmented nature of the diagnostics industry offers significant scope for consolidation. Scalable business model & cost efficiencies, quality assurance and branding initiatives by diagnostic chains have hastened the transition from unorganized to organized players. The current disruption and the enhanced role of private laboratories in Covid-19 testing will accelerate medium to long term shifts in the diagnostic market landscape in favour of organized players. Given its strong cash position, Dr Lal remains best positioned in the industry to tide over the current crisis and to exploit inorganic growth opportunities. While the medium-term growth drivers remain in place and we continue to like Dr Lal for its operational excellence, at c.47x FY22E EPS (c.25% premium to historical trading range), valuations are now stretched with limited room for underperformance. We broadly maintain our FY21/22 EPS estimates despite the 1Q beat as we temper our near-term volume expectations. Downgrade to HOLD with a revised Mar'21 TP of INR 1790.

■ Key operating details:

- **Complete recovery in non-Covid volumes expected to be delayed:** Patient volume (including Covid volumes of c.0.2 mn) declined by 28% YoY to 3.5 mn (10% beat). Patient volume declined by 62% YoY and by 25% YoY in Apr (0.6 mn) and May (1.2 mn) respectively. Volumes grew by 3% YoY in June (1.7 mn) with the growth being aided by pent-up demand, market share gains from other organized & unorganized players and a favourable base. Non-Covid volumes in July stood at c.90% of base volumes with a complete recovery in non-Covid volumes expected by the end of 2Q. Sample volumes declined by 34% YoY to 7.9 mn, in line with our estimates. Tests per patient declined by 6% YoY to 2.27 (10% miss). Realization per patient improved by 11% YoY to INR 760 (10% beat) and was primarily aided by Covid testing (Realization per patient of c. INR 2836). Realization per patient for non-Covid tests declined by 7% YoY to INR 636 owing to the increase in contribution of ROI markets, a change in the channel mix in favour of collection centers and the decline in tests per patient.
- **Covid testing boosts top line but remains margin dilutive:** Revenue contribution of Covid testing stood at 21%. Covid testing remained margin dilutive even as it helped to partially offset the decline in top line resulting from lower non-Covid volumes and cover fixed costs. Gross margin for Covid tests stood at c.55% (vs c.76% for non-Covid tests) owing

Financial Summary					(INR mn)
Y/E March	FY18A	FY19A	FY20A	FY21E	FY22E
Net Sales	10,569	12,034	13,304	13,733	16,611
Sales Growth (%)	15.8	13.9	10.6	3.2	21.0
EBITDA	2,640	2,936	3,436	3,601	5,049
EBITDA Margin (%)	25.0	24.4	25.8	26.2	30.4
Adjusted Net Profit	1,707	1,993	2,259	2,364	3,389
Diluted EPS (INR)	20.5	23.9	27.1	28.3	40.6
Diluted EPS Growth (%)	10.1	16.7	13.3	4.7	43.4
ROIC (%)	51.5	55.6	66.6	71.2	118.4
ROE (%)	24.6	23.0	22.8	21.4	26.3
P/E (x)	92.3	79.0	69.7	66.6	46.5
P/B (x)	19.9	16.7	15.3	13.4	11.2
EV/EBITDA (x)	57.9	51.3	43.7	41.2	28.9
Dividend Yield (%)	0.2	0.3	0.8	0.5	0.6

Source: Company data, JM Financial. Note: Valuations as of 31/Jul/2020



Anmol Ganjoo
anmol.ganjoo@jmfl.com | Tel: (91 22) 66303056

Shashank Krishnakumar
shashank.krishnakumar@jmfl.com | Tel: (91 22)
62241878

Recommendation and Price Target

Current Reco.	HOLD
Previous Reco.	BUY
Current Price Target	1,790
Upside/(Downside)	-5.4%
Previous Price Target	1,660
Change	7.8%

Key Data – DLPL IN

Current Market Price	INR1,892
Market cap (bn)	INR157.7/US\$2.1
Free Float	40%
Shares in issue (mn)	83.3
Diluted share (mn)	83.4
3-mon avg daily val (mn)	INR246.5/US\$3.3
52-week range	2,030/1,053
Sensex/Nifty	37,607/11,073
INR/US\$	74.8

Price Performance

%	1M	6M	12M
Absolute	19.9	6.9	77.8
Relative*	14.9	13.4	75.5

* To the BSE Sensex

JM Financial Research is also available on:
Bloomberg - JMFR <GO>,
Thomson Publisher & Reuters,
S&P Capital IQ, FactSet and Visible Alpha

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

to higher reagent costs and the smaller scale of testing. While Dr Lal is currently conducting Covid testing in Delhi, Kolkata and Indore, the company is now looking to add capacity in 3-4 focus cities. The public vs private (home collection + hospitals) split for Covid revenue stood at 60%/40%.

- **High quality franchise but now fairly valued:** The Kolkata Reference Lab is aiding volume growth in the East with the region growing faster than the overall business. Sustained focus on network expansion and a favourable collection center to lab ratio is expected to further drive scale in the East. While Dr Lal has a strong presence in the B2B segment in South and West India, it is now focusing on expanding its footprint in the B2C segment via the franchisee-led model. Dr Lal plans to build clusters around the cities of Bangalore & Pune and grow organically in contiguous markets. Dr Lal made 5 acquisitions in the West in FY20 and continues to actively seek M&A opportunities outside its core Delhi NCR market. The company is focusing on improving turnaround time, enhancing service levels, leveraging technology to generate sales leads and on home collection to drive differentiation and to retain its premium positioning in the B2C segment. While the medium-term growth outlook remains robust, at c.47x FY22E EPS, the stock is now trading at c.25% premium to its historical trading range with limited room for underperformance.

■ Key Con-Call Takeaways:

- **Changes in patient behaviour and channel mix:** Demand for home collection is increasing. Walk-ins to company-owned labs have decreased while walk-ins to collection centers and pick-up points have increased with patients avoiding labs which tend to be more crowded.
- **On antibody testing as an opportunity:** While antibody testing could help in serosurveillance, the jury is still out on its role given that it is not a diagnostic test. Antibody testing could be an opportunity once Covid cases plateau. The size of the opportunity depends on how the pandemic shapes up. However, larger labs do not enjoy any advantage in antibody testing over unorganized labs.
- **Increase in fees to collection centers:** The business model is dependent on collection centers for scalability. The contribution of collection centers has increased with the increase in contribution of ROI markets. The throughput per collection center in ROI markets remains low. Moreover, Dr Lal does not offer door-step pick-up in ROI markets unlike in NCR and, hence, offers higher fees to collection centers in those markets.
- **Swasthfit contribution stable:** The contribution of the Swasthfit wellness portfolio to revenue has remained stable during the quarter indicating that preventive healthcare will continue to gain traction going forward.

■ Key financials:

Revenue/EBITDA/PAT of INR 2660 mn/ 483 mn/ 284 mn were -21%/-49%/-52% YoY and were +21%/+40%/+54% vs our estimates. Gross Margin declined by 729 bps YoY (-467 bps QoQ) to 71.5% (JMFe: 76.5%). EBITDA margin declined by 1021 bps YoY (-83 bps QoQ) to 18.2% (JMFe: 15.7%) with the beat primarily being driven by lower other expenses (-556 bps vs JMFe, -206 bps YoY). Normalized EBITDA margin (pre-ESPS/RSU/CSR) stood at 20.3%, declining by 920 bps YoY. Capex for the quarter stood at INR 125 mn. Cash, FDs and liquid investments at the end of June'20 stood at INR 7598 mn as compared to INR 7443 mn at the end of Mar'20.

Exhibit 1. Dr Lal 1QFY21 Earnings Snapshot

Dr. Lal - P&L (INR mn)	1Q20A	1Q21A	% YoY	1Q21E	% Delta vs JMFe	1Q21E (cons)	% Delta vs cons	4Q20A	% QoQ
Total Revenue	3,352	2,660	-21%	2,195	21%	2,183	22%	3,017	-12%
COGS	712	759	7%	516				720	5%
Gross Profit	2,640	1,901	-28%	1,680				2,297	-17%
Staff Cost	583	595	2%	533				625	-5%
Other expenses	1,106	823	-26%	801				1,099	-25%
EBITDA	951	483	-49%	346	40%	312	55%	573	-16%
EBITDA margin (%)	28.4%	18.2%	-1021 bps	15.7%	241 bps			19.0%	-83 bps
Other Income	144	114	-21%	151	-24%			120	-5%
Finance Cost	38	37		40				39	
Depreciation	163	179		204				200	
PBT	894	381	-57%	252	51%			454	-16%
Exceptional Items	0	0		0				0	
Tax	303	97	-68%	64	53%			128	-24%
Tax Rate (%)	33.9%	25.5%		25.2%				28.2%	
Minority Interest	3	0		4				1	
PAT (Reported)	588	284	-52%	184	54%	136	109%	325	-13%
PAT margin (%)	17.5%	10.7%	-687 bps	8.4%				10.8%	-10 bps
Diluted EPS (INR)	7.1	3.4	-52%	2.2	54%			3.9	-13%
Dr. Lal - Cost margins	1Q20A	1Q21A	% YoY	1Q21E	% Delta vs JMFe			4Q20A	% QoQ
COGS/sales	21.2%	28.5%	729 bps	23.5%	503 bps			23.9%	467 bps
Staff cost/sales	17.4%	22.4%	498 bps	24.3%	-189 bps			20.7%	165 bps
Other expenditure/sales	33.0%	30.9%	-206 bps	36.5%	-556 bps			36.4%	-549 bps

Source: Company, Bloomberg, JM Financial

Exhibit 2. Estimate Changes

(INR mn)	FY21E				FY22E			
	Old	New	growth	change %	Old	New	growth	change %
Total operating revenue	13,326	13,733	3.2%	3.1%	16689	16,611	21.0%	-0.5%
Gross profit	10,361	9,951	-3.5%	-4.0%	13034	12,874	29.4%	-1.2%
% margin	77.8%	72.5%	-509bps		78.1%	77.5%	504bps	
EBITDA	3,626	3,601	4.8%	-0.7%	5041	5,049	40.2%	0.2%
% margin	27.2%	26.2%	40bps		30.2%	30.4%	417bps	
PAT	2,415	2,364	4.7%	-2.1%	3461	3,389	43.4%	-2.1%
% margin	18.1%	17.2%	24bps		20.7%	20.4%	319bps	
Diluted EPS (INR)	29.0	28.3	4.7%	-2.1%	41.5	40.6	43.4%	-2.1%

Source: Company, JM Financial

Financial Tables (Consolidated)

Income Statement		(INR mn)			
Y/E March	FY18A	FY19A	FY20A	FY21E	FY22E
Net Sales	10,569	12,034	13,304	13,733	16,611
Sales Growth	15.8%	13.9%	10.6%	3.2%	21.0%
Other Operating Income	0	0	0	0	0
Total Revenue	10,569	12,034	13,304	13,733	16,611
Cost of Goods Sold/Op. Exp	2,260	2,624	2,987	3,782	3,738
Personnel Cost	1,807	2,083	2,426	2,482	2,758
Other Expenses	3,861	4,391	4,455	3,868	5,066
EBITDA	2,640	2,936	3,436	3,601	5,049
EBITDA Margin	25.0%	24.4%	25.8%	26.2%	30.4%
EBITDA Growth	11.2%	11.2%	17.0%	4.8%	40.2%
Depn. & Amort.	331	382	728	801	882
EBIT	2,309	2,554	2,708	2,800	4,168
Other Income	312	460	550	550	574
Finance Cost	8	8	153	161	169
PBT before Excep. & Forex	2,613	3,006	3,105	3,189	4,572
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	2,613	3,006	3,105	3,189	4,572
Taxes	895	1,000	829	812	1,166
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	10	13	17	13	17
Reported Net Profit	1,707	1,993	2,259	2,364	3,389
Adjusted Net Profit	1,707	1,993	2,259	2,364	3,389
Net Margin	16.2%	16.6%	17.0%	17.2%	20.4%
Diluted Share Cap. (mn)	83.4	83.4	83.4	83.4	83.4
Diluted EPS (INR)	20.5	23.9	27.1	28.3	40.6
Diluted EPS Growth	10.1%	16.7%	13.3%	4.7%	43.4%
Total Dividend + Tax	318	552	1,555	953	1,074
Dividend Per Share (INR)	3.2	5.5	15.5	9.5	10.7

Source: Company, JM Financial

Cash Flow Statement		(INR mn)			
Y/E March	FY18A	FY19A	FY20A	FY21E	FY22E
Profit before Tax	2,613	3,006	3,105	3,189	4,572
Depn. & Amort.	331	382	728	801	882
Net Interest Exp. / Inc. (-)	-231	-341	-296	161	169
Inc (-) / Dec in WCap.	89	93	122	244	-282
Others	109	89	115	0	0
Taxes Paid	-940	-1,043	-935	-812	-1,166
Operating Cash Flow	1,971	2,185	2,839	3,583	4,175
Capex	-725	-420	-796	-500	-525
Free Cash Flow	1,246	1,765	2,043	3,083	3,650
Inc (-) / Dec in Investments	-1,195	-847	127	0	0
Others	197	270	408	0	0
Investing Cash Flow	-1,723	-997	-261	-500	-525
Inc / Dec (-) in Capital	444	1	2	1	0
Dividend + Tax thereon	-318	-552	-1,555	-953	-1,074
Inc / Dec (-) in Loans	0	0	-351	0	0
Others	-1	-2	-1	-161	-169
Financing Cash Flow	125	-553	-1,905	-1,113	-1,242
Inc / Dec (-) in Cash	373	635	673	1,971	2,408
Opening Cash Balance	286	659	1,294	1,967	3,937
Closing Cash Balance	3,135	4,903	5,691	7,662	10,069

Source: Company, JM Financial

Balance Sheet		(INR mn)			
Y/E March	FY18A	FY19A	FY20A	FY21E	FY22E
Shareholders' Fund	7,912	9,455	10,328	11,740	14,056
Share Capital	833	833	833	834	834
Reserves & Surplus	7,078	8,622	9,495	10,906	13,222
Preference Share Capital	0	0	0	0	0
Minority Interest	38	55	212	225	242
Total Loans	0	0	0	0	0
Def. Tax Liab. / Assets (-)	-169	-215	-228	-228	-228
Total - Equity & Liab.	7,781	9,295	10,312	11,737	14,070
Net Fixed Assets	2,204	2,121	4,245	3,944	3,587
Gross Fixed Assets	3,460	3,846	5,891	6,391	6,916
Intangible Assets	510	486	1,223	1,223	1,223
Less: Depn. & Amort.	1,863	2,245	2,973	3,774	4,656
Capital WIP	96	34	104	104	104
Investments	1,448	1,848	1,643	1,643	1,643
Current Assets	5,368	6,721	7,628	9,762	12,538
Inventories	273	285	570	588	712
Sundry Debtors	412	532	514	643	777
Cash & Bank Balances	3,135	4,903	5,691	7,662	10,069
Loans & Advances	2	9	9	9	11
Other Current Assets	1,545	992	844	860	968
Current Liab. & Prov.	1,239	1,395	3,204	3,612	3,698
Current Liabilities	734	810	2,107	2,420	2,403
Provisions & Others	505	585	1,097	1,191	1,295
Net Current Assets	4,129	5,326	4,424	6,150	8,840
Total - Assets	7,781	9,295	10,312	11,737	14,070

Source: Company, JM Financial

Dupont Analysis					
Y/E March	FY18A	FY19A	FY20A	FY21E	FY22E
Net Margin	16.2%	16.6%	17.0%	17.2%	20.4%
Asset Turnover (x)	1.5	1.4	1.3	1.1	1.2
Leverage Factor (x)	1.0	1.0	1.1	1.1	1.1
RoE	24.6%	23.0%	22.8%	21.4%	26.3%

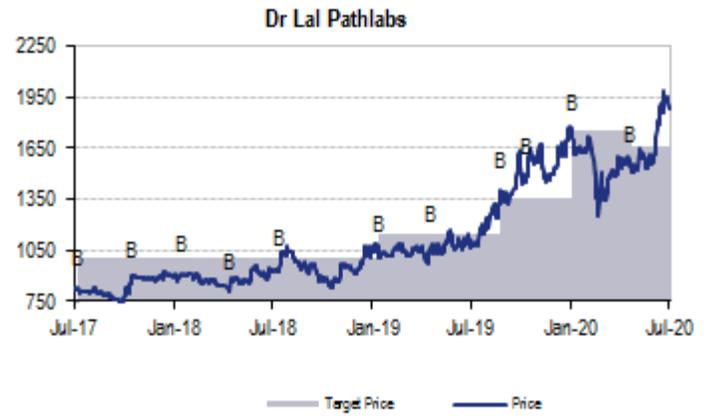
Key Ratios					
Y/E March	FY18A	FY19A	FY20A	FY21E	FY22E
BV/Share (INR)	94.9	113.4	123.8	140.8	168.5
ROIC	51.5%	55.6%	66.6%	71.2%	118.4%
ROE	24.6%	23.0%	22.8%	21.4%	26.3%
Net Debt/Equity (x)	-0.6	-0.7	-0.7	-0.8	-0.8
P/E (x)	92.3	79.0	69.7	66.6	46.5
P/B (x)	19.9	16.7	15.3	13.4	11.2
EV/EBITDA (x)	57.9	51.3	43.7	41.2	28.9
EV/Sales (x)	14.5	12.5	11.3	10.8	8.8
Debtor days	14	16	14	17	17
Inventory days	9	9	16	16	16
Creditor days	30	32	44	54	46

Source: Company, JM Financial

History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
8-Aug-17	Buy	1,000	
13-Nov-17	Buy	1,000	0.0
12-Feb-18	Buy	1,010	1.0
14-May-18	Buy	1,010	0.0
13-Aug-18	Buy	1,010	0.0
11-Feb-19	Buy	1,150	13.9
20-May-19	Buy	1,148	-0.2
23-Sep-19	Buy	1,350	17.6
11-Nov-19	Buy	1,355	0.4
3-Feb-20	Buy	1,750	29.2
19-May-20	Buy	1,660	-5.1

Recommendation History



APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd., National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd.

SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst – INH000000610

Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.

Board: +9122 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com

Compliance Officer: Mr. Sunny Shah | Tel: +91 22 6630 3383 | Email: sunny.shah@jmfl.com

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 15%. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 15% upside from the current market price.
Sell	Price expected to move downwards by more than 10%

Research Analyst(s) Certification

The Research Analyst(s), with respect to each issuer and its securities covered by them in this research report, certify that:

All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and

No part of his or her or their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE), National Stock Exchange of India Ltd. (NSE) and Metropolitan Stock Exchange of India Ltd. (MSEI). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or its associates, their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and members of their household are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

This report is not directed or intended for distribution to, or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject JM Financial Institutional Securities and/or its affiliated company(ies) to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to a certain category of investors. Persons in whose possession this report may come, are required to inform themselves of and to observe such restrictions.

Persons who receive this report from JM Financial Singapore Pte Ltd may contact Mr. Ruchir Jhunjunwala (ruchir.jhunjunwala@jmf.com) on +65 6422 1888 in respect of any matters arising from, or in connection with, this report.

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

JM Financial Institutional Securities only accepts orders from major U.S. institutional investors. Pursuant to its agreement with JM Financial Institutional Securities, JM Financial Securities effects the transactions for major U.S. institutional investors. Major U.S. institutional investors may place orders with JM Financial Institutional Securities directly, or through JM Financial Securities, in the securities discussed in this research report.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus Exemptions and a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.