

## Sorrento Therapeutics (Nasdaq: SRNE)

October 5, 2020

### BUY: A PolyClonal Cocktail – R&D Day Scheduled

**Jason H. Kolbert**

Head of Healthcare Research

646-465-6891

jkolbert@dawsonjames.com

*Our prayers are with the first family for a speedy recovery. We noted that the President appears to have received a polyclonal cocktail from Regeneron (REGN-Not Rated). We see this as “validating” for Sorrento’s STI-1499 and STI-2020, which demonstrated potent neutralizing activity against SARS-CoV-2 virus isolates, including the emerging Spike D614G variant virus. 100% undetectable on day five.*

*Sorrento has scheduled an R&D Day event on October 13<sup>th</sup>, 2020, focusing on its comprehensive multi-modal approach to COVID-19. During this 90-minute event, management will highlight continued strategic advancement, challenges, critical pipeline updates, and drivers of future growth in the COVID-19 space.*

**A Potent Cocktail Shows 100% Inhibition.** Both STI-1499 and STI-2020 demonstrated protective activities against SARS-CoV-2 infection in Syrian golden hamsters. At day 5, STI-2020 at 500 µg reduced virus load in hamster lungs to undetectable levels in 100% of animals tested, whereas STI-1499 at 2,000 µg reduced virus load below the detection limit in 60% of animals tested and showed a 10-fold reduction in the remaining 40% of animals. As a cocktail, the product could remain effective even if virus mutations occur. Through the U.S.’s Project Warp Speed, it’s possible we could see this cocktail move rapidly to commercialization. Sorrento STI-1499, or COVI-GUARD, is in a Phase 1 trial. The initial clinical trial for STI-1499 is expected to be in ICU patients to ensure safety and allow a preliminary look at efficacy. In vitro results so far have demonstrated STI-1499’s ability to completely neutralize SARS-CoV-2 infection at low doses, making STI-1499 Sorrento’s lead candidate for potential cost-effective passive protection against COVID-19.

**Proof of Concept.** We note that Eli Lilly (LLY-Not Rated) reported positive interim results from a placebo-controlled trial of a similar compound to STI-1499. We believe the Sorrento antibody could be more potent and manufactured more efficiently at a larger scale.

**Valuation.** We assume that the company successfully develops COVI-SHIELD (and non-opioid Pain Medication, RTX). We apply a probability of success of just 50%, but given the size of the indication, the valuation potential for COVID alone is significant. For Sorrento, we additionally apply a 30% discount rate. Our valuation conclusion is an equally-weighted average of our FCFE, EPS, and sum-of-the-parts analysis rounded to the nearest whole number. We use an estimated fully diluted end-year share count (we assume a capital raise). The conclusion of this method is a \$21.00 price target.

**Risk to our thesis** includes the following: (1) commercial; (2) regulatory; (3) clinical; (4) manufacturing; (5) financial; (6) liability; and (7) intellectual property. We review these and other risks in the risk section of this report.

Current Price				\$10.38
Price Target				\$21.00
<b>Estimates</b>				
	F2020E	F2021E	F2022E	
Expenses (\$000s)	\$ 1,502,068	\$ 1,117,435	\$ 821,747	
1Q March	\$ 50,884	\$ 257,010	\$ 189,002	
2Q June	\$ 56,735	\$ 268,184	\$ 197,219	
3Q September	\$ 56,940	\$ 290,533	\$ 213,654	
4Q December	\$ 1,337,509	\$ 301,708	\$ 221,872	
	F2020E	F2021E	F2022E	
EPS (diluted)	\$ 10.75	\$ 6.67	\$ 3.93	
1Q March	\$ (0.36)	\$ 1.53	\$ 0.90	
2Q June	\$ (0.36)	\$ 1.60	\$ 0.94	
3Q September	\$ (0.25)	\$ 1.73	\$ 1.02	
4Q December	\$ 11.71	\$ 1.80	\$ 1.06	
<b>EBITDA/Share</b>				
	\$11.50	\$8.33	\$5.24	
<b>EV/EBITDA (x)</b>				
	1.1	1.4	2.3	
<b>Stock Data</b>				
52-Week Range	\$1.39	-	\$19.39	
Shares Outstanding (mil.)				261.7
Market Capitalization (mil.)				\$2,717
Enterprise Value (mil.)				\$2,695
Debt to Capital				0%
Book Value/Share				\$2.41
Price/Book				7.2
Average Three Months Trading Volume (K)				24,141
Insider Ownership				14.2%
Institutional Ownership				24.3%
Short interest (mil.)				28.7%
Dividend / Yield				\$0.00/0.0%



**COVID Model Assumptions:**

1. We assume that one million essential workers (U.S. & Europe) are candidates for a COVID Prophylaxis and Treatment Products
2. We assume pricing below Gilead's Remdesivir at \$4,000 per therapeutic course.
3. For modeling purposes, we apply a 50% probability of success. This is selected based on the early stage of development but also an acknowledgment that the product has shown promising data that should be predictive in man, and the desperate need to develop a countermeasure to COVID now, i.e., acknowledgment of Project Warp Speed, the U.S. Plan to develop a vaccine and or antidote to Covid.

**Exhibit 1. COVID Models U.S. and Rest of World**

COVID19	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Target Population	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Population growth	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Population Coverage	100.00%	75.00%	50.00%	40.00%	30.00%	20.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Units Stockpiled	1,000,000	750,000	500,000	400,000	300,000	200,000	100,000	100,000	100,000	100,000	100,000
Average price per unit	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Revenue ('000)	\$ 4,000,000	\$ 3,000,000	\$ 2,000,000	\$ 1,600,000	\$ 1,200,000	\$ 800,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
Risk adjustment	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
<b>Total Revenue ('000)</b>	<b>\$ 2,000,000</b>	<b>\$ 1,500,000</b>	<b>\$ 1,000,000</b>	<b>\$ 800,000</b>	<b>\$ 600,000</b>	<b>\$ 400,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>

Source: Dawson James Estimates

COVID 19 ROW	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Target Population	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Population growth	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Population Coverage	100.00%	75.00%	50.00%	40.00%	30.00%	20.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Units Stockpiled	1,000,000	750,000	500,000	400,000	300,000	200,000	100,000	100,000	100,000	100,000	100,000
Units Purchased in Year	1,000,000	750,000	500,000	400,000	300,000	200,000	100,000	100,000	100,000	100,000	100,000
Average price per unit	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Increase in Cost	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Revenue ('000)	\$ 4,000,000	\$ 3,000,000	\$ 2,000,000	\$ 1,600,000	\$ 1,200,000	\$ 800,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
Risk adjustment	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
<b>Total Revenue ('000)</b>	<b>\$ 2,000,000</b>	<b>\$ 1,500,000</b>	<b>\$ 1,000,000</b>	<b>\$ 800,000</b>	<b>\$ 600,000</b>	<b>\$ 400,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>

Source: Dawson James estimates

**RTX Model Assumptions – Non-Opioid Pain Relief:**

1. We assume up to ten million people seek treatment for knee and other related pain relief in the U.S. and also in Rest of the World.
2. We assume pricing at \$5,000 per therapeutic course.
3. For modeling purposes, we apply a 50% probability of success. This is selected based on the ownership of Scilex.
4. For conservatism, we do not include chronic cancer pain and other indications, which could be realized once RTX is commercialized.

**Exhibit 2. Sciatca Models U.S. and Rest of World**

Non-Opioid Pain Relief USA	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Population	10,000,000	10,100,000	10,201,000	10,303,010	10,406,040	10,510,101	10,615,202	10,721,354	10,828,567	10,936,853	11,046,221
Increase in population	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Seeking Intervention	1,000,000	1,010,000	1,020,100	1,030,301	1,040,604	1,051,010	1,061,520	1,072,135	1,082,857	1,093,685	1,104,622
Market Penetration				4.00%	8.00%	12.00%	15.00%	15.00%	15.00%	20.00%	25.00%
Total patients treated	-	-	-	41,212	83,248	126,121	159,228	160,820	162,429	218,737	276,156
Average price per treatment		\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,100	\$ 5,202	\$ 5,306	\$ 5,412	\$ 5,520	\$ 5,631	\$ 5,743
Increase in Cost		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parnter revenue ('000)	\$ -	\$ -	\$ -	\$ 206,060	\$ 424,566	\$ 656,083	\$ 844,870	\$ 870,385	\$ 896,671	\$ 1,231,667	\$ 1,586,080
Royalty or profit share (50%)	\$ -	\$ -	\$ -	\$ 103,030	\$ 212,283	\$ 328,041	\$ 422,435	\$ 435,193	\$ 448,335	\$ 615,834	\$ 793,040
Sorrento Ownership adjustment		50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
<b>Total Revenue ('000)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 51,515</b>	<b>\$ 106,142</b>	<b>\$ 164,021</b>	<b>\$ 211,218</b>	<b>\$ 217,596</b>	<b>\$ 224,168</b>	<b>\$ 307,917</b>	<b>\$ 396,520</b>

Source: Dawson James Estimates

Non-Opioid Pain Relief ROW	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Population	25,000,000	25,250,000	25,502,500	25,757,525	26,015,100	26,275,251	26,538,004	26,803,384	27,071,418	27,342,132	27,615,553
Increase in population	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Seeking Intervention	2,500,000	2,525,000	2,550,250	2,575,753	2,601,510	2,627,525	2,653,800	2,680,338	2,707,142	2,734,213	2,761,555
Market Penetration				4.00%	8.00%	12.00%	15.00%	15.00%	15.00%	20.00%	25.00%
Total patients treated	-	-	-	103,030	208,121	315,303	398,070	402,051	406,071	546,843	690,389
Average price per treatment		\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,100	\$ 5,202	\$ 5,306	\$ 5,412	\$ 5,520	\$ 5,631	\$ 5,743
Increase in Cost		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parnter revenue ('000)	\$ -	\$ -	\$ -	\$ 515,151	\$ 1,061,416	\$ 1,640,206	\$ 2,112,176	\$ 2,175,963	\$ 2,241,677	\$ 3,079,168	\$ 3,965,199
Royalty or profit share (50%)	\$ -	\$ -	\$ -	\$ 257,575	\$ 530,708	\$ 820,103	\$ 1,056,088	\$ 1,087,982	\$ 1,120,839	\$ 1,539,584	\$ 1,982,599
Sorrento Ownership adjustment		50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
<b>Total Revenue ('000)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 128,788</b>	<b>\$ 265,354</b>	<b>\$ 410,052</b>	<b>\$ 528,044</b>	<b>\$ 543,991</b>	<b>\$ 560,419</b>	<b>\$ 769,792</b>	<b>\$ 991,300</b>

Source: Dawson James Estimates

**Valuation.** We assume that the company successfully develops COVI-SHIELD, but apply a probability of success factor of 50% to our therapeutic model. We make similar assumptions for our RTX model, which assumes ten million candidates for non-opioid pain relief (knee, cancer, and other). Please see our models and assumptions for more details. In addition to our risk cuts in both the COVID and RTX models, we also apply a 30% discount rate. We select 30% as the company is not yet profitable, and most of the products are still dependent on the outcome of the clinical trial. Our model assumes the company raises capital and is based on the 2030 share count. Our valuation conclusion is an equally-weighted average of our FCFF, EPS, and sum-of-the-parts analysis. We use an estimated fully diluted end-year share count and assume multiple raises. The conclusion of this method is a \$21.00 price target.

### Exhibit 3. Free Cash Flow Model.

Average	\$	21.0
Price Target	\$	22.3
Year		2020

#### DCF Valuation Using FCFF (mln):

units (millions - \$)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	2,532,945	1,894,895	1,190,707	1,032,646	882,122	739,478	570,573	581,572	592,950	793,317	1,005,480
Tax Rate	0%	20%	25%	28%	30%	33%	33%	33%	33%	33%	33%
EBIT(1-t)	2,540,055	1,515,916	893,030	743,505	617,485	495,450	382,284	389,653	397,276	531,522	673,671
- Change in NWC											
Free Cash Flow to Firm (FCFF)	2,540,055	1,515,916	893,030	743,505	617,485	495,450	382,284	389,653	397,276	531,522	673,671
PV of FCFF	2,540,055	1,169,689	531,687	341,562	218,880	135,511	80,678	63,452	49,917	51,532	50,396
Discount Rate		30%									
Long Term Growth Rate		1%									
Terminal Cash Flow		177,973									
Terminal Value YE 2030		13,314									
NPV		5,246,673									
NPV-Debt		182,958									
Shares out (thousands)		227,400	2030								
NPV Per Share		22.3									

Source: Dawson James estimates

### Exhibit 4. Discounted-EPS Model.

Current Year	2020
Year of EPS	2022
Earnings Multiple	10
Discount Factor	30%
Selected Year EPS	\$ 3.93
NPV	\$ 23.4

Source: Dawson James estimates

		Discount Rate and Earnings Multiple Varies, Year is Constant					
		2022 EPS					
		20%	25%	30%	35%	40%	45%
Earnings Multiple	10	\$30.93	\$28.51	\$26.36	\$24.44	\$22.73	\$ 21.19
	15	\$46.40	\$42.76	\$39.53	\$36.66	\$34.09	\$ 31.78
	20	\$61.86	\$57.01	\$52.71	\$48.88	\$45.45	\$ 42.37
	25	\$77.33	\$71.27	\$65.89	\$61.10	\$56.81	\$ 52.96
	30	\$92.80	\$85.52	\$79.07	\$73.32	\$68.18	\$ 63.56
	35	\$108.26	\$99.77	\$92.25	\$85.54	\$79.54	\$ 74.15
	40	\$123.73	\$114.03	\$105.42	\$97.76	\$90.90	\$ 84.74
	45	\$139.19	\$128.28	\$118.60	\$109.98	\$102.26	\$ 95.33

Source: Dawson James estimates

### Exhibit 5. Sum-of-the-Parts Model.

Sorrento Sum of the Parts	LT Gr	Discount Rate	Yrs. to Mkt	% Success	Peak Sales MM's	Term Val
COVID19 USA *	1%	30%	1	70%	\$1,500	\$5,172
NPV						\$7.35
COVID 19 ROW *	1%	30%	1	70%	\$1,500	\$5,172
NPV						\$7.35
Non - Opioid Pain Relief U.S.	1%	30%	3	50%	\$397	\$1,367
NPV						\$0.82
Non - Opioid Pain Relief ROW	1%	30%	3	50%	\$991	\$3,418
NPV						\$2.05
Service Revenues	1%	50%	0	50%	\$13	\$28
NPV						\$0.04
DAR-T Platform	1%	90%	5	50%	\$25	\$28
NPV						\$0.00
Net Margin						60%
MM Shrs OS						227
Total						\$18

Source: Dawson James estimates

## Risk Analysis

**Clinical and regulatory risk.** There is no assurance that any of the company's products will be approved for any additional indications and, even if approved, will be reimbursed by insurance, or successfully commercialized.

**Commercial risk.** The focus of the company is on successfully developing their products and eventually bringing them to the mass market. It is important to note that the market opportunity in COVID is a race against time. Others may develop a vaccine that could reduce the need for the company's therapy.

**Financial risk.** The company may need to raise capital in the marketplace relatively soon, and there can be no assurances that the company will be able to successfully raise capital and do so on favorable terms.

**Intellectual property risk.** The company may have to defend its patents and technical know-how, and there can be no assurances that the patents will not be infringed or will be held as valid if challenged, and the company may infringe on third party's patents.

**Reimbursement and insurance payment risk.** Insurance payment for products may be an additional hurdle for adoption.

**Exhibit 6. Income Statement.**

Sorrento Income Statement (\$ '000)															
SRNE	1Q20A	2Q20A	3Q20E	4Q20E	2020E	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
COVID19 USA *				2,000,000	2,000,000	1,500,000	1,000,000	800,000	600,000	400,000	200,000	200,000	200,000	200,000	200,000
COVID 19 ROW *				2,000,000	2,000,000	1,500,000	1,000,000	800,000	600,000	400,000	200,000	200,000	200,000	200,000	200,000
Non - Opioid Pain Relief U.S.						-	-	51,515	106,142	164,021	211,218	217,596	224,168	307,917	396,520
Non - Opioid Pain Relief ROW						-	-	128,788	265,354	410,052	528,044	543,991	560,419	769,792	991,300
Service Revenues	2,473	3,213	3,245	3,278	12,209	12,331	12,454	12,579	12,704	12,831	12,960	13,089	13,220	13,352	13,486
Revenues	5,248	5,794	5,852	5,910	22,804	3,000,000	2,000,000	1,780,303	1,571,496	1,374,072	1,139,261	1,161,587	1,184,587	1,477,709	1,787,820
Total Revenues (Product Sales, Service and Therapeutics)	7,721	9,007	9,097	4,009,188	4,035,013	3,012,331	2,012,454	1,792,881	1,584,200	1,386,904	1,152,221	1,174,677	1,197,807	1,491,061	1,801,306
<b>Expenses</b>															
COGS	2,439	2,249	2,911	1,282,940	1,290,539	903,699	603,736	537,864	475,260	416,071	345,666	352,403	359,342	447,318	540,392
% COGS	31.6%	32%	32%	32%	32%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
R&D	21,154	29,031	29,321	29,615	109,121	111,303	113,529	115,800	118,116	120,478	122,888	125,346	127,852	130,409	133,018
Intangible	992	992	992	992	3,968										
SG&A (net)	26,299	24,463	24,708	24,955	100,424	102,433	104,481	106,571	108,703	110,877	113,094	115,356	117,663	120,016	122,417
Total costs & expenses	50,884	56,735	56,940	1,337,509	1,502,068	1,117,435	821,747	760,235	702,078	647,426	581,648	593,105	604,858	697,744	795,826
Operating Income (Loss) EBIT	(43,163)	(47,728)	(47,843)	2,671,679	2,532,945	1,894,895	1,190,707	1,032,646	882,122	739,478	570,573	581,572	592,950	793,317	1,005,480
Oper Margin															
(Loss) or Gain on Securities	(59)	2													
Loss on Partial Debt	(23,645)	(28,294)													
Gain (loss) on derivate liabilities	4,920	1,980													
Loss gain on Fx	(147)	124													
Interest Expense	(6,825)	(8,297)	(8,297)	(8,297)	(31,716)										
Interest Income	19	2													
Other Income expenses - Financial Expenses (net)	(25,737)	(34,483)	50	50	(60,120)										
Pre-tax income	(68,900)	(82,213)	(56,190)	2,663,332	2,456,029	1,894,895	1,190,707	1,032,646	882,122	739,478	570,573	581,572	592,950	793,317	1,005,480
Taxes	(276)	(6,618)	-	-	(6,894)	378,979	297,677	289,141	264,636	244,028	188,289	191,919	195,673	261,795	331,808
Tax Rate	0%	0%	0%	0%	0%	20%	25%	28%	30%	33%	33%	33%	33%	33%	33%
Net Income (loss)	(69,180)	(84,993)	(56,190)	2,663,332	2,462,923	1,515,916	893,030	743,505	617,485	495,450	382,284	389,653	397,276	531,522	673,671
Net Loss attributable to noncontrolling interests	(3,985)	(7,253)	(3,371)	159,800	145,190.50	493,942.29	513,998.32	534,868.72	556,586.53	579,186.18	602,703.46	627,175.64	652,641.48	679,141.34	706,717
Net Gain / Loss to Sorrento	(65,195)	(77,740)	(52,819)	2,503,532	2,307,778.20	673,313	173,635	37,630	(81,123)	(197,690)	(308,345)	(327,143)	(346,739)	(269,869)	1,380,388
Basic EPS	(0.36)	(0.36)	(0.25)	11.71	10.75	6.67	3.93	3.27	2.72	2.18	1.68	1.71	1.75	2.34	3.98
Basic Wght Average Shares Outstanding (thousands)	182,609	216,956	227,173	227,400	213,535	227,400	227,400	227,400	227,400	227,400	227,400	227,400	227,400	227,400	227,400
Fully Diluted Wgtd Avg Shrs outstanding (Thousands)	182,609	216,956	232,173	232,405	216,036	227,400	227,400	227,400	227,400	227,400	227,400	227,400	227,400	227,400	227,400

Source: Dawson James estimates, company reports

Companies mentioned in this report:

Eli Lilly (LLY-Not Rated)  
Gilead (GILD-Not Rated)

Important Disclosures:

**Price Chart:**



Price target and ratings changes over the past three years:

- Initiated – Buy – May 26, 2020 – Price Target \$24.00
- Update – Buy – June 2, 2020 – Price Target \$24.00
- Update – Buy – June 5, 2020 – Price Target \$24.00
- Update – Buy – June 10, 2020 – Price Target \$24.00
- Update – Buy – July 2, 2020 – Price Target \$24.00
- Update – Buy – July 20, 2020 – Price Target \$24.00
- Update – Buy – July 29, 2020 – Price Target \$24.00
- Update – Buy – August 26, 2020 – Price Target \$21.00
- Update – Buy – August 28, 2020 – Price Target \$21.00
- Update – Buy – September 17, 2020 – Price Target \$21.00
- Update – Buy – September 24, 2020 – Price Target \$21.00
- Update – Buy – September 29, 2020 – Price Target \$21.00
- Update – Buy – October 5, 2020 – Price Target \$21.00

Dawson James Securities, Inc. (the "Firm") is a member of the Financial Industry Regulatory Authority ("FINRA") and the Securities Investor Protection Corporation ("SIPC").

The Firm does not make a market in the securities of the subject company(s). The Firm has NOT engaged in investment banking relationships with SRNE in the prior twelve months, as a manager or co-manager of a public offering and has NOT received compensation resulting from those relationships. The Firm may seek compensation for investment banking services in the future from the subject company(s). The Firm has NOT received any other compensation from the subject company(s) in the last 12 months for services unrelated to managing or co-managing of a public offering.

Neither the research analyst(s) whose name appears on this report nor any member of his (their) household is an officer, director, or advisory board member of these companies. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future. As of September 31, 2020, the Firm as a whole did not beneficially own 1% or more of any class of common equity securities of the subject company(s) of this report. The Firm, its officers, directors, analysts, or employees may affect transactions in and have long or short positions in the securities (or options or warrants related to those securities) of the company(s) subject to this report. The Firm may affect transactions as principal or agent in those securities.

Analysts receive no direct compensation in connection with the Firm's investment banking business. All Firm employees, including the analyst(s) responsible for preparing this report, may be eligible to receive non-product or service-specific monetary bonus compensation that is based upon various factors, including total revenues of the Firm and its affiliates as well as a portion of the proceeds from a broad

pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Although the statements in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice.

**Information about valuation methods and risks can be found in the "VALUATION" and "RISK ANALYSIS" sections of this report.**

The securities of the company discussed in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.

**Ratings Definitions:**

- 1) **Buy:** The analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months;
- 2) **Neutral:** The analyst believes the price of the stock is fairly valued for the next 12-18 months;
- 3) **Sell:** The analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies, followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	23	85%	4	17%
Market Perform (Neutral)	4	15%	1	25%
Market Underperform (Sell)	0	0%	0	0%
Total	27	100%	5	19%

**Analyst Certification:**

The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his (their) personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) all Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service-specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.