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ProPhase Labs (NASDAQ: PRPH)

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BUY: Testing, Testing & More Testing; All Systems Are Go

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No need to wait for stimulus to pass as the new administration has already announced several new actions to expand testing. ProPhase is perfectly positioned to benefit as the company's second facility starts ramping up capacity.

What new initiatives? 1. The Administration will expand COVID-19 testing for schools and underserved populations. HHS will partner with the Department of Defense (DOD) to make a \$650 million investment to expand testing opportunities for K-8 schools and underserved congregate settings, such as homeless shelters, directly through new coordination "hubs." 2. The Administration will ramp up the domestic manufacturing of testing supplies and raw materials to address testing shortages. HHS and DOD will make an \$815 million investment to increase domestic manufacturing of testing supplies and raw materials, including filter pipette tips, nitrocellulose used in antigen point-of-care tests, and specific injected molded plastics needed to house testing reagents. 3. The Administration, through Centers for Disease Control and Prevention (CDC), plans to increase genomic sequencing of the virus to better prepare for the threat of variants and slow the spread of disease. CDC plans to invest nearly \$200 million to expand genomic sequencing capabilities, including bioinformatics, reporting, and modeling, to increase sequencing three-fold per week.

The COVID Diagnostic Opportunity: We present some basic assumptions in our model on the market size (U.S.) for COVID. Suffice to say: it's a multi-billion-dollar market. As such, even a small piece of the market has the ability to be transformative to a company such as ProPhase. Recognizing the opportunity, the company acquired a CLIA lab (October 2020) capable of processing 1,000 samples in 24 hours (& now expanded to 10k/day). We visited the newest facility in Garden City, which is set to come on-line with the capability to process up to 50,000 samples per day. Please see photos on the pages that follow from our walk-through.

A Shift from Swabs to Saliva-Based RT-PCR Diagnostic: COVID & Beyond. A saliva-based test with a high specificity and sensitivity rate coupled with a quick turnaround is ideal. No one likes nasal testing versus a saliva swab. We view testing as critical towards opening up the economy and the globe. We also see the potential for this testing to move beyond COVID to Flu (validated for both), and other respiratory disorders. Our models, for the moment, do not assume other respiratory disorders.

OTC Business Offsets Expenses. The company's current revenues are mainly from the contract manufacturing of OTC healthcare products (principally cold remedy products) combined with the sale of ProPhase's dietary supplement products. The company has developed strong marketing capabilities as represented by its T.K. Supplements product line of dietary supplements. We see this as a good business and one where the management team, particularly the CEO, has demonstrated the ability to turn around both a falling business and a company. With that said, we see this business as a means to an end, with the end being diagnostics.

Current Price	\$9.50		
Price Target	\$25.00		
Estimates	F2020E	F2021E	F2022E
Revenues (\$000s)	\$ 13,151	\$ 60,865	\$ 86,032
1Q March	\$ 1,888	\$ 10,834	\$ 21,108
2Q June	\$ 3,623	\$ 14,506	\$ 20,741
3Q September	\$ 3,840	\$ 16,292	\$ 21,661
4Q December	\$ 3,800	\$ 19,233	\$ 22,522
	F2020E	F2021E	F2022E
EPS (diluted)	\$ (0.13)	\$ 2.05	\$ 2.97
1Q March	\$ (0.07)	\$ 0.33	\$ 0.73
2Q June	\$ 0.01	\$ 0.48	\$ 0.71
3Q September	\$ (0.04)	\$ 0.56	\$ 0.75
4Q December	\$ (0.04)	\$ 0.68	\$ 0.77
EBITDA/Share	(\$0.13)	\$2.05	\$3.46
EV/EBITDA (x)	-984.3	64.4	38.2
Stock Data			
52-Week Range	\$1.20 - \$16.04		
Shares Outstanding (mil.)	15.2		
Market Capitalization (mil.)	\$144		
Enterprise Value (mil.)	\$132		
Debt to Capital	0%		
Book Value/Share	\$2.86		
Price/Book	-		
Average Three Months Trading Volume (K)	49		
Insider Ownership	18.5%		
Institutional Ownership	3.1%		
Short Interest (mil.)	0.7%		
Dividend / Yield	\$0.00/0.0%		



Valuation: We project detailed revenue assumptions in our model out to 2030. We apply a 70% success probability (30% risk cut) to our revenue estimates. On top of this, we apply a 30% risk rate in our Free Cash Flow to the Firm (FCFF), discounted EPS (dEPS), and Sum-of-the-Parts (SOP) models, which are then equal-weighted and averaged and rounded to the nearest whole number to derive our 12-month projected price target of \$25.00.

Risks to our thesis include: (1) commercial; (2) financial; (3) intellectual property; and (4) OEM and/or manufacturing. We review these risks in the Risk Analysis section of this report.

Exhibit 1. Collection Kit for Saliva Based Sample (left); Workstations (right)



Source: Dawson James

Exhibit 2. Lab Processing – Training Session – 75 Technical Staff with 50,000 daily samples possible.



Source: Dawson James

Exhibit 3. ThermoFisher Sample Prep System (left) and a Processing Station (right). These machines can process a 96 well plate in 22 minutes. Seven machines are operational, with expansion underway to 18.



Source: Dawson James

Exhibit 4. Workstations. Twelve machines are shown. Each machine can process 384 samples in one hour x 12 = 4,608 results.



Source: Dawson James

Our Model Preference – A Population-based model. In our population model, we can easily vary the inputs, such as percent of the population that is tested (e.g., 10%, 20%, 100%, 200%) and the net revenue each test generates for the company (e.g., \$30, \$40, \$50, \$60). We assume 20% of the U.S. population is tested just once annually. We believe this is conservative. Some of us will be tested regularly. For example, many college students have been mandated to weekly testing.

We assume \$50.00 per test in net revenue. This results in 2030E revenues of \$255M. This is when washed through the same operating and valuation models (Free Cash Flow to the Firm or FCFF, discounted EPS or dEPS, and Sum of the Parts [SOP]), all at a 30% discount rate, and recall that the revenue models also have a probability of success factor of 70%, so this is like a double discount rate.

Percent Annual Testing of US Population	Inputs	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
U.S. Population		330,000,000	330,000,000	333,300,000	336,633,000	339,999,330	343,399,323	346,833,317	350,301,650	353,804,666	357,342,713	360,916,140
10% Testing (annual)	20%	66,000,000	66,000,000	66,660,000	67,326,600	67,999,866	68,679,865	69,366,663	70,060,330	70,760,933	71,468,543	72,183,228
Market Share of Testing		0%	2%	3%	5%	6%	7%	8%	9%	10%	10%	10%
No. of Tests		0	1,320,000	1,999,800	3,366,330	4,079,992	4,807,591	5,549,333	6,305,430	7,076,093	7,146,854	7,218,323
Net Margin per test	\$50	\$50	\$51	\$51	\$51	\$51	\$51	\$51	\$51	\$51	\$51	\$51
Annual Operating Income (\$M)		0	67	101	170	206	243	280	318	357	361	365
Risk Adjusted		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Risk Adjusted Operating Income (\$M)		\$0	\$47	\$71	\$119	\$144	\$170	\$196	\$223	\$250	\$253	\$255

Source: Dawson James estimates

20% & \$50.00: The net result of these assumptions is a net present value of \$25.00 per share.

Net Rev. per Test	% Annual Testing						
	10%	20%	30%	40%	50%	100%	200%
\$30	\$15	\$19	\$23	\$27	\$32	\$53	\$95
\$40	\$16	\$22	\$27	\$33	\$39	\$67	\$123
\$50	\$18	\$25	\$32	\$39	\$46	\$81	\$151
\$60	\$19	\$27	\$36	\$44	\$53	\$95	\$179
\$70	\$20	\$30	\$40	\$50	\$60	\$109	\$207

Source: Dawson James estimates

Valuation: While we do believe the percentage of Americans that are likely to be tested could easily reach 50%, especially when we assume that some folks will be tested multiple times, we select the example above, which assumes that 20% of the U.S. population is tested annually, and we assume a higher margin per test of \$50. Our operating model applies a 70% success probability to the revenue assumptions, and the valuation models, free cash flow to the Firm (FCFF), discounted EPS (dEPS), and Sum-of-the-Parts (SOP) models use a 30% discount rate. The result is equal-weighted and averaged and rounded to the nearest whole number.

Exhibit 5. Free Cash Flow Model

Average	\$	25
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Price Target	\$	20
Year		2021

DCF Valuation Using FCF (mln):

units ('000 - Cnd\$)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(1,559)	23,933	40,688	67,799	82,268	97,063	112,194	127,669	143,498	145,796	148,190
Tax Rate	0%	0%	15%	20%	25%	28%	30%	31%	32%	33%	33%
EBIT(1-t)	(1,559)	23,933	34,585	54,239	61,701	69,886	78,536	88,092	97,579	97,683	99,287
CapEx	(2,974)	-	-	-	-	-	-	-	-	-	-
Depreciation	253	-	-	-	-	-	-	-	-	-	-
Change in NWC	-	-	-	-	-	-	-	-	-	-	-
FCF	(4,280)	23,933	34,585	54,239	61,701	69,886	78,536	88,092	97,579	97,683	99,287
PV of FCF	(5,564)	23,933	26,604	32,094	28,084	24,469	21,152	18,251	15,551	11,975	9,363
Discount Rate	30%										
Long Term Growth Rate	1%										
Terminal Cash Flow	345,793.12										
Terminal Value YE2030	32,608										
NPV	238,518										
NPV-Debt	10										
Shares out (thousands)	11,851	2030E									
NPV Per Share	\$ 20										

Source: Dawson James estimates

Exhibit 6. Discounted EPS Model

Current Year	2021
Year of EPS	2030
Earnings Multiple	30
Discount Factor	30%
Selected Year EPS	\$ 8.38
NPV	\$ 24

Discount Rate and Earnings Multiple Varies, Year is Constant							
		2030 EPS					
Earnings Multiple		5%	10%	15%	20%	25%	30%
	2	\$10.80	\$7.11	\$4.76	\$3.25	\$2.25	\$ 1.58
	5	\$27.00	\$17.76	\$11.91	\$8.12	\$5.62	\$ 3.95
	10	\$54.00	\$35.53	\$23.81	\$16.24	\$11.24	\$ 7.90
	15	\$81.00	\$53.29	\$35.72	\$24.35	\$16.87	\$ 11.85
	20	\$108.00	\$71.06	\$47.63	\$32.47	\$22.49	\$ 15.80
	25	\$135.00	\$88.82	\$59.53	\$40.59	\$28.11	\$ 19.75
	30	\$162.00	\$106.58	\$71.44	\$48.71	\$33.73	\$ 23.70
	35	\$189.00	\$124.35	\$83.35	\$56.83	\$39.35	\$ 27.65

Source: Dawson James estimates

Exhibit 7. Sum-of-the-Parts Model

Sum of the Parts	LT Gr	Discount Rate	Yrs. to Mkt	% Success	Peak Sales MM's	Term Val
OTC	1%	30%	0	100%	\$28	\$98
NPV						\$4.13
COVID	1%	30%	1	70%	\$329	\$1,133
NPV						\$25.73
Net Margin						50%
MM Shrs OS						12
Total						\$30

Source: Dawson James estimates

Risk Analysis

Commercial risk. The focus of the company is on successfully developing its products and bringing them to the market. Competition may be intense from external players as well as customers who choose to “build it themselves.”

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

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 parties' patents.

Regulatory Risk. Diagnostic testing is regulated by the government. There can be no assurances that ProPhase’s process will not be interrupted as a result of regulatory requirements.

OEM and/or manufacturing risk. Original Equipment Manufacturers (OEMs) may decide to make products themselves, and, as such, terminate production contracts before completion, creating revenue shortfalls. Manufacturing risks include the ability to produce and do so in a competitive, timely, and efficient way.

Exhibit 8. Income Statement

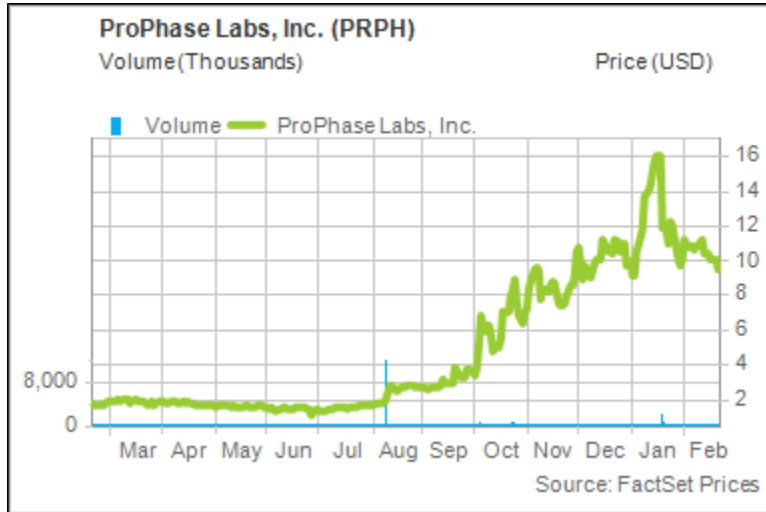
PRPH., Inc. Income Statement (\$000)																			
YE Dec. 31	1Q20A	2Q20A	3Q20A	4Q20E	2020E	1Q21E	2Q21E	3Q21E	4Q21E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue (\$000)																			
OTC Consumer Healthcare Products	1,888	3,623	3,840	3,800	13,151	3,835	2,841	3,693	3,835	14,203	15,339	16,566	17,892	19,323	20,869	22,539	24,342	26,289	28,392
Other Business																			
COVID & Flu Diagnostics						6,999	11,666	12,599	15,398	46,662	70,693	119,000	144,228	169,948	196,169	222,897	250,140	252,641	255,168
Total Revenues	1,888	3,623	3,840	3,800	13,151	10,834	14,506	16,292	19,233	60,865	86,032	135,566	162,120	189,271	217,038	245,435	274,481	278,930	283,560
Expenses																			
COGS	1,473	2,344	2,798	2,660	9,275	5,417	7,253	8,146	9,617	30,433	38,715	61,005	72,954	85,172	97,667	110,446	123,517	125,519	127,602
% COGS	78%	65%	73%	70%	71%	50%	50%	50%	50%	50%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Gross Profit	415	1,279	1,042	1,000	3,736	5,417	7,253	8,146	9,617	30,433	47,318	74,561	89,166	104,099	119,371	134,989	150,965	153,412	155,958
Sales (Advertising & Marketing) expense	170	125	253	250	798	240	250	250	260	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195
General and administrative	998	1,030	1,299	1,100	4,427	1,200	1,250	1,250	1,300	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975
Research & Development	59	65	57	60	241	120	125	125	130	500	510	520	531	541	552	563	574	586	598
Total expenses	1,227	1,220	1,609	1,410	5,466	1,560	1,625	1,625	1,690	6,500	6,630	6,763	6,898	7,036	7,177	7,320	7,466	7,616	7,768
Operating Profit	(812)	59	(567)	(410)	(1,730)	3,857	5,628	6,521	7,927	23,933	40,688	67,799	82,268	97,063	112,194	127,669	143,498	145,796	148,190
Oper Margin																			
Unrealized gain on debt securities	11	11	39		61					-	-	-	-	-	-	-	-	-	-
Interest expense	3	(5)	(41)		(43)					-	-	-	-	-	-	-	-	-	-
Income discontinued ops			161		161					-	-	-	-	-	-	-	-	-	-
Other (loss)			(8)		(8)					-	-	-	-	-	-	-	-	-	-
Pre-tax income	(798)	65	(416)	(410)	(1,559)	3,857	5,628	6,521	7,927	23,933	40,688	67,799	82,268	97,063	112,194	127,669	143,498	145,796	148,190
Pretax Margin																			
Income Tax (Benefit)	-										6,103	13,560	20,567	27,178	33,658	39,578	45,919	48,113	48,903
Tax Rate											15%	20%	25%	28%	30%	31%	32%	33%	33%
GAAP Net Income	(798)	65	(416)	(410)	(1,559)	3,857	5,628	6,521	7,927	23,933	34,585	54,239	61,701	69,886	78,536	88,092	97,579	97,683	99,287
GAAP-EPS	(0.07)	0.01	(0.04)	(0.04)	(0.13)	0.33	0.48	0.56	0.68	2.05	2.97	4.64	5.27	5.96	6.68	7.48	8.27	8.26	8.38
Non GAAP EPS (dil)	(0.07)	0.01	(0.04)	(0.04)	(0.13)	0.33	0.48	0.56	0.68	2.05	2.97	4.64	5.27	5.96	6.68	7.48	8.27	8.26	8.38
Wgtd Avg Shrs (Bas) - '000s	11,582	11,592	11,604	11,615	11,615	11,638	11,662	11,685	11,708	11,673	11,767	11,861	11,957	12,053	12,149	12,247	12,345	12,444	12,544
Wgtd Avg Shrs (Dil) - '000s	11,582	11,618	11,604	11,615	11,615	11,605	11,628	11,652	11,675	11,640	11,663	11,687	11,710	11,733	11,757	11,780	11,804	11,828	11,851

Source: Dawson James estimates, company reports

Companies mentioned in this report:

Important Disclosures:

Price Chart:



Price target and ratings changes over the past three years:

Initiated – Buy – January 20, 2021 – Price Target \$25.00

Update – Buy – February 1, 2021 – Price Target \$25.00

Update – Buy – February 22, 2021 – Price Target \$25.00

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Market Perform (Neutral)	8	28%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	29	100%	6	21%

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