

## Dyadic (DYAI-NASDAQ) – Buy-Rated

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### Sorrento (SRNE-Buy Rated) & Dyadic Working Together

*Dyadic and Sorrento announce the signing of a binding term sheet to enter into a license agreement to develop and commercialize vaccines, therapeutics, and diagnostics for coronaviruses, which includes Dyadic's lead COVID-19 vaccine candidate, DYAI-100, produced using Dyadic's patented C1-cell protein production platform.*

## Investment Highlights

### Deal Terms:

- Sorrento to obtain exclusive rights in North and South America, Europe, major Asian countries (including Greater China and Japan) and certain other countries to utilize Dyadic's C1 technology for the development and commercialization of vaccines, therapeutic antibodies, protein therapeutics, and diagnostics for coronaviruses, including DYAI-100, Dyadic's lead COVID-19 vaccine candidate.
- Dyadic's lead COVID-19 Vaccine, DYAI-100, utilizes the SARS-CoV-2 Spike Protein receptor binding domain (RBD) and has been extensively studied in vitro and in vivo for its induction of high-titer neutralization activities in vaccinated animals against the SARS-CoV-2 virus and its major variants of concern (VoCs).
- MultiValent COVID-19 Vaccine is under development using the RBDs for the VoCs, such as delta, alpha, beta, gamma and lambda, and is designed to cover all known and emerging VoCs.
- Consideration includes a \$10 million upfront payment (\$5 million in cash and \$5 million in Sorrento stock), reimbursement of certain DYAI-100 R&D expenses, with potential for multiple future development milestones and royalty payments.

**Valuation:** If we flip a coin four times, the reality is we have no idea how many times it will be heads vs. tails. The same thing is true in terms of our ability to predict the next partnership or license deal. With that said, if we flip a coin a hundred times, we can expect about half of the tosses to be heads (or tails). For Dyadic, we broadly evaluate the utility of the C1 platform across several market segments such as the Pharma and Biotechnology areas, Biosimilars, Vaccines, and Industrial markets. For this modeling exercise, we apply a +/- 80% discount (or 20% +/- the probability of success) factor to determine the revenue stream. This discount is in addition to our (r) discount rate that we use in our Free Cash Flow to the Firm (FCFF), discounted EPS (dEPS), and Sum of the Parts (SOP) models. For this rate, we select  $r = 15\%$ . Our model uses a fully diluted projected out-year (2030) share count. Our three models (FCFF, dEPS, and SOP) are then equal-weighted, averaged, and rounded to the nearest whole number to derive our 12-month price target of \$6.00.

**Risks include:** Partnership, commercialization, financial, clinical and regulatory, and legal and intellectual property.

 Current Price \$4.16  
 Price Target \$6.00


Source: Dyadic

Stock Data			
52-Week Range	\$3.15	-	\$9.02
Shares Outstanding (mil.)	27.6		
Market Capitalization (mil.)	\$115		
Enterprise Value (mil.)	\$78		
Debt to Capital	0%		
Book Value/Share	\$1.76		
Price/Book	5.2		
Average Three Months Trading Volume (K)	219		
Insider Ownership	30.5%		
Institutional Ownership	19.6%		
Short interest (mil.)	5.4%		
Dividend / Yield	\$0.00/0.0%		



**Valuation.** If we flip a coin four times, the reality is we have no idea how many times it will be heads vs. tails. The same thing is true in terms of our ability to predict the next partnership or license deal Dyadic may announce. With that said, if we flip a coin a hundred times, we can expect about half of the tosses to be heads (or tails). For Dyadic, we broadly evaluate the utility of the C1 platform across multiple market segments. Pharma and Biotechnology, Biosimilars, Vaccines, and Industrial markets. We assume a number of possible deals over the next ten years, in each of the three segments, or 24 possible revenue streams, each with their own milestones and royalties. We know it's unlikely that the company will achieve all 24 deals, and we also believe it's equally unlikely they will have no new deals (given the existing track record). For this modeling exercise, we apply an 80% discount (or 20% probability of success) factor to determine the revenue stream. This discount is in addition to our (r) discount rate that we use in our Free Cash Flow to the Firm (FCFF), discounted EPS (dEPS), and Sum of the Parts (SOP) models. For this rate, we select  $r = 15\%$ . Our model uses a fully diluted projected out-year (2030) share count. Our three models (FCFF, dEPS, and SOP) are then equal-weighted, averaged, and rounded to the nearest whole number to derive our 12-month price target of \$6.00.

### Exhibit 1. Discounted Free Cash Flow Model

Average \$		6.00											
Price Target		7											
Year		2021											
units ('000)		2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT		(8,298)	(9,294)	(10,226)	(2,747)	7,861	16,484	23,514	36,481	43,801	55,894	67,578	85,478
Tax Rate		0%	0%	0%	0%	10%	15%	20%	22%	24%	25%	27%	29%
EBIT (1-t)		(8,298)	(9,294)	(10,226)	(2,747)	7,075	14,011	18,811	28,455	33,289	41,920	49,332	60,689
CapEx		(47,616)	(17,639)	(11,975)	-	-	-	-	-	-	-	-	-
Depreciation		198	331	421	-	-	-	-	-	-	-	-	-
Change in NWC													
FCF		(55,715)	(26,602)	(21,780)	(2,747)	7,075	14,011	18,811	28,455	33,289	41,920	49,332	60,689
PV of FCF		(73,683)	(30,592)	(21,780)	(2,389)	5,349	9,213	10,755	14,147	14,392	15,759	16,127	17,252
Discount Rate		15%											
Long Term Growth Rate		1%											
Terminal Cash Flow		437,830											
Terminal Value YE2027		124,459											
NPV		203,284											
NPV-Debt													
Shares out ('000)		28,585	2030E										
NPV Per Share		7											

Source: Dawson James estimates, company reports

### Exhibit 2. EPS Model

Current Year	2021
Year of EPS	2030
Earnings Multiple	10
Discount Factor	15%
Selected Year EPS	\$ 2.03
NPV	5.76

Discount Rate and Earnings Multiple Varies, Year is Constant							
Earnings Multiple	5.76	5%	10%	15%	20%	25%	30%
	0	0	0	0	0	0	0
5	12.60	8.29	5.56	3.79	2.62	1.84	
10	25.21	16.58	11.12	7.58	5.25	3.69	
15	37.81	24.88	16.67	11.37	7.87	5.53	
20	50.42	33.17	22.23	15.16	10.50	7.38	
25	63.02	41.46	27.79	18.95	13.12	9.22	
30	75.63	49.75	33.35	22.74	15.75	11.06	
35	88.23	58.05	38.91	26.53	18.37	12.91	

Source: Dawson James estimates

**Exhibit 3. Income Statement**

DYAL: Income Statement (\$000)																					
:- YE December 31	2018A	2019A	2020A	1Q21A	2Q21E	3Q21E	4Q21E	2021E	1Q22E	2Q22E	3Q22E	4Q22E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue:																					
Research & Development Revenue	1,295	1,681	1,602	461	392	408	373	1,634	383	400	417	467	1,667	1,700	1,734	1,769	1,804	1,840	1,877	1,914	1,953
Total Product Sales	1,295	1,681	1,602	461	392	408	373	1,634	383	400	417	467	1,667	1,700	1,734	1,769	1,804	1,840	1,877	1,914	1,953
Industrial Milestone Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Industrial Royalty Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	2,100	8,700	11,835	15,620	20,062	24,866	28,842	
Vaccine & Related Milestone Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	3,000	1,500	1,500	4,500	3,000	3,000	4,500	
Vaccine & Related Royalty Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	6,600	11,700	14,205	17,387	23,655	31,519	36,490	
Pharma and Bio Related Milestone Revenues	-	-	-	-	-	-	-	-	690	720	750	840	3,000	4,500	3,000	3,000	7,500	3,000	3,000	4,500	
Pharma and Bio Related Royalty Revenues	-	-	-	-	-	-	-	-	2,536	2,646	2,756	3,087	11,025	14,100	18,705	23,987	29,355	36,019	41,890	47,880	
Total Revenue	1,295	1,681	1,602	461	392	408	373	1,634	3,226	3,366	3,506	3,927	14,025	30,300	43,605	54,527	74,363	85,737	104,276	122,212	149,478
Expenses:																					
Cost of research and development revenue	1,027	1,460	1,425	391	349	363	350	1,453	341	356	371	415	1,482	1,512	1,542	1,573	1,605	1,637	1,670	1,703	
Research & Development	2,102	3,088	3,868	1,808	947	986	204	3,945	926	966	1,006	1,127	4,024	4,105	4,187	4,271	4,356	4,443	4,532	4,623	
Research & Development (related party)	1,216	869	187	-	46	48	98	191	45	47	49	55	195	199	203	207	211	215	220	224	
General & Administrative	4,523	5,520	6,085	1,554	1,490	1,552	1,611	6,206	1,456	1,519	1,583	1,773	6,331	6,457	6,586	6,718	6,852	6,990	7,129	7,272	
Foreign Currency Exchange	21	28	62	28	15	16	4	64	15	16	16	18	65	66	67	69	70	72	73	75	
Total Expenses	8,888	10,964	11,628	3,781	2,846	2,965	2,268	11,860	2,782	2,903	3,024	3,387	12,097	12,339	12,586	12,838	13,095	13,356	13,624	13,896	
Operating Income (Loss)	(7,592)	(9,283)	(10,026)	(3,321)	(2,454)	(2,557)	(1,895)	(10,226)	443	463	482	540	1,928	17,961	31,019	41,689	61,268	72,380	90,652	108,315	
Settlement of Litigation	-	-	285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Interest Income, net	895	985	447	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Other Income	-	-	447	(3,294)	(2,454)	(2,557)	(1,895)	(10,200)	443	463	482	540	1,928	17,961	31,019	41,689	61,268	72,380	90,652	108,315	
Pretax Income	(6,698)	(8,298)	(9,294)	(3,294)	(2,454)	(2,557)	(1,895)	(10,226)	443	463	482	540	1,928	17,961	31,019	41,689	61,268	72,380	90,652	108,315	
Income Tax Benefit (Provision)	1,006	12	31	-	-	-	-	-	-	-	-	-	-	1,796	4,653	8,338	13,479	17,371	22,663		
Tax Rate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	15%	20%	22%	24%	25%		
Gain (Loss) from discontinued operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GAAP Net Income (Loss)	(5,692)	(8,310)	(9,325)	(3,294)	(2,454)	(2,557)	(1,895)	(10,200)	443	463	482	540	1,928	16,165	26,366	33,352	47,789	55,009	67,989		
GAAP EPS	(0.21)	(0.31)	(0.34)	(0.12)	(0.09)	(0.09)	(0.07)	(0.37)	0.02	0.02	0.02	0.02	0.07	0.58	0.94	1.19	1.70	1.95	2.40		
GAAP EPS (Dil)	(0)	(0.31)	(0.34)	(0.12)	(0.09)	(0.08)	(0.06)	(0.36)	0.02	0.02	0.02	0.02	0.07	0.55	0.90	1.14	1.62	1.86	2.29		
Wgt'd Avg Shrs (Bas) - '000s	27,673	27,003	27,472	27,533	27,561	27,588	27,616	27,575	27,644	27,671	27,699	27,727	27,685	27,796	27,907	28,019	28,131	28,244	28,357		
Wgt'd Avg Shrs (Dil) - '000s	27,673	27,003	27,472	27,533	27,561	30,088	30,389	27,575	27,644	27,671	30,199	30,501	27,685	27,796	27,907	28,019	28,131	28,244	28,357		

Source: Dawson James estimates, company reports

Companies related to Dyadic and/or mentioned in this report:

DuPont  
Sanofi  
Syngene  
Biocon  
WuXi  
Sorrento (SRNE) Buy rated

**Important Disclosures:**

**Price Chart:**



Price target and rating changes over the past three years:

Initiated – Buy – October 14, 2019 – Price Target \$14.00  
Update – Buy – November 4, 2019 – Price Target \$14.00  
Update – Buy – November 22, 2019 – Price Target \$14.00  
Update – Buy – January 27, 2020 – Price Target \$14.00  
Update – Buy – February 26, 2020 – Price Target \$14.00  
Update – Buy – April 20, 2020 – Price Target \$14.00  
Update – Buy – June 10, 2020 – Price Target \$14.00  
Update – Buy – July 9, 2020 – Price Target \$14.00  
Price Target Change – Buy – August 25, 2020 – Price Target \$12.00  
Update – Buy – October 23, 2020 – Price Target \$12.00  
Update – Buy – December 4, 2020 – Price Target \$12.00  
Update – Buy – March 18, 2021 – Price Target \$12.00  
Update – Buy – March 22, 2021 – Price Target \$12.00  
Price Target Change – Buy – May 17, 2021 – Price Target \$6.00  
Update – Buy – May 26, 2021 – Price Target \$6.00  
Update – Buy – July 27, 2021 – Price Target \$6.00  
Update – Buy – August 11, 2021 – Price Target \$6.00

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- 2) **Neutral:** The analyst believes the price of the stock is fairly valued for the next 12-18 months;
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	<b>Company Coverage</b>		<b>Investment Banking</b>	
<b>Ratings Distribution</b>	<b># of Companies</b>	<b>% of Total</b>	<b># of Companies</b>	<b>% of Totals</b>
Market Outperform (Buy)	25	71%	4	16%
Market Perform (Neutral)	10	29%	0	0%
Market Underperform (Sell)	0	0%	0	0%
<b>Total</b>	<b>35</b>	<b>100%</b>	<b>4</b>	<b>11%</b>

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