

OncoZenge

Equity Analysis OncoZenge AB (publ)

by Impala Nordic
12 april 2024



IMPALA NORDIC

1. Overview	3
2. Background	4
3. Product	4
4. Clinical proof and research	7
5. Market	9
6. Strategy	12
7. Business model	14
8. Value drivers and risks	15
9. Financials	16
10. Corporate governance	18
11. Final words	21
12. Disclaimer	22
13. Sources	23

1. OVERVIEW

Teaser

- OncoZenge AB (publ) ("OncoZenge" or "the Company"), is a Swedish biotech company developing BupiZenge™, a pain-relieving lozenge intended for pain relief in oral mucositis. The Company is working to prepare the candidate for Phase-3 studies and thereafter a possible market launch in Europe.
- BupiZenge™ has the potential to improve the quality of life for patients suffering from oral mucositis and has shown benefits in clinical Phase-1 and 2 studies. Its rapid action and pain-relieving ability are factors that, among other things, facilitate food intake for patients, which can strengthen the immune system and accelerate recovery from cancer.
- OncoZenge is intensifying efforts to prepare for a Phase-3 program and is exploring possibilities for partnerships.
- The Company holds patents that provide protection for the use of bupivacaine in lozenges for pain relief in the mouth, which is an important asset. To strengthen this patent protection, the Company has also filed a new patent application, which could extend patent protection until 2045.
- The main value drivers for OncoZenge are assessed to be a partnership and progress towards Phase-3 studies of BupiZenge™. At the same time, there is potential to enter into various partnerships, which could facilitate the further development of BupiZenge™. The main risks include potential delays in partnerships and Phase-3 studies, capital requirements, and insufficient study data.

Overview

Ticker	ONCOZ
List	First North Stockholm
Stock price	4,18 SEK
Amount of shares.....	11 713 244
Market cap	48 MSEK
CEO.....	Stian Kildal
Chairman	Daniel Ehrenstråhle

Owner list

Share	Largest shareholders
10,9 %	Holmgren, Niclas
10,0 %	Linc AB
9,2 %	Östersjöstiftelsen
5,0 %	Ozbek, Andreas
4,6 %	Avanza Pension
2,7 %	Nordnet Pensionsförsäkring
2,7 %	Svenska Mäklarkontoret AB
2,6 %	Holmgren Bergqvist, Monica
2,6 %	Kildal, Stian
2,5 %	Holmgren, Kalle

Analysts

Ylber Rexhepi
Vilhelm Ruhr

2. BACKGROUND AND PRODUCT

Background

OncoZenge is a Swedish biotech company developing BupiZenge™, a lozenge intended to alleviate pain in individuals with oral mucositis. In clinical Phase-1 and 2 studies, BupiZenge™ has shown clear advantages over standard treatments for pain relief in the mouth, with a rapid effect. This has the potential to improve the quality of life for cancer patients with oral mucositis, as the pain relief facilitates food intake, which in turn accelerates the recovery of the immune system.

The Company, originally a spin-off from Moberg Pharma, was listed on First North Stockholm at the beginning of 2021. Following disagreements about the future direction of the Company, the entire board and management were recently replaced at the initiative of the new main owner, Niclas Holmgren. The focus is now on preparing for a Phase-3 study and finding a partner to assist OncoZenge in the effort to bring BupiZenge™ to market. OncoZenge is listed on Nasdaq First North and has a market value of approximately 4,5 MUSD.

Product - BupiZenge™

OncoZenge is developing the medication BupiZenge™, a pain-relieving lozenge primarily intended for individuals with oral mucositis. Oral mucositis is an inflammation of the mucous membranes that can form in the mouth, leading to painful sores and blisters. The condition is common among cancer patients undergoing chemotherapy or radiation therapy, and the pain can be very troublesome. The most vulnerable group is patients with head and neck cancer who need to undergo both chemotherapy and radiation therapy. In this patient group, an estimated 90–100% suffer from severe problems related to oral mucositis.

The active substance in the Company's product is bupivacaine, a well-known local anesthetic that is also used during surgical procedures. The substance was first developed in the 1960s and works by blocking nerve impulses in the areas where it is used. Common uses for bupivacaine include pain relief during surgical procedures and local anesthesia in dentistry. This makes it easier for the Company to develop BupiZenge™, as the substance in the medication is already well-understood and documented.



2. PRODUCT

An additional advantage of bupivacaine, as mentioned by the Company, is that the substance is not an opioid nor is it classified as a narcotic. This means that BupiZenge™ could serve as an alternative to opioid pain relief treatments in the mouth and throat. For example, the USA has had significant issues with opioid addiction and overdoses, with over 80,000 registered overdoses in 2020. This highlights the benefit of patients being able to use pain relief alternatives that are not opioids.

Oral mucositis

A person affected by oral mucositis is typically a cancer patient with a weakened immune system after undergoing chemotherapy and/or radiation therapy. Due to cancer treatment, the renewal of cells in the mucous membrane slows down, making it more sensitive. Mucositis usually occurs 12–17 days after the start of radiation treatment targeting the head and neck region, and in extreme cases, the condition can last from 7 to 98 days in some patients. Once affected, the patient typically experiences sores, burning, and pain, complicating eating, swallowing, and speaking. Moreover, maintaining good oral hygiene can be challenging, leading to additional issues.

The healing of oral mucositis often takes at least 2–3 weeks, and it's not until white blood cells begin to be produced again in the bone marrow that a person with oral mucositis can start healing the mucous membrane. For some, the pain is so severe that they cannot eat at all and thus need to be fed through a tube. In some cases, even patients undergoing chemotherapy may need to adjust the treatment dose due to the severity of oral mucositis. This, in turn, affects cancer treatment, which can impact the disease prognosis. Besides cancer patients, more than a majority of those who have undergone stem cell transplantation suffer from oral mucositis.

From an economic perspective, oral mucositis is associated with significantly increased patient costs. The extent of the increased patient costs varies greatly depending on the patient's underlying condition. Studies have shown about \$1,700–\$6,000 in increased costs per patient treated with chemotherapy. At the same time, one study found that the increased patient costs amount to \$5,000–\$30,000 if the cancer patient undergoes radiation therapy. Considering the large population, which includes about 40% of all cancer patients, the total costs are enormous regardless of the estimates assumed.



3. PRODUCT

Different grades of oral mucositis according to WHO

Grade 1	Grade 2	Grade 3	Grade 4
Mild pain and redness in the mouth.	Redness and sores in the mouth, still possible to eat solid food.	Sores in the mouth and the patient can only eat liquid food.	The patient is so severely affected that they are unable to eat at all.

Other areas of use

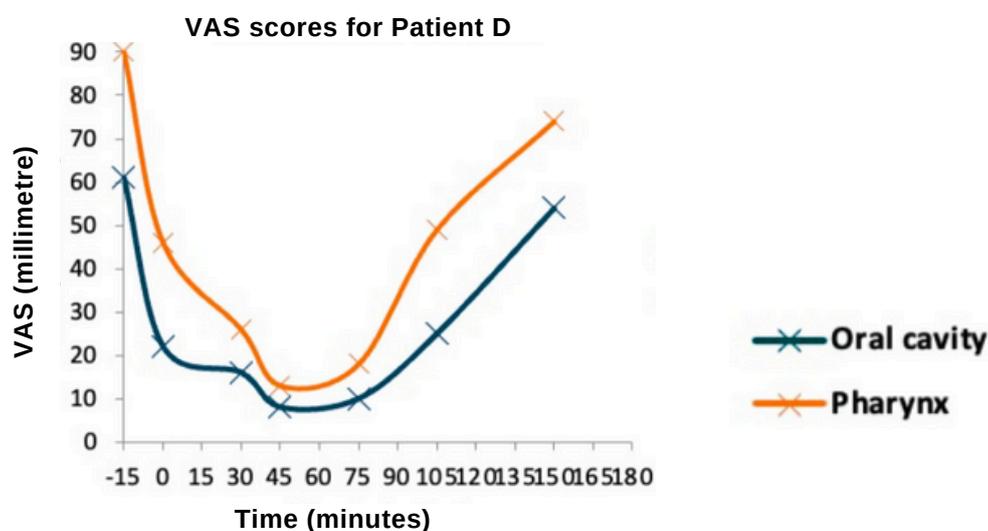
Beyond the main focus on oral mucositis, the Company has identified future potential to expand the use of BupiZenge™ to other areas where there is a demand for alternative pain relief. Examples mentioned by the Company include pain relief during endoscopy, various surgical procedures in the mouth and throat, dental care, and Burning Mouth Syndrome (BMS). However, it is important to note that these potential applications should be considered as possible options for the future and are not the primary focus at present.

Some of the alternative uses for BupiZenge™ have already been explored in smaller studies, and a possible approval for use against oral mucositis would also facilitate development for other applications. A possibility for OncoZenge is to license the product to stakeholders interested in developing BupiZenge™ for other uses in the future.



Research

BupiZenge™ has a strong documented pain-relieving effect, as demonstrated by OncoZenge in both Phase-1 and Phase-2 studies with patients suffering from oral mucositis. In both studies, BupiZenge™ has been shown to be safe to use, with no serious side effects noted. The results from the Phase-2 study are particularly promising, where pain in the oral cavity/throat decreased by 31%, and a significant reduction of 50% was observed solely in the oral cavity. The clinical Phase-2 study, which was conducted over 7 days, included patients with cancer in the head and neck region who had developed oral mucositis.



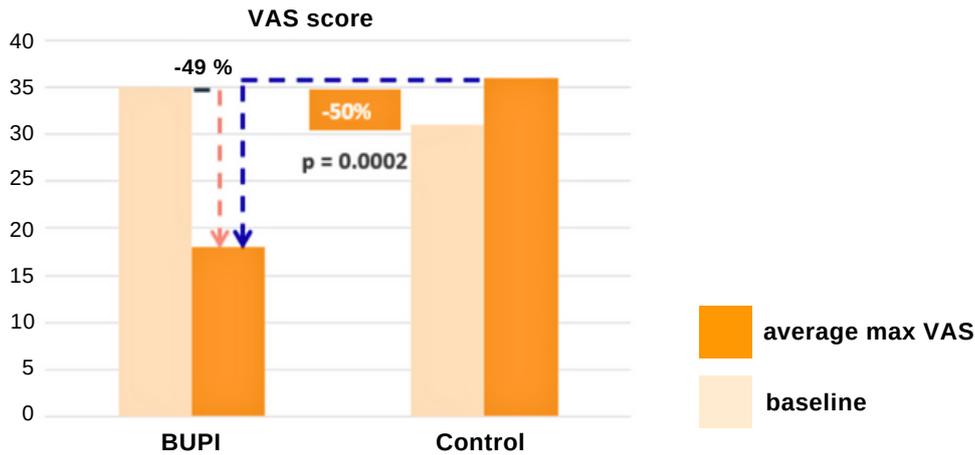
Graph from OncoZenge.se

The chart above shows a patient's perceived pain in the mouth (Oral Cavity) and the throat (Pharynx). The chart demonstrates a reduction in pain from 90 and 60 down to 15 and 10, respectively. For reference, 50–60 on the VAS scale indicates moderate pain, while 80 or more represents severe pain. VAS stands for Visual Analogue Scale and is one of the most common pain scales for subjective pain assessment. The patient rates their pain on the scale from no pain at all (0) to the worst imaginable pain (100).

The chart clearly shows that pain relief is noticeable just 15 minutes after BupiZenge™ dissolves in the mouth. This indicates faster pain relief compared to other treatment methods. For instance, the substance lidocaine, which is used in various mouthwash treatments, only begins to relieve pain after 1 hour.

It's important to note that the effect can vary between patients, as pain is subjectively experienced. Moreover, the use of BupiZenge™ may vary depending on the stage of cancer treatment the patient is in.

3. RESEARCH AND CLINICAL EVIDENCE



Graph from OncoZenge.se

The chart above shows results from the Company's Phase-2 study, in which 38 patients with cancer in the head and neck area participated. In the study, BupiZenge™ was compared with standard treatments that contained lidocaine in the form of ointment, oral pain relief tablets, and morphine. In the "BUPI" group, lidocaine was replaced with BupiZenge™, resulting in a 50% reduction in pain in the mouth.

Preparing for Phase-3 studies

The entire case hinges on the ability to successfully take BupiZenge™ to Phase-3 studies, in turn paving the way for possible market approval. The protocol for the Phase-3 study is designed for a 6-week use of BupiZenge™, linked to radiation therapy as part of the cancer treatment. Patients are expected to use an average of 4 lozenges per day. To maximize the benefits associated with BupiZenge™, the tablet should be taken primarily in conjunction with breakfast, lunch, dinner, and before sleep. By reducing pain in the patient's mouth, eating is facilitated, which strengthens the immune system and promotes faster recovery from both oral mucositis and the cancer treatment. Improvement of the patients' food intake is a key argument for BupiZenge™ and will be evaluated in the Phase-3 study, where a possible measurement method could be to assess differences in weight loss.

It appears that OncoZenge is well-prepared for the Phase-3 study, especially considering that they have been developing the project for several years. This preparation is positively assessed and will likely facilitate the work of finding a partner and financier for the study. The start of the Phase-3 studies is considered the primary trigger at present.

Patents

Currently, OncoZenge holds patents approved in the USA, Canada, Australia, and Europe. In 2021, the Company received a new patent in Europe that is valid until 2032/2033. This patent provides the Company with general protection for lozenges containing bupivacaine for the treatment of pain in the mouth. The patent is based on the Company's original patent that protects the use of lozenges for the treatment of oral mucositis in cancer patients.

To strengthen patent protection, OncoZenge has filed a new patent application, which, if granted, means that BupiZenge™ would receive extended patent protection until 2045. If the patent is approved, it would enhance the possibilities for broadening global protection and filing for new patents in key markets, such as China and Japan. This would strengthen the commercial protection for any possible licensee or partner.

Significant market potential

The market for BupiZenge™ is significant, and the Company has recently shared its own estimates of its annual value. According to their calculations, the value of the American market ranges between \$100–\$800 million annually, while the European market is between \$110–\$540 million. These estimates are based on the following assumptions:

- A population of 2 million patients diagnosed with cancer, where 30–50% suffer from oral mucositis and are treated for 6 weeks.
- The Company expects a potential usage rate of 20–40% of these patients.
- The pricing of the tablet could vary between \$4–\$6 in Europe and \$5–\$12 in the USA.

Sales Potential in Europe Below, some assumptions have been made in the analysis regarding the sales of BupiZenge™ in Europe based on the usage rate in the patient population. The following factors have been considered:

- A treatment period of 6 weeks and that patients on average take 4 tablets a day.
- Assuming the number of cancer patients in Europe is 2.7 million, as stated by the Company.
- An assumed prevalence of 40%, which corresponds to the middle of the range stated by the Company (30–50%). This results in a population of 1,080,000 patients.
- A gross margin of 95%.
- A sales revenue of \$2 per tablet, which is lower than the range stated by the Company (\$4–\$6).

These assumptions mean that on average, a patient generates \$336 in revenue during a 6-week treatment. Furthermore, the gross profit is relatively inconsequential, partly because sales revenues will be shared with a partner, and partly because drug launches involve significant costs related to sales force and organization. The extent of the revenue share that OncoZenge can receive in the form of royalties is unclear, but it is presumably going to be a low double-digit percentage.

Amount of total population	2 % (21 600 patients)	5 % (54 000 patients)	10 % (108 000 patients)	15 % (162 000 patients)
Revenue in USD	7 257 000	18 144 000	36 288 000	54 432 000
Gross profit in USD	6 894 150	17 236 800	34 473 600	51 710 400

Amount of total population	20 % (216 000 patients)	25 % (270 000 patients)	30 % (324 000 patients)	35 % (378 000 patients)
Revenue in USD	72 576 000	90 720 000	108 864 000	127 008 000
Gross profit in USD	68 947 200	86 184 000	103 420 800	120 657 600

Note that these figures are simplified, and OncoZenge will likely need to negotiate sales revenues with partners, which could affect the profit.

4. MARKET

Sales Potential in the USA

Even though potential approval in the USA is further away than in Europe, assumptions have been made in the analysis to exemplify what the revenues might look like depending on how large a portion of the patient population with oral mucositis is treated with BupiZenge™. The assumptions are based on the following:

- 2 million cancer patients, as stated by the Company.
- 40% suffering from oral mucositis, which leads to 800,000 patients.
- An average of 4 tablets taken per day by a patient, treated for 6 weeks.
- A conservatively assumed price of \$4 per tablet, which is low compared to the Company's assumptions of \$5–\$12 per tablet.
- A gross margin of 95%.

These assumptions result in an average revenue of \$672 per patient treated with BupiZenge™. Just as in the examples for Europe, the revenues for OncoZenge will be lower considering that they intend to enter into partnerships, as such agreements usually involve a predetermined sharing of future revenues through royalty agreements.

Amount of total population	2 % (16 000 patients)	5 % (40 000 patients)	10 % (80 000 patients)	15 % (120 000 patients)
Revenue in USD	10 752 000	26 880 000	53 760 000	80 640 000
Gross profit in USD	10 214 400	25 536 000	51 072 000	76 608 000

Amount of total population	20 % (160 000 patients)	25 % (200 000 patients)	30 % (240 000 patients)	35 % (280 000 patients)
Revenue in USD	107 520 000	134 400 000	161 280 000	188 160 000
Gross profit in USD	102 144 000	127 680 000	153 216 000	178 752 000

Note that these figures are simplified, and OncoZenge will likely need to negotiate sales revenues with partners, which could affect the profit.



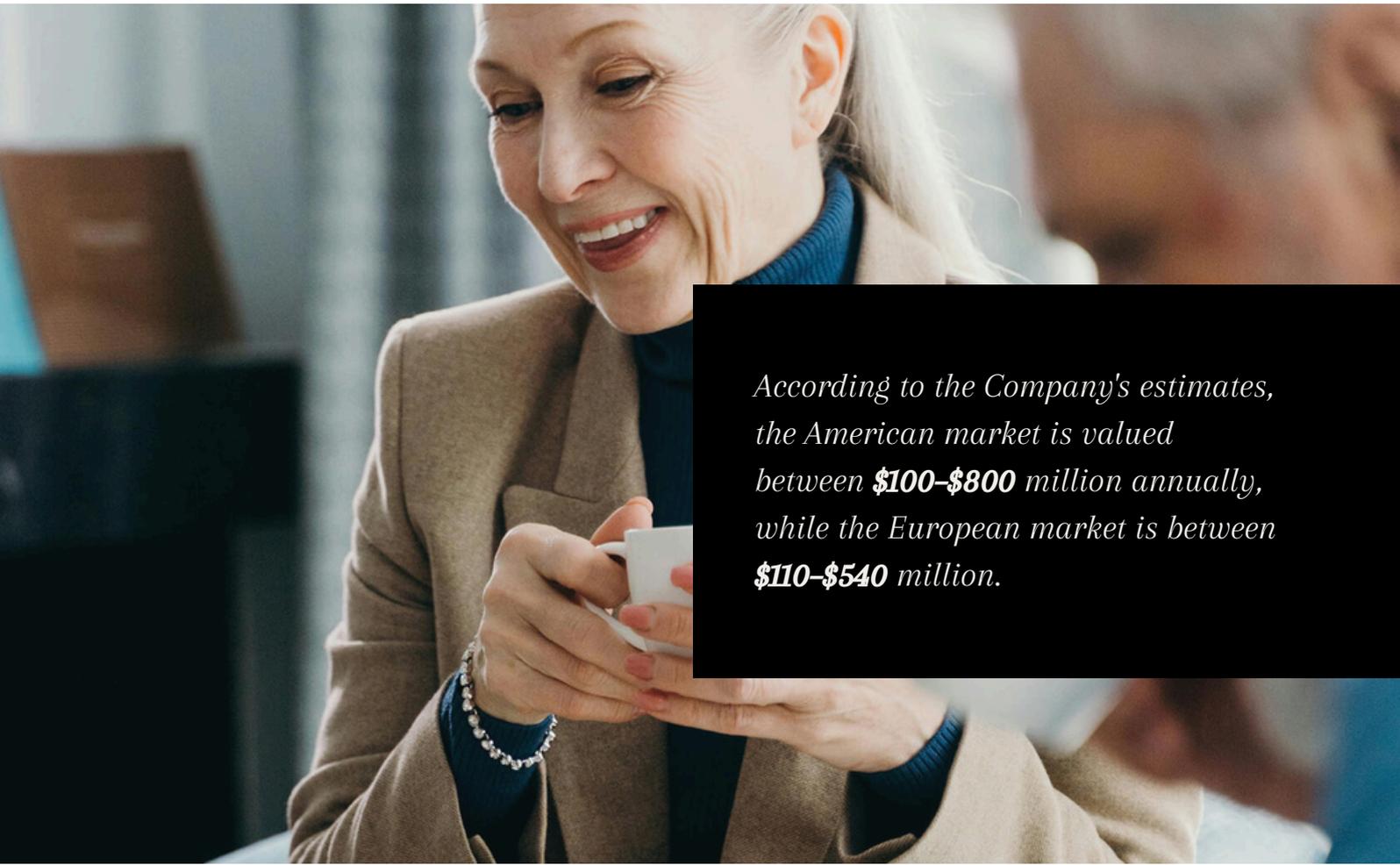
4. MARKET

Current Treatment Options

The treatment options available for oral mucositis today vary depending on the patient's condition and, most importantly, the level of pain they experience. Several options for treatment and preventive measures are available, including:

- Various mouthwash treatments with different pain-relieving substances, primarily lidocaine.
- Opioid pain relief tablets, such as morphine. This option is mainly used for patients experiencing severe pain.
- Cryotherapy, which involves different methods of cooling the mouth to prevent severe oral mucositis.
- Oral gels that form a protective film in the mouth.
- Preventive measures through dietary changes.

Currently, there is no standard treatment for oral mucositis, as the effectiveness of the alternatives varies significantly depending on the patient's condition. An option like BupiZenge™, which is easy to use and much safer than opioids, has the potential to be of great benefit to patients with oral mucositis.



*According to the Company's estimates, the American market is valued between **\$100-\$800** million annually, while the European market is between **\$110-\$540** million.*

Strategy

Currently, OncoZenge is exploring the possibilities of conducting a Phase-3 study in collaboration with an external partner. The core focus is to work towards market approval in Europe; therefore, the company has assessed that if they can secure a partner for the Phase-3 study without delay, a possible market approval in Europe could be obtained during 2026

Apart from the European focus, OncoZenge is also exploring opportunities in other promising markets, such as China. We view this as an interesting complement to the focus on Europe, and believe that the new patent filing will improve the possibilities to attract licensing partners in other markets. We expect more focus on this when the Phase 3 project for the European market is confirmed.

Reaching the European market by 2026 is based on several assumptions, which could change depending on partner discussions or regulatory timelines. The project is expected to take two years to complete, which includes preparing for studies, waiting for study approval, recruiting patients, administering treatments, collecting study data, providing a top-line readout, and finally, filing for market authorization. Therefore, the plan to reach the market by 2026 seems feasible if a partner is secured in the near term, enabling potential market access in H2 2026.

Before the Company communicated its strategy update at the end of 2023, the original plan was to conduct the Phase-3 study on its own, which would have required a capital injection of 60 million SEK. With the new strategy, OncoZenge can use its existing capital for operational expenses.

It's worth noting that 60 million SEK is a relatively low cost for a Phase-3 study, made possible by the relatively simple study design compared to other Phase-3 studies in the pharmaceutical industry. For example, the administration time to the patient is only 6 weeks according to the study protocol, which is a relatively short period compared to other drug projects. Assuming the cost of bringing BupiZenge™ to the market in Europe is 60 million SEK, the project should appear interesting from a partner's perspective.

Collaborations and partners

To expedite preparations for the Phase 3 program, dialogues are being held with potential partners. The Company has previously communicated that 3 partner options are being qualified, all with different strengths and weaknesses. Priority is on securing a partner who is ready to assume cost in the project, presumably in return for rights to market exclusivity. The Company has recently communicated that additional markets are being explored as a complement, such as China, where there are presumably large patient needs and opportunities. Other markets too are likely to hold large potential (such as Japan). Some of these markets may require local approvals and as such a local pharma partner would be logical in order to effectively address the potential of these markets, complementary to the company's own short term focus on Europe.

To improve its chances of entering the American market, OncoZenge signed a letter of intent with the American research company Ensysce Biosciences in November. It is important to note that Ensysce Biosciences is a very small company with financial challenges. The letter of intent should be seen as an opportunistic measure where OncoZenge has nothing to lose. Through this letter of intent, OncoZenge has, among other things, received cost-free assistance with applying for financial support from the National Institutes of Health (NIH). This support could be used to meet the specific requirements for toxicity studies that the FDA requests.

Terms in partnerships

In the pharmaceutical industry, it's common for smaller companies to enter into partnerships with larger firms to develop and commercialize their drug candidates. These partnerships can vary in terms and arrangements, but a typical procedure is for the smaller company to out-license its candidate to the larger partner. This arrangement may mean that the larger partner takes responsibility for financing and conducting clinical studies and obtaining market approval.

In such agreements, it's common for the smaller partner to receive a lump sum upon entering the agreement, followed by milestone payments linked to various achievements throughout the development process. Ultimately, the smaller partner may receive a certain percentage of the sales once the drug reaches the market.

The specifics of a potential partnership for OncoZenge are still unclear and will be negotiated between OncoZenge and the potential partner. Given that OncoZenge currently needs an external partner to finance a Phase-3 study, this could result in the terms of the agreement being more favorable to the partner. The final terms will depend on the negotiations and the relationship between the Company and its partner. It's possible that the agreement includes an upfront payment, milestone payments, and a percentage of the sales, but exact figures and terms are challenging to estimate.

Business model and outlook for BupiZenge™

OncoZenge currently does not generate any revenue since BupiZenge™ has not yet reached the market. The Company relies on securing financing and partnerships to commence Phase-3 studies with BupiZenge™ and subsequently apply for market approval.

BupiZenge™ is intended to be sold as a prescription tablet, requiring a doctor's prescription for patient use. The reason OncoZenge cannot sell BupiZenge™ over-the-counter is due to the extensive safety data required. While not a focus for the Company at present, this could be a possibility in the future.

Market research is crucial for understanding how doctors and patients perceive and may use a drug. In 2016, OncoZenge conducted market research among prescribing doctors in Germany and Italy, where 83% preferred BupiZenge™ over existing alternatives for the pain relief treatment of oral mucositis. Although the results from earlier market research might be interesting, it's essential to remember that market conditions can change over time.



6. VALUE DRIVERS AND RISKS

Value drivers and risks

Value Drivers

The primary value drivers in OncoZenge are primarily considered to be a partnership or some collaboration that can take the Company to Phase-3 studies. Considering the low confidence in the market, Impala also assesses that further confirmation that BupiZenge™ is ready for Phase-3 could be value-driving.

The primary value drivers:

- Partnership
- Initiation of Phase-3 studies
- Positive results from Phase-3 studies
- Market approval

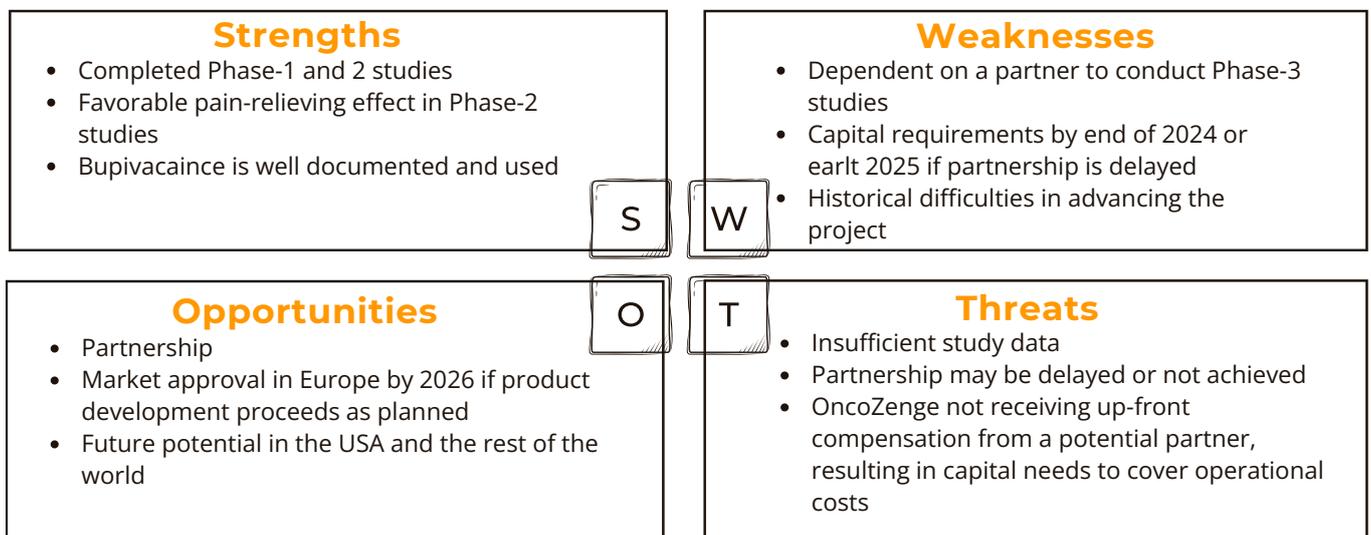
Risks

Considering that OncoZenge is a single-product company, the main risk is clearly that BupiZenge™, for some reason, is either not taken to Phase-3 studies or the study data is subpar. The risk that the Company needs to raise new capital is also a risk, which would increase if delays occur in the start of Phase-3 studies. The risk of raising capital is also different depending on the approach and terms. There is also a risk that one of the major shareholders would sell their shares and put pressure on the stock price. However, this risk is not particularly significant from a fundamental perspective as long as it does not press the stock price so much that the conditions for raising potential capital are significantly worsened.

The primary risks:

- Delay of Phase-3 studies
- That Phase-3 studies are not started or that the Company does not find a partner
- Capital needs
- Insufficient study data

SWOT analysis



Financial overview

At the end of 2023, the Company's cash amounted to SEK 12.6 million, indicating that there is no immediate need for capital at this time. As of April 1, the cash is estimated to be just under SEK 10 million. The current burn rate is around SEK 3 million per quarter, which should mean that the Company has money for the rest of the year. Previous communications from the Company indicated a capital need of SEK 60 million, but due to a strategic shift meaning not conducting a Phase-3 study independently, the need was revised.

Future Capital Requirements

Currently, the Company's assessment is that no more capital is needed as long as discussions with potential partners do not get delayed. In such a scenario, we estimate that the Company may need more capital by the end of 2024 to finance operational costs. Impala assesses that the burn rate will continue to be around SEK 3 million per quarter.

Apart from the possibility of the Company receiving money through a partnership, Impala assesses that there is a risk of capital raising from H2 2024 onwards. Should there be good conditions for the Company to raise capital earlier than that, it is not impossible. OncoZenge has only raised money once during its time on the stock market, which was through a rights issue of SEK 60 million in connection with the stock market introduction at the beginning of 2021.

Valuation

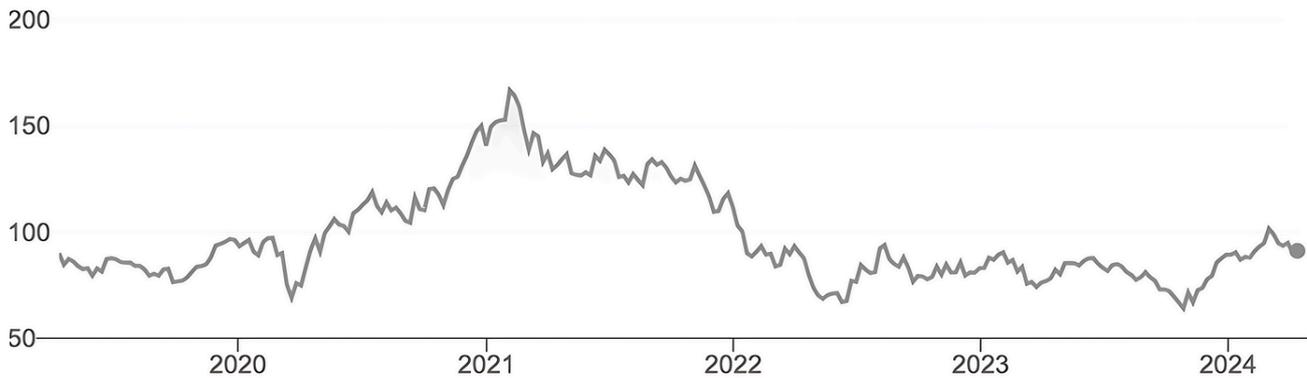
At present, OncoZenge has a market capitalization of approximately 45 million SEK, which may be considered low considering the potential demonstrated by BupiZenge™ in clinical trials and the hopeful prospect of advancing to Phase-3 studies in the future. A significant reason why the stock is trading as it is stems from the market's lack of belief in the potential of BupiZenge™ and the opportunities to reach the market. At the same time, the market's confidence in the Company appears low, which is another explanation. Impala Nordic does not have a concrete view on the likelihood of reaching the market but assesses that any progress will have a significant impact on the stock price and increase market expectations.

9. FINANCIALS

As an investor, one should be aware that there are clearly difficulties in advancing the drug, considering the Company's history. Overall, Impala Nordic sees it as likely that fundamental progress is required for the Company to be revalued by the market, which is currently overall pessimistic. At the same time, the current valuation is an obvious opportunity for those who believe in the fundamental development and want to support the new team.

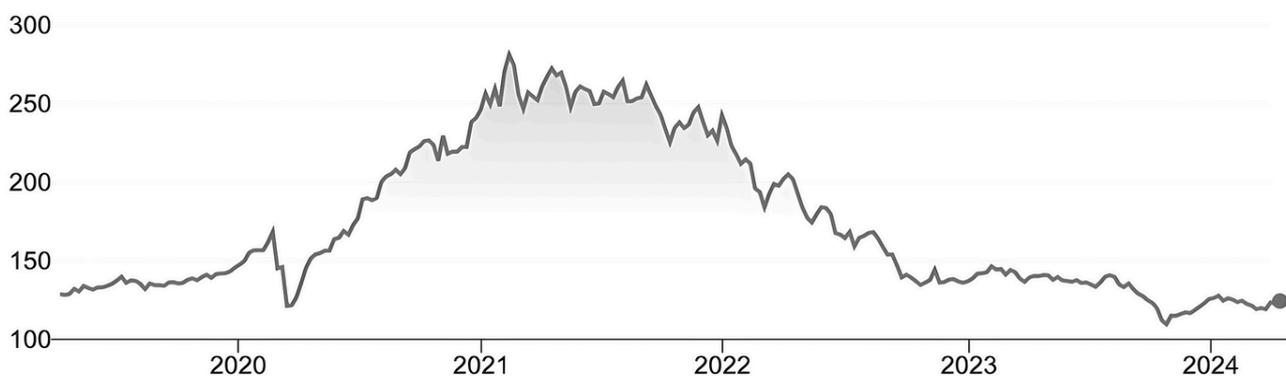
Beyond the company-specific valuation, there is potential for a revaluation of the biotech sector and micro-caps in general, which could affect the valuation of OncoZenge. The development for the SPDR S&P Biotech ETF and First North All-Share below is inconsequential for OncoZenge as a company but can be good to keep in mind when looking at today's valuation in many smaller research companies.

SPDR S&P Biotech ETF



Graph from Google Finance

First North All-Share SEK



Graph from Google Finance

Corporate governance - Background

In the fall of 2023, the management and board of OncoZenge were replaced after disagreements with the main owner, Niclas Holmgren, regarding the Company's way forward. In his view of the future, Niclas Holmgren received support from LINC, which is the second-largest owner of the Company, holding 10% of the shares. This drama has taken up a lot of space and overshadowed the rest of the operations.

After an extraordinary general meeting, the new board of OncoZenge consists of Chairman Daniel Ehrenstråhle and members Christoph Nowak and Niclas Holmgren. Daniel Ehrenstråhle has extensive experience from several industries and has, among other things, worked with mergers and acquisitions (M&A). Christoph Nowak holds a PhD in molecular epidemiology from Uppsala and a medical degree from Oxford. His experience includes roles at Diamyd Medical and Melius Pharma, where he has been Chief Medical Officer (CMO).

Since last fall, the CEO of OncoZenge has been Stian Kildal, who was previously the CEO of the Irish company Ammeon Ltd. He has experience from various leadership positions. In addition to CEO Stian Kildal, the management includes Michael Owens, CFO. Owens has over 20 years of experience in the finance sector, with roles focused on life science companies. The Company has also appointed an Advisory Board with Stephen T. Sonis, Pooja Nandawi Patel and recently also Dr Paolo Bossi.



Stian Kildal, CEO OncoZenge AB (publ)

Management



Stian Kildal

CEO

Stian Kildal has held several leadership positions with responsibility for P&L, product portfolios, and business development in an international setting. Most recently, he served as CEO of the Irish company Ammeon Ltd, which was sold to Intive GmbH following a structured exit process. Previous roles have included leadership in challenging restructuring situations as well as growth ambitions. Stian's leadership is characterized by taking on challenges with a clear vision and strategy, building teams and structures to drive change, and executing towards set goals. Stian Kildal joined OncoZenge in 2023 and owns 500,000 warrants and 300,000 shares in OncoZenge, both directly and through companies, and is independent in relation to the company and larger shareholders.



Michael Owens

CFO

Michael Owens has over 20 years of experience in finance, with a focus on both large and small life science companies. His experience includes auditing at Arthur Andersen and being a Certified Auditor at EY, an active role in listing Karolinska Development, and financial and controller roles for several companies listed on NASDAQ First North. Michael Owens has experience as a CFO from companies such as Infant Bacterial Therapeutics AB (publ), Lipidor AB (publ), and Ziccum AB (publ).

Previous roles have involved business development with divestments, acquisitions, financing, and asset listings. Michael joined OncoZenge in 2023, and has no shares in the company, and is independent in relation to the company and larger shareholders.

Board



Daniel Ehrensträhle

Chairman

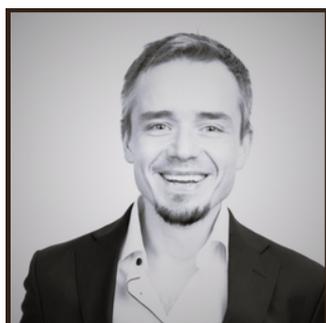
Born in 1974, Daniel brings extensive experience as an executive, consultant, and advisor across various industries. Central to many of his roles is a broad scope of responsibilities covering strategy, transactions, M&A (buy and sell-side), portfolio management, governance, and go-to-market strategies in an international context. Prior to his 6 years in the executive group for global business units at Ericsson, Daniel worked 7 years at McKinsey and, before that, 3 years at ZS Associates in Paris, focusing on the pharmaceutical sector. Daniel Ehrensträhle is independent in relation to both the Company and its management, as well as larger shareholders in the Company. Daniel Ehrensträhle joined the board in 2023 and holds 350,000 warrants in OncoZenge AB.



Niclas Holmgren

Member of the board

Born in 1992, Niclas is an entrepreneur, land developer, investor, municipal politician, and lay judge. Niclas Holmgren joined the board in 2023 and holds 350,000 warrants and 1,277,023 shares, equivalent to approximately 10.9 percent of the total shares and votes in OncoZenge AB (publ). Additionally, relatives of Niclas Holmgren hold 742,912 shares, corresponding to approximately 6.3 percent of the total shares and votes in OncoZenge AB (publ). Niclas Holmgren is independent in relation to the Company and its management but dependent on larger shareholders.

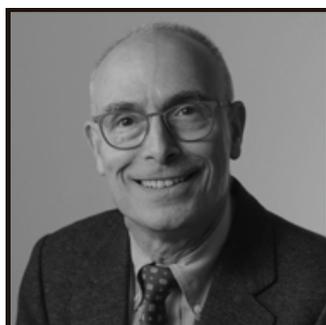


Christoph Nowak

Member of the board

Born in 1986, Christoph Nowak holds a PhD in molecular epidemiology from Uppsala University, a medical degree from the University of Oxford (UK), and is a licensed psychologist (Diplom-Psychologe) from Braunschweig's Technical University (Germany). Previous experiences include serving as an Assistant Professor at the Karolinska Institute and a physician at Raigmore Hospital in Inverness (Scotland). Chris has authored >60 scientific articles published in peer-reviewed journals, with over 20 as the lead author. Significant roles in other companies include Chief Medical and Business Officer at Diamyd Medical AB and Chief Medical Officer at Melius Pharma AB. Christoph Nowak is independent in relation to both the Company and its management, as well as larger shareholders in the Company. Christoph Nowak joined the board in 2023 and holds 27,000 Shares and 350,000 warrants in OncoZenge AB.

Advisory Board



Stephen T. Sonis

Professor of Oral Medicine at Harvard

Dr. Sonis is a senior academic at Harvard, Brigham and Women's Hospital and the Dana-Farber Cancer Institute and a world-renowned expert on tissue toxicities of cancer therapy. Dr. Sonis is the former President of Triad, an international not-for-profit company which focused on the adverse health and economic outcomes of cancer treatment toxicities and has served as a special employee of the FDA. He holds several patents and is the author of more than 300 original publications, reviews, and chapters and 11 books. He received his DMD from Tufts, completed his DMSc and residency at Harvard, and his postdoctoral training in tumor immunology at Oxford where he was a Knox Fellow.



Dr Pooja Nandawi Patel

Head of Department of Radiation Oncology at Sterling Cancer Hospital

Dr. Pooja Nandwani Patel is a Radiation Oncologist working in the field of cancer since 2005. Currently, she is a Senior Consultant and Head of the Radiation Oncology Department at Sterling Cancer Hospital, India. She has received the Most Promising Young Oncologist Award from Indian Cancer Society in 2012. She has been the recipient of many popular fellowships from AROI (Association of Radiation Oncologists of India), ASTRO (American Society of Radiation, ESTRO (European Society for Radiotherapy & Oncology), IGCS (International Gynecological Cancer Society), SNO (Society of NeuroOncology) and ASCO (American Society of Clinical Oncology).



Dr Paolo Bossi

Head of Head and Neck Cancer Unit at Humanitas Hospital in Milan

Paolo Bossi is a Medical Oncologist, Associate Professor and Head of the Head and Neck Cancer Unit at the Humanitas University and Humanitas Cancer Center in Milan, Italy. He is involved in all institutional research activities on head and neck cancer, from translational research (gene expression, next generation sequencing) to assessment of quality of life and value-based medicine. He is the Principal Investigator and co-investigator of several Italian and International trials on Head and Neck cancer and non-melanoma skin cancer.



Impala Nordic's final words

Impala Nordic considers OncoZenge as an interesting case, where a combination of strategic shifts and changes in leadership make the future worth watching. With a fairly stable financial situation and a cash balance estimated at just under 10 million SEK at present, the Company has the opportunity to focus fully on attracting a partner to advance a Phase-3 study and potential commercialization of BupiZenge™. The Company itself sees potential to enter the European market by 2026, provided they find a collaborative partner without delay. The market itself is expected to be worth hundreds of millions of dollars in Europe alone.

The Company's study results from the previously conducted Phase-1 and 2 trials appear promising, which should increase the chances of attracting a collaborative partner. However, it is worth noting that historically, the Company has faced some difficulties in advancing the project, which should be contrasted with the promising potential. Additionally, the Company has an advantage with BupiZenge™, as the substance in the product, Bupivacaine, is well-documented and widely used.

Looking ahead, there are several interesting triggers to consider, including updates on partnerships and ultimately the potential initiation of Phase-3 studies with a partner. The primary risks going forward are assessed to be the Company's inability to find a partner, which could hinder plans to conduct a Phase-3 study. The risk of OncoZenge needing to raise new capital should also be considered, although it is not a significant risk at present. However, it is encouraging to see that the newly appointed CEO, Stian Kildal, has acquired a stake in the Company, making him one of the larger shareholders. Finally, it should be noted that OncoZenge is still a research company, and thus, uncertainty about the future remains significant.

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Sources

1. **"Kommuniké från OncoZenge's extra bolagsstämma den 1 november 2023,"** OncoZenge AB, 2023. <https://mfn.se/cis/a/oncozenge/oncozenge-ab-kommunike-fran-oncozenges-extra-bolagsstamma-den-1-november-2023-214887a8>
2. **"OncoZenge AB: OncoZenge - den nya formuleringen av BupiZenge™ är ren,"** OncoZenge AB, 2023. <https://mfn.se/cis/a/oncozenge/oncozenge-ab-oncozenge-den-nya-formuleringen-av-BupiZenge™-ar-ren-dc4e1ec8>
3. **"OncoZenge AB: Publ VD Stian Kildal fulltecknade 500,000 teckningsoptioner i bolagets optionsprogram,"** OncoZenge AB, 2023. <https://mfn.se/cis/a/oncozenge/oncozenge-ab-publ-vd-stian-kildal-fulltecknade-500-000-teckningsoptioner-i-bolagets-optionsprogram-40b07280>
4. **"OncoZenge AB: Bokslutskommuniké 2023,"** OncoZenge AB, 2023. <https://mb.cision.com/Main/19978/3865965/2396796.pdf>
5. **"OncoZenge AB: OncoZenge tillhandahåller strategiuppdatering,"** OncoZenge AB, 2023. <https://mfn.se/cis/a/oncozenge/oncozenge-ab-oncozenge-tillhandahaller-strategiuppdatering-871bf122>
6. **"Our Team,"** OncoZenge AB, 2023. <https://oncozenge.se/investors/#our-team>
7. **"OncoZenge AB: OncoZenge VD kommentar till avsiktsförklaring med Ensysce Biosciences Inc,"** OncoZenge AB, 2023. <https://mfn.se/cis/a/oncozenge/oncozenge-ab-oncozenge-vd-kommentar-till-avsiktsforklaring-med-ensysce-biosciences-inc-9f1d4266>
8. **"Handlingar till regionstyrelsens sammanträde 2023-04-18,"** Region Uppsala, 2023. <https://publikdocplus.regionuppsala.se/Home/GetDocument?containerName=e0c73411-be4b-4fee-ac09-640f9e2c5d83&reference=DocPlusSTYR-13856&docId=DocPlusSTYR-13856>
9. **"Opioid Overdose Crisis," National Institute on Drug Abuse,** 2023. <https://www.ncbi.nlm.nih.gov/books/NBK565848/>
10. **"Overdose Death Rates," National Institute on Drug Abuse,** 2023. <https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates>
11. **"Management of Cancer Therapy-Associated Oral Mucositis,"** Journal of Oncology Practice, 2023. <https://ascopubs.org/doi/10.1200/JOP.19.00652>
12. **"Home Page,"** Soligenix, 2023. <https://www.soligenix.com/>
13. **"The cost of illness of oral mucositis in stem cell transplant patients: a microcosting study of hospital resource use,"** PubMed, 2023. <https://pubmed.ncbi.nlm.nih.gov/17398022/>
14. **"Costs of Oral Complications of Cancer Therapies: Estimates and a Blueprint for Future Study,"** ResearchGate, 2023. https://www.researchgate.net/publication/335273819_Costs_of_Oral_Complications_of_Cancer_Therapies_Estimates_and_a_Blueprint_for_Future_Study