

# Genetic Analysis

Mangold Insight – Commissioned research – Update – 2023-09-06

## Growth and cost reduction

Genetic Analysis, with its GA-map technology, increased sales by 22 percent in the second quarter to 3.7 million NOK\* compared to same period last year. An inventory effect from a major customer had a negative impact on sales, which meant that the company did not reach our estimate. Due to the pandemic, an inventory build-up at a customer site have occurred over time. The customer has started to build down the inventory in Q2 but it could also spill over to third quarter. The operating costs were lower, and the operating loss was reduced to NOK 5.3 million. Several new customers have been added since the Q2-report, which is expected to contribute to increased sales in the long term.

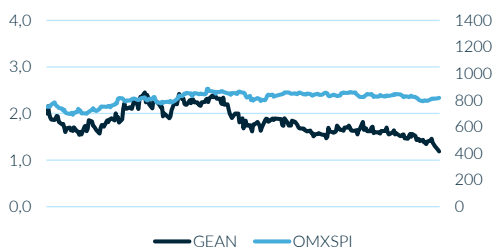
## Microbiome market growing

The microbiome market is growing, but still in an early phase. Standardisation of diagnostics in this area is in great demand by pharma companies. Genetic Analysis has a prominent position for diagnostic tests. More approved drugs on the microbiome market are expected to drive growth as well as deals like Viome have done with CVS Pharma.

## Adjusted Estimates

Mangold has chosen to adjust sales for 2023, taking into account previous inventory build up at customers which affected the valuation. Also coming years have been adjusted. It is still early in the sales cycle and sales depends on collaborations which gives uncertainty in our estimates. Mangold lowers the price target to SEK 3.40 (4.00) per share. This still leads to a large upside in the share of over 100 percent.

\*Norwegian kroner throughout analysis



Price Performance %	1m	3m	12m
Genetic Analysis	-19,4	-31,9	-43,3
OMXSPI	-1,5	-4,2	7,4

## Information

Price Target (NOK)	3.40
Risk	High
Price (NOK)	1.19
Market value (MNOK)	30
No. of shares (million)	24.9
Free float	73,0%
Ticker	GEAN
Next earnings report	2023-11-16
Website	genetic-analysis.com
Analyst	Jan Glevén

Ownership structure	Shares	Capital
Avanza Bank	6.8	27.2%
Bio-Rad Inc	5.3	21.3%
Nordnet	1.4	5.8%
Biohit Oyi	1.4	5.7%
Molver AS	0.6	2.6%
LJM AS	0.6	2.2%
Muen Invest AS	0.5	2.0%
S. Munkhaugen AS	0.5	1.9%
Jama Holding AS	0.4	1.7%
Bjelland Capital I AS	0.4	1.7%
<b>Total</b>	<b>24.9</b>	<b>100.0%</b>

Key Ratios (MNOK)	2021	2022	2023E	2024E	2025E
Revenue (Incl Grants)	13.4	20.7	25.7	35.6	38.3
EBIT	-28.9	-28.2	-21.6	-10.2	-3.9
Profit b. tax	-29.0	-28.3	-21.7	-10.3	-4.2
EPS, adj	-1.16	-1.13	-0.87	-0.41	-0.17
EV/S	10.0	6.1	4.1	2.6	1.8
EV/EBITDA	-2.3	-2.4	-3.1	-6.7	-17.2
P/E	neg	neg	neg	neg	nm

# Genetic Analysis - Investment Case

## Improving gastric health with new test

Mangold repeats Buy for Genetic Analysis at a price target of NOK 3.40 (4.00) per share.

*Buy the stock - price target 3.40 (NOK)*

## To become standard

The company's product GA-map is intended for in vitro diagnostic examination of samples from the human body in order to obtain information about treatment effects or conditions in the intestinal flora. There is significant market potential linked to diseases such as IBS and IBD. In the United States and Europe, about 73 million people suffer from IBS and about 6 million from chronic IBD. The company also sees opportunities in other disease indications with a great need for cost-effective and reliable diagnostics.

*Microbioma diagnostic company*

## Platform strategy

The company is based on a platform strategy with recurrent revenues from the sale of reagent kits to laboratories. Mangold estimates that the company can grow by an average of 47 percent per year during the period 2021 to 2027. At the end of the projection period, the company is expected to reach an EBIT margin of nearly 25 percent. Sales should be close to SEK 70 million by 2027 according to our Basecase.

*Recurring revenue*

*Growth of 47% CAGR 2021-2027*

## New market takes shape

The market for microbiome tests is characterized by non-standardized research-based tests. There is a clear incentive for microbiome tests from the research area to clinical routine use. Genetic Analysis is intended to become the standard for microbiome testing. It is the first company to have developed a CE-marked In Vitro diagnostic microbiome test for patients with IBS and IBD.

*Intending to become standard*

The market was estimated at around \$600 million by 2021 according to Data Bridge Market Research. Growth (CAGR) is expected to reach 23 percent. In 2029, the value of the microbial market is expected to increase to USD 3.1 billion.

*Growing market*

## To grow in the United States and Europe

Triggers consists of the company's sales accelerating in the North American and European markets. Sales should be made to larger labs in the first place. Genetic Analysis is still in an early sales cycle but in addition to existing customers in US and Europe, GA has already entered into agreements in China, India and Thailand that are expected to contribute to sales. The success of the company is supported by the strong interest from the United States and a strong increase in research and clinical studies in microbiome. As more drugs enter the market, the need for standardised diagnostics tests will increase. If the company's products get high demand and succeed in reaching the clinical market after positive opinions from the FDA, we see the company as a acquisition candidate.

*More drugs in the microbiom market provide support*

# Genetic Analysis - Update Q1

## Growth but inventory effects

Sales of GA-map technology amounted to NOK 3.7 million in the second quarter. An increase of 22 percent compared to the same period last year. Including research grants, revenue increased to NOK 5.7 million (5.5). Sales of reagents decreased to NOK 1.7 million (2.2). More instruments are now sold from GA's distributors, and thus GA had fewer instruments sold. This was offset by increased sales of lab tests that increased to NOK 2.1 million (0.6). Income from research grants reached NOK 2.1 million (2.5), consisting of IBD projects funded by Skattefunn and Research Council Norway. Agreements with new laboratory customers are expected to increase reagent revenue in the future, with high margins. Some of the customers are estimated to be in the start-up phase with initial revenue expected to be low but increasing over time.

*Sales increased by 22 percent*

### GENETIC ANALYSIS - Q2 ESTIMATES VS ACTUAL

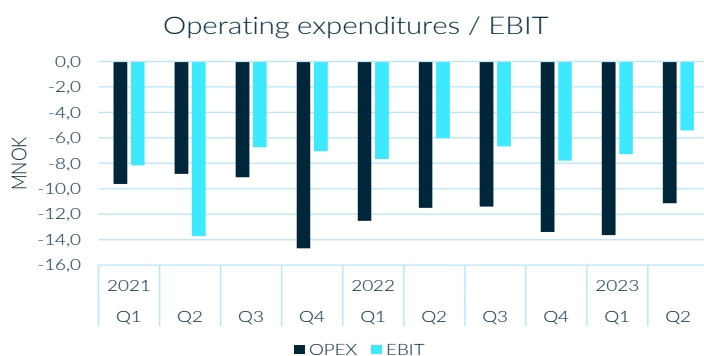
MNOK	Kv2'22	Kv2'23E	Kv2'23A	Diff%
<b>Sales</b>	2,5	4,5	3,7	-9%
<i>Growth</i>	156%	80%	22%	
<b>Grants</b>	2,3	2,5	2,1	-10%
<b>Total revenue</b>	<b>4,8</b>	<b>7,0</b>	<b>5,7</b>	<b>-9%</b>
<b>EBIT</b>	-7,7	-5,0	-5,4	

Source: GA

## Shrunked Cost Costume

The company has made efforts to reduce its operational costs, which has been successful. As costs decrease and sales increase, the company is heading towards reduced losses. The company's EBIT amounted to NOK -5.4 million, compared to NOK -6.0 last year. We consider that the level of costs now reached is sustainable for some time to come. Personnel costs have decreased as have other expenses, including costs for the IBD project, research and development and marketing.

*Loss in Q2 decreased*



Source: GA, Mangold Insight

# Genetic Analysis - Update Q2

## High activity in the microbiome market

In the consumer segment, which GA also aims to enter, activity is high. The US diagnostic company Viome Life Sciences (Viome) has entered into a partnership with CVS Pharmacy for the sale of Gut Intelligence tests. This kit is targeted at consumers and will be sold in CVS 200 stores. In connection with this, Viome has raised USD 86.5 million in a funding round. Its test kit can analyze the composition of microbiome in saliva and blood and detect various metabolic diseases such as IBS. The test is analysed by Viome and suggestions are then given on which diet is best suited for better stomach health.

There has been an increase in the number of companies focusing on consumer microbiome tests (DTCs). American Ombre and Biohm Health have similar diagnostic tests. The global market for Microbiome Analyzing Consumer Market is expected to grow at a high pace. In 2022, it amounted to USD3 billion and is expected to increase to USD32.6 billion in 2030. Precedence Research estimates that over the period 2022 to 2030, annual growth is 34.7 percent on average.

### MICROBIOME DTC-TEST

Viome  
Ombre Lab  
Biohm Health  
Verisana  
Floré

Source: Mangold Insight

## Apps are emerging

In addition, a large number of apps for better stomach health, such as Food Marble and MyHealthGut have emerged. The Personalized Nutrition Market is expected to increase to USD33.6 million in 2030 from USD11.1 million in 2022. Market growth is expected to reach 14.8 percent on average over this period according to P&S Intelligence.

### APPS - Gut Health (IBS)

Food Marble  
MyHealthGut  
Cara Care  
Bowelle  
MyHealthyGut  
Nerva

Source: Mangold Insight

*DTC market looms for GA*

*According to PitchBook data, Viome is valued at USD339 million 2022.*

*The DTC segment is expected to grow at an average annual rate of 35%*

*Gut health apps on the rise*

# Genetic Analysis - Estimates

## Adjusted estimates

For Genetic Analysis, we expect that the high growth rate will continue throughout the rest of the year. We have reduced our estimates for Q3 due to inventory effect but expect a stronger Q4 due to seasonal effects. Our estimates are shown in the following table:

*Inventory effects expected in Q3*

MANGOLD INSIGHT - 2023 QUARTERLY ESTIMATES				
MNOK	Q1	Q2	Q3E	Q4E
Net Sales old			4.8	6.2
Net Sales new	4.1	3.7	3.5	5.2
Growth	64%	22%	60%	50%
Grants	2.3	2.1	2.4	2.5
<b>Total Revenue</b>	<b>6.4</b>	<b>5.7</b>	<b>5.9</b>	<b>7.7</b>

For the coming years, we expect the company to grow faster than the market. The company has added more distributors in Europe and has contracts in both China and Thailand that can bear fruit in the long term. The company has most of its sales in the United States, the biggest market, and the company recently announced a new US customer. Approaching the pharmaceutical industry and growing with more labs can take Genetic Analysis to the next level. If the market becomes more dynamic next year, our predictions will probably be too conservative. Genetic Analysis has good opportunities for collaborations which would also mean that sales could increase at a higher pace. Estimates for 2024 to 2027 had been adjusted.

*Continued high growth*

GENETIC ANALYSIS - YEARLY ESTIMATES						
MNOK	2022	2023E	2024E	2025E	2026E	2027E
Net Sales	11	16	26	38	53	68
Growth	64%	48%	55%	50%	37%	30%
Grants	10	9	10	0	0	0
<b>Total Revenue</b>	<b>21</b>	<b>26</b>	<b>36</b>	<b>38</b>	<b>53</b>	<b>68</b>
<b>EBIT</b>	-28	-22	-10	-4	7	17
Marginal %				-9%	13%	25%

Källa: Mangold Insight

## Financing

Genetic Analysis is in need of a capital injection to get to profitability. The company had a cash position of NOK 12 million at the half of the year. Mangold believes that a capital raise should be done in order not to lose momentum around the development of new products and the marketing of the GA-map technology. At current burnrate, cash flow is expected to last until the end of the year. In our DCF-model, we have chosen to take up loans for 2024 and 2025 in order to avoid a negative cash position.

*Capital needs for 2024*

# Genetic Analysis - Valuation

## DCF-valuation

Mangold has chosen to value Genetic Analysis with a DCF model. A risk-adjusted discount rate of 12 percent has been used which is in line with recommendations from the PwC Risk Premium Study 2023. Mangold has applied a size-related risk premium supplement of 8.4 percent and a rate of return of 3.8 percent rounded to 12 percent. Mangold use Norwegian tax rates. Based on these assumptions, we receive a fair value of NOK 3,44. Mangold price target is SEK 3.40 per share (previously SEK 4.00) an upside of over 100 percent. As the company reaches more markets and increases sales, the value of the company is expected to approach our Basecase.

*Target price NOK 3.40 per share*

### GENETIC ANALYSIS - DCF

(TNOK)	2023E	2024E	2025E	2026E	2027E
EBIT	-21 570	-10 174	-3 940	6 527	16 201
Free Cash Flow	-18 051	-5 872	-3 144	3 337	13 044
Terminal Value					130 436

Assumptions	Disc.rate	Growth	Tax
	12%	2%	28%

Equity Value	85 717
Fair Value/share	3,44

Source: Mangold Insight

## Sensitivity analysis

Mangold has chosen to carry out a sensitivity analysis in which revenue increased by 10 percent in a Bull case and decreased by 10 percent in a Bear case. These scenarios have since been compared with various discount rate ranging from 11 percent to 13 percent. With 10 percent higher growth and lower discount rate requirements, a fair value of the share can amount to NOK 4.76 per share.

*NOK 4.76 in Bull case (12% disc rate)*

### MANGOLD - SENSITIVITY ANALYSIS

Disc rate %	Bear	Base	Bull
11%	3.15	3.96	4.76
12%	2.74	3.44	4.14
13%	2.40	3.02	3.65

Source: Mangold Insight

# Genetic Analysis - Peers valuation

## Diagnostic Peers

The following table shows comparable peers in Life Science and Diagnostics. The table is organized by market capitalization in local currency. For Genetic Analysis, the P/S ratio is expected to fall below 2.0x in 2023. The table does not form a basis for valuation, but should be seen as an overview of how similar companies are valued.

*Low valuation vs. Peers*

### MANGOLD - PEERS

Company	Exchange	Activities	MC (M)*	Sales 2023 (M)*	P/S 2023
Gentian Diagnostics	Oslo Börs	IVD	649	120	5,4
Viro Gates	First North Köpenhamn	suPAR (measures protein in blood)	67	10	6,6
Alphahelix	Spotlight Stock Market	PCR/qPCR (viruses och bacteria)	31	34	0,9
Average					4,3
Genetic Analysis	Spotlight Stock Market Norge	Human Microbiome Diagnostics	30	16	1,8

\*Local Currency, MNOK, MDKK, MSEK

## Summary of projects and collaborations

Interest in seeking a partner in the microbiome market is increasing. GA has positioned itself in several markets. The company is located in the largest US market and has strongholds in Asia with projects in Thailand, India and China. Distributors in Europe represent an important part of sales, and the company is now also located in the Balkan region. Well-equipped labs with spare capacity after COVID-19 tests provide opportunities for increasing sales of GA-map tests.

*IBD and diabetes projects have potential*

The company has a major ongoing biomarker project within IBD with Gothenburg University Hospital and Akershus University Hospital that will last for a three-year period and that is funded by research grants. Interesting to follow is its diabetes project where positive results were presented in a scientific journal (BMC Endocrine Disorders). Listed below are the projects in progress

### GENETIC ANALYSIS - PROJECTS

<b>IBD (Inflammatory Bowel Disease)</b>	Biomarkers IBD	
<b>GA-DIS200</b>	Biomarkers for research	Launch Q2 23
<b>GA-LAD25</b>	New technology in microbiota	
<b>LDT Thalys/Kiina</b>	GA-map technology	H2 2023
<b>Diabetes T2</b>	Biomarkers/Diabetes Type 2	

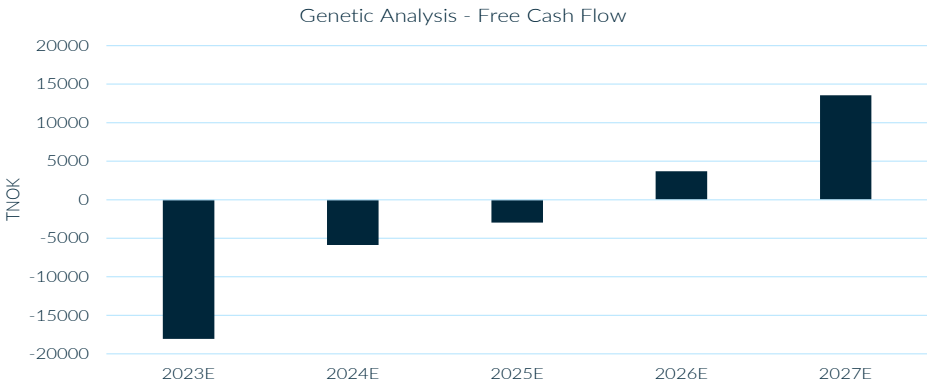
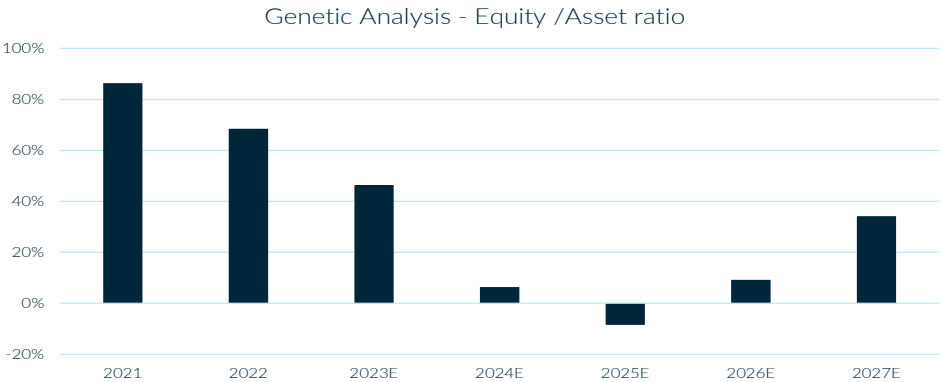
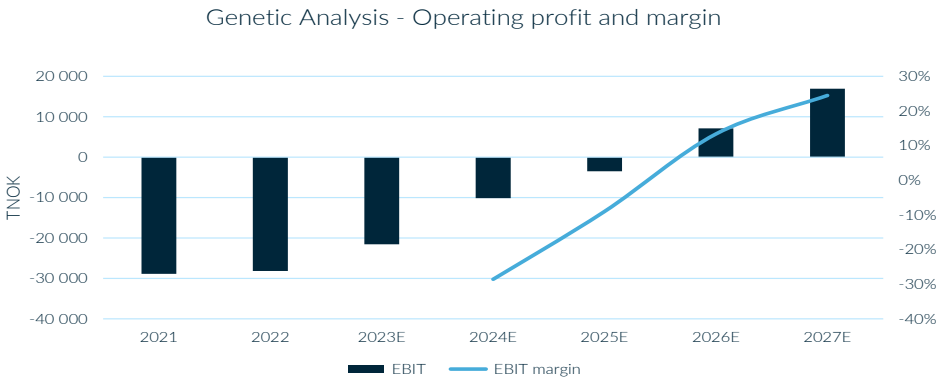
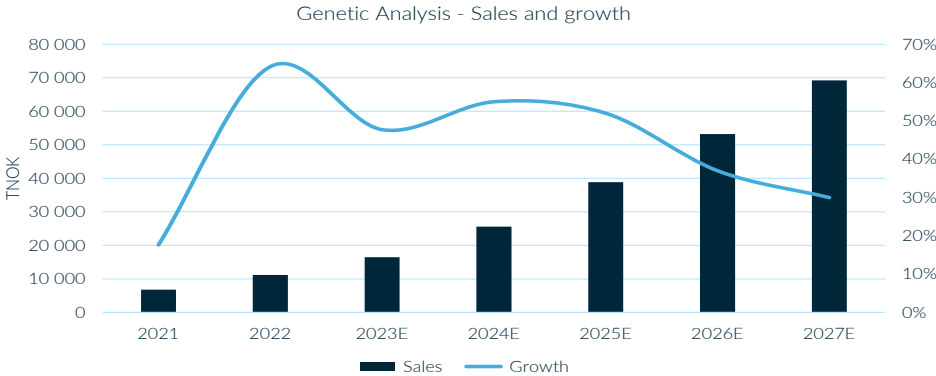
Källa: GA

# Genetic Analysis – SWOT





# Genetic Analysis – Appendix



# Genetic Analysis – Profit and loss

Income Statement (TNOK)	2021	2022	2023E	2024E	2025E	2026E	2027E
Total Revenues	13 379	20 747	25 690	35 560	38 339	52 525	68 282
<b>Gross profit</b>	<b>12 098</b>	<b>16 840</b>	<b>22 392</b>	<b>31 726</b>	<b>32 588</b>	<b>43 596</b>	<b>54 626</b>
Personnel costs	-22 835	-25 196	-26 341	-26 341	-26 341	-27 487	-28 632
Other operating expenses	-13 602	-14 994	-12 745	-11 598	-6 959	-6 959	-7 655
Depreciation	-4 531	-4 834	-4 876	-3 961	-3 229	-2 623	-2 138
<b>Operating result</b>	<b>-28 870</b>	<b>-28 184</b>	<b>-21 570</b>	<b>-10 174</b>	<b>-3 940</b>	<b>6 527</b>	<b>16 201</b>
Operating margin	0%	0%	0%	-29%	-10%	12%	24%
Net interest income	135	90	132	132	232	262	262
<b>Profit after net fin. items</b>	<b>-29 005</b>	<b>-28 274</b>	<b>-21 703</b>	<b>-10 307</b>	<b>-4 173</b>	<b>6 265</b>	<b>15 939</b>
Taxes	0	0	0	0	0	-1 754	-4 463
<b>Net profit</b>	<b>-29 005</b>	<b>-28 274</b>	<b>-21 703</b>	<b>-10 307</b>	<b>-4 173</b>	<b>4 511</b>	<b>11 476</b>

Källa: Mangold Insight

Balance sheet	2021	2022	2023E	2024E	2025E	2026E	2027E
<b>Assets</b>							
Cash and bank	46 810	25 323	1 027	2 101	648	3 823	16 705
Trade receivables	8 419	8 359	4 066	6 302	9 454	12 951	13 095
Inventory	2 367	1 755	813	945	1 418	2 202	3 367
Fixed assets	25 894	28 987	19 804	16 143	13 115	10 692	8 753
<b>Total assets</b>	<b>83 490</b>	<b>64 425</b>	<b>25 711</b>	<b>25 492</b>	<b>24 635</b>	<b>29 668</b>	<b>41 921</b>
<b>Liabilities</b>							
Account Payables	9 968	12 946	542	630	945	1 468	2 245
Liabilities	1 432	7 338	13 244	23 244	26 244	26 244	26 244
<b>Total liabilities</b>	<b>11 400</b>	<b>20 284</b>	<b>13 786</b>	<b>23 874</b>	<b>27 189</b>	<b>27 712</b>	<b>28 489</b>
<b>Equity</b>							
Restricted equity	99 871	72 090	72 090	72 090	72 090	72 090	72 090
Unrestricted equity	-27 781	-27 950	-60 165	-70 472	-74 645	-70 134	-58 658
Total equity	72 090	44 141	11 925	1 618	-2 555	1 956	13 432
<b>Liabilities and Equity</b>	<b>83 490</b>	<b>64 425</b>	<b>25 711</b>	<b>25 492</b>	<b>24 635</b>	<b>29 668</b>	<b>41 921</b>

Källa: Mangold Insight

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Mangold last analysed Genetic Analysis 2023-06-02.

Mangold's analyst does not own shares in Genetic Analysis.

Mangold does not own shares in Genetic Analysis, such as for own stock.

Mangold does not own shares in Genetic Analysis through assignments, such as a liquidity guarantor.

Mangold has performed services for the company and has received remuneration from the company for these.

Mangold comes under the supervision of Finansinspektionen (FI), Sweden's financial supervisory authority.

Recommendation structure:

Mangold Insight grades its share recommendations over a 12-month period, according to the following structure:

Buy – An upside in the share of at least 20%

Increase – An upside in the share of 10–20%

Neutral – An upside and downside in the share of 0–10%

Decrease – A downside in the share of 10–20%

Sell – A downside in the share of at least 20%