

Initial Research

2023-12-01

## Xintela's integrin marker carries hidden value

- XSTEM license deal possible in 2024
- Targinta develops tumour-directed cancer treatments in a hot field
- We initiate coverage with a fair value of SEK 1.30 per share

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Stock ticker: XINT  
Industry: Biotech  
Listed on: Nasdaq First North  
Latest share price (SEK): 0.25  
Market cap (MSEK): 137.0  
Enterprise Value (MSEK): 134.7  
Total number of shares (M): 545.92  
- of which free float (M): 228.30

**VHCF fair value per share**  
DCF model SEK 1.30

**Xintela**  
Address: Scheeletorget 1  
223 81 Lund  
Webpage: xintela.com  
CEO: Evy Lundgren-Åkerlund

**Main owners (27 Sept 2023)**

	Capital (%)
Flerie Invest AB	54.2
Avanza Pension	5.0
AB Svedala Finans	1.5
Per Åke Oldentoft	1.3
Evy Lundgren-Åkerlund	1.2

### Share price history (SEK)



	-1m	-3m	-12m
Change (%)	3.7	0.4	-49.7
52 wk range (Low/Hi) - SEK	0.22 / 0.52		

Source: Västra Hamnen Corporate Finance

**Xintela** is a biopharma company with two assets in clinical development phase. The company focuses on stem cell therapy and cancer therapy based on the cell surface receptor integrin  $\alpha 10 \beta 1$ .

Xintela's stem cell product *XSTEM* is currently being evaluated in two phase I/IIa studies. The first is in osteoarthritis (OA) in the knee joint. We expect the first read-outs during 2024, implying that Xintela could attain early efficacy data next year. The second study evaluates XSTEM in patients with difficult-to-heal venous leg ulcers (VLU). We anticipate the first patient to be included soon in the study, which means that a read-out could be reached in 2024.

In addition to these programmes, Xintela develops *EQSTEM*, a treatment for joint disease in horses. The company plans to develop the next step in this project with a partner.

Xintela's fully-owned subsidiary, **Targinta**, develops therapies for aggressive cancer forms, focusing on triple-negative breast cancer and glioblastoma. The pipeline includes the antibody-drug conjugate (ADC) *TARG9* and the function-blocking antibody *TARG10*. Both candidates are being prepared for phase 0 studies in 2024. The ADC field is one of the most highlighted areas of oncology today, with several big pharma companies competing for positions. Recent licensing deals and acquisitions indicate a great willingness to pay for stand-out assets in the preclinical stage.

Our view is that Xintela's current market cap of SEK 137 million does not reflect the potential of its pipeline. In Xintela, we find a broad promising pipeline, a strong IP situation, a supportive main shareholder and high interest from the industry for the indication areas.

However, even if our model suggests a fair value many times higher than the current market cap, we stress that the valuation is associated with very high risk. Should Xintela not be able to show data indicating efficacy as planned, the valuation would be significantly affected. We also recognise a near-term funding risk as the company needs financing to be able to reach its milestones during 2024.

**Table 1: Sum of the parts valuation, SEK per share**

OA	0.66
VLU	0.25
EQSTEM	0.15
TNBC	0.12
GBM	0.12
<b>Sum</b>	<b>1.30</b>

Source: Västra Hamnen Corporate Finance

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## What does Xintela do?

Based on discoveries regarding the cell surface protein integrin  $\alpha 10\beta 1$ , Xintela develops regenerative stem cell-based therapies for osteoarthritis (OA), difficult-to-heal venous leg ulcers (VLU) and acute respiratory distress syndrome (ARDS). Xintela's subsidiary, Targinta develops tumour-directed antibody-based therapies, targeting the integrin  $\alpha 10\beta 1$  receptor on cancer cells.

The integrin  $\alpha 10\beta 1$  belongs to the integrin family of cell surface receptors that are known to bind to extracellular matrix molecules and regulate various cellular functions in all tissues in the body. Xintela's founder and CEO **Evy Lundgren-Åkerlund** discovered the collagen binding integrin  $\alpha 10\beta 1$  on cartilage cells on mesenchymal stem cells (MSC) which can be found in bone marrow, adipose tissue and other tissues. MSCs have great therapeutic potential as they are multipotent, i. e. they can develop into different types of specialised cells, such as cartilage cells and skin cells, and replace dead or damaged cells. MSCs also have immunomodulatory and anti-inflammatory properties.

### A homogenous stem cell product

Xintela uses integrin  $\alpha 10\beta 1$  for identifying, selecting and assuring the quality of allogeneic MSCs from adipose tissue to produce the company's patented stem cell product *XSTEM*. The technology enables consistent quality of MSCs between donors, which is advantageous not only for developing a potent therapy but also from a regulatory perspective.

### Tumour-directed antibodies

Xintela's research team also found that integrin  $\alpha 10\beta 1$  is highly expressed on tumour cells in certain aggressive cancer forms. This is the focus for Targinta, which develops tumour-directed antibody-based therapies against triple-negative breast cancer (TNBC) and glioblastoma.

### The GMP facility is a valuable asset

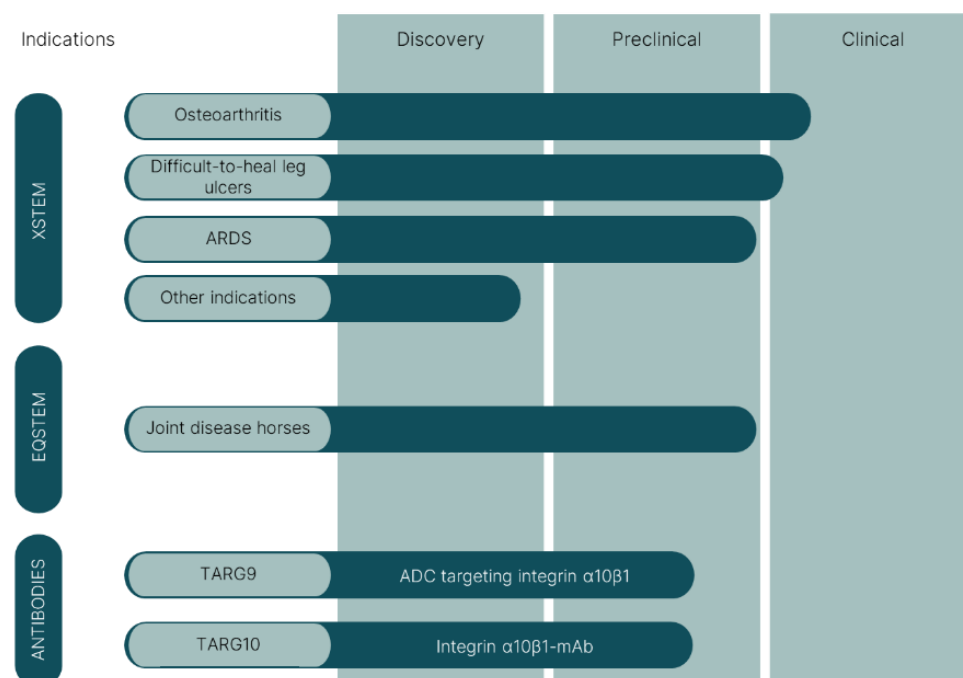
#### *The GMP facility*

In Lund, Xintela has established its manufacturing facility for producing stem cells in compliance with good manufacturing practice (GMP). GMP is a required standard for producing drugs for clinical trials and commercial products. Thus, Xintela has the facility and the qualified personnel in-house, which means the company fully controls stem cell production for its clinical trials. Xintela could also act as a contract manufacturer of cell and gene therapy candidates for external parties.

### A broad pipeline

#### *The pipeline*

Xintela develops XSTEM, a stem cell therapy in clinical phase I/IIa for OA and difficult-to-heal venous leg ulcers. The company also has preclinical data with XSTEM in ARDS. *EQSTEM* is Xintela's veterinary joint disease candidate. In oncology, Targinta's drug candidates, *TARG9*, an antibody-drug conjugate (ADC), and *TARG10*, a function-blocking antibody, are in preclinical development.

**Figure 1. Xintela's pipeline.**

Source: Xintela

**Company and key personnel****Evy Lundgren-Åkerlund**, founder and CEO/CSO

Evy founded Xintela in 2009, and has vast experience in the life science sector, as a researcher and from leading positions in academia and the industry. Evy was the CEO and Head of Research of **Cartela** during 2000-2007 and CEO of **Lund Life Science Incubator** between 2008 and 2012. Evy holds 6,658,008 shares.

**Gregory Batcheller**, Chairman of the Board

Gregory has been Chairman of the Board since 2011. He is also chairman of **Targinta** and **CarryGenes Group** and a member of the board of **CarryGenes Oncology**, **Pharmacyl**, **Canacyl**, and **Business Research Life Sciences**. Previous assignments include Chairman of the Board of **Abliva**, **Guard Therapeutics**, **Monocl** and **Saga Diagnostics**. Gregory holds 4,406,032 shares.

**Liselotte Theorell**, Director Quality Management, Qualified Person (QP)<sup>1</sup>

Liselotte has more than 35 years of experience in product development in the biotechnology and pharmaceutical industry. Liselotte has held leading positions in quality management at **Pharmacia**, **Biovitrum**, **SentoClone**, **Moberg Pharma**, and **Cellaviva**.

<sup>1</sup> A QP is responsible for that each batch of a medicinal product complies with GMP standards and fulfils the requirements of the marketing authorisation for the medicinal product concerned.



**Lucienne Vonk**, Director of Musculoskeletal Diseases

Lucienne has extensive experience in research and development on biological musculoskeletal tissue regeneration from several leading positions within the industry at **CO.DON**, and academia, at **University Medical Center Utrecht**. She is deputy chair of the Translational research committee of the **International Cartilage Regeneration & Joint Preservation Society**, and senior editor of **the Journal of Cartilage & Joint Preservation**.



**Camilla Wennersten**, Director of Clinical Development

Camilla has 20 years of experience in the life science industry, most recently in a leading role at **Alligator Bioscience** and before she held positions at **Novo Nordisk** and **AstraZeneca**. Camilla holds 21,000 shares.

### *Owners and financing*

Xintela's main shareholder is Thomas Eldered and **Flerie Invest**. Thomas and related parties hold 295,692,260 shares, corresponding to 54.16 per cent of the company.



**Thomas Eldered**, Board member since 2022

Thomas has extensive experience in life science from several leading positions, mainly in the pharmaceutical industry. Thomas is co-founder and main owner of Flerie Invest and is currently Chairman of the Board of **Amarna Therapeutics**, **NorthX Biologics** and **Prokarium**. He is a member of the board of **Buzzard Pharmaceutical**, **Chromafora**, **Flerie Invest**, **Kahr Bio**, **Nanologica**, **Toleranzia**, and **Sixera Pharma**, among others. Thomas co-founded **Recipharm**, where he served as CEO from 2008 to 2021.

Xintela is dependent on external financing. In June 2023, the company raised SEK 71.5 million in a rights issue. After offsetting a convertible loan to Flerie Invest of SEK 25.8 million and the repayment of a bridge loan of 25.3 including interest to the same party, Xintela added SEK 20.4 to its cash holdings. By the end of Q3, the cash position amounted to SEK 11.7 million.



Source: Xintela

### **What is the market potential?**

#### **XSTEM OA**

OA is a very common condition worldwide, and there is no disease-modifying osteoarthritis drug (DMOAD) on the market. Should Xintela be successful with XSTEM, the commercial potential is substantial. The total OA market was valued at USD 2.5 billion in 2021 by **Global Data**, forecasting a CAGR of 4 per cent until 2031.<sup>2</sup>

We base our market estimate on the prevalence of OA in the US, the UK, EU5 (France, Germany, Italy, Spain and the UK) and Japan. Positioning XSTEM OA as a treatment for

**The global OA market is growing**

<sup>2</sup> [Global Data](#) (2022)

### Beneficial for patients and the health care system

patients with moderate knee OA and addressing patients receiving intra-articular treatments. Such treatments include for instance anti-NGF, hyaluronic acid and corticosteroids. We estimate this group to be almost 500,000 patients at peak. We assume that Xintela's treatment will reach approximately 25 per cent of these patients at peak sales.

We model that XSTEM OA will enter phase IIb in 2025, and phase III in 2027, with a final readout and filing in 2030. We assume that the treatment will be approved in 2031 and reach a 25 per cent market share five years after launch.

### XSTEM VLU

The global treatment market for venous leg ulcers has been estimated to be USD 4.84 billion by 2026.<sup>3</sup> Compression therapy stands for about 60 per cent of the market and advanced wound dressings, such as semipermeable films and foams, and hydrocolloids are 30 per cent. Other treatments include pharmaceutical therapies, analgesics, anti-infectives, topical wound care, wound care devices, active wound therapies and traditional dressings. A regenerative treatment would not only benefit patients but could also reduce the medical cost of treating VLUs.

We assume that Xintela will complete the current phase I/IIa study in 2024, start a phase IIb study in 2025 and initiate a phase III by the end of 2026. In our model, Xintela will file for approval in 2029 and reach the market in 2030. From launch, we estimate five years to peak sales, and will by then reach a market share of five per cent.

### EQSTEM

Degenerative joint disease is the most common reason for lameness in horses. The prevalence of OA is greater than 50 per cent in horses older than 15 years and 80 to 90 per cent in horses 30 years of age or older.<sup>4</sup> In the absence of a DMOAD, veterinarians and horse owners are mainly referred to symptom-relieving treatments, including non-steroid anti-inflammatory drugs (NSAIDs), corticosteroids, and viscosupplementation.

In response, the European Medicines Authority approved two stem cell treatments in 2019 – *Arti-Cell Forte* and *HorStem*. The former is a combination of stem cells derived from peripheral blood from horses and platelet-rich plasma. The latter is a stem cell product with MSCs derived from the umbilical cord of horses.<sup>5</sup> These products have shown efficacy against lameness, but no regenerative effect on the cartilage. There are currently no approved stem cell OA treatments in the US.

### The OA market for horses is valued to USD 752 million

According to Xintela, the market for horse OA is estimated to be USD 752 million by 2023. The market is expected to grow annually by 3.2 per cent, implying a total market potential of USD 900 million by the time EQSTEM could reach the market.

We model Xintela's market share to reach 15 per cent at peak sales, given success in all development steps. The development process in veterinary medicine is usually shorter and significantly less costly than in human medicine. We estimate that EQSTEM will be launched in Q3 2029.

### Cancer treatment

Integrin  $\alpha 10\beta 1$  has been detected in several aggressive cancer forms. Targinta is currently focusing on two indications, glioblastoma and triple-negative breast cancer.

### Glioblastoma

Glioblastoma is the most common primary brain tumour in adults. The tumours develop from glial cells, in supportive tissue in the brain, and commonly spread into nearby brain tissue. The cancer form is resistant to current therapies such as surgery, radiation and

### The therapeutic market for glioblastoma valued to USD 1.4 billion

<sup>3</sup> [Fortune Business Insights](#) (2019)

<sup>4</sup> Baccarin et al. [Animal Frontiers](#) (2022)

<sup>5</sup> [Speedhorse](#) (2022)

**The global therapeutic market for TNBC valued to USD 2.1 billion**

chemotherapy, leading to poor prognosis. The average survival time with current treatment options is 15 months.<sup>6</sup>

In the US, EU5 and Japan, around 30,000 people are diagnosed with glioblastoma annually. Of these patients, circa 75 per cent were actively treated. The therapeutic market for this patient group has been estimated to be USD 1.4 billion in 2027.

#### **TNBC**

TNBC is an aggressive cancer form with a high risk of recurrence and metastasis. According to Global Data, every year around 300,000 patients are diagnosed globally. The therapeutic market has been estimated to be USD 2.1 billion in 2028. In our model, we assume that Targinta could reach a market share of 20 per cent at peak sales.

Assuming that Xintela and its partner will be successful in all development steps, we estimate that TARG9 and TARG10 could reach the market in 2031.

### **What is the competitive situation?**

#### **XSTEM**

Currently, there are no DMOADs on the market. However, some programmes with MSCs have reached later-stage development.

In August 2023, Indian **Stempeutics** published phase III results with its candidate *Stempeucel-OA* in the American Journal of Sports Medicine. The drug candidate, derived from bone marrow MSCs, showed significant improvement in joint function compared to placebo.<sup>7</sup> The regulatory authority in India has granted the product limited approval for the treatment of Buerger's disease. Stempeutics is also conducting a phase III trial with Stempeucel in diabetic foot ulcers.

**Kolon TissueGene's Invossa** was the first OA cell-mediated gene therapy approved in South Korea in 2017. The approval was revoked in 2019 after mislabelling the origin of the cells used in the therapy. The same year the FDA halted a phase III trial with Invossa, which was resumed in 2021.<sup>8</sup>

Singapore-based **Juniper Biologics** licensed Invossa for 40 countries, including Japan, the Middle East and Africa. Juniper Biologics paid an upfront fee of USD 12.18 million and an additional USD 540 million depending on development and commercialisation progress.

In January 2023, Korean **Medipost** completed the first administration of *Cartistem* in its phase III study in Japan. Cartistem is an MSC candidate derived from the umbilical cord.<sup>9</sup>

Australian **Magellan** plans to start a phase III study with *MAG200* in Q4 2023. MAG200 is an MSC product derived from allogeneic adipose tissue.

**Organogenesis Holding's ReNu** has also shown efficacy and safety for up to twelve months from a single intra-articular injection. Renu is an amniotic suspension allograft, currently being evaluated in a phase III study. The company also develops products for wound healing. Organogenesis is listed on the **Nasdaq** with a market cap of around USD 345 million.

#### **Oncology**

Oncology is a therapy field of fierce competition, but the demand for new and improved treatments is huge. Currently, the FDA has approved two ADC treatments for TNBC,

<sup>6</sup> Mohammed et al, [Reports of Practical Oncology and Radiotherapy](#) (2022)

<sup>7</sup> Gupta et al., [Journal of American Sports Medicine](#) (2023)

<sup>8</sup> [Pharmaceutical Technology](#) (2022)

<sup>9</sup> Han, [The Korea Economic Daily](#) (2023)



Immunomedic's *Trodely* and *Enhertu* by AstraZeneca and Daiichi Sankyo. There are currently around 10 ADC projects in late-stage development directed towards TNBC.

In glioblastoma, there are currently around 10-15 late-stage clinical studies ongoing, using different approaches.



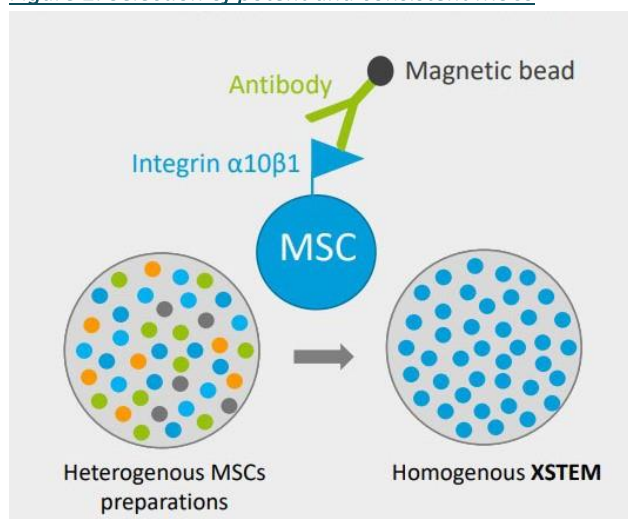
Source: Xintela

### What are Xintela's competitive advantages?

#### A homogenous stem cell product

A major hurdle for allogeneic MSC-derived therapies has been the heterogeneity of the preparations. Xintela's integrin marker technology addresses this problem and provides selected MSCs that meet the requirements of identity, purity and potency. These properties are key for delivering a consistent, high-quality MSC product, not dependent on the varying quality of the donated adipose tissue preparations. Quality and consistency are important factors also from a regulatory perspective.

*Figure 2. Selection of potent and consistent MSCs*



Source: Xintela

#### The GMP facility

Xintela's GMP facility in Lund, including the qualified and experienced personnel, is a valuable asset and a competitive advantage. Being able to control the manufacturing of its drug candidates, de-risks the operation and saves time in the development process, among other things. Xintela could also decide to produce for external parties, bringing cash flow to the company.

### A strong IP situation

Xintela has protected its stem cell products including XSTEM and EQSTEM and uses for all indications including musculoskeletal diseases until 2038. XSTEM is also protected for use in skin defects including VLU until 2039 and in lung disorders including ARDS until 2041.

### First-in-class drug candidates

Targinta's drug candidates target a cell receptor not previously explored. The candidates are first-in-class, which adds value to the programmes.

Targinta has protected its technology and application with two patent families. The first is valid until 2036 and protects integrin  $\alpha 10\beta 1$  targeted antibody treatment and diagnostics of malignant CNS tumours. The second patent family is pending and grants protection for the treatment and diagnostics of aggressive cancer forms, expiring in 2040.

### What is Xintela's strategy?

For most smaller biotech companies, including Xintela, potential revenues are projected far in the future, while development costs appear in the present. Many biotech companies plan their strategic development to achieve proof-of-concept in phase II, to be able to out-license the innovation to a larger partner for further development, approval and marketing. Xintela is no exception.

The company is currently active in discussions with potential partners. These discussions are part of long-term processes, often years, but they could eventually result in deals of significant value. Should Xintela out-license one or more of its projects, it would imply cash flow in the form of upfront payments, milestone payments and royalties from potential sales revenues.

With Xintela's broad pipeline, we think that several of the programmes are subject to out-licensing at a relatively early stage. For instance, the two XSTEM projects in phase I/IIa could reach a stage where it is possible to achieve a deal already in 2024. Also, the industry interest in ADCs is strong even for projects in the preclinical stage.

### Licensing deals

#### Stem cell therapy for OA and VLU

In recent years stem cell therapies have attracted interest from large pharmaceutical and biotechnology companies. Below is a list of recent relevant partnering and licensing deals within OA.

**Figure 3. Licensing deals within OA.**

Licensor	Licensee	Candidate	Deal Value (USD)	Upfront (USD)	Royalty Range	Phase	Date
Hansoh	KiOmed		71M		Undisclosed	approved	2022-09-26
Juniper	Kolon Life Science	Invossa	600M	600M		IIb	2022-04-13
Haisco	Biosplice	Lorecivivint	140M	20M		III	2021-09-15
Nuance	Antibe		100M	20M		II	2021-02-09
Merck	Novartis	M64	529M	59M		II	2020-10-06
Kolon Life Science	Mundipharma	Invossa	592M	27M		IIb	2018-11-18

Source: Xintela, Västra Hamnen Corporate Finance

Also, in the field of difficult-to-heal wounds, some relevant licensing deals and acquisitions have been announced in recent years.

**Figure 4. Deals within wound care.**

Licensor	Licensee	Market	Deal value (USD)	Upfront (USD)	Royalty range	Date
Aurealis	Xbiome	Diabetic Foot and Other Ulcers	139M	Undisclosed	5-10%	2022-01-28
Acell	Integra	Wound Care	400M	300M	-	2020-12-16
MediWound	Vericel	Wound Care	150M	17.5M	7-13%	2019-05-07
Solsys	Misonix	Wound Healing	119M	119M	-	2019-05-02
Osiris	Smith & Nephew	Wound Healing	656M	656M	-	2019-03-13
Organogenesis	Avista	Wound Care	92M	92M	-	2018-08-17

**Aiming for proof-of-concept**

**The pipeline creates opportunities for licensing deals**



Source: Xintela, Västra Hamnen Corporate Finance

### Antibody-based cancer therapy

The big pharma companies position themselves in the ADC field, a market with large commercial potential. Between 2018 and 2023, more than 100 ADC licensing deals have been publicly announced. In 2020, **Immunomedics** won approval for its first ADC therapy *Trodelvy*. Soon after, **Gilead Sciences** acquired Immunomedics for USD 21 billion. In 2023, **Pfizer** bought the ADC specialist **Seagen** for USD 43 billion.<sup>10</sup> In October 2023, **Merck** signed a deal with Daiichi Sankyo for three ADC candidates paying an upfront fee of USD 4 billion. The total deal could be worth up to USD 22 billion.<sup>11</sup>

### High interest in preclinical ADC projects

We expect that Targinta's novel target and first-in-class drug candidates will attract attention from the industry. However, it is not easy to guess whether the interest could materialise into licensing deals shortly. Below is a table of recent relevant deals in the area, demonstrating the willingness to pay for ADC assets. It should be noted that many deals are made at the preclinical stage.

Figure 5. Licensing deals within ADCs.

Licensor	Licensee	Indication	Deal Value (USD)	Upfront (USD)	Royalty Range	Phase	Date
Daiichi Sankyo	MSD	Cancer	22B	4B		Phase I-III	2023-10-20
Hansoh	GSK	Solid tumours	1.4B	85M		Phase Ib	2023-10-20
Bliss	Eisai	Cancer	2.00B	Undisclosed	Undisclosed	Phase I/II	2023-05-08
Tubulis	BMS	Solid tumours	1.02B	22M	Undisclosed	Preclinical	2023-04-20
GeneQuantum	Pyramid Bio	Cancer	1.02B	20M	5-10%	Preclinical	2023-04-13
Duality Bio	BioNTech	Solid tumours	1.67B	170M	5-15%	Phase II and Preclinical	2023-04-08
CSPC	Elevation	Solid tumours	1.18B	27M	Undisclosed	Phase I	2022-07-28

Source: Xintela, Västra Hamnen Corporate Finance.

### The funding risk is substantial

### What is the cash situation?

By the end of Q3 2023, Xintela's cash position amounted to SEK 11.7 million. Given Xintela's clinical and pre-clinical activities, we expect Xintela to fund its operations by the end of Q1 2024.

In connection with the rights issue in 2023, Xintela issued 158.8 million warrants of series TO3. The warrant expires on June 5, 2025, with four designated subscription periods per year. The first period is November 25 – December 5, 2023, and the second is May 26 – June 5, 2024. The subscription price is set to SEK 0.30 per share. Fully subscribed, the TO3 could in total add SEK 47.7 million to Xintela.

### What is the fair value for the share?

We realise that Xintela will not take all its projects through the clinical phases and to market on its own. The company aims to out-license its programmes and take them through late-stage development together with a partner.

### Estimating a value for each project

To calculate a fair value of Xintela, we use a risk-adjusted discounted cash flow approach. We estimate future revenues and project development costs for each candidate or indication. We then adjust for the development risk, applying probabilities for success based on benchmark statistics.

### We apply a WACC of 18 per cent

We apply a discount factor to future cash flows, the weighted average cost of capital (WACC). In this case, we use a WACC of 18 per cent, derived from the current risk-free rate, stock market risk premium, small cap risk premium and benchmark discount rates for companies in the biotechnology sector.

### The LOA reflects development risk

After discounting the cash flows, we adjust for development risk, using probabilities for the likelihood of approval (LOA). The LOAs reflect the chances for each drug candidate

<sup>10</sup> Langhauser, [Pharma Manufacturing](#) (2023)

<sup>11</sup> Taylor, [Fierce Biotech](#) (2023)

to successfully pass the clinical phases and be approved by regulatory authorities. In all drug development, development risk is a substantial part of the total project risk.

Every milestone reached in the development process increases the LOA. Production of the drug candidate, the inclusion of patients in clinical studies, the last patient treated in a study, publication of safety data, and efficacy data read-outs are examples of such milestones. Should Xintela not be successful in reaching these, the LOA would be severely affected and consequently the fair value of the company.

We apply LOAs from published statistical surveys of clinical trials. These publications have investigated the LOAs in different indication areas and different drug classes. For instance, the LOA for a drug candidate in oncology is only 5.1 per cent in phase I, it increases to 8.4 in phase II, and in phase III the LOA is 35.1 per cent on average.

**Figure 6. LOA through phase I-III.**

Indication	Phase I to launch	phase II to launch	Phase III to launch	Regulatory submission to launch
Musculoskeletal	7.0%	14.0%	52.0%	-
Oncology	5.1%	8.4%	35.1%	82.1%
Dermatology	10.0%	15.3%	49.6%	85.3

Source: Thornblad (2021)

**The stem cell projects are valued to SEK 1.06 per share**

### Stem cell projects

Our DCF model suggests a fair value of XSTEM OA of SEK 0.66 per share, using an LOA of 14.0 per cent which is the probability for a drug candidate in musculoskeletal diseases. We use an LOA of 10.0 per cent for XSTEM VLU, implying a net present value of SEK 0.25 per share. We motivate a lower LOA in this case since the phase I/IIa study is in its early stages. In EQSTEM, our model suggests a value of SEK 0.15 per share with an LOA of 20.0 per cent. In sum, the stem cell projects correspond to SEK 1.06 per share. We have not included ARDS in our model, nor other potential indication areas.

The probability of 14.0 per cent is a benchmark for a phase II drug candidate within musculoskeletal diseases. If successful in phase IIb, the benchmark probability increases to 52.0 per cent in phase III. If we apply this scenario to XSTEM OA, the risk-adjusted discounted fair value would increase to SEK 2.42 per share.

**The oncology projects are valued to SEK 0.24 per share**

### Oncology projects

In the oncology projects, we have used a similar model, using the same WACC but different LOAs. As mentioned above, for projects in oncology, benchmarks suggest an LOA of 5.1 per cent from phase I to market. We expect that Targinta will be successful in its phase 0 studies and that the drug candidates will enter phase I in 2025. Hence, our model suggests a risk-adjusted fair value of the oncology projects of SEK 0.12 per share for TNBC and glioblastoma respectively, i.e., SEK 0.24 per share.

**Table 1: Sum of the parts valuation, SEK per share**

OA	0.66
VLU	0.25
EQSTEM	0.15
TNBC	0.12
GBM	0.12
Sum	<b>1.30</b>

Source: Västra Hamnen Corporate Finance

### What is behind the numbers?

In our research we try to look beyond the reported numbers to see if the company uses accounting methods or reports items off the income statement or balance sheet, that could impact our interpretation of its official figures. The underlying financials of the company could be stronger or weaker than they look at first glance and this could be important for our valuation.

**Incurred losses of SEK 313 million**

Due to previously reported losses the company has an off-balance sheet asset in the form of incurred losses. Incurred losses can be used to offset future tax payments as seen in the company's Q2 report 2023. We estimate that the company's accumulated

losses amount to SEK 313 million per Q2 2023 and we have thus not modelled any tax costs until the company has used its latent tax asset in its entirety. We estimate that the company will not be subjected to pay any taxes until the beginning of 2032.

As mentioned above, Xintela has issued 158,899,790 warrants of series TO3 with the exercise price of SEK 0.30 per share. Potentially, this could add SEK 47.7 million and would imply a dilutive effect of 22.5 per cent.

The company reports a significant post of intangible assets which mainly consists of capitalised expenditure on development. It is not unusual for a company such as Xintela to allocate significant resources to research and development, it does however affect the reported numbers in ways worth mentioning. By capitalising expenditures, the cost is distributed over time in the form of depreciation, effectively improving the result short term but decreasing it in the long term.

### **What could go wrong?**

As mentioned, the development risk in Xintela is very high. We have identified a few risks that are crucial to the company's success or failure.

#### **Development risk**

All patients have been dosed in all three dose levels in the phase I/IIa study in knee OA, efficacy remains to be evaluated. Xintela's ambition is to provide the next generation of MSC therapy in this field where others have failed in late-stage development. The risk of failure for Xintela is substantial.

Patient recruitment is ongoing in the short VLU study. We assume that Xintela will be able to complete recruitment during H1 2024, presenting results during the second half of 2024. Delays are always costly, and the risk of not reaching the endpoints is high at this development stage.

The preclinical oncology projects also carry substantial development risk. According to benchmark statistics, only 5.1 per cent of all oncology projects succeed from phase I to market. Even though biological drugs have a higher probability for success, 14.8 per cent from phase I to market, the risk is still very high.<sup>12</sup>

#### **Financial risk**

The development work must be adequately funded. Xintela is dependent on its shareholders to receive financing for its programmes or other sources of funding. The current unfavourable market sentiment for risk assets sets the conditions for the biotech sector to attract funds. Although Xintela's main shareholder Flerie Invest supports the company, the cost of raising capital is significantly higher today than only three years ago.

#### **Partners and collaborations**

Xintela is dependent on collaboration with existing and future partners. Xintela is a small biotech company, and resources to develop the pipeline at late-stage are very limited. Therefore, partnerships and licensing deals are important to fund the company long-term.

#### **Key personnel**

Keeping and attracting qualified biomedical experts and laboratory specialists are essential for Xintela to drive its projects successfully. The company is also highly dependent on having the right competence within business development for partnering and reaching potential licensing deals.

#### **Liquidity in the share and share-related securities**

Xintela's shares are traded on Nasdaq Stockholm First North and have, at times, shown limited liquidity. The company cannot predict to what extent there will be sufficient interest in the company's shares to maintain an active and liquid market for existing

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<sup>12</sup> Thornblad & Carlsson, Biotech Valuation (2022)

and newly issued shares. Should an active and liquid market not be maintained, it may hurt the market price of the shares and create difficulties for shareholders in selling their Xintela shares. An investor wishing to dispose of their holdings in the company may, therefore, need to sell their shares at a significant loss.

### Upcoming events *Financial calendar*

28 Feb 2024

Year-end report 2023

### Appendix: Valuation method

Early-stage companies usually report negative net profits and may have many years left until they turn a profit. Sometimes they even have years until their first significant sales revenues. The difficulty in valuing growth companies with limited historical records is that the valuation rests on uncertain estimates of future earnings, more uncertain than for companies with years of stable profits on record. There is little in terms of historical figures on which to base estimates of future revenues, future profit margins and other items.

To handle these challenges, we choose to follow a generally accepted method for valuing growth companies described by Professor **Aswath Damodaran**<sup>13</sup>, among others. Instead of scaling the discount rate (WACC) to account for all the risks and uncertainties associated with a young company, we use a two-stage valuation approach:

- First, we estimate fair enterprise value under the explicit assumption that the company survives until its first year of sustainable profits. We use a WACC commensurate with the circumstances of the company once it reaches profitability.
- Second, we adjust the estimated enterprise value by multiplying it with a probability factor reflecting the likelihood that the company survives. These probabilities are based on statistical surveys on drug development in the biotechnology and pharmaceutical industries.

With each passing period after the initial valuation, the probability factor may be adjusted based on the company's development and our updated assessment of its chances of survival.

### Financial overview

Modelling the fair value, we have assumed that Xintela will take all its projects to market on its own. Therefore, the tables of the financial overview include financing rounds to fund development work as revenues will occur in the future. In reality, costs will most likely be split by Xintela and a partner.

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<sup>13</sup> Damodaran, Aswath, "Valuing Young, Start-up and Growth Companies: Estimation Issues and Valuation Challenges", Stern School of Business, New York University, May 2009.

## Income Statement - Annual Data

kSEK	2020	2021	2022	2023e	2024e	2025e	2026e	2027e
Net revenues	0	0	0	0	0	0	0	0
Other revenues	14 947	0	0	0	0	0	0	0
<b>Total revenues</b>	<b>14 947</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Cost of goods sold	0	0	0	0	0	0	0	0
Personnel costs	-3 757	-4 095	-5 154	-4 972	-5 354	-5 676	-6 115	-6 749
Other external costs	-38 170	-44 120	-51 565	-52 292	-167 865	-317 350	-376 750	-417 925
Other operating expenses	-6 917	-6 774	-10 370	-8 817	-10 445	-10 977	-11 536	-12 124
<b>EBITDA</b>	<b>-33 897</b>	<b>-54 989</b>	<b>-67 089</b>	<b>-66 080</b>	<b>-183 663</b>	<b>-334 003</b>	<b>-394 401</b>	<b>-436 798</b>
Amortisation & depreciation	0	0	0	-113	-401	-329	-270	-221
<b>EBIT</b>	<b>-33 897</b>	<b>-54 989</b>	<b>-67 089</b>	<b>-66 194</b>	<b>-184 065</b>	<b>-334 331</b>	<b>-394 670</b>	<b>-437 020</b>
Financials, net	-2 667	-538	-4 110	-1 138	0	0	0	0
<b>EBT</b>	<b>-36 564</b>	<b>-55 527</b>	<b>-71 199</b>	<b>-67 332</b>	<b>-184 065</b>	<b>-334 331</b>	<b>-394 670</b>	<b>-437 020</b>
Taxes	0	0	0	3 811	0	0	0	0
<b>Net profit</b>	<b>-36 564</b>	<b>-55 527</b>	<b>-71 199</b>	<b>-63 521</b>	<b>-184 065</b>	<b>-334 331</b>	<b>-394 670</b>	<b>-437 020</b>
<b>Earnings per share (SEK)</b>	<b>-0.89</b>	<b>-0.51</b>	<b>-0.46</b>	<b>-0.16</b>	<b>-0.34</b>	<b>-0.61</b>	<b>-0.72</b>	<b>-0.80</b>
<b>Growth (%)</b>								
Net revenues	na	na	na	na	na	na	na	na
EBITDA	na	na	na	na	na	na	na	na
EBIT	na	na	na	na	na	na	na	na
Net profit	na	na	na	na	na	na	na	na
<b>% of revenues (%)</b>								
EBITDA margin	neg	neg	neg	neg	neg	neg	neg	neg
EBIT margin	neg	neg	neg	neg	neg	neg	neg	neg
EBT margin	neg	neg	neg	neg	neg	neg	neg	neg
Profit margin	neg	neg	neg	neg	neg	neg	neg	neg
Personnel costs	neg	neg	neg	neg	neg	neg	neg	neg
Total OPEX	neg	neg	neg	neg	neg	neg	neg	neg
<b>Profitability (%)</b>								
ROE	neg	neg	neg	neg	neg	neg	neg	neg
ROIC	neg	neg	neg	neg	neg	neg	neg	neg

Source: Västra Hamnen Corporate Finance

**Balance Sheet - Annual Data**

kSEK	2020	2021	2022	2023e	2024e	2025e	2026e	2027e
Receivables in subsidiaries	3 476	3 081	0	0	0	0	0	0
Prepaid costs & accrued income	598	950	1 138	882	955	1 034	1 119	1 211
Inventories	0	706	319	427	463	501	542	587
Tax claims	0	0	0	0	0	0	0	0
Other short-term receivables	0	1 449	9 502	1 644	1 780	1 926	2 085	2 257
Cash and cash equivalents	33 601	9 941	8 343	14 973	332 191	398 284	504 026	67 433
<b>Total current assets</b>	<b>37 675</b>	<b>16 127</b>	<b>19 302</b>	<b>17 927</b>	<b>335 389</b>	<b>401 745</b>	<b>507 773</b>	<b>71 488</b>
Shares in subsidiaries	839	839	0	0	0	0	0	0
Tangible assets	8 877	7 012	4 576	2 082	1 696	1 382	1 125	917
Intangible assets	1 050	746	640	302	287	273	260	247
Financial assets	71	18	0	0	0	0	0	0
<b>Total fixed assets</b>	<b>10 837</b>	<b>8 615</b>	<b>5 216</b>	<b>2 385</b>	<b>1 983</b>	<b>1 655</b>	<b>1 385</b>	<b>1 164</b>
<b>Total assets</b>	<b>48 512</b>	<b>24 742</b>	<b>24 518</b>	<b>20 311</b>	<b>337 372</b>	<b>403 399</b>	<b>509 158</b>	<b>72 652</b>
Accounts payable	2 712	3 899	8 846	5 088	5 507	5 961	6 453	6 984
Short term tax liabilities	233	135	399	0	0	0	0	0
Short term debt	10 900	0	0	0	0	0	0	0
Other short term liabilities	2 746	13 019	4 332	13 814	14 993	14 989	14 941	14 925
Accrued cost & prepaid income	4 316	3 742	5 163	3 140	2 667	2 575	2 560	2 558
<b>Total current liabilities</b>	<b>20 907</b>	<b>20 795</b>	<b>18 740</b>	<b>22 041</b>	<b>23 167</b>	<b>23 525</b>	<b>23 954</b>	<b>24 468</b>
<b>Long term liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total equity</b>	<b>27 607</b>	<b>3 947</b>	<b>5 777</b>	<b>-1 730</b>	<b>314 205</b>	<b>379 874</b>	<b>485 204</b>	<b>48 184</b>
<b>Total equity and liabilities</b>	<b>48 514</b>	<b>24 742</b>	<b>24 517</b>	<b>20 311</b>	<b>337 372</b>	<b>403 399</b>	<b>509 158</b>	<b>72 652</b>

Source: Västra Hamnen Corporate Finance

**Cash flow statement**

kSEK	2020	2021	2022	2023e	2024e	2025e	2026e	2027e
Operating activities	-32 995	-40 670	-62 621	-56 793	-183 663	-334 003	-394 401	-436 798
Changes in working capital	790	8 677	-9 498	8 520	882	95	143	205
Investing activities	-355	-1 202	72	-104	0	0	0	0
Financing activities	65 748	9 534	70 359	55 216	500 000	400 000	500 000	0
<b>Cash flow for the period</b>	<b>33 188</b>	<b>-18 628</b>	<b>-1 688</b>	<b>6 839</b>	<b>317 219</b>	<b>66 092</b>	<b>105 743</b>	<b>-436 593</b>
Beginning cash balance	412	33 600	14 972	13 284	20 123	337 341	403 434	509 176
<b>Ending cash balance</b>	<b>33 600</b>	<b>14 972</b>	<b>13 284</b>	<b>20 123</b>	<b>337 341</b>	<b>403 434</b>	<b>509 176</b>	<b>72 583</b>

Source: Västra Hamnen Corporate Finance



## Income Statement - Quarterly Data

kSEK	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023e	Q1 2024e	Q2 2024e
Net revenues	0	0	0	0	0	0	0	0
Other revenues	0	0	0	0	0	0	0	0
<b>Total revenues</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Cost of goods sold	0	0	0	0	0	0	0	0
Personnel costs	-1 027	-1 670	-1 063	-1 275	-1 333	-1 301	-1 314	-1 327
Other external costs	-11 029	-19 366	-12 387	-14 074	-9 641	-16 190	-18 165	-56 975
Other operating expenses	-1 776	-2 326	-2 146	-2 469	-1 671	-2 531	-2 563	-2 595
<b>EBITDA</b>	<b>-13 832</b>	<b>-23 362</b>	<b>-15 596</b>	<b>-17 818</b>	<b>-12 645</b>	<b>-20 021</b>	<b>-22 041</b>	<b>-60 897</b>
Amortisation & depreciation	0	0	0	0	0	-113	-108	-103
<b>EBIT</b>	<b>-13 832</b>	<b>-23 362</b>	<b>-15 596</b>	<b>-17 818</b>	<b>-12 645</b>	<b>-20 135</b>	<b>-22 149</b>	<b>-60 999</b>
Financials, net	-2 043	-164	-636	-851	349	0	0	0
<b>EBT</b>	<b>-15 875</b>	<b>-23 526</b>	<b>-16 232</b>	<b>-18 669</b>	<b>-12 296</b>	<b>-20 135</b>	<b>-22 149</b>	<b>-60 999</b>
Taxes	0	0	0	0	3 811	0	0	0
<b>Net profit</b>	<b>-15 875</b>	<b>-23 526</b>	<b>-16 232</b>	<b>-18 669</b>	<b>-8 485</b>	<b>-20 135</b>	<b>-22 149</b>	<b>-60 999</b>
<b>Earnings per share (SEK)</b>	<b>-0.05</b>	<b>-0.08</b>	<b>-0.05</b>	<b>-0.06</b>	<b>-0.01</b>	<b>-0.04</b>	<b>-0.04</b>	<b>-0.11</b>
<b>Y-o-Y Growth (%)</b>								
Net revenues	na	na	na	na	na	na	na	na
EBITDA	na	na	na	na	na	na	na	na
EBIT	na	na	na	na	na	na	na	na
Net profit	na	na	na	na	na	na	na	na
<b>% of revenues (%)</b>								
EBITDA margin	neg	neg	neg	neg	neg	neg	neg	neg
EBIT margin	neg	neg	neg	neg	neg	neg	neg	neg
EBT margin	neg	neg	neg	neg	neg	neg	neg	neg
Profit margin	neg	neg	neg	neg	neg	neg	neg	neg
Personnel costs	neg	neg	neg	neg	neg	neg	neg	neg
Total OPEX	neg	neg	neg	neg	neg	neg	neg	neg
<b>Profitability (%)</b>								
ROE	neg	neg	neg	neg	neg	neg	neg	neg
ROIC	314.3%	723.2%	95.5%	48.3%	304.4%	95.7%	94.0%	250.7%

Source: Västra Hamnen Corporate Finance

**Balance Sheet - Quarterly Data**

kSEK	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023e	Q1 2024e	Q2 2024e
Receivables in subsidiaries	0	0	0	0	0	0	0	0
Prepaid costs & accrued income	86	1 138	813	1 198	865	882	900	918
Inventories	409	319	264	301	419	427	436	445
Tax claims	0	0	0	0	3 625	0	0	0
Other short-term receivables	4 636	9 502	9 132	8 448	1 612	1 644	1 677	1 711
Cash and cash equivalents	878	8 343	2 415	697	11 703	14 973	194 839	134 442
<b>Total current assets</b>	<b>6 009</b>	<b>19 302</b>	<b>12 624</b>	<b>10 644</b>	<b>18 224</b>	<b>17 927</b>	<b>197 852</b>	<b>137 515</b>
Shares in subsidiaries	0	0	0	0	0	0	0	0
Tangible assets	5 307	4 576	3 752	2 929	2 192	2 082	1 978	1 879
Financial assets	0	0	0	0	0	0	0	0
Intangible assets	951	640	528	417	306	302	298	295
<b>Total fixed assets</b>	<b>6 258</b>	<b>5 216</b>	<b>4 280</b>	<b>3 346</b>	<b>2 498</b>	<b>2 385</b>	<b>2 277</b>	<b>2 174</b>
<b>Total assets</b>	<b>12 267</b>	<b>24 518</b>	<b>16 904</b>	<b>13 990</b>	<b>20 722</b>	<b>20 311</b>	<b>200 128</b>	<b>139 689</b>
Accounts payable	8 063	8 846	10 224	8 400	4 988	5 088	5 190	5 293
Short term tax liabilities	368	399	240	212	0	0	0	0
Short term debt	0	0	0	0	0	0	0	0
Other short term liabilities	4 498	4 332	13 424	31 967	5 531	13 814	16 184	16 874
Accrued cost & prepaid income	1 954	5 163	3 570	2 028	1 798	3 140	2 634	2 400
<b>Total current liabilities</b>	<b>14 883</b>	<b>18 740</b>	<b>27 458</b>	<b>42 607</b>	<b>12 317</b>	<b>22 041</b>	<b>24 007</b>	<b>24 567</b>
<b>Long term liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total equity</b>	<b>-2 614</b>	<b>5 777</b>	<b>-10 553</b>	<b>-28 617</b>	<b>8 405</b>	<b>-1 730</b>	<b>176 121</b>	<b>115 122</b>
<b>Total equity and liabilities</b>	<b>12 269</b>	<b>24 517</b>	<b>16 905</b>	<b>13 990</b>	<b>20 722</b>	<b>20 311</b>	<b>200 128</b>	<b>139 689</b>

Source: Västra Hamnen Corporate Finance

**Cash flow statement**

kSEK	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023e	Q1 2024e	Q2 2024e
Operating activities	-13 508	-20 930	-14 907	-17 468	-4 397	-20 021	-22 041	-60 897
Changes in working capital	-31 089	3 886	9 468	15 411	-29 650	13 291	1 907	499
Investing activities	0	0	0	0	-104	0	0	0
Financing activities	45 359	25 000	0	0	45 216	10 000	200 000	0
<b>Cash flow for the period</b>	<b>762</b>	<b>7 956</b>	<b>-5 439</b>	<b>-2 057</b>	<b>11 065</b>	<b>3 270</b>	<b>179 866</b>	<b>-60 397</b>
Beginning cash balance	143	878	8 343	2 415	697	11 703	14 973	194 839
<b>Ending cash balance</b>	<b>878</b>	<b>8 343</b>	<b>2 415</b>	<b>697</b>	<b>11 703</b>	<b>14 973</b>	<b>194 839</b>	<b>134 442</b>

Source: Västra Hamnen Corporate Finance

## Glossary

<b>Acute respiratory distress syndrome (ARDS)</b>	A life-threatening lung disorder where patients may experience severe breathing difficulties and low blood oxygen levels.
<b>Adipose tissue</b>	Fat tissue
<b>Allogenic MSCs</b>	MSCs received from a donor.
<b>Amniotic suspension allograft</b>	Amniotic tissue or components of amniotic fluid that are processed for clinical treatments.
<b>Analgesics</b>	Pain-reducing medication that targets pain receptors in the body.
<b>Antibody drug conjugate (ADC)</b>	A targeted cancer treatment that uses a combination of an antibody and a drug such as a cell toxin.
<b>Anti-nerve growth factor (anti-NGF)</b>	NGF is a protein known to generate pain. Anti-NGF is a medication that acts to reduce the effect of NGF, primarily used to manage chronic pain.
<b>Articular cartilage</b>	A type of hyaline cartilage that can be found in joints covering bone ends and is important for maintaining joint movement.
<b>Articular trauma</b>	An injury of the joint.
<b>Chondrocytes</b>	The cells found in cartilage.
<b>Corticosteroids</b>	A type of medication with anti-inflammatory and immunosuppressive properties.
<b>Disease-modifying osteoarthritis drug (DMOAD)</b>	A treatment addressing the cause of the disease and not only the symptoms.
<b>Glioblastoma</b>	The most common and deadliest primary brain tumour.
<b>Hydrocolloids</b>	A type of dressing containing gel-forming substances that absorb fluids from wounds, used for treating VLU and other wounds.
<b>Immunomodulatory</b>	The ability of a cell or a substance to modulate the immune system.
<b>Integrin <math>\alpha 10\beta 1</math></b>	A specific collagen-binding cell-surface protein. The integrin can be found on cartilage cells, on the surface of MSCs and on aggressive cancer cells.
<b>Intra-articular corticosteroid</b>	A treatment where corticosteroids are injected into a joint.
<b>Mesenchymal stem cells (MSC)</b>	MSC are found in different tissues of the body such as adipose tissue. They are used as therapeutics due to their regenerative and immunomodulatory properties.
<b>Non-steroidal anti-inflammatory drug (NSAID)</b>	A type of medication primarily used to reduce, pain, inflammation, and fever.
<b>Osteoarthritis (OA)</b>	A degenerative joint disease which is characterised by progressive breakdown of cartilage in joints, usually leading to stiffness, reduced mobility, and pain.
<b>Platelet-rich plasma</b>	A concentrate of platelets in blood plasma with potential regenerative effects.
<b>Triple-negative breast cancer (TNBC)</b>	A specific type of aggressive breast cancer signified by the absence of the three receptors: estrogen receptors, progesterone receptors, and human epidermal growth factor receptor 2.
<b>Venous leg ulcers (VLU)</b>	A wound caused by veins having difficulties returning blood to the heart, resulting in damage to skin and surrounding tissues.
<b>Viscosupplementation</b>	Medical treatment for osteoarthritis where a gel-like fluid is injected in the joint to increase lubrication and reduce pain.

**Clinical phases**

<b>Phase 0</b>	Pharmacokinetics (how the body interacts with the administered substance), oral bioavailability and half-life of the drug are observed. Low doses of the drug candidate are used.
<b>Phase I</b>	The first stage of clinical studies. The main goal is to evaluate the safety of the drug candidate.
<b>Phase II</b>	In the second stage of clinical development, the study evaluates the efficacy of the treatment and further examines the safety. Positive results here obtain proof-of-concept, motivating further development.
<b>Phase IIa</b>	Evaluating proof-of-concept, clinical efficacy and biological activity
<b>Phase IIb</b>	Investigating the optimal dose for maximum effect and a minimum of side-effects.
<b>Phase III</b>	A study that aims to further examine the effectiveness and safety of the treatment. A phase III study involves a larger group of patients than the studies in the previous phases.
<b>Phase IV</b>	This is a post-marketing surveillance study, to detect any long-term side-effects. The time span for a phase IV study is typically longer than in earlier phases.

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