

12 Jul 2022 11:36:01 ET | 37 pages

# Prenetics (PRE.N)

## Initiate at Buy (1H): From Covid to a Wider Portfolio; Personalized Healthcare Testing for Health-conscious Consumers

### CITI'S TAKE

HK-based Prenetics offers a wide portfolio of personalized healthcare tests including DTC-GT, cancer screening, and Covid-19 testing. The latter is the company's near-term driver (contributing 78% / 94% of revenue and 80% / 93% profits in 2020/2021), with good margins and stable cash flows that can help fuel Prenetics' expansion into new businesses. We expect long-term growth will be driven by personalized healthcare test products, along with other products in its pipeline or from future M&A. Prenetics should be a beneficiary of increased healthcare testing demand and health consciousness amongst consumers. We initiate coverage at Buy / High Risk.

**A leading Covid-19 testing player in HK** — As Covid-19 variants have continued to spread, Covid-19 testing is still in high demand in many regions. At the same time, demand globally remains robust given variant trends plus travel growth and related testing requirements. Prenetics differentiates with exclusive testing services at airports and quarantine hotels, supported by edges on timeliness and reliability of service, supporting higher prices vs. peers that in turn carry higher margins. While Covid-19 testing demand may ultimately fade over time, it near-term remains a solid cash cow biz that should benefit from travel-related testing demand amid reopening, helping unlock new businesses in the future.

**Well-positioned amid growing consumer interest in personalized health testing** — Prenetics is positioned to capture emerging healthcare testing opportunities, including from DTC-GT; its CircleDNA (well accepted in HK & UK) stands out with its edge on data analysis supported by whole exome sequencing technology, which can read out more folds of data than peers. We expect Prenetics would deliver a 3-year 26% CAGR growth to 2024E in its Prevention segment, by launching new products from pipeline (e.g. Circle Medical), entering into cancer screening and IVD.

**SPAC merger** — Prenetics listed via a merger with Nasdaq-listed special purpose acquisition company (SPAC) Artisan Acquisition Corp. in May 2022.

**US\$8.10 target price** — We apply 3x P/S 2023E, at parity with the industry average.

**Key risks** — 1) Fierce competition; 2) high reliance on Covid-19 testing related revenue; 3) regulation; 4) privacy violation risks; 5) challenges in expanding via M&A; 6) lack of profitability; 7) shareholder lock-up expirations in November 2022.

### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Dec	(US\$M)	(US\$)	(%)	(x)	(x)	(%)	(%)
2020A	-2	-0.15	90.6	na	1.7	-8.1	0.0
2021A	-174	-1.57	na	-2.6	2.0	-138.7	0.0
2022E	-18	-0.17	89.5	na	2.2	-8.7	0.0
2023E	-58	-0.52	na	-7.7	3.1	-33.7	0.0
2024E	-48	-0.43	16.9	-9.3	4.7	-40.4	0.0

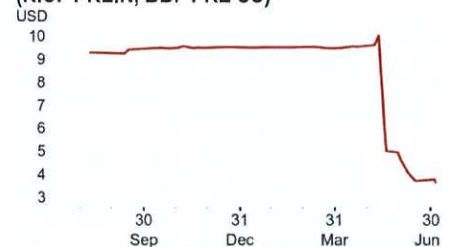
Source: Powered by dataCentral

### Buy / High Risk

Price (11 Jul 22 00:00)	US\$4.04
Target price	US\$8.10
Expected share price return	100.5%
Expected dividend yield	0.0%
Expected total return	100.5%
Market Cap	US\$898M

### Price Performance

(RIC: PRE.N, BB: PRE US)



### Zoe Bian <sup>AC</sup>

+852-2501-2752  
zoe.bian@citi.com

John Yung, CFA  
+852-2501-2790  
john.yung@citi.com

David Shang  
david.shang@citi.com

Chu Wang

Eva Zhao, CFA

### See Appendix A-1 for Analyst Certification, Important Disclosures and Research Analyst Affiliations.

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Certain products (not inconsistent with the author's published research) are available only on Citi's portals.

PRE.N: Fiscal year end 31-Dec						Price: US\$4.04; TP: US\$8.10; Market Cap: US\$898m; Recomm: Buy/High Risk					
Profit & Loss (US\$m)	2020	2021	2022E	2023E	2024E	Valuation ratios	2020	2021	2022E	2023E	2024E
Sales revenue	65.2	275.9	311.7	301.1	281.0	PE (x)	-27.4	-2.6	-24.5	-7.7	-9.3
Cost of sales	-38.8	-169.7	-192.0	-189.4	-177.0	PB (x)	1.7	2.0	2.2	3.1	4.7
Gross profit	26.3	106.1	119.7	111.7	104.0	EV/EBITDA (x)	na	na	53.0	-28.6	-41.5
Gross Margin (%)	40.4	38.5	38.4	37.1	37.0	FCF yield (%)	-10.8	1.1	-8.0	-15.2	-12.3
<b>EBITDA (Adj)</b>	<b>1.4</b>	<b>-2.9</b>	<b>14.2</b>	<b>-28.3</b>	<b>-21.0</b>	Dividend yield (%)	na	na	na	na	na
EBITDA Margin (Adj) (%)	2.2	-1.0	4.6	-9.4	-7.5	Payout ratio (%)	0	0	0	0	0
Depreciation	-1.3	-4.3	-10.4	-12.2	-11.0	ROE (%)	-8.1	-138.7	-8.7	-33.7	-40.4
Amortisation	-1.1	-3.1	-11.9	-7.4	-4.5	<b>Cashflow (US\$m)</b>	<b>2020</b>	<b>2021</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>EBIT (Adj)</b>	<b>-1.0</b>	<b>-10.2</b>	<b>-8.1</b>	<b>-47.8</b>	<b>-36.5</b>	EBITDA	1.4	-2.9	14.2	-28.3	-21.0
EBIT Margin (Adj) (%)	-1.5	-3.7	-2.6	-15.9	-13.0	Working capital	-7.8	-6.6	-27.4	-19.3	-15.4
Net interest	-0.1	-5.2	-0.2	-0.2	-1.7	Other	3.5	22.9	-10.0	-10.0	-10.0
Associates	0	0	0	0	0	<b>Operating cashflow</b>	<b>-2.9</b>	<b>13.4</b>	<b>-23.1</b>	<b>-57.6</b>	<b>-46.4</b>
Non-Op/Except/Other Adj	-2.8	-154.8	-10.0	-10.0	-10.0	Capex	-2.9	-8.5	-12.6	-10.7	-8.6
<b>Pre-tax profit</b>	<b>-3.9</b>	<b>-170.3</b>	<b>-18.3</b>	<b>-58.1</b>	<b>-48.2</b>	Net acq/disposals	-3.1	-12.2	-1.6	-1.5	-1.4
Tax	1.9	-3.7	0	0	0	Other	0.0	-1.3	0	0	0
Extraord./Min.Int./Pref.div.	0.0	0.0	0	0	0	<b>Investing cashflow</b>	<b>-6.0</b>	<b>-22.0</b>	<b>-14.2</b>	<b>-12.2</b>	<b>-10.0</b>
<b>Reported net profit</b>	<b>-1.9</b>	<b>-174.0</b>	<b>-18.3</b>	<b>-58.1</b>	<b>-48.2</b>	Dividends paid	0	0	0	0	0
Net Margin (%)	-3.0	-63.1	-5.9	-19.3	-17.2	<b>Financing cashflow</b>	<b>11.8</b>	<b>29.3</b>	<b>-0.2</b>	<b>-0.2</b>	<b>-1.7</b>
Core NPAT	-1.9	-174.0	-18.3	-58.1	-48.2	<b>Net change in cash</b>	<b>3.0</b>	<b>20.8</b>	<b>-37.5</b>	<b>-70.0</b>	<b>-58.0</b>
<b>Per share data</b>	<b>2020</b>	<b>2021</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>Free cashflow to s/holders</b>	<b>-5.7</b>	<b>4.9</b>	<b>-35.7</b>	<b>-68.3</b>	<b>-54.9</b>
Reported EPS (\$)	-0.15	-1.57	-0.17	-0.52	-0.43						
Core EPS (\$)	-0.15	-1.57	-0.17	-0.52	-0.43						
DPS (\$)	0	0	0	0	0						
CFPS (\$)	-0.22	0.12	-0.21	-0.52	-0.42						
FCFPS (\$)	-0.44	0.04	-0.32	-0.62	-0.50						
BVPS (\$)	2.36	1.98	1.82	1.29	0.86						
Wtd avg ord shares (m)	13	111	111	111	111						
Wtd avg diluted shares (m)	13	111	111	111	111						
<b>Growth rates</b>	<b>2020</b>	<b>2021</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>						
Sales revenue (%)	605.9	323.2	13.0	-3.4	-6.7						
EBIT (Adj) (%)	95.2	-926.8	20.7	-490.2	23.6						
Core NPAT (%)	90.4	na	89.5	-216.9	16.9						
Core EPS (%)	90.6	-965.1	89.5	-216.9	16.9						
<b>Balance Sheet (US\$m)</b>	<b>2020</b>	<b>2021</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>						
Cash & cash equiv.	14.5	179.8	142.3	72.3	64.2						
Accounts receivables	23.0	47.0	68.7	81.5	90.1						
Inventory	4.5	6.8	10.8	13.5	15.4						
Net fixed & other tangibles	6.8	14.0	16.2	14.7	12.3						
Goodwill & intangibles	28.1	27.8	17.4	11.5	8.4						
Financial & other assets	2.0	8.3	9.8	12.5	14.5						
<b>Total assets</b>	<b>78.9</b>	<b>283.8</b>	<b>265.3</b>	<b>205.9</b>	<b>204.9</b>						
Accounts payable	13.4	10.0	9.6	9.5	8.9						
Short-term debt	16.2	1.7	1.7	1.7	51.7						
Long-term debt	0.8	16.4	16.4	16.4	16.4						
Provisions & other liab	17.4	36.0	36.2	35.0	32.8						
<b>Total liabilities</b>	<b>47.9</b>	<b>64.1</b>	<b>63.9</b>	<b>62.6</b>	<b>109.8</b>						
Shareholders' equity	31.1	219.8	201.5	143.4	95.2						
Minority interests	-0.1	-0.1	-0.1	-0.1	-0.1						
<b>Total equity</b>	<b>31.0</b>	<b>219.7</b>	<b>201.4</b>	<b>143.3</b>	<b>95.1</b>						
<b>Net debt (Adj)</b>	<b>2.5</b>	<b>-161.7</b>	<b>-124.2</b>	<b>-54.2</b>	<b>3.9</b>						
Net debt to equity (Adj) (%)	8.1	-73.6	-61.7	-37.8	4.1						

For definitions of the items in this table, please click [here](#).

# Contents

<b>Investment Thesis</b>	<b>5</b>
#1: Well-positioned amid growing personalized healthcare test demand	5
#2: A leading Covid-19 testing player in HK	8
<b>Company Overview</b>	<b>11</b>
Background & business model	11
Core products	12
Pipeline	13
SPAC merger	14
Shareholder structure	14
Free-float and lock-up provisions	15
<b>Industry Overview</b>	<b>16</b>
Prevention	16
Diagnostics	17
Personalized care	18
<b>Financials</b>	<b>19</b>
Revenue	19
Costs and gross profits	19
Expenses	20
Financial statements	21
<b>Valuation</b>	<b>24</b>
P/S-based target price of US\$8.10	24
Key comps valuations	24
DCF cross-check	25
<b>Risks</b>	<b>26</b>
<b>Bull/Bear: Prenetics (PRE.N)</b>	<b>27</b>
<b>Prenetics</b>	<b>28</b>
Company description	28
Investment strategy	28
Valuation	28
Risks	28
<b>23andMe Holding Co</b>	<b>28</b>
Valuation	28
Risks	29
<b>Exact Sciences Corporation</b>	<b>29</b>
Valuation	30
Risks	30
<b>Personalis, Inc.</b>	<b>30</b>
Valuation	30
Risks	30
<b>Appendix A-1</b>	<b>31</b>



# Investment Thesis

## #1: Well-positioned amid growing personalized healthcare test demand

### Overview

Prenetics offers accessible and affordable comprehensive testing services covering three pillars – prevention, diagnostics, and personalized care. With a total addressable market of increasingly health-conscious consumers who display increasing willingness to pay for such services, the company targets to be a platform provider with a wide range of products to enable its customers to proactively prevent and diagnose potential diseases.

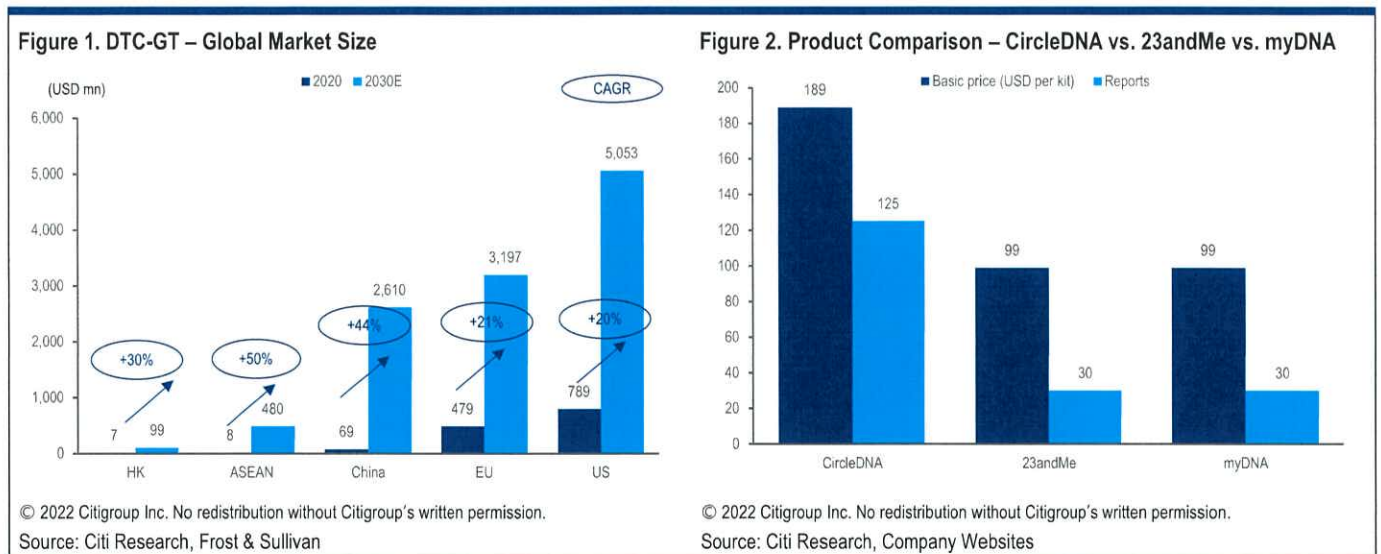
Its services include CircleDNA (launched in 2019), Covid testing (launched in 2020), Circle HealthPod (launched in 2021), and ColoClear (launched in 2022). The launched products help Prenetics capture emerging opportunities from Direct-to-Consumer Gene Testing (DTC-GT), Covid-19 testing, POCT diagnostics, cancer screening and others.

### Differentiated pricing strategy backed by data analysis edge

According to Frost & Sullivan, the global DTC molecular testing service market size reached ~US\$1.4bn in 2020, and is forecast to exceed US\$11bn in 2030E, within which the US, EU and China market are expected to grow over 20% CAGR to US\$3~5 billion. In the global DTC-GT market, there are currently more than 10 major players, offering DNA tests ranging from US\$99 to US\$189 per kit.

As a late-mover, and charging a higher price, Prenetics launched CircleDNA in 2019 priced at US\$189 per kit, comparing to 23andMe's product launched in 2007 and priced at US\$99. Prenetics has recorded >140k test kits sales since it was launched. CircleDNA stands out with its edge on data analysis supported by whole exome sequencing technology, which can read out more folds of data than peers. 23andMe can only read out 30+ trait reports, while CircleDNA can read out 125+ reports with more detailed diagnostics.

Consistent with the high pricing strategy, CircleDNA focuses on the HK and EU markets, where customers tend to be of higher income and willing to pay higher prices for better service. This strategy seeks to avoid head-to-head competition with 23andMe in the US and Mega Genomics in China, save inefficient marketing expenses, and contribute a higher operating margin – although the targeted population and total addressable market for the higher-pricing strategy may be more limited.

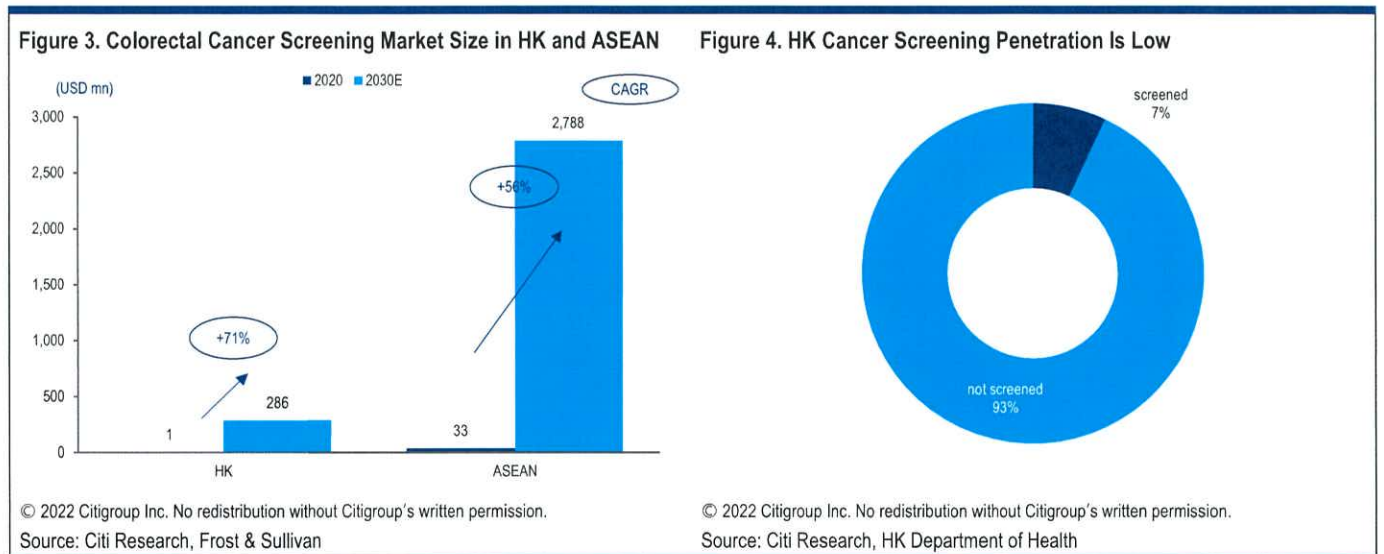


### Wide portfolio and pipeline in cancer screening and IVD

Besides basic DNA testing, demand for cancer screening is surging. As cancer remains a disease with significant unmet medical needs, it is widely known among consumers that delays in cancer diagnosis usually lead to significantly higher treatment costs and higher mortality rates. Early risk assessment and early detection generally allow for options ranging from lifestyle changes and health management to medication and surgical intervention. Pre-cancerous lesions identified by cancer screening can usually be surgically removed, thereby preventing malignant growth.

Among all cancers, colorectal cancer is the most common cancer in HK, and is also the second most common cause of cancer death after lung cancer in HK. In 2019, there were 5,556 newly diagnosed colorectal cancer cases, accounting for 15.8% of new cancer cases, and colorectal cancer led to 2,174 deaths, accounting for 14.6% of all cancer deaths.

Prenetics entered the colorectal cancer screening market by cooperating with New Horizon Health (6606.HK) with exclusive rights to commercialize ColoClear in HK, Macau and the Philippines. This cooperation allows Prenetics to save on high R&D costs, while expand its product portfolio with 50% take rates on ColoClear sales.



Prenetics has developed a pipeline in In-Vitro-Diagnostic (IVD) with Circle Snapshot and Circle Medical. Circle Snapshot is an off-the-shelf at-home blood test to keep users regularly and frequently updated on their latest health condition. Circle Medical is designed to identify causal genetic mutations for patients with certain symptoms for medical professionals. Furthermore, Prenetics targets to launch personalized care products such as Circle One and F1x to tailor the plan based on customers' genetic variations, e.g. personalized nutrition, hair loss and others.

### Proven M&A ability to fuel future growth

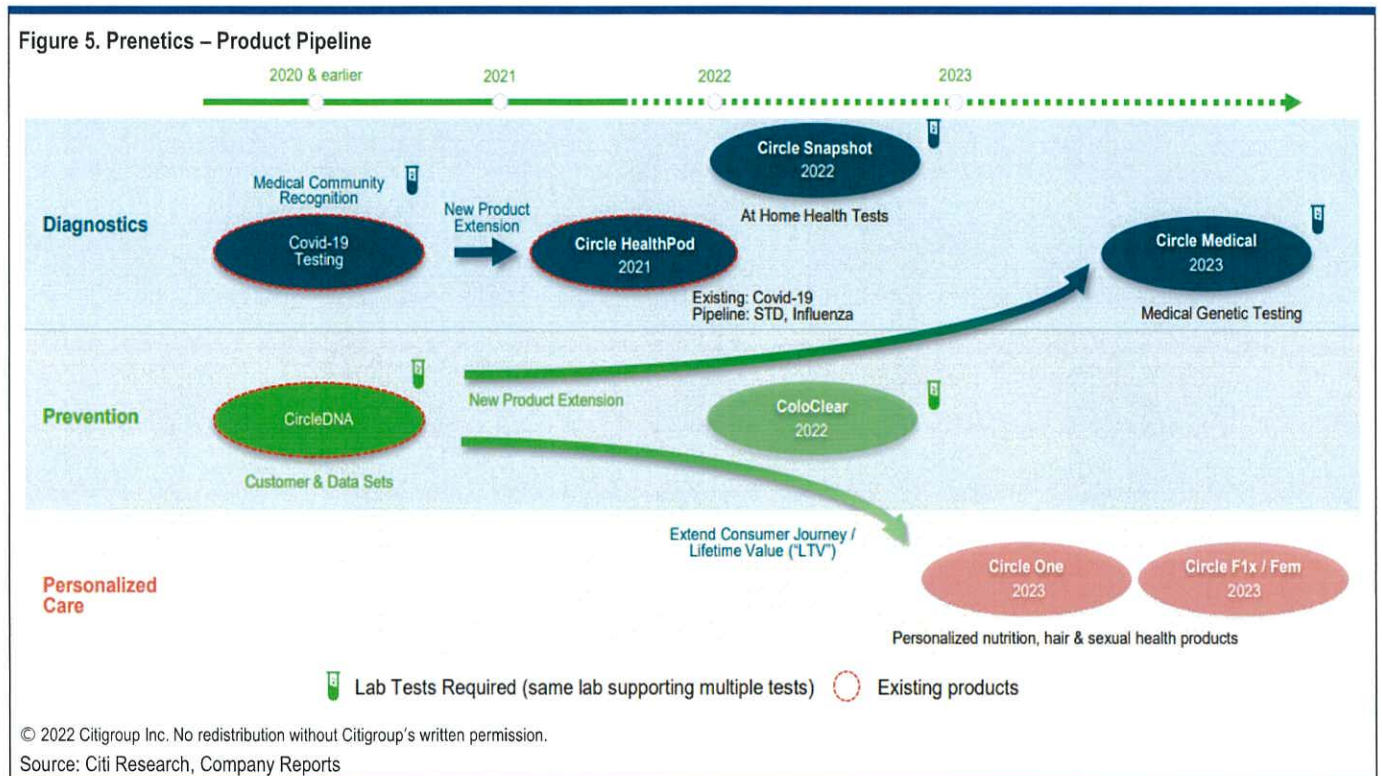
The rapidly evolving consumer healthcare industry provides the potential for opportunities in expansion and extension via a buy & build strategy. Prenetics is experienced at leveraging such strategies by acquiring or cooperating with peers.

Historically, Prenetics successfully expanded its footprint by acquisition:

- The acquisition of DNAFit in 2018 provided Prenetics with the opportunity to enter the UK market. Currently, the UK business contributes roughly half the company's revenue.
- The acquisition of Oxsed in 2020 helped Prenetics obtain nucleic acid amplification technology which is the technological building block for Circle HealthPod.

Prenetics management plans to enter new markets and obtain new technology by acquisition to help fuel future growth.





## #2: A leading Covid-19 testing player in HK

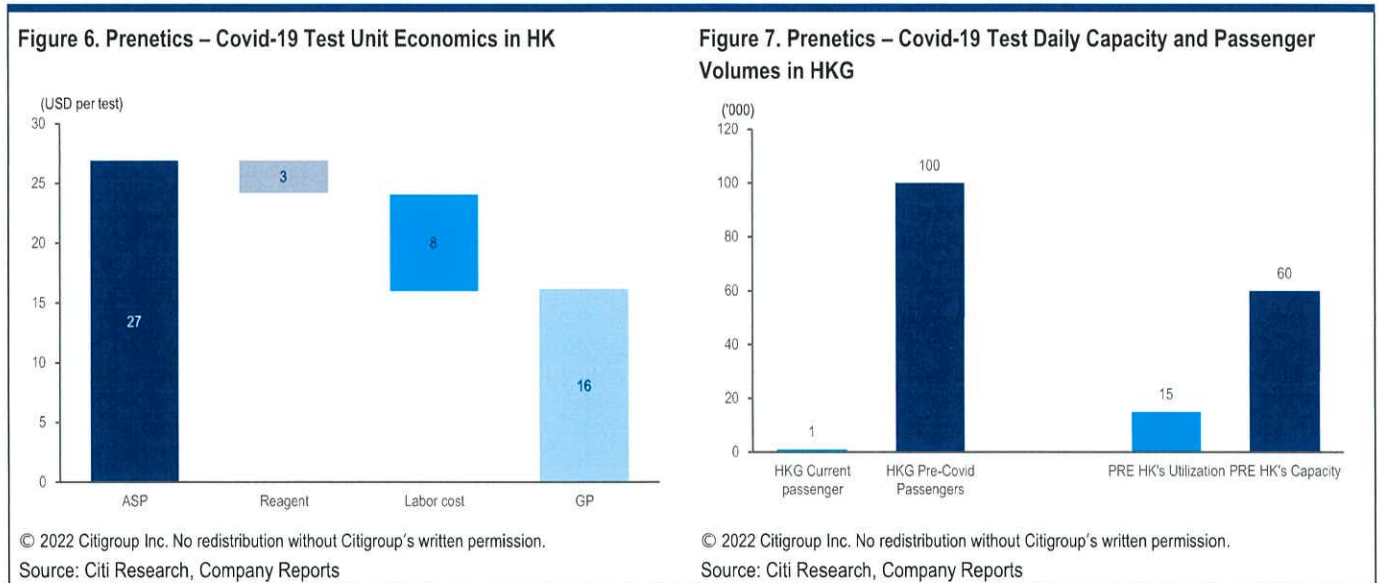
As Covid-19 variants have continued to spread, Covid-19 testing is still in high demand for some regions including HK and mainland China. At the same time, testing demand globally also remains robust given travel reopening and related testing requirements.

Prenetics offer testing services at easily accessible nodes such as community test centers, airports, hotels and other place in both HK and the UK. The company differentiates itself with exclusive testing services at airports and quarantine hotels, supported by edges on timeliness and reliability of service, thus supporting higher prices than peers, which in turn carry higher margins. In HK, Prenetics offers Covid testing services at the community testing centers, airports, quarantine hotels, and other high-risk locations. In the UK, Prenetics has been selected as the sole provider to the Football Association Premier League since the resumption of the 2019/2020 season.

Covid-19 testing is an attractive business in HK given its high margin guaranteed by the government. Prenetics can achieve ~40% blended GPM from Covid-19 testing, breaking down as: UK <40% GPM and HK ~50-70%. Labor/reagent expense accounts for ~30% / 10% COGS, explaining relatively low labor cost results in higher margin in HK.

Prenetics has readiness for larger test volumes from reopening given its current capacity at 60k tests per day compares with a utilization ratio at only 20-25%. Comparing to the daily passenger volume at 100K pre-Covid, current daily arrival passengers at HK international Airport are at only 1k under current strict travel regulations. In 2021, arrival testing accounted for ~55% of total Covid-19 testing

revenue for Prenetics, increasing from 2% in 2020. Prenetics is expected to be one of the first beneficiaries from HK reopening trends with its best position in HK Airport, and presences in major cities such as London Heathrow Airport, Manchester Airport, London Stansted Airport, London City Airport and East Midlands Airport.

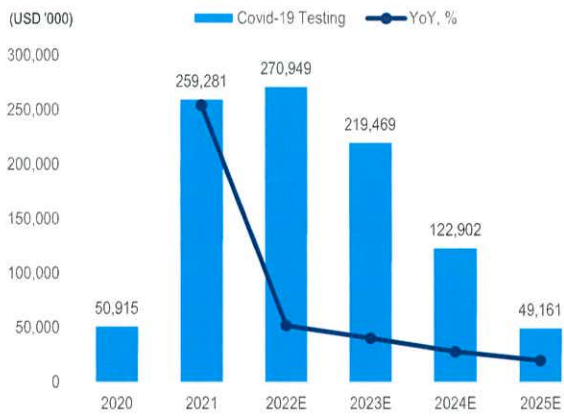


In addition to its community testing services, Prenetics has launched a home-and-professional-use Covid-19 test product, HealthPod, priced at HK\$1,000 per set. HealthPod has already attracted attention from various business organizations and medical service providers that plan to enhance public access to diagnostic testing services. In August 2021, New World Development pre-ordered 10,000 devices and 50,000 capsules to be utilized across its extensive ecosystem of retail malls, office buildings, residential developments, and art & cultural facilities.

Although Covid-19 related revenue may wane over time if the pandemic fades, we expect this cash cow business to remain robust in the near term and generate cash flow for Prenetics to expand into new business. Supported by strong 1Q22 results, we expect the Covid-19 test revenue will slightly increase in 2022E, before turning down in 2023E, with main contributions from higher demand on transit, quarantine and recovering international travel. If the HK government adds more quarantine hotels, it may stimulate more transit or travel demand, and hence more Covid-19 test demand.

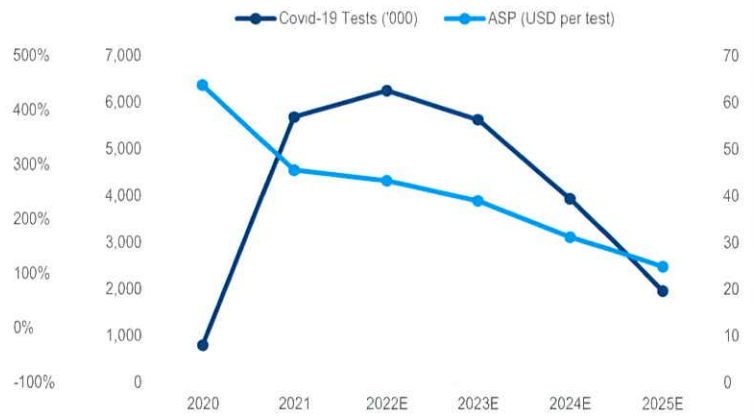


Figure 8. Prenetics – Covid-19 Test Revenue Trend



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

Figure 9. Prenetics – Covid-19 Test Volume and ASP



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

# Company Overview

## Background & business model

Prenetics, founded in 2014, offers personalized healthcare services in prevention and diagnostics across nine regional markets currently, supported by 11 labs in HK and the UK. After launching CircleDNA in 2019, Covid testing in 2020, Circle HealthPod in 2021, and ColoClear in 2022, Prenetics covers DTC-GT, cancer screening and Covid-19 testing, and targets to launch personalized care products to widen its product portfolio.

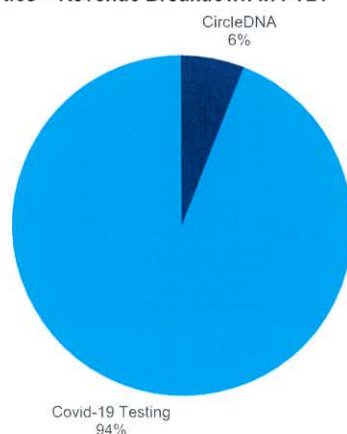
The Covid-19 testing business has been the near-term driver for Prenetics. This segment surged over past two years and contributed 78% / 94% of revenue and 80% / 93% profits in 2020/2021, increasing from zero in 2019. The blended Covid-19 testing margin printed at ~40%, lower than CircleDNA GPM, mainly dragged by lower margin for the Covid-19 testing business in the UK.

Prenetics runs an asset-light business model by outsourcing production of all existing products. This avoids capex on plants, but exposes Prenetics to risks from supply-chain limitations or disruptions, as seen with "hot" product sales for HealthPod.

On sales channels, Prenetics conducts marketing based on product characteristics, by marketing the CircleDNA on the internet and ColoClear via clinics and hospitals, because the DTC-GT market is already well-educated, while cancer screening still tends to need professionals to discuss with customers.

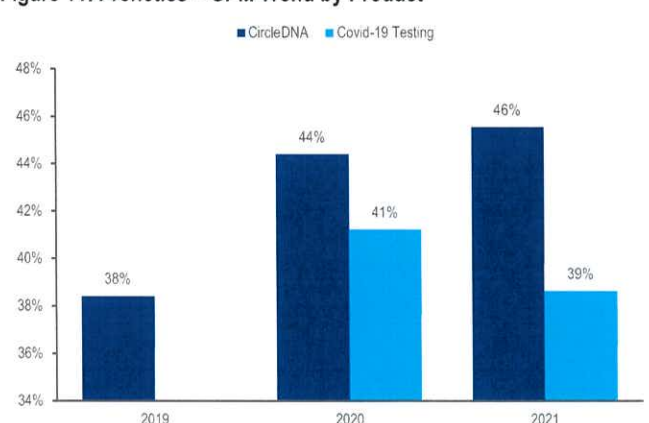
Besides internal R&D and organic growth, Prenetics explores M&A to acquire new technology or enter new geographic markets. Historically, Prenetics successfully expanded its footprint by acquisition. The acquisition of DNAFit in 2018 provided Prenetics with the opportunity to enter the UK market, which currently contributes roughly half of revenue. The acquisition of Oxsed in 2020 helped Prenetics obtain nucleic acid amplification technology which is the technological building block for Circle HealthPod.

Figure 10. Prenetics – Revenue Breakdown in FY21



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Company Reports

Figure 11. Prenetics – GPM Trend by Product



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Company Reports

## Core products

### Prevention: CircleDNA and ColoClear

Prenetics entered the prevention business with CircleDNA in 2019, and then launched ColoClear in June 2022.

CircleDNA is a consumer genetic testing product developed by Prenetics. Customers can access a wellspring of information about their genetic make-up and receive actionable recommendations at their fingertips. Prenetics presents four types of product including Vital, Family Planning, Health and Premium. The test kits are sold internationally, primarily via website, and ship to customers in more than 30 countries. By geography, Hong Kong has accounted for approximately 40% of the sales of CircleDNA since its launch, and the DNA test product is also well accepted by consumers in the UK, Malaysia and Singapore markets.

ColoClear was developed by New Horizon Health (6606.HK) based on FIT-DNA, a multi-target stool-based DNA testing technology, and provides an early colorectal cancer screening test that identifies abnormal DNA and traces of blood in the stool which can be caused by precancerous colon polyps and colon cancer. ColoClear is the only noninvasive FIT-DNA colorectal cancer screening test approved by NMPA. Prenetics cooperates with New Horizon Health to promote and distribute the ColoClear in HK, Macau, and ASEAN, and shares 50%/50% profits for each.

Figure 12. Prenetics – Selected CircleDNA Products



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Company Reports

Figure 13. Prenetics – ColoClear Product



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Company Reports

### Diagnostics: Covid-19 testing and HealthPod

Prenetics has run Covid-19 PCR testing services in HK and the UK with 11 labs since April 2020, and then launched Circle HealthPod in November 2021.

For Covid-19 testing services, Prenetics mainly developed the business with enterprise clients and has built a strong clientele, including the HK government, Cathay Pacific Airway, the Premier League, Matchroom Boxing, Britannia TV 3, and Virgin Atlantic. Prenetics also serves customers with rapid test service at airports or at home.

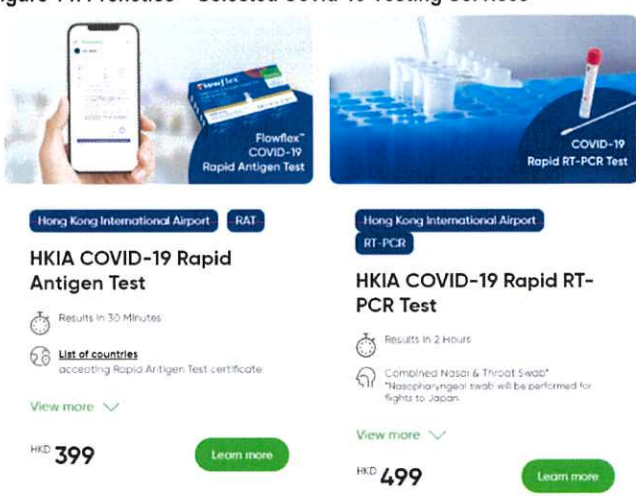
Prenetics also launched a decentralized Covid-19 testing product, HealthPod, which enables customers to use a simple self-administered nasal swab test and get



results rapidly. The Circle HealthPod is targeted at the global market for sales and distribution, and can be utilized in many scenarios, including hospitals and clinics, businesses and schools, travel, sports and entertainment sectors, and households, among others. Currently, HealthPod can be sold in the UK and EU only for professional use, but can be sold for both professional and home use in HK. At the same time, HealthPod also commenced a clinical validation and seeks approval on professional and home use from the US FDA.

Circle HealthPod has already attracted attention from various business organizations and medical service providers that plan to roll out efforts to enhance public access to diagnostic testing services. In August 2021, New World Development pre-ordered 10,000 devices and 50,000 capsules to be utilized across its extensive ecosystem of retail malls, office buildings, residential developments, and art and cultural facilities.




**Figure 14. Prenetics – Selected Covid-19 Testing Services**



**HKIA COVID-19 Rapid Antigen Test**  
 Results in 30 Minutes  
 List of countries accepting Rapid Antigen Test certificate  
 HKD **399**

**HKIA COVID-19 Rapid RT-PCR Test**  
 Results in 2 Hours  
 Combined Nasal & Throat Swab  
 \*Nasopharyngeal swab will be performed for flights to Japan.  
 HKD **499**

**Figure 15. Prenetics – HealthPod Product**

	<b>The Circle HealthPod Set</b> 1 x Circle HealthPod	<b>990 HKD</b>
	<b>The Circle HealthPod Starter Set</b> 1 x Circle HealthPod 5 x Single-use Capsules	<b>2190 HKD</b>
	<b>The Circle HealthPod Family Set</b> 2 x Circle HealthPods 10 x Single-use Capsules	<b>4161</b> <del>4380</del> HKD save 5 %

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
 Source: Citi Research, Company Reports

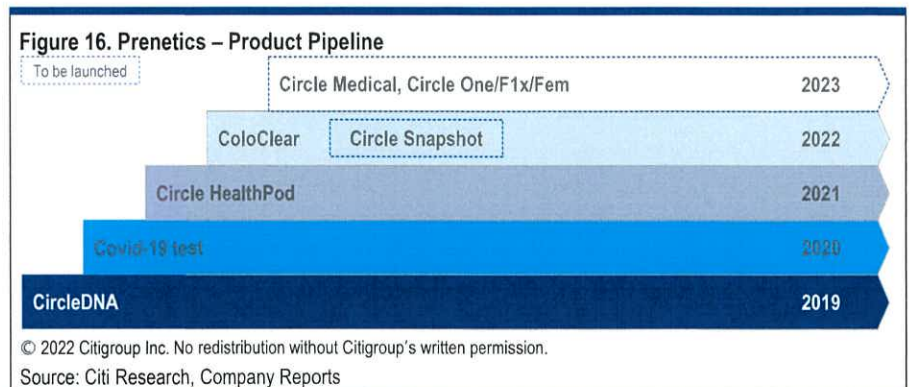
## Pipeline

### Diagnostics

Prenetics' product pipeline includes Circle Snapshot and Circle Medical. Circle snapshot is an off-the-shelf at-home blood test to keep users regularly and frequently updated on their latest health condition. Circle Medical is designed to identify causal genetic mutations for patients with certain symptoms for medical professionals.

### Personalized care

Prenetics commenced the R&D on Circle One, F1x and Fem, to provide customers personalized nutrition, hair loss and sexual health information, tailored to each customer's genetic variation and biology. By leveraging the proprietary genetic insights derived from customers' CircleDNA test results, Prenetics can develop algorithms to customize personalized care products and make actionable recommendations.



## SPAC merger

Prenetics listed via a merger with Nasdaq-listed special purpose acquisition company (SPAC) Artisan Acquisition Corp. The transaction valued Prenetics at an enterprise value of US\$1.25bn, with a combined equity value of approximately US\$1.7bn. The transaction was completed on May 18, 2022, and the shares of Prenetics began trading on Nasdaq under the new ticker symbol "PRE". Fundraising took place via the SPAC, private investment in public equity (PIPE), and forward purchase agreements. Post redemptions and fees, Prenetics received net financing of around ~US\$134mn (see table below).

**Figure 17. Prenetics – SPAC Process Financing**

<i>in USD mn</i>	Amount	Redemption	Net Financing
PIPE	56	na	56
Forward purchase	60	na	60
Artisan	339	-289	50
- financing fee	na	na	-32
Total financing	455	na	134

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Company Reports

## Shareholder structure

Prenetics shareholders hold 64.7% of Class A and 8.8% % of Class B share, while the Artisan public shareholders, sponsor and Artisan directors, PIPE investors, and Forward investors hold 5.9%, 6.3%, 6.5%, 7.9%, respectively.

**Figure 18. Prenetics – Shareholder Structure (after redemption, by May 18, 2022)**

Name	% of total shares
Prenetics Shareholders	73.5%
Artisan Public Shareholders	5.9%
Sponsor and certain Artisan directors	6.3%
PIPE Investors	6.5%
Forward Purchase Investors	7.9%

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Company Reports

## Free-float and lock-up provisions

Prenetics had 101,265,483 Class A Ordinary Shares and 9,713,864 Class B Shares issued and outstanding as of May 18, 2022 after giving effect to the Business Combination. All of the Class A Ordinary Shares issued to the Artisan shareholders in connection with the Business Combination are freely transferable by persons other than by Sponsor or Artisan's, Prenetics' or Prenetics' affiliates without restriction or further registration under the Securities Act. Pursuant to the lock-up agreements, ordinary securities held by certain Prenetics shareholders and executives are subject to a lock-up for **180** days following the consummation of the business combination on May 18 2022.

As of May 18, 2022, the number of free-floating stocks were 74.783mn, or 67.4% of total shares outstanding. Sales of substantial amounts of Prenetics' Class A Ordinary Shares in the public market could adversely affect the stock price. As of July 8, 2022, Prenetics' 30-day average trading volume was 84,304, and share turnover was only 0.1%, which indicates low liquidity. Risk exists of increased share-price volatility and downward pressure when lock-up shares are released into the market in November 2022.



# Industry Overview

## Prevention

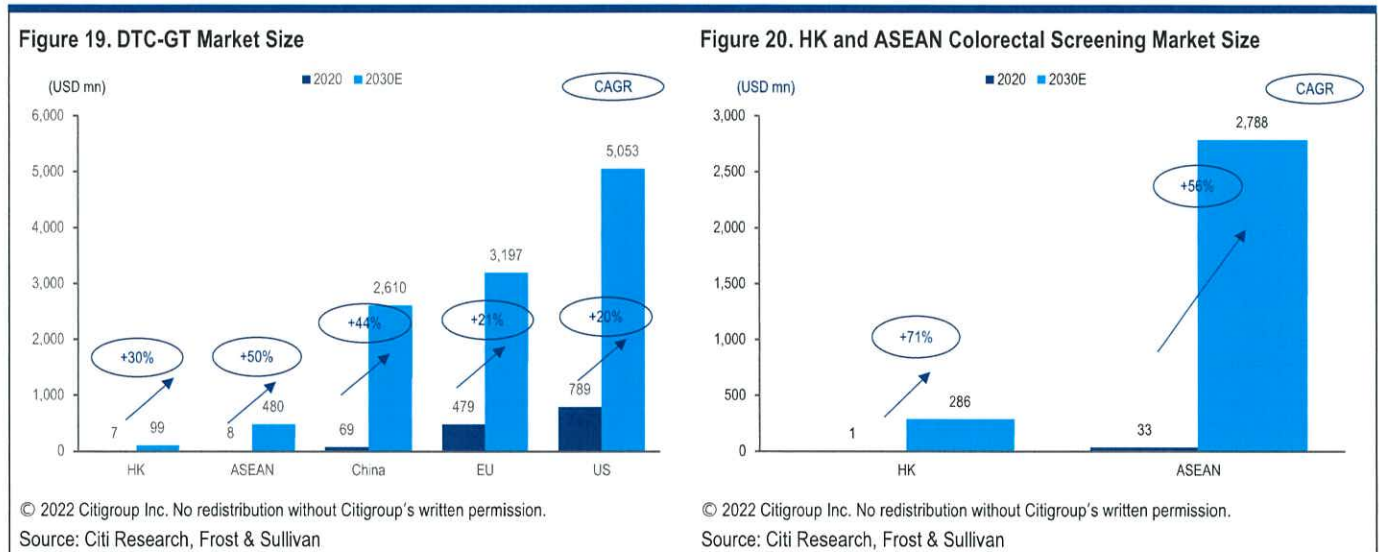
Prevention market is composed by DTC-GT testing and cancer screening markets.

The growth of the DTC-GT market is likely to be driven by rising public awareness, technology development, consumer empowerment and service personalization. Participants in the DTC-GT market are expected to continuously focus on the improvement of test validity. Due to the iterative and continuous advancement of sequencing techniques, market participants may gradually shift from the adoption of gene chip technology to the deployment of the more advanced NGS technologies such as WES and whole-genome sequencing, together with the expected substantial reduction of the cost of analyzing genomics over time.

According to Frost & Sullivan, the size of the DTC molecular testing service market in Hong Kong, Southeast Asia and Europe is projected to reach US\$99.2 million, US\$480.2 million, and US\$3,197.1 million in 2030E, respectively. In DTC-GT, Prenetics faces competition from companies such as 23andMe, Inc., myDNA Life Ltd., Ancestry.com LLC, MyHeritage Ltd., Futura Genetics, and Invitae Corporation.

Cancer screening is a test that looks for the presence of cancer in people without symptoms. Most cancer may be prevented or cured with high reliability and at relatively low costs, if detected at precancerous or early stages. In contrast, late detection of cancer often results in higher treatment cost and higher mortality rate. For example, generally, precancerous lesions identified by cancer screening can be surgically removed, so as to substantially reduce the likelihood of the occurrence of cancer. Also, if detected early, patients diagnosed with cancers can choose to receive surgical resection, which refers to the removal of tissue or part or all of an organ, as their treatment plan instead of the less effective drug treatment, or use standard first-line drugs instead of the more expensive experimental regimens.

Colorectal screening is one of the cancer screening products. The market size for early colorectal cancer screening services in Hong Kong and Southeast Asia is projected to reach US\$285.9 million and US\$2,787.7 million in 2030E, vs. US\$1.3mn and US\$33.4mn in 2020, respectively. In Coloclear cancer screening, Prenetics may compete with peers include Exact Sciences Corporation, Freenome Holdings, Inc., GRAIL, Inc., and Guardant Health Inc., among others.



## Diagnostics

Diagnostics markets cover 1) Covid-19 testing, 2) POCT molecular diagnostics, 3) at-home health testing; and 4) medical genetic testing markets.

Point-of-care testing (POCT) is defined as an investigation taken at the time of the consultation with instant availability of results to make immediate and informed decisions about patient care. According to the Frost & Sullivan Report, the size of the POCT molecular diagnostics market in Hong Kong, Southeast Asia and Europe is forecast to reach US\$292.4 million, US\$731.1 million, and US\$2,147.4 million in 2030E, respectively.

Home use health testing offers laboratory health-monitoring tests with online ordering, kit delivery and at-home sample collection. It can potentially save time by minimizing the need for frequent hospital visits and save healthcare resources as a consequence. The size of the at-home health testing market in Hong Kong, Southeast Asia and Europe is forecast to reach US\$134.9 million, US\$570.9 million and US\$1,501.3 million in 2030E, respectively.

Medical genetic testing needs to be recommended by a doctor and conducted in a hospital or clinic with the assistance of licensed clinical professionals. Depending on clinical needs, different types of medical genetic testing are used, which are designed to identify pathogenic mutations or genetic variations in a patient's genome in order to meet different medical needs. The size of the medical genetic testing market in Hong Kong, Southeast Asia and Europe is forecast to reach US\$358.8 million, US\$868.4 million and US\$14,400.9 million in 2030E, respectively.

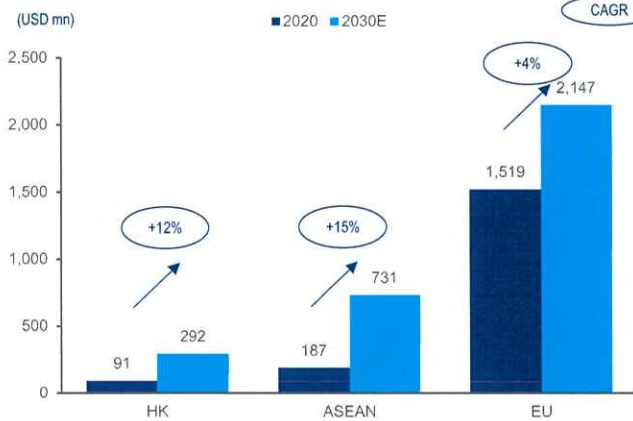
Competitors with diagnostic tests include private and public companies, such as Cue Health Inc., Lucira Health, Inc., LumiraDx Limited, BGI Group, KingMed Diagnostics (Hong Kong) Limited, Sonic Healthcare Limited, Myriad Genetics, Inc. and Invitae Corporation.

## Personalized care

Personalized nutrition uses information on individual characteristics to develop targeted nutritional advice, products, or services. The service segments of DNA profile based personalized nutrition solutions consist of building user's initial database through a series of tests and lifestyle questionnaires, measuring and continuously monitoring user's health condition, interpreting personalized profile and providing recommendations, intervening by providing personalized services and reviewing user's emotional feedback.

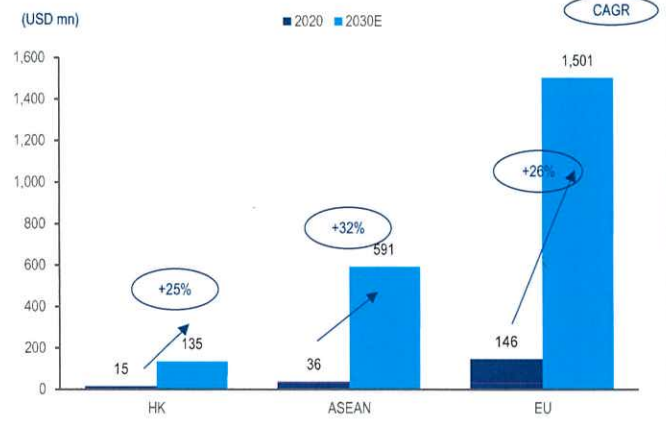
According to Frost & Sullivan, the size of the DNA profile based personalized nutrition market in Hong Kong, Southeast Asia and Europe is forecast to reach US\$113.4 million, US\$419.9 million and US\$2,414.2 million in 2030E, respectively.

Figure 21. POCT Market Size



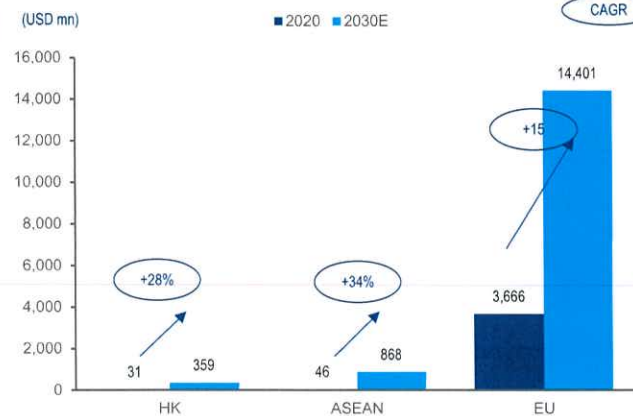
© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Frost & Sullivan

Figure 22. At-home Test Market Size



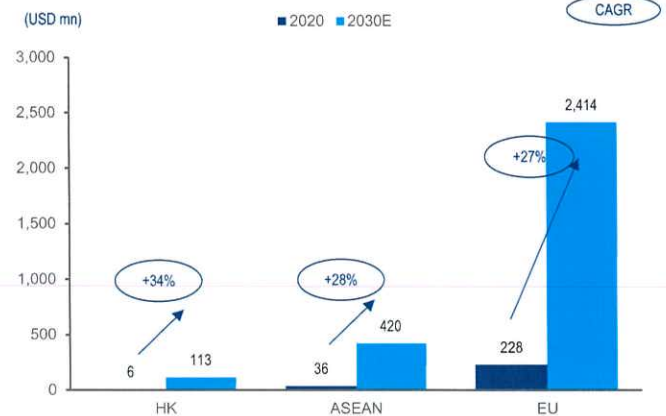
© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Frost & Sullivan

Figure 23. Medical Genetic Testing Market Size



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Frost & Sullivan

Figure 24. Personalized Nutrition Market Size



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research, Frost & Sullivan

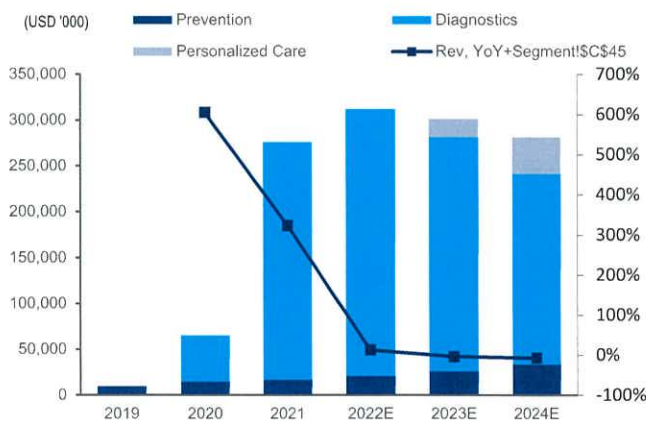


# Financials

## Revenue

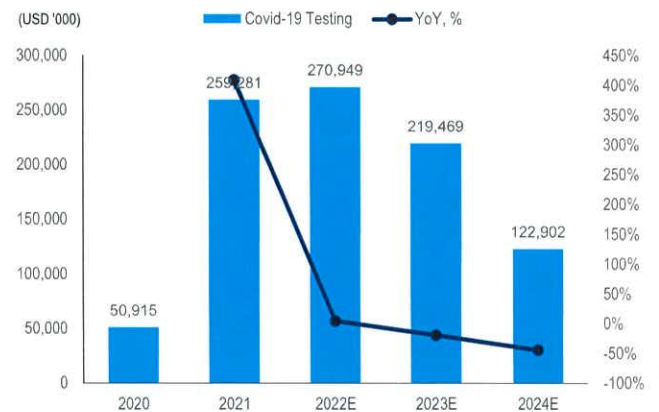
Prevention and Diagnostics businesses currently drive Prenetics revenue, with Covid-19 testing revenue in particular accounting for ~90% of total revenue in 2021. By region, HK and the UK accounted for 45% / 55% of revenue in 2021 respectively. Looking forward, we expect CircleDNA, Healthpod, ColoClear can meet some part of the gap of Covid-19 testing revenue's expected gradual decrease, although supply-chain clogs and disruptions may limit the sales of certain products such as HealthPod.

Figure 25. Prenetics – Revenue Breakdown and Growth



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

Figure 26. Prenetics – Covid-19 Testing Revenue and Growth

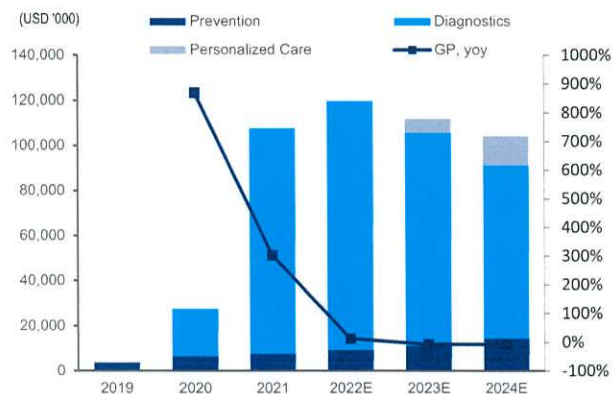


© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

## Costs and gross profits

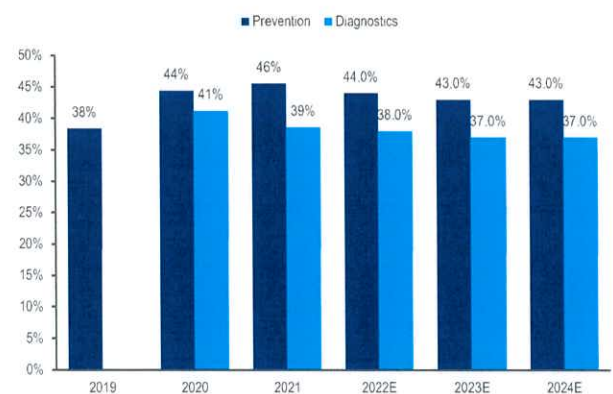
Direct costs consist primarily of material costs, service fees and WES sequencing cost, lab equipment depreciation, staff costs and shipping cost. Per our checks, fixed costs are typically high single-digit percent of the final price, while labor costs could account for the majority of variable cost.

Figure 27. Prenetics – Gross Profit Breakdown and Growth



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

Figure 28. Prenetics – Gross Margin Mix

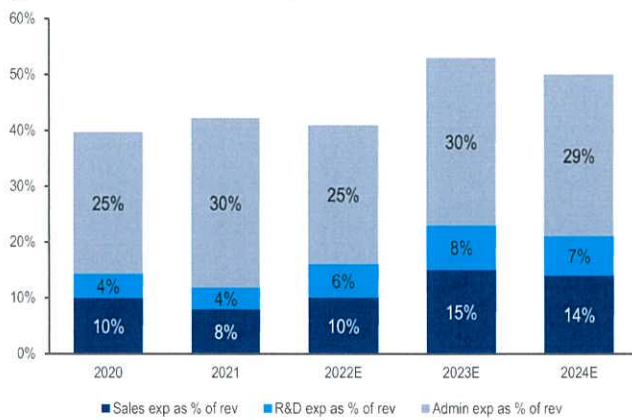


© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

## Expenses

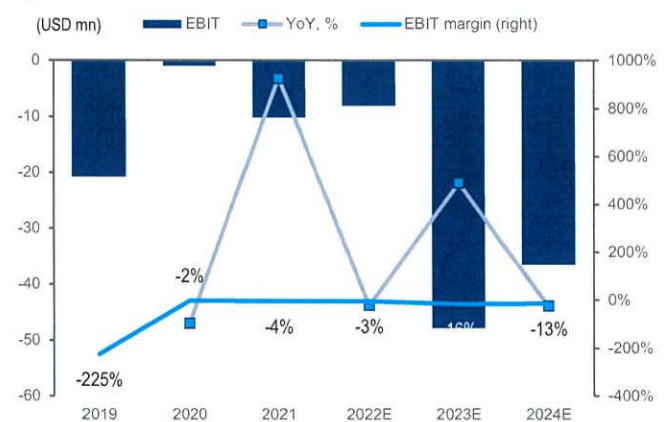
Admin expense accounted for 25-30% of revenues as a result of business expansion, according to the company, and is expected to maintain at a similar level. We expect admin expense would decrease slightly in coming years, while sales and R&D expenses are forecast to keep growing on the back of marketing spend and the company exploring new growth drivers.

Figure 29. Prenetics – SG&A Expense Breakdown and Trend



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

Figure 30. Prenetics – EBIT Growth and Margin



© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports

## Financial statements

**Figure 31. Prenetics – Income Statement**

in USD mn	2019	2020	2021	2022E	2023E	2024E
<b>Revenue</b>	<b>9.23</b>	<b>65.18</b>	<b>275.85</b>	<b>311.73</b>	<b>301.09</b>	<b>281.02</b>
YoY, %		606%	323%	13%	-3%	-7%
Direct costs	-6.52	-38.83	-169.72	-192.03	-189.35	-177.05
YoY, %		496%	337%	13%	-1%	-6%
<b>Gross profit</b>	<b>2.72</b>	<b>26.34</b>	<b>106.13</b>	<b>119.70</b>	<b>111.74</b>	<b>103.98</b>
YoY, %		870%	303%	13%	-7%	-7%
GPM	29%	40%	38%	38%	37%	37%
Other income and other net losses	0.00	-0.32	0.14	0.00	0.00	0.00
Share of loss of a joint venture	-2.58	-1.13	0.00	0.00	0.00	0.00
Selling and distribution expenses	-4.77	-6.49	-21.93	-31.17	-45.16	-39.34
as % of revenue	52%	10%	8%	10.0%	15.0%	14.0%
Research and development expenses	-2.99	-2.78	-10.56	-18.70	-24.09	-19.67
as % of revenue	32%	4%	4%	6.0%	8.0%	7.0%
Administrative and other operating expenses	-13.19	-16.62	-83.99	-77.93	-90.33	-81.50
as % of revenue	143%	25%	30%	25.0%	30.00%	29.00%
<b>Loss from operations</b>	<b>-20.80</b>	<b>-1.00</b>	<b>-10.22</b>	<b>-8.11</b>	<b>-47.84</b>	<b>-36.53</b>
YoY, %		-95%	927%	-21%	490%	-24%
EBIT margin	-225%	-2%	-4%	-3%	-16%	-13%
Finance costs	-0.07	-0.06	-5.24	-0.21	-0.21	-1.70
Fair value change	0.00	-2.85	-154.83	-10.00	-10.00	-10.00
<b>Loss before taxation</b>	<b>-20.87</b>	<b>-3.90</b>	<b>-170.28</b>	<b>-18.32</b>	<b>-58.05</b>	<b>-48.23</b>
Income tax credit	0.68	1.94	-3.73	0.00	0.00	0.00
Tax rate, %	-3%	-50%	-2%	0%	0%	0%
<b>Loss for the year</b>	<b>-20.20</b>	<b>-1.96</b>	<b>-174.02</b>	<b>-18.32</b>	<b>-58.05</b>	<b>-48.23</b>
Net margin	-219%	-3%	-63%	-6%	-19%	-17%
Non-controlling interests	-0.05	-0.02	-0.01	0.00	0.00	0.00
<b>Equity shareholders of the Company</b>	<b>-20.14</b>	<b>-1.94</b>	<b>-174.01</b>	<b>-18.32</b>	<b>-58.05</b>	<b>-48.23</b>

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates, Company Reports



Figure 32. Prenetics – Cash Flow Statement

in USD mn	2019	2020	2021	2022E	2023E	2024E
<b>Cash flows from operating activities</b>						
Loss for the year	-20.20	-1.96	-174.02	-18.32	-58.05	-48.23
Adjustments for:						
Interest income	-0.02	-0.01	0.00	0.00	0.00	0.00
Depreciation	1.12	1.29	4.29	10.43	12.17	10.97
Amortization of intangible assets	1.11	1.13	3.06	11.91	7.41	4.54
Finance costs	0.07	0.06	5.24	0.21	0.21	1.70
Others	5.86	4.51	181.42	0.00	0.00	0.00
Changes in:						
Increase/decrease in inventories	0.42	-3.75	-2.33	-4.01	-2.64	-1.91
Increase/decrease in trade receivables	1.83	-20.09	-24.05	-21.70	-12.71	-8.62
Increase in deposits and prepayments and other receivables	-0.16	-1.09	-6.13	-1.44	-2.69	-2.01
Increase in trade payables	1.71	9.71	-3.46	-0.38	-0.13	-0.62
Increase in accrued expenses and other current liabilities	2.76	5.96	27.35	0.39	-0.85	-1.61
Increase in contract liabilities	3.81	1.49	2.53	-0.24	-0.32	-0.60
<b>Cash used in operations</b>	<b>-1.84</b>	<b>-2.76</b>	<b>13.40</b>	<b>-23.14</b>	<b>-57.60</b>	<b>-46.38</b>
Income tax paid	-0.04	-0.12	0.02	0.00	0.00	0.00
<b>Net cash used in operating activities</b>	<b>-1.88</b>	<b>-2.88</b>	<b>13.42</b>	<b>-23.14</b>	<b>-57.60</b>	<b>-46.38</b>
<b>Cash flows from investing activities</b>						
Payment for purchase of property, plant and equipment	-0.26	-2.86	-8.55	-12.61	-10.67	-8.56
Proceeds from disposal of property, plant and equipment	0.00	0.01	0.71	0.00	0.00	0.00
Payment for purchase of intangible assets	-0.11	-0.20	-2.87	-1.56	-1.51	-1.41
<b>Net cash used in investing activities</b>	<b>-4.60</b>	<b>-5.97</b>	<b>-22.02</b>	<b>-14.17</b>	<b>-12.18</b>	<b>-9.96</b>
<b>Cash flows from financing activities</b>						
Capital element of lease rentals paid	-0.50	-0.61	-1.30	0.00	0.00	0.00
Interest element of lease rentals paid	-0.06	-0.05	-0.21	-0.21	-0.21	-1.70
Interest paid	-0.01	0.00	0.00	0.00	0.00	0.00
Proceeds from issuance of preference shares	0.00	0.00	25.97	0.00	0.00	0.00
Proceeds from issuance of convertible securities	0.00	12.50	4.98	0.00	0.00	0.00
Proceeds from financing	0.00	0.00	0.00	0.00	0.00	50.00
Increase in amounts due to shareholders	0.00	0.00	-0.13	0.00	0.00	0.00
<b>Net cash from/used in financing activities</b>	<b>-0.57</b>	<b>11.84</b>	<b>29.32</b>	<b>-0.21</b>	<b>-0.21</b>	<b>48.30</b>
<b>Net increase/decrease in cash and cash equivalent</b>	<b>-7.05</b>	<b>2.99</b>	<b>20.71</b>	<b>-37.52</b>	<b>-69.99</b>	<b>-8.04</b>
Cash and cash equivalents at the beginning of the year	18.78	11.52	14.49	169.89	132.37	62.38
Effect of foreign exchange rate changes	-0.21	-0.02	0.09	0.00	0.00	0.00
<b>Cash and cash equivalents at the end of the year</b>	<b>11.52</b>	<b>14.49</b>	<b>35.29</b>	<b>132.37</b>	<b>62.38</b>	<b>54.34</b>

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.

Source: Citi Research estimates, Company Reports

Figure 33. Prenetics – Balance Sheet

in USD mn	2019	2020	2021 (Pro Forma)	2022E	2023E	2024E
<b>Assets</b>						
Property, plant and equipment	2.11	4.69	13.04	15.22	13.72	11.30
Intangible assets	6.27	24.10	23.83	13.47	7.57	4.43
Goodwill	3.85	3.99	3.98	3.98	3.98	3.98
Deferred tax assets	0.00	1.95	0.08	0.08	0.08	0.08
Other non-current assets	0.16	0.19	0.88	0.88	0.88	0.88
<b>Non-current assets</b>	<b>14.06</b>	<b>34.93</b>	<b>41.80</b>	<b>33.63</b>	<b>26.22</b>	<b>20.67</b>
Inventories	0.55	4.50	6.83	10.83	13.48	15.39
Trade receivables	2.89	22.99	47.04	68.75	81.45	90.08
Deposits and prepayments	0.29	0.89	7.91	9.35	12.04	14.05
Other receivables	0.07	0.80	0.41	0.41	0.41	0.41
Financial assets at fair value through profit or l	0.00	0.00	9.91	9.91	9.91	9.91
Cash and cash equivalents	11.52	14.49	169.89	132.37	62.38	54.34
<b>Current assets</b>	<b>15.63</b>	<b>43.96</b>	<b>242.00</b>	<b>231.63</b>	<b>179.68</b>	<b>184.18</b>
<b>Total assets</b>	<b>29.69</b>	<b>78.88</b>	<b>283.81</b>	<b>265.26</b>	<b>205.91</b>	<b>204.85</b>
<b>Liabilities</b>						
Deferred tax liabilities	0.00	0.00	0.66	0.66	0.66	0.66
Preference shares liabilities	0.00	0.00	12.84	12.84	12.84	12.84
Lease liabilities	0.78	0.80	3.60	3.60	3.60	3.60
Short-term borrowing	0.00	0.00	0.00	0.00	0.00	50.00
<b>Non-current liabilities</b>	<b>0.93</b>	<b>0.80</b>	<b>17.09</b>	<b>17.09</b>	<b>17.09</b>	<b>67.09</b>
Trade payables	2.76	13.44	9.98	9.60	9.47	8.85
Accrued expenses and other current liabilities	3.00	8.93	24.55	24.94	24.09	22.48
Contract liabilities	5.57	7.05	9.59	9.35	9.03	8.43
Lease liabilities	0.56	0.87	1.67	1.67	1.67	1.67
Tax payable	0.00	0.00	1.22	1.22	1.22	1.22
<b>Current liabilities</b>	<b>11.90</b>	<b>47.07</b>	<b>47.01</b>	<b>46.78</b>	<b>45.48</b>	<b>42.66</b>
<b>Total liabilities</b>	<b>12.83</b>	<b>47.88</b>	<b>64.10</b>	<b>63.88</b>	<b>62.57</b>	<b>109.75</b>
<b>Equity</b>						
Share capital	45.69	53.24	0.01	0.01	0.01	0.01
Share premium	0.00	0.00	404.86	404.86	404.86	404.86
Reserves	-28.79	-22.16	-185.08	-203.40	-261.45	-309.68
Non-controlling interests	-0.05	-0.08	-0.08	-0.08	-0.08	-0.08
<b>Total equity</b>	<b>16.85</b>	<b>31.01</b>	<b>219.70</b>	<b>201.38</b>	<b>143.33</b>	<b>95.10</b>
<b>Total equity and liabilities</b>	<b>29.69</b>	<b>78.88</b>	<b>283.81</b>	<b>265.26</b>	<b>205.91</b>	<b>204.85</b>

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.

Source: Citi Research estimates, Company Reports

## Valuation

### P/S-based target price of US\$8.10

Our target price for Prenetics shares is US\$8.10, based on 3x P/S on 2023E sales per share. This is set at parity with the industry average level. We apply P/S method to value Prenetics, as we believe top-line is the best metric to measure the growth of an emerging personalized healthcare firm.

Figure 34. Prenetics – Sensitivity Analysis on PS Valuation

		PS multiple (x)				
		2.0x	2.5x	3.0x	3.5x	4.0x
FY23 Sales per share	2.2	4.4	5.5	6.6	7.7	8.7
	2.4	4.9	6.1	7.3	8.5	9.7
	2.7	5.4	6.8	8.1	9.5	10.8
	3.0	5.9	7.4	8.9	10.4	11.9
	3.3	6.5	8.2	9.8	11.4	13.1

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.

Source: Citi Research estimates

## Key comps valuations

Figure 35. Personalized Healthcare – Valuation Comps (as of 12 Jul)

Ticker	Name	CY	Current Price	Target Price	Rating	MKT Cap US\$	'22-'24 CAGR		Price/Sales			Price/Book			EV/ Sales	EV/ EBITDA
							Sales %	EPS %	22E	23E	24E	22E	23E	24E		
300676 CH Equity	BGI Genomics	CNY	66.9	NA	NR	4,112.2	7.9	(1.6)	4.7	4.4	4.1	2.9	2.4	2.2	3.4	11.2
ME US Equity	23andMe	USD	2.8	3.0	Neutral/H	1,266.7	(0.6)	n.a.	4.6	4.6	4.7	n.a.	2.8	n.a.	2.9	n.a.
HLTH US Equity	CUE Health	USD	3.3	NA	NR	483.6	15.3	(7.0)	1.2	1.1	0.9	0.7	0.9	1.0	0.3	n.a.
NTRA US Equity	Natera	USD	37.6	NA	NR	3,620.4	23.4	(18.7)	4.5	3.6	3.0	5.1	na	na	3.3	n.a.
PSNL US Equity	Personalis	USD	3.8	14.0	Buy/H	171.3	35.5	(7.8)	2.7	2.0	1.4	0.5	0.6	0.8	n.a.	n.a.
MYGN US Equity	Myriad	USD	19.4	NA	NR	1,558.7	6.3	136.6	2.3	2.1	2.0	1.5	1.6	1.6	1.8	27.0
EXAS US Equity	EXACT Sciences	USD	45.4	65.0	Neutral	7,984.4	17.4	(41.1)	3.9	3.4	2.9	n.a.	3.0	3.2	4.1	n.a.
PRE US Equity	Prenetics	USD	4.1	8.1	Buy/H	449.5	18.1	(75.2)	1.3	1.1	0.9	n.a.	n.a.	n.a.	1.1	n.a.
<b>Average</b>							<b>15.4</b>	<b>-2.1</b>	<b>3.2</b>	<b>2.8</b>	<b>2.5</b>	<b>2.2</b>	<b>1.9</b>	<b>1.7</b>	<b>2.4</b>	<b>19.1</b>

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.

Source: Citi Research estimates, Bloomberg Consensus estimates



### DCF cross-check

We cross-check our \$8.10 target price with a DCF model, with 10.4% WACC and 2% terminal growth rate.

**Figure 36. Prenetics – DCF Valuation**

DCF (in USD mn)	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue	312	301	281	309	340	367	397	421	446	473
YoY		-3%	-7%	10%	10.0%	8.0%	8.0%	6.0%	6.0%	6.0%
EBIT	-8	-48	-37	-10	0	4	8	13	18	24
EBIT Margin	-3%	-16%	-13%	-3%	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%
-Tax	0	0	0	0	0	1	1	2	3	4
+D&A	22	20	16	12	20	29	40	42	45	47
as % of rev	7%	7%	6%	4%	6.0%	8.0%	10.0%	10.0%	10.0%	10.0%
EBITDA	14	-28	-21	2	20	33	48	55	62	71
- Change in W.C.	-27	-19	-15	-30	-34	-37	-40	-42	-45	-47
as % of rev	-9%	-6%	-5%	-10%	-10.0%	-10.0%	-10.0%	-10.0%	-10.0%	-10.0%
- Capex	14	12	10	9	10	11	12	13	13	14
as % of rev	5%	4%	4%	3%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>FCF</b>	27	-21	-16	22	44	59	75	84	94	104
TV										1268
<b>Total</b>	27	-21	-16	22	44	59	75	84	94	1372
PV of FCF	27	-19	-13	16	30	36	42	42	43	565
<b>Enterprise Value (USD mn)</b>	769									
+ cash	132									
- total debt	5									
- non-controlling interest	0									
Equity Value (USD mn)	896									
<b>Target price (USD)</b>	8.1									
<b>Implied FY23E PS (x)</b>	3.0x									

<b>WACC</b>	10.4%
Risk-free rate	1.9%
Beta	0.85
Risk premium	10.3%
Cost of Equity	10.6%
Cost of Debt	5.0%
Debt Ratio	5.0%
Effective tax rate	18%
Terminal growth rate	2%

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates

**Figure 37. Prenetics – DCF Sensitivity Analysis**

		Terminal Growth				
		1.0%	1.5%	2.0%	2.5%	3.0%
<b>WACC</b>	8.4%	9.9	10.4	10.9	11.6	12.4
	9.4%	8.6	8.9	9.3	9.8	10.3
	10.4%	7.5	7.8	<b>8.1</b>	8.4	8.8
	11.4%	6.7	6.9	7.1	7.4	7.6
	12.4%	6.0	6.2	6.4	6.5	6.7

© 2022 Citigroup Inc. No redistribution without Citigroup's written permission.  
Source: Citi Research estimates

## Risks

### Fierce competition in Prevention and Diagnostics

The diagnostics industry, especially Covid-19 testing, is highly competitive and rapidly changing. In each segment where Prenetics operates, there are several competitors. Prenetics faces and expects ongoing substantial competition, including from diagnostic / genetic test manufacturers and service providers, academic institutions, public & private research institutions and government agencies. Many of Prenetics' current and potential competitors are significantly larger with substantially greater financial, scientific, manufacturing and other resources, which may allow them to quickly adapt to new technologies, obtain regulatory approvals faster, produce products at lower costs, and commercialize products more efficiently.

### High reliance on Covid-19 testing related revenue

We expect Covid-19 related revenue to contribute 94% / 85% / 74% of Prenetics' total revenues in 2022E/23E/24E respectively. Demand for Covid-19 testing services may fade over time depending on the coronavirus variant dynamics the production and widely administered use of efficacious vaccines and therapeutic treatments, or other healthcare measures.

### Strict regulation on personalized healthcare testing

The company conducts the majority of its operations in HK and the UK. The diagnostics industry is highly regulated, encompassing the approval, registration, manufacturing, packaging, licensing and marketing of testing products. When entering new markets, Prenetics must obtain approval from local authorities. Any regulatory changes may impact potential approvals and commercialization of the company's product candidates, as well as increase compliance costs.

### Privacy violation risks

Prenetics collects and stores a great amount of personal data, including personally identifiable information, genetic information, payment information, etc. Should Prenetics actually violate, or be perceived to have violated, any privacy promises it makes to customers, Prenetics could be subject to a complaint from an affected individual or interested privacy regulator.

### Challenges in expanding portfolio via M&A

Besides internal R&D and organic growth, Prenetics seeks to use M&A to acquire new technology or enter new geographic markets. The company may fail to expand its product portfolio through M&As if unable to find suitable targets or complete such transactions on favorable terms, or unsuccessfully integrate such acquisitions.

### Lack of profitability

Prenetics was not profitable during the past three years (2019-2021), and we forecast losses over the coming three years (2022E-2024E).

### Lock-up expirations

Risk exists of increased share-price volatility and downward pressure when lock-up shares are released into the market in November 2022.

# Bull/Bear: Prenetics (PRE.N)

## Bull/Bear: Prenetics (PRE)

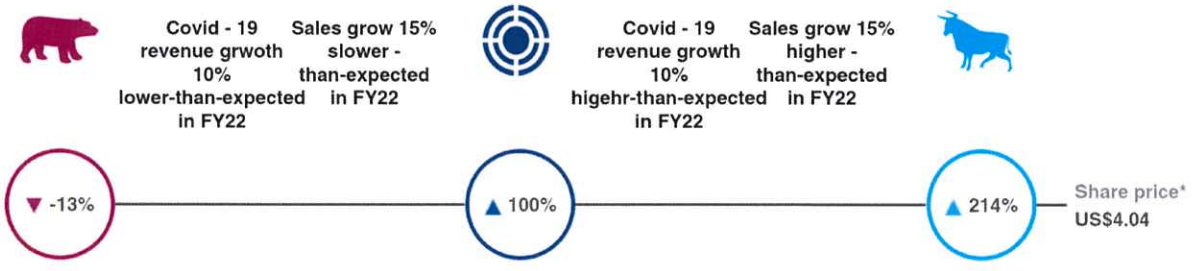
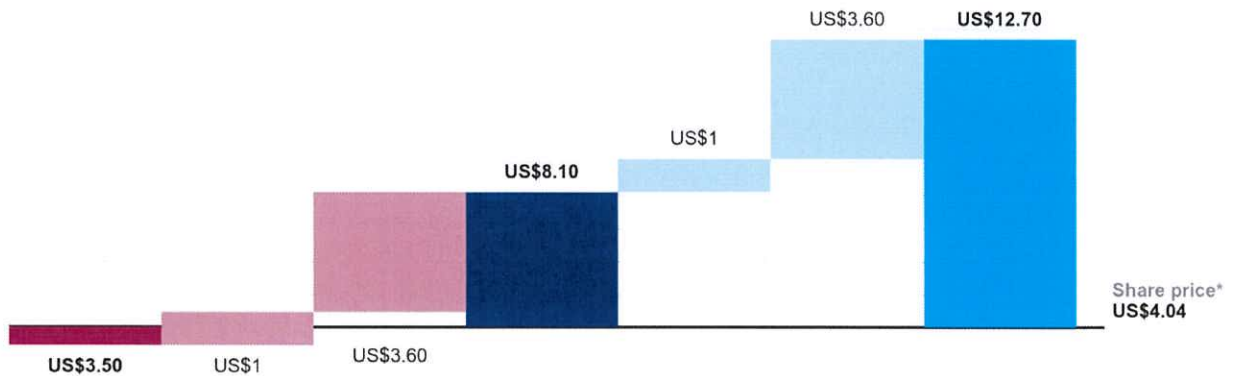


US\$8.1 target price

100% expected share price return

Buy/High Risk rating

227pp Bull/Bear Spread



Source: Citi Research

\*Share price as of 11 Jul 2022

- US\$12.7** (Bull):
  - Covid-19 revenue growth 10% higher-than-expected in FY22
  - FY22 sales grow 15% higher-than-expected
- US\$8.1** (Bull):
  - Covid-19 testing revenue slightly increase 4% in FY22
  - FY22 sales increase 13% YoY
- US\$3.5** (Bear):
  - Covid-19 revenue growth 10% lower-than-expected in FY22
  - FY22 sales grow 15% slower-than-expected



## Prenetics

### Company description

Prenetics, founded in 2014 and listed via SPAC merger in May 2022, offers personalized healthcare services in prevention and diagnostics across nine regional markets currently, supported by 11 labs in HK and the UK. After launching CircleDNA in 2019, Covid testing in 2020, Circle HealthPod in 2021, and ColoClear in 2022, Prenetics covers DTC-GT, cancer screening and Covid-19 testing, and targets to launch personalized care products to widen its product portfolio. The Covid-19 testing business has been the near-term driver for Prenetics. This segment surged over past two years and contributed 78% / 94% of revenue and 80% / 93% profits in 2020/2021.

### Investment strategy

We rate Prenetics shares at Buy / High Risk (1H). We believe Prenetics has pursued a differentiated pricing strategy backed by data analysis edge; has built a strong position in Covid-19 testing; should benefit from ongoing expansion of its products & services via internal R&D and external M&A; should broadly be a beneficiary of increased healthcare testing demand and risk consciousness amongst consumers; and offers attractive valuations compared to peers.

### Valuation

Our target price for Prenetics shares is US\$8.10, based on 3x P/S on 2023E sales per share. This is set at par with the industry average level. We apply P/S method to value Prenetics, as we believe top-line is the best metric to measure the growth of an emerging personalized healthcare firm.

### Risks

We assign a High Risk rating to Prenetics shares given their brief trading history (listing via SPAC merger in May 2022) and the company's lack of profitability in recent years and our forward forecast periods. Key downside risks that could prevent the shares from reaching our target price include: 1) fierce competition in Prevention and Diagnostics testing products, with significant competitors across all segments, including some competitors with greater scope and resources; 2) high reliance on Covid-19 testing related revenue; 3) strict regulation on personalized healthcare testing; 4) privacy violation risks; 5) challenges in expanding its portfolio via M&A; 6) lack of profitability; and 7) shareholder lock-up expirations in November 2022.

## 23andMe Holding Co

(ME.O; US\$2.82; 2H; 11 Jul 22; 16:00)

### Valuation

Our \$3 target price is based on a sum-of-the-parts analysis ascribing \$719M of value to the therapeutics business and \$135M of value to the consumer

business. We derive our consumer segment value based on a 0.5x CY23 revenue multiple, a discount to ME's CRS comps. We think that this is warranted given: 1) ME is growing slower in a market that has already largely been saturated; 2) there is considerable risk in ME's ability to stem the consumer revenue decline; and 3) ME's consumer business is lower margin than peers. We derive our CD96 valuation based on a low double digit tiered royalty. We derive our therapeutics pipeline value based on a risk-adjusted, discounted revenue multiple.

## Risks

We rate ME High Risk largely due to the risks inherent in early stage therapeutic development, coupled with increasing competitive intensity and slowing market demand in the consumer segment.

We note the following risks to the shares achieving our target price:

23andMe's lead therapeutic asset is still in clinical trials and is exposed to clinical trial delays as well as regulatory hurdles. Delays to clinical trials or push back from regulators could result in 23andMe's projected time to commercialization being pushed back. This could potentially have a negative impact on 23's revenue streams and/or fall below projections. Delays to 23's revenue streams could also lead the company to explore dilutive financing; however, we think some of this risk is mitigated given 23's collaboration with GSK which includes costs/profit sharing mechanism.

Should 23andMe's therapeutics make it to commercialization, drug pricing and gaining coverage from insurance providers is another risk that could result in projected revenue and earnings estimates to come in below investor expectations. Given 23andMe's lead therapeutic asset is in the field of immuno-oncology, it is exposed to multiple competitors. If a competitor can develop another immuno-oncology asset with greater efficacy, safety, convenience, and/or pricing, it could erode 23andMe's addressable market. We think GSK's experience and drug marketing expertise could help to mitigate some of the insurance coverage and competition risks for 23andMe.

Additional risks include:

- Slowing DTC-GT market growth as the market becomes saturated.
- Limited clinical relevance of health tests.
- Heavy reliance on kit sales during Amazon Prime day.
- Difficulties attracting customers due to privacy concerns.
- Difficulty developing new genetic reports and receiving FDA authorization for those reports.
- Slower-than-expected adoption of 23andMe+.
- Increased regulatory burden on direct-to-consumer healthcare and marketing.
- Cyber security failures.

## Exact Sciences Corporation

(EXAS.O; US\$45.38; 2; 11 Jul 22; 16:00)

## Valuation

Our price target of \$65 applies a 4.3x EV/sales multiple to our Q5-Q8 revenue estimate of \$2.4bn. We believe the stock's current multiple fully reflects the upside related to the early-stage liquid biopsy opportunity, following large movements off of the preliminary data release, the outlook on the near-term Cologuard trajectory, and the acquisition announcement of Thrive Earlier Detection.

## Risks

Risks to the upside of our price target include: 1) investors continue to ascribe more value to the longer-term early-stage liquid biopsy screening market; and 2) Cologuard volumes rebound faster than expected.

Risks to the downside of our price target include: 1) adoption of Cologuard among new physicians could slow, putting pressure on market share gains; and 2) negative data readouts on Cologuard effectiveness could cause adherence and adoption to slow.

## Personalis, Inc.

(PSNL.O; US\$3.77; 1H; 11 Jul 22; 16:00)

## Valuation

Our \$14 target price applies a 4.7x EV/Sales multiple to our Q5-Q8 revenue estimate of \$81mn. We believe PSNL should trade more in-line with other high growth names related to the genomics, liquid biopsy, and oncology research markets.

## Risks

We rate PSNL High Risk based on the Citi quantitative risk assessment model. Risks to achieving our target price include 1) Liquid offering does not get approval/reimbursement, 2) potential slowdown in the adoption of NeXT, and 3) a shift in focus around cancer therapies away from immunotherapies.

If you are visually impaired and would like to speak to a Citi representative regarding the details of the graphics in this document, please call USA 1-888-800-5008 (TTY: 711), from outside the US +1-210-677-3788

## Appendix A-1

### ANALYST CERTIFICATION

The research analysts primarily responsible for the preparation and content of this research report are either (i) designated by "AC" in the author block or (ii) listed in bold alongside content which is attributable to that analyst. If multiple AC analysts are designated in the author block, each analyst is certifying with respect to the entire research report other than (a) content attributable to another AC certifying analyst listed in bold alongside the content and (b) views expressed solely with respect to a specific issuer which are attributable to another AC certifying analyst identified in the price charts or rating history tables for that issuer shown below. Each of these analysts certify, with respect to the sections of the report for which they are responsible: (1) that the views expressed therein accurately reflect their personal views about each issuer and