

## Sorrento Therapeutics (Nasdaq: SRNE)

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### BUY: Project Warp Speed – Developing A COVID Antidote

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*Sorrento's STI-1499 (Antibody) has demonstrated in early data a 100% inhibition of the SARS-CoV-2 virus infection of healthy cells after four days of incubation. Specific binding to S1 subunit of the SARS-CoV-2 Spike protein and complete blockade of its interaction with ACE2 receptor (which is used for viral entry into healthy cells). We see a significant market opportunity in treating frontline workers (doctors, nurses and other mission critical personnel, as well as occupants of military ships at sea) to prevent and treat COVID infection. If we assume pricing below Remdesivir (\$4k) and a million doses equals a \$4 billion opportunity for this potential antidote.*

**Creating the Antidote. 100% Inhibition.** Sorrento examined billions of antibodies and identified approximately a small group that demonstrated the ability to block the S1 protein's interaction with human angiotensin-converting enzyme 2 (ACE2), the receptor used for viral entrance into human cells. The goal is to generate an antibody cocktail against SARS-CoV-2 coronavirus infection. 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 STI-1499 move rapidly to commercialization.

**VOVI-Shield and STI-1499.** This antibody (STI-1499) demonstrated complete blockade of the SARS-CoV-2 virus in early experiments. What was also equally impressive was the low dose, which suggests the antibody "fits" its target extraordinarily well and, as such, can work at a very low dose. This could translate into the ability to scale up rapidly to millions of treatments at a very effective cost of goods. Sorrento plans to develop **STI-1499 as part of this "antibody cocktail," known as COVI-SHIELD. What is the Next Step?** Priority Evaluation / Accelerated Review. The company expects to be in talks with regulators to determine the best pathway to make any potential treatment available as soon as possible.

**The Ability to Manufacture at Scale.** The company also stated that they can produce up to two hundred thousand doses per month. Current plans are to produce a million doses. Management feels it is well within their reach to produce tens of millions of doses in a short period of time to meet the vast projected demand.

**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 large. 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 a fully diluted end-year share count (we assume a capital raise). The conclusion of this method is a \$24.00 price target.

**Risk to our thesis,** include 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				\$5.07
Price Target				\$24.00
<b>Estimates</b>				
	F2020E	F2021E	F2022E	
Expenses (\$000s)	\$ 1,483,671	\$ 1,099,574	\$ 803,535	
1Q March	\$ 50,884	\$ 252,902	\$ 184,813	
2Q June	\$ 50,423	\$ 263,898	\$ 192,848	
3Q September	\$ 562,927	\$ 285,889	\$ 208,919	
4Q December	\$ 819,436	\$ 296,885	\$ 216,955	
	F2020E	F2021E	F2022E	
EPS (diluted)	\$ 12.28	\$ 7.52	\$ 4.45	
1Q March	\$ (0.36)	\$ 1.73	\$ 1.02	
2Q June	\$ (0.26)	\$ 1.81	\$ 1.07	
3Q September	\$ 5.11	\$ 1.96	\$ 1.16	
4Q December	\$ 7.78	\$ 2.03	\$ 1.20	
<b>EBITDA/Share</b>				
	\$12.80	\$9.40	\$5.94	
<b>EV/EBITDA (x)</b>				
	0.4	0.5	0.8	
<b>Stock Data</b>				
52-Week Range	\$1.39	-	\$10.00	
Shares Outstanding (mil.)				202.1
Market Capitalization (mil.)				\$1,025
Enterprise Value (mil.)				\$1,003
Debt to Capital				0%
Book Value/Share				\$2.41
Price/Book				7.2
Average Three Months Trading Volume (K)				3,845
Insider Ownership				20.3%
Institutional Ownership				17.1%
Short interest (mil.)				12.0%
Dividend / Yield				\$0.00/0.0%



**More than COVID.** Sorrento, through Scilex (58% owned), is developing several Non-Opioid Pain Management therapies. Resiniferatoxin is a toxin that ablates afferent nerves. It is being developed for pain associated with knee replacement deferment / Osteoarthritis knee pain and Terminal Cancer Pain. Knee replacement pivotal studies are expected this year. In addition, Scilex is developing Scilex SP-102 (P3 data expected later this year) as an epidural steroid injection for the treatment of sciatica pain, which is as many of us unfortunately know, a blockbuster market.

**Platform Technology.** Sorrento's antibody-centric pipeline leverages its G-MAB library. This includes anti-CD38 targeting I.O. programs for multiple myeloma (early-stage programs) with an innovative autologous CAR-T plus allogeneic DAR-T program.

**Company Description:** Sorrento Therapeutics is both an early stage and clinical stage / commercial biopharma company. The heart of the company is its antibody-discovery platform (G-MAB library) coupled with targeted delivery modalities to generate the next generation of both antibody (such as COVID) and cancer therapeutics. One unique element is the company's chimeric antigen receptor T-cell therapy (CAR-T) and dimeric antigen receptor T-cell therapy (DAR-T) antibody-drug conjugates, as well as bispecific antibody, approaches. The acquisition of Sofusa (July 2018) gave the company an innovative delivery system allowing the delivery of biologics directly into the lymphatic system to potentially achieve improved efficacy and fewer adverse effects than standard parenteral immunotherapy. The company also has a majority owned position in Scilex, which is developing an epidural steroid product for the treatment of sciatica, knee pain, cancer pain, and other non-opioid pain relief indications.

The company also has a cell therapy programs with a focus on CAR-T (adoptive immunotherapy) targeting both solid and liquid tumors. Early data from a Phase 1 trials of the carcinoembryonic antigen (CEA)-directed CAR-T program has been promising. The company treated five patients with stage 4, unresectable adenocarcinoma (four with pancreatic and one with colorectal cancer), and CEA-positive liver metastases with anti-CEA CAR-T. Sorrento (successfully) submitted an Investigational New Drug application for their anti-CD38 CAR-T for the treatment of refractory or relapsed multiple myeloma and plans to commence a human clinical trial for this indication.

Our focus, however, has been on the news that the company has identified several antibodies that appear to successfully block the S1 protein's interaction with human angiotensin-converting enzyme 2 (ACE2), the receptor used for viral entrance into human cells. The goal is to generate an antibody cocktail against SARS-CoV-2 coronavirus infection. As a cocktail, the idea is that the product would remain effective even if virus mutations occur, which would render a single antibody therapy less effective over time.

**Exhibit 1. KOL's Have Identified ACE2 Target**

**Soluble ACE2  
as a rationale  
front-line  
therapy  
for COVID-19**

ESR Connect  
European Society of Radiology

myESR.org

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Source: <https://healthcare-in-europe.com/en/news/seeking-a-covid-19-antidote-the-potential-of-ace2.html>

Exhibit 2. Corporate Structure



Source: Sorrento

Exhibit 3. Catalysts

Core Therapeutic Programs		Key Affiliates / Equity Holdings	
<p><b>sorrento Therapeutics</b></p> <p><b>Immuno-Oncology</b></p>	<ul style="list-style-type: none"> <li>Antibody-centric pipeline leverages Sorrento's proprietary G-MAB™ library</li> <li>Anti-CD38 targeting I-O programs for multiple myeloma                             <ul style="list-style-type: none"> <li>Autologous CAR-T – Phase 1 data read-out in Q4 2019 / Q1 2020</li> <li>Allogeneic DAR-T – IND submission in Q4 2019</li> <li>ADC – IND submission in Q4 2019</li> </ul> </li> </ul>	<p><b>SCILEX®</b></p> <p>58% Ownership</p>	<ul style="list-style-type: none"> <li>Commercial non-opioid pain company with late-stage programs in large markets with high unmet need</li> <li>Recently launched ZTlido® (lidocaine topical system 1.8%)</li> <li>Semnur's SP-102, for sciatica back pain, has blockbuster potential                             <ul style="list-style-type: none"> <li>Fast Track Designation; Pivotal Phase 3 top-line data targeted for 2H 2020</li> </ul> </li> <li>Shareholders include leading global venture capital firms:                             <ul style="list-style-type: none"> <li>VIVO CAPITAL</li> <li>Canaan</li> <li>FRAZIER HEALTHCARE PARTNERS</li> </ul> </li> </ul>
<p><b>sorrento Therapeutics</b></p> <p><b>Non-Opioid Pain Analgesics</b></p>	<ul style="list-style-type: none"> <li>Resiniferatoxin ("RTX"), a toxin that ablates afferent nerves that conduct pain signals while sparing other nerve functions:                             <ul style="list-style-type: none"> <li>Knee replacement deferment: targeting registrational study upon obtaining FDA breakthrough designation</li> <li>Osteoarthritis knee pain: Two Phase 3 pivotal trials to start in Q1 2020</li> <li>Terminal cancer pain: Phase 1 trial to conclude in 2019</li> <li>Residual limb pain: IND submission in Q4 2019 / Q1 2020</li> </ul> </li> </ul>	<p><b>celularity</b></p> <p>Approximately 25% Ownership</p>	<ul style="list-style-type: none"> <li>Cell therapy joint venture seeking to develop "off-the-shelf" allogeneic cell therapy solutions using placenta-derived / cord-blood derived cells</li> <li>Sorrento is the single largest shareholder with approximately 25% ownership</li> <li>Joint venture partners include:                             <ul style="list-style-type: none"> <li>United Therapeutics CORPORATION</li> <li>Celgene</li> </ul> </li> </ul>
		<p><b>ImmuneOncia Therapeutics Inc.</b></p> <p>Approximately 35% Ownership</p>	<ul style="list-style-type: none"> <li>Immuno-oncology joint venture focused on developing and commercializing a number of immune checkpoint antibodies for hematological malignancies and solid tumors</li> <li>Established in 2016 by Yuhan Corporation and Sorrento</li> <li>Concluded Phase 1 PD-L1 mAb trial; Registrational Phase 2 study initiating in 2H 2019</li> </ul>

Source: Sorrento

**Exhibit 4. Resiniferatoxin Timeline**

Platform	Program	Pre-IND	IND	Phase 1/2	Pivotal	NDA	Upcoming Milestones
Non-opioid Pain Management	Knee Replacement Deferment (Potential fast-track)	[Progress bar]			2020		Targeting registrational study upon FDA <b>breakthrough</b> designation
	Knee Osteoarthritis Pain (Lead Program)	[Progress bar]			2020		Phase 1b completed (94 patients); <b>Pivotal</b> trial(s) expected to begin in 2020
	Terminal Cancer Pain (Orphan designation)	[Progress bar]			2020		Phase 1 complete; Registrational <b>orphan drug</b> trial expected to commence in 2020

Source: Sorrento

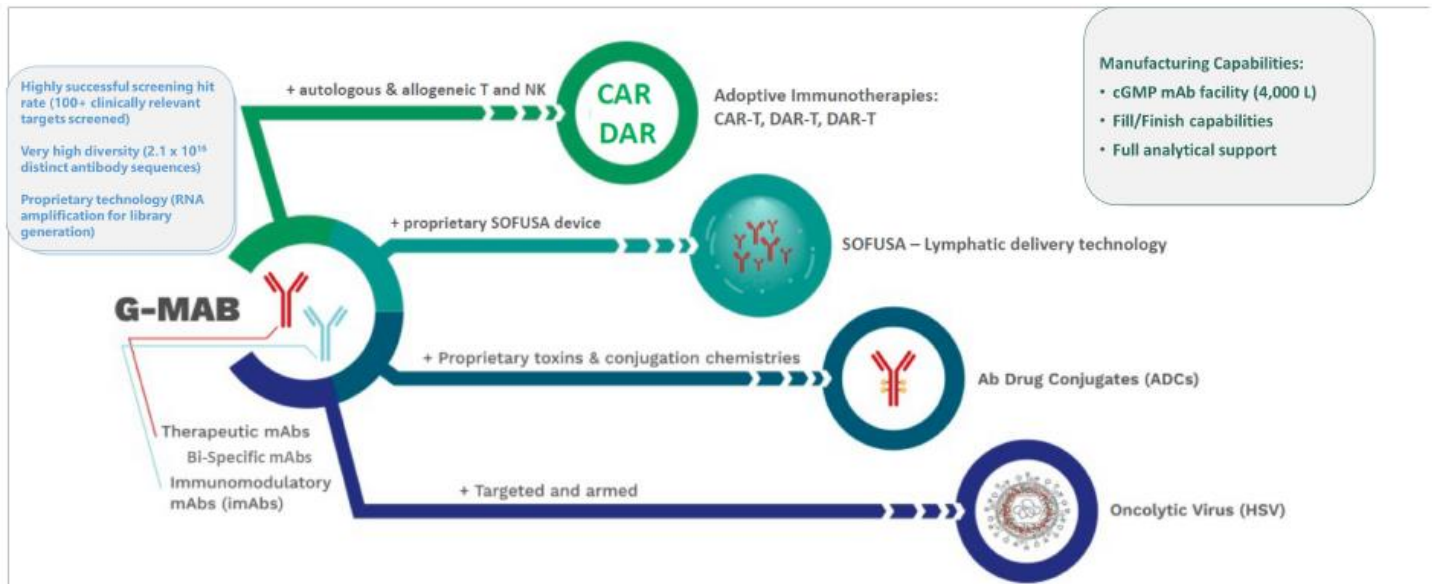
Resiniferatoxin (RTX) is a non-opioid-based toxin that ablates nerves that conduct chronic and inflammatory pain signals while leaving other nerve functions intact; It is being studied for chronic pain treatment. RTX has been granted orphan drug status for the treatment of intractable pain with end-stage cancer. A Phase 1b trial studying tolerance and efficacy of RTX for the control of osteoarthritis knee pain was initiated in late 2018, and intermediate results have shown efficacy with no dose-limiting toxicities. The osteoarthritis trial enrolled the last patient in 1Q20. Clinical data is expected to be available soon after the last patient enrolled completes the day 84 visit (end-point) which may have already occurred. Knee arthritis registrational trials are planned to start later in the 2H20 with an Australia/USA Phase 3 trial, pending meeting with the FDA and receiving clearance to proceed.

**Exhibit 5. Scilex (58% owned) by Sorrento**

Platform	Program	IND	Phase 1	Phase 2	Phase 3 Pivotal	NDA	Approved	Upcoming Milestones	
Non-Opioid Pain Management	ZIido® 1.8% (Postherpetic Neuralgia-PHN)	[Progress bar]							Launched October 2018
	SP-103 (ZIido® 5.4% (3X)) (Low Back Pain)	[Progress bar]							Initiating Phase 2 in 2H 2019
	SP-102 (Lumbar Radicular/Sciatica Pain)	[Progress bar]							Top line pivotal data targeted for 2H 2020

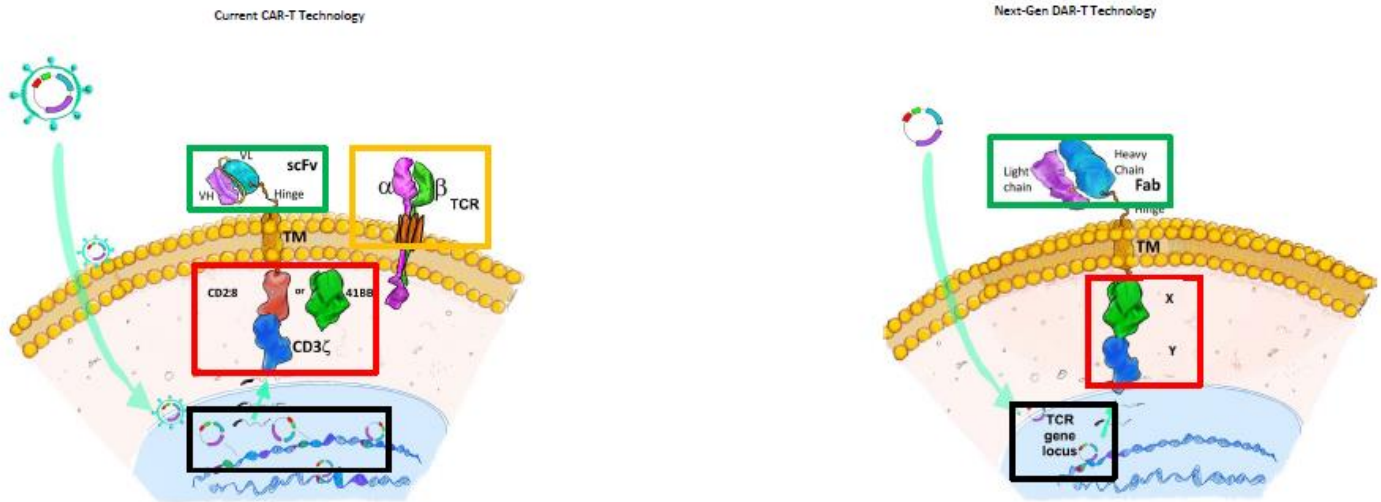
Source: Sorrento

**Exhibit 6. Immune-Oncology Platform**



Source: Sorrento

**Exhibit 7. Autologous CAR-T vs. Allogeneic KOKO DAR-T.** Sorrento is developing the next-generation non-viral, "off-the-shelf" allogeneic DAR-T solutions. Sorrento is working through Celularity, Inc., a joint venture with Celgene, United Therapeutics and others. Celularity focuses on developing cell therapies with placenta-derived and cord blood T cells, which have natural allogeneic "off-the-shelf" characteristics.



Source: Sorrento

**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 8. 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

**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 can be realized once RTX is commercialized.

**Exhibit 9. Sciatica 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%
Parmer 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>		\$ -	\$ -	\$ 51,515	\$ 106,142	\$ 164,021	\$ 211,218	\$ 217,596	\$ 224,168	\$ 307,917	\$ 396,520

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%
Parmer 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>		\$ -	\$ -	\$ 128,788	\$ 265,354	\$ 410,052	\$ 528,044	\$ 543,991	\$ 560,419	\$ 769,792	\$ 991,300

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 FCFE, EPS, and sum-of-the-parts analysis. We use a fully diluted end-year share count and assume multiple raises. The conclusion of this method is a \$24.00 price target.

**Exhibit 10. Free Cash Flow Model.**

Average	\$	24.0
Price Target	\$	25.1
Year		2020

**DCF Valuation Using FCFE (mln):**

units (millions - \$)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	2,547,680	1,910,567	1,206,708	1,048,982	898,800	756,506	587,957	599,320	611,069	811,815	1,024,364
Tax Rate	0%	20%	25%	28%	30%	33%	33%	33%	33%	33%	33%
EBIT(1-t)	2,547,961	1,528,454	905,031	755,267	629,160	506,859	393,931	401,545	409,416	543,916	686,324
- Change in NWC											
Free Cash Flow to Firm (FCFF)	2,547,961	1,528,454	905,031	755,267	629,160	506,859	393,931	401,545	409,416	543,916	686,324
PV of FCFF	2,547,961	1,179,363	538,832	346,965	223,019	138,632	83,136	65,388	51,443	52,734	51,343
Discount Rate	30%										
Long Term Growth Rate	1%										
Terminal Cash Flow	181,315										
Terminal Value YE 2030	13,564										
NPV	5,292,378										
NPV-Debt	182,958										
Shares out (thousands)	203,187	2030									
NPV Per Share	25.1										

Source: Dawson James.

**Exhibit 11. Discounted-EPS Model.**

Current Year	2020
Year of EPS	2022
Earnings Multiple	10
Discount Factor	30%
Selected Year EPS	\$ 4.45
NPV	\$ 26.5

Source: Dawson James estimates

		Discount Rate and Earnings Multiple Varies, Year is Constant					
		2022 EPS					
Earnings Multiple		20%	25%	30%	35%	40%	45%
	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.

**Exhibit 12. 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						\$8.22
COVID 19 ROW *	1%	30%	1	70%	\$1,500	\$5,172
NPV						\$8.22
Sciatica *	1%	30%	3	50%	\$397	\$1,367
NPV						\$0.92
Sciatica ROW *	1%	30%	3	50%	\$991	\$3,418
NPV						\$2.30
Service Revenues	1%	50%	0	50%	\$11	\$23
NPV						\$0.03
DAR-T Platform	1%	90%	5	50%	\$25	\$28
NPV						\$0.00
Net Margin						60%
MM Shrs OS						203
Total						\$20

Source: Dawson James.

**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 13. Income Statement.**

Sorrento Income Statement (\$ '000)															
SRNE	1Q20A	2Q20E	3Q20E	4Q20E	2020E	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
COVID19 USA *			800,000	1,200,000	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 *			800,000	1,200,000	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	2,498	2,523	2,548	10,041	10,142	10,243	10,346	10,449	10,554	10,659	10,766	10,873	10,982	11,092
Revenues	5,248	5,300	5,353	5,407	21,309	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	7,798	1,607,876	2,407,955	4,031,350	3,010,142	2,010,243	1,790,648	1,581,945	1,384,626	1,149,921	1,172,353	1,195,460	1,488,691	1,798,911
<b>Expenses</b>															
COGS	2,439	2,495	514,520	770,546	1,290,000	903,043	603,073	537,194	474,583	415,388	344,976	351,706	358,638	446,607	539,673
% COGS	31.6%	32%	32%	32%	32%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
R&D	21,154	21,366	21,579	21,795	85,894	87,612	89,364	91,151	92,974	94,834	96,730	98,665	100,638	102,651	104,704
Intangible	992	992	992	992	3,968										
SG&A (net)	26,299	26,562	26,828	27,096	106,784	108,920	111,099	113,321	115,587	117,899	120,257	122,662	125,115	127,617	130,170
Total costs & expenses	50,884	50,423	562,927	819,436	1,483,671	1,099,574	803,535	741,666	683,145	628,120	561,963	573,033	584,391	676,876	774,547
Operating Income (Loss) EBIT	(43,163)	(42,625)	1,044,949	1,588,518	2,547,680	1,910,567	1,206,708	1,048,982	898,800	756,506	587,957	599,320	611,069	811,815	1,024,364
Oper Margin															
(Loss) or Gain on Securities	(59)														
Loss on Partial Debt	(23,645)														
Gain (loss) on derivate liabilities	4,920														
Loss gain on Fx	(147)														
Interest Expense	(6,825)	(6,825)	(6,825)	(6,825)	(27,300)										
Interest Income	19														
Other Income expenses - Financial Expenses (net)	(25,737)	50	50	50	(25,587)										
Pre-tax income	(68,900)	(49,500)	1,038,074	1,581,643	2,501,318	1,910,567	1,206,708	1,048,982	898,800	756,506	587,957	599,320	611,069	811,815	1,024,364
Taxes	(276)	-	-	-	(276)	382,113	301,677	293,715	269,640	249,647	194,026	197,776	201,653	267,899	338,040
Tax Rate	0%	0%	0%	0%	0%	20%	25%	28%	30%	33%	33%	33%	33%	33%	33%
Net Income (loss)	(69,180)	(49,500)	1,038,074	1,581,643	2,501,594	1,528,454	905,031	755,267	629,160	506,859	393,931	401,545	409,416	543,916	686,324
Net Loss attributable to noncontrolling interests	(3,985)	(2,970)	62,284	94,899	150,228.07	293,332.08	305,242.54	317,636.61	330,533.93	343,954.93	357,920.88	372,453.90	387,577.03	403,314.21	419,690
Net Gain / Loss to Sorrento	(65,195)	(46,530)	975,790	1,486,745	2,350,809.69	883,577	391,631	263,919	153,919	46,326	(54,594)	(63,265)	(72,326)	15,501	1,106,015
Basic EPS	(0.36)	(0.26)	5.11	7.78	12.28	7.52	4.45	3.72	3.10	2.49	1.94	1.98	2.01	2.68	4.05
Basic Wght Average Shares Outstanding (thousands)	182,609	192,792	202,984	203,187	195,393	203,187	203,187	203,187	203,187	203,187	203,187	203,187	203,187	203,187	203,187
Fully Diluted Wgtd Avg Shrs outstanding (Thousands)	182,609	192,792	207,984	208,192	197,894	203,187	203,187	203,187	203,187	203,187	203,187	203,187	203,187	203,187	203,187

Source: Company Reports and Dawson James \* Ownership &amp; or Risk Adjustment - Revenue source cut by half (50%)



Companies mentioned in this report:

Gilead (GILD-Not Rated)

United Therapeutics (UTHR – Not Rated)

Celgene (CELG-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

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- 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;
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	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	22	88%	3	14%
Market Perform (Neutral)	3	12%	1	33%
Market Underperform (Sell)	0	0%	0	0%
Total	25	100%	4	16%

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