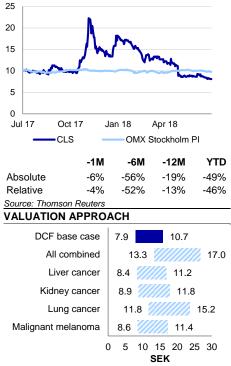


# **Clinical Laserthermia Systems**

Healthcare | Sweden

KEY DATA	
Country	Sweden
Bloomberg	CLSB SS
Reuters	CLSRb.ST
Share price	8.2
Free float	100%
Market cap (m)	SEK 290
Website	www.clinicallaser.se
Next report date	23 August 2018





Source: Thomson Reuters and Nordea

#### Nordea Markets – Analysts

Dan Johansson Analyst Simon Møller Blok Analyst Edyta Lewandowska Analyst Carl Mellerby Analyst Hans Mähler Director

# Turning up the heat inside

#### Immunotherapies on the rise

CLS offers advanced products and technology for differentiated thermal cancer treatment. With its method, imILT, the target tumour is heated up through lasers, which destroys it while releasing antigens that activate the immune system to attack any metastatic tumours. Its second method, Focal Laser Ablation (FLA) destroys the tumour through higher heat, but does not provide an immunotherapeutic effect. The global oncology market is posting strong structural underlying growth with immunotherapy as a key driver. CLS estimates that the immunotherapy market will grow at a 2016-21 CAGR of 14%, reaching USD 119bn in 2021.

#### **First customers signed**

CLS recorded its first sales of its TRANBERG system in 2017, where seven separate orders from US hospitals, treating early-stage prostate cancer with FLA, were received. We estimate SEK 12m of sales in 2018, solely from this cancer indication. Currently, CLS is conducting studies of its products in several solid tumour types, where letters of intent have been signed with hospitals testing it in pancreatic and breast cancer. We believe that these studies will be concluded in 2019 and 2020, and estimate sales to reach SEK 15m and SEK 78m. We estimate that CLS has operational funding for approximately the next year, after which we believe one last equity issue will be needed for funding.

#### Significant hidden potential value in lung cancer

In our estimates, we only include sales in indications in which hospitals have signed letters of intent or where sales have been initiated. However, we analysed several valuation scenarios for the indications currently omitted, which revealed substantial hidden value in the lung cancer segment. We believe the target price range could increase to SEK 11.8-15.2 by entering the lung cancer segment, or to SEK 13.3-17.0 in a blue sky scenario where launch in all solid tumour indications currently tested are obtained.

#### Valuation

We base our valuation on a DCF model and calculate an equity value range of SEK 7.9-10.7 by varying the EBIT margin and WACC. This implies a 2020E EV/sales multiple of 3.7-4.9x.

SUMMARY TABLE - KEY FIGURES								
SEKm	2013	2014	2015	2016	2017	2018E	2019E	2020E
Net sales	0	0	0	4	11	12	15	78
- growth	-90%	-56%	n.m.	n.m.	208%	8%	24%	415%
EBIT	-18	-18	-17	-27	-21	-28	-41	-29
- margin	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EPS	-1.16	-1.03	-0.82	-1.14	-0.81	-0.86	-1.15	-0.81
- growth	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
DPS	0	0	0	0	0	0	0	0
P/E	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EV/EBIT	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EV/Sales	n.m.	n.m.	n.m.	68.6	45.6	21.3	16.8	3.5
RoE	-84.9%	-60.7%	-65.0%	-147.6%	-84.9%	-63.7%	-71.9%	-62.7%
Div. yield	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
FCF yield	n.m.	n.m.	n.m.	n.m.	n.m.	0	0	0
ND/EBITDA	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	0.7x

Source: Company data and Nordea



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# **Factors to consider**

CLS is a medical technology company, focused on developing thermal cancer treatment solutions, in a market that is seeing structural growth from increased research spending and new treatment options. In our view, CLS is well positioned to capitalise on this market growth through its immunotherapeutic treatment solution (imILT) and thermal ablation treatment (FLA). The immunotherapy market is expected to grow at a 2016-21 CAGR of 14% by CLS. The first sales were recorded in 2017 to US hospitals treating early-stage prostate cancer with FLA, while customers treating pancreatic and breast cancer with imILT have signed letters of intent to sell the products.

# Key factors to consider when evaluating an investment in CLS

We have identified a number of key themes describing the investment case in CLS

- CLS is present in a market with strong underlying structural growth, driven by increased oncology research spending and introduction of new treatment options. CLS expects the immunotherapy market to grow at a 2016-21 CAGR of 14%, reaching USD 119bn. We believe CLS should be able to capture its fair share of this growth, with its treatment options.
- CLS's imILT and FLA treatments offer a less invasive treatment procedure than competing solutions that also results in shorter recovery time. We view this as a competitive advantage that leaves CLS well positioned to capitalise on the growing oncology market.
- Despite being an early-stage company, CLS has managed to obtain CE-mark and FDA 510K approval for its products, and has signed letters of intent with several hospitals. In our view, this support CLS's business model.
- CLS has received acknowledgement from third parties, as the EU provided CLS with SEK 20m in funding through Horizon2020, while clinical tests so far have shown the product to be safe, efficient and without severe side effects.
- Even though letters of intent have only been signed for treatment of pancreatic, breast and early-stage prostate cancer, CLS argues that the products have potential in several lucrative oncology indications, such as lung (SEK 3.4bn), prostate (SEK 1.8bn) and kidney cancer (SEK 0.7bn), measured on 2018E addressable market sizes.

# Key risk factors

- CLS's treatments are not covered by insurance or any national payment system today.
- Despite having products eligible for sale, CLS needs to prove its products through clinical studies, which are time consuming and expensive. Furthermore, several studies have been delayed due to patient recruiting difficulties.
- CLS plans to partner with key opinion leaders within oncology as references for its products. This makes the company highly dependent on third parties in terms of expanding its market reach.
- CLS has a limited operational history and has yet to return any profits or generate positive cash flows.
- CLS faces competition from companies with extensive experience and resources. Apart from established treatments, CLS could also face competition from novel treatments currently under development.

Immunotherapies are among the fastest-growing areas in the oncology market

# Strong growth opportunities within the oncology market, fuelled by the rise of immunotherapies

The immunotherapy market is expected to grow at a 2016-21 CAGR of 14% and reach global sales of USD 119bn in 2021, according to CLS. Research conducted by the IQVIA Institute has shown that immunotherapies are among the fastest-growing areas in oncology R&D. Traditional methods, such as surgery and chemotherapy treatments, have certain drawbacks, including the recurrence of cancer, whereas immunotherapies have shown more promise in this regard.

CLS aims to reap the benefits of the rapid growth in the global immunotherapy market through commercialisation of its TRANBERG system, which treats cancer thermally. CLS inserts an optic laser fibre into the tumour and heats the tissue at a constant temperature until it dies. TRANBERG is used in two treatment types. The first, imILT, heats the tumour at 46°C for 30 minutes. At this temperature, antigens are released, which activate the immune system to attack similar tumour cells in the entire body. This has proved effective against metastatic and recurring cancer. The second treatment, FLA, heats the tumour at a higher temperature with shorter treatment. This efficiently destroys the tumour, but does not produce antigens.

Development of immunotherapeutic treatment solutions is still at an early stage, and thus entails certain risks. In some cases, the unleashed immune system has not only attacked the cancerous cells, but also healthy cells and organs. However, so far, the clinical tests of CLS treatment solutions have proved safe and without any severe side effects.

Research has shown that immunotherapeutic treatment solutions are promising in terms of combined treatments with other more traditional methods. CLS sees potential for its TRANBERG system to be used in combination with other types of treatment, as experiences with similar local ablative techniques have shown that there is a high chance that such combination could be successful. Strategies for using the TRANBERG system with other kinds of procedures are currently evaluated in the ongoing clinical trials. In our view, CLS's differentiated thermal treatment leaves it well positioned to capitalise on this growing market opportunity.



Source: Company data and Nordea

# Regulatory approvals in place, and customer attention rising

Despite still being an early-stage company, CLS has managed to acquire the required certification by the EU and the FDA in the US to sell its products in these markets.. In 2013, CLS received a CE-mark in the EU for imILT; in 2014, it was granted FDA 510K approval in the US. The CE-mark was further expanded in 2018 to include its FLA treatment, thereby allowing the sale of its entire product portfolio in Europe and the US. These approvals mean that TRANBERG system meets the safety, health and environmental requirements set by the EU and US.

The current challenge faced by CLS is commercialisation of its product, and grabbing the attention of customers in the market, as there are no legal barriers left to be surpassed. To obtain market interest, the company has initiated studies of its product in several solid tumour indications. So far, letters of intent for sales have been signed

CLS has been granted approval for sales by both European and US regulatory authorities with hospitals treating pancreatic and breast cancer, and are conditional on successful outcomes of these studies with imILT. Treatments of early-stage prostate cancer with FLA have already commenced, as the first orders were received by US hospitals in 2017. Combined with the regulatory approval, we believe that this early-stage customer support provides validation of CLS's products.

However, regulatory approvals are still needed for sales in Asia, where CLS's long-term goal is to make its methods available in China, Japan and South Korea.

#### Promising results of clinical studies

Based on clinical updates provided by CLS, studies have shown that imILT is safe, without any severe side effects and with reasonably accuracy. However, we note that the size of the test was small and conducted with a short follow-up time, which introduces some noise into the results.

Letters of intent have been signed with four hospitals for imILT treatment and one for FLA. Conditional on successful outcomes of the studies, these hospitals will become customers of CLS and serve as reference clinics. Three of the studies are financed by the funding granted by the EU through Horizon2020.

We note that CLS's product is already approved for sales in Europe and the US, and sales are therefore not directly dependent on the outcome of these studies. The purpose of the studies is to validate CLS's treatment processes in order to grab the attention of potential customers. Indirectly, we view these studies as necessary for generating sales, as customers need to validate and test the product before using it on patients, especially as it is not yet covered by any insurance.

#### Competitive advantage from minimally-invasive treatment

The TRANBERG system allows for minimally-invasive treatment

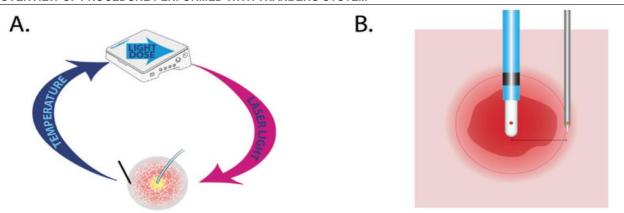
In our view, the main competitive advantage possessed by CLS relates to its minimally-invasive treatment procedure and its ability to provide treatment both solely and in combination with other procedures.

According to the American Cancer Society (ACS) and the National Cancer Institute (NCI), thermal cancer treatment can sensitise a tumour towards other treatments, such as radiation and chemotherapy, as it changes the tumour cells. Furthermore, it can be used to destroy tumours. The prospect of thermal treatment is positive both in a sole use and combined setting, increasing the potential use of CLS's products.

As the procedure is minimally invasive, patients can leave the hospital a few hours after the treatment. The treatment does not require general anaesthesia, radiation or surgical incision. Surgical incision or radiation treatment of prostate cancer have led to side effects, such as urinary incontinence, impotence and decreased bowel function, which can be avoided when using laser therapy.

CLS's TRANBERG system uses MR-guidance, which enables doctors to apply the product extremely precisely for ablation of targeted cancerous tissue. This has proved effective in treatment of early-stage prostate cancer, where the tumour is difficult to identify. CLS has already generated customer orders for its FLA treatment for this indication. We view this market as extremely attractive for CLS, as the most used treatment option now is through surgery. In these cases, doctors often wait and let the tumour grow to a size where surgical removal becomes possible. Therefore, CLS's treatment solution targets a market where unmet demand still exists.

#### OVERVIEW OF PROCEDURE PERFORMED WITH TRANBERG SYSTEM



Source: Company data and Nordea Markets

#### **Recognition from independent third parties**

CLS's treatment solutions have received recognition from important third parties for their capabilities, which increases confidence in the company's future prospects. In 2016, CLS was granted SEK 20m for clinical studies through an EU programme, Horizon2020. The programme is an initiative aimed at investing in research to drive future economic growth and job creation. According to CLS, this funding validates the safety and potential of its treatment. Owing to the funding obtained through the programme, CLS was able to set up three clinical studies: two for pancreatic cancer and one for breast cancer.

#### Potentially lucrative target indications

The cancer indications that CLS targets have high market potential. According to the medical market intelligence company, Evaluate, the 2018 market sizes for pancreatic and breast cancer are USD ~0.9bn and USD ~20bn, with 2017-22 CAGRs of ~17% and ~9%, respectively. The prostate cancer market is expected to reach a size of USD 8bn, and grow at a 2017-22 CAGR of 5%.

Based on the Evaluate data and survival statistics from the NCI, we see untapped market potential within pancreatic cancer, which has also been highlighted by CLS's management. Pancreatic cancer is extremely difficult to treat as it is mostly discovered at a late stage, and its five-year survival rate in the US is still only around 8%. Based on the low survival rate, we see room for new treatment solutions like CLS's to grab market shares. According to the Evaluate data, pancreatic treatment sales are set to accelerate as new product innovations are being introduced. Currently, eight new products under development are factored into the consensus data. According to Ipsos, a healthcare survey among oncologists in the US and Europe, pancreatic cancer was perceived as the one with the greatest need of new treatment alternatives among all cancer types.

Evaluate forecasts the breast cancer market to grow at an annual average ~9%, reaching USD ~28bn in 2022. CLS is running a clinical study in this cancer area and signed a letter of Intent with Nottingham University Hospital, where the study takes place. Therefore, we predict that CLS could grab market share in this important market within a few years. However, with more established treatment procedures than for pancreatic cancer, it has higher barriers to entry.

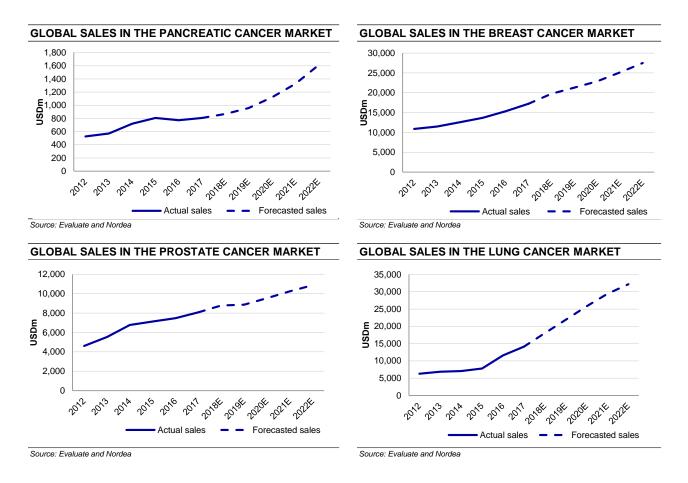
Besides these indications where CLS has already initiated sales or signed letters of intent with customers, the long-term goal of management is to make its treatments available in most solid tumour indications. We have not yet factored in any sales from indications such as lung, kidney, liver and skin cancer, where CLS have yet to sign customers. However, we assess the value potential within these indications via

CLS's target indications offer high market potential

We factor in value from pancreatic, breast and earlystage prostate cancer sales...

... while lung cancer provides a large value option

several sensitivity analyses on sales and valuation. We find that the lung cancer market is especially interesting, in light of its market size. Based on our sensitivity analysis, the successful launch of CLS's products for use in lung cancer could increase our current fair value range of SEK 7.9-10.7 per share to SEK 11.8-15.2 per share. If CLS is successful in reaching the market for all four of these indications, our "what-if" analysis points to a fair value range of SEK 13.3-17.0 per share, thereby pointing to substantial value potential.



# Valuation

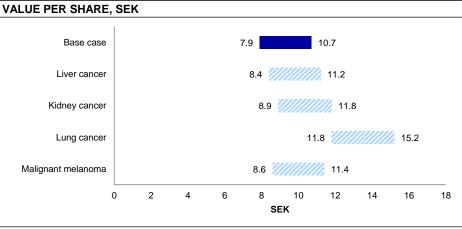
We estimate a fair value range of SEK 7.9-10.7 per share based on variations in sales growth, EBIT margins and WACC. We derive our fair value from a fundamental DCF methodology.

# Valuation

Based on a fundamental discounted cash flow (DCF) approach and assuming a weighted average cost of capital (WACC) of 12-13%, we derive an equity value range of SEK 7.9-10.7 per share. We note that the valuation is based on a long-term analysis and is not linked to a near-term assessment of the performance of the company.

# Valuation highlighted

We derive a fair equity value range of SEK 7.9-10.7 per share for CLS Based on a DCF framework, we derive an equity valuation range of SEK 7.9-10.7 per share for CLS. Our forecast model is based on a NPV approach, discounting cash flows from sales in cancer indications where CLS has initiated sales or signed letters of intent with potential customers. Our base-case valuation thus includes sales from imILT treatments in pancreatic and breast cancer, and FLA treatment of early-stage prostate cancer.



Source: Nordea estimates

# **DCF** valuation

One of the most common ways to value the attractiveness of an investment opportunity is the discounted cash flow (DCF) method. A DCF model discounts all available cash flows for equity, bond and non-equity holders at the weighted average cost of capital (WACC). In other words, WACC represents a blended cost of capital for all invested capital in the company. In fundamental terms, a DCF framework is built on three parts:

- Discounting the company's free cash flow at WACC
- Identifying the value of debt and other non-equity claims on the enterprise value
- Deducting all claims to determine the value of the common equity.

The fair value per share is then simply calculated by dividing the equity value by the number of outstanding shares.

A DCF valuation is commonly considered among academics and practitioners to be the best way to capture the underlying fundamental drivers of a company, such as cost of capital, growth rates, reinvestment rates, etc. If applied correctly, it represents the best way to approximate the true intrinsic value of a company. A main appeal of a DCF framework compared with other valuation methodologies is that it also focuses on streams of cash rather than accounting earnings. Its main disadvantage is its relative sensitivity to changes in input values.

Our valuation approach is primarily based on a DCF framework

## Near-term valuation triggers

We perceive the outcomes of the ongoing clinical trials and existence of established partnerships within respective cancer indications to be key short-term valuation triggers.

CLS has seven ongoing clinical studies aiming at verifying efficacy of its imILT treatment. Among the institutions involved in the studies, five have signed letters of intent with CLS. Three of them are conducting clinical trials with pancreatic cancer, which we believe will conclude in late 2018 and early 2019, hence initiating sales in 2019. One letter of intent has been signed within breast cancer, while a clinical study is planned to be concluded in 2019. We expect that CLS will reach the market and start realising revenue in 2020, which will grow at a slower pace than within pancreatic cancer. One of the most significant short-term data points will be provided in November 2018, when CLS will publish an interim-update on the studies currently commencing at the Portuguese Oncology Institute of Porto and the Institut Paoli-Calmettes.

CLS's revenue currently stems solely from the FLA method used for prostate cancer treatment. With orders gradually coming in, we expect that CLS will consistently gain market share within this area. CLS has signed a letter of intent with Toronto General Hospital for use of FLA in this indication, conditional upon a successful outcome of currently ongoing tests.

Cancer indications without any ongoing clinical studies and/or without a signed letter of intent were disregarded in our base-case valuation.

#### **Fundamental valuation**

In the table below, we set out the general assumptions that we use to calculate our DCF value. With variations in sales growth, EBIT margin and WACC assumptions, we arrive at a fair equity value range of SEK 7.9-10.7 per share. In the terminal period, we model WACC equal to ROIC and 2.5% growth.

AVERAGES AND ASSUMPTIONS						
	2018-30	2031-33	2034-38	2039-43	2044-48	Sust.
Sales growth, CAGR	45.6%	2.0%	2.0%	2.0%	2.0%	
EBIT-margin, excluding associates	10.4%	15.0%	15.0%	15.0%	3.7%	
Capex/depreciation, x	1.1	1.00	1.00	1.00	1.00	
Capex/sales	10.0%	10.0%	10.0%	10.0%	10.0%	
NWC/sales	-14.7%	20.0%	20.0%	20.0%	20.0%	
FCFF, CAGR	n.a	n.a	2.0%	2.0%	-27.9%	2.5%
Source: Nordea estimates						

To highlight the sensitivity of the DCF valuation, we also provide sensitivity matrices modelling variations in revenue growth, margin assumptions and cost of capital.

#### WACC

We apply a range of cost capital (WACC) of 12-13% as the input for our DCF valuation. The assumptions behind our WACC are outlined in the following table.

WACC ASSUMPTIONS	
WACC components	
Risk-free interest rate	1.5%
Market risk premium	5.5%
Forward looking asset beta	nm
Beta debt	1.00
Forward looking equity beta	1.9-2.1
Cost of equity	12.5%
Cost of debt	3%
Tax-rate used in WACC	22%
Equity weight	100%
WACC	12-13%

Source: Nordea estimates

We apply a WACC range of 12-13%

Our DCF valuation indicates a

fair value range of

SEK 7.9-10.7 per share

# **DCF** sensitivity

Below, we provide a sensitivity table illustrating how the equity value varies with changes in EBIT-margin assumptions, sales growth assumptions and WACC.

Our DCF value with varying EBIT margins and WACC

		WACC							
		12.0%	12.3%	12.5%	12.8%	13.0%			
	+1.0pp	10.9	10.4	10.0	9.6	9.2			
EBIT marg.	+0.5pp	10.6	10.1	9.7	9.3	8.9			
change		10.2	9.8	9.4	9.0	8.6			
	-0.5pp	9.9	9.5	9.1	8.7	8.4			
	-1.0pp	9.6	9.2	8.8	8.5	8.1			

#### WACC VS SALES GROWTH

		WACC							
		12.0%	12.3%	12.5%	12.8%	13.0%			
	+1.0pp	10.6	10.2	9.7	9.3	8.9			
Sales gr.	+0.5pp	10.4	10.0	9.6	9.2	8.8			
change		10.2	9.8	9.4	9.0	8.6			
	-0.5pp	10.1	9.6	9.2	8.9	8.5			
	-1.0pp	9.9	9.5	9.1	8.7	8.4			

Source: Nordea estimates

#### SALES GROWTH VS EBIT MARGIN

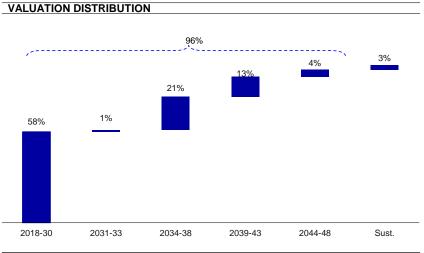
		Sales growth change							
		-1.0pp	-0.5pp		0.5pp	1.0pp			
	+1.0pp	9.6	9.8	10.0	10.2	10.4			
EBIT margin	+0.5pp	9.4	9.5	9.7	9.9	10.1			
change		9.1	9.2	9.4	9.6	9.7			
	-0.5pp	8.8	9.0	9.1	9.3	9.4			
	-1.0pp	8.6	8.7	8.8	9.0	9.1			

Source: Nordea estimates

#### **Terminal year**

The majority of value is distributed in the coming ten-year period

We use a stringent valuation framework where ROIC equals WACC in the terminal period, which prevents the model from extrapolating above-market returns in perpetuity. The majority of the value (58%) is distributed in the coming ten-year period and 97% within our 30-year estimate cycle.



Source: Nordea estimates

## Potential upswing from other target indications

We include a theoretical example illustrating potential value from reaching the market for other indications Some of the cancer indications included in CLS's addressable pool of patients were disregarded in our base-case valuation. We believe that cancer indications where clinical trials have yet to begin or have no sales or letters of intent are to risky to include in the estimates. However, we do take into account the possibility that CLS could initiate sales within some of these indications, by complementing our base-case valuation with a "what-if" analysis to evaluate how a successful launch in each of these indications would impact its sales and equity valuation.

To illustrate how revenue from other indications could add upside to sales, we include theoretical scenarios where CLS achieves 0.7-4.8% market share in 2030E with varying inflation outlooks (1-5%) in melanoma, lung, kidney and liver cancer.

imILT	ILT: SKIN CANCER, 2030E SALES							imILT: LUNG CANCER, 2030E SALES									
SEKm	SEKm Market share				Market share S				Market share S					Ма	rket share		
c		0.7%	1.8%	2.8%	3.8%	4.8%	<b>_</b>		0.7%	1.8%	2.8%	3.8%	4.8%				
ation	1%	6.6	15.4	24.1	32.9	41.7	tio	1%	51.3	119.7	188.0	256.4	324.8				
nfla	2%	6.6	15.5	24.4	33.2	42.1	ıfla	2%	51.8	120.9	189.9	259.0	328.0				
.=	3%	6.7	15.7	24.6	33.6	42.5	<u>,</u>	3%	52.3	122.0	191.8	261.5	331.3				
rice	4%	6.8	15.8	24.9	33.9	42.9	jč	4%	52.8	123.2	193.6	264.1	334.5				
Pri	5%	6.8	16.0	25.1	34.2	43.4	ā	5%	53.3	124.4	195.5	266.6	337.7				
Source: Company data and Nordea						Source:	Company o	lata and Norde	a								

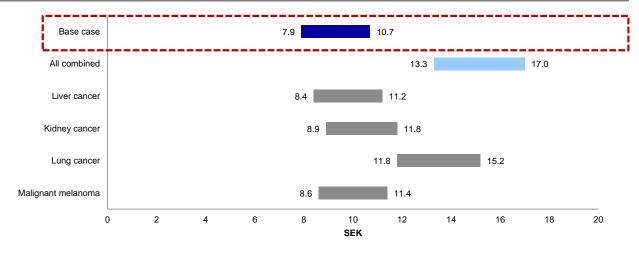
imILT	IMILT: KIDNEY CANCER, 2030E SALES						imILT	: LIVEF	<b>CANCEF</b>	R, 2030E S	SALES		
SEKm			Ma	rket share			SEKm			Mai	ket share		
Б		0.7%	1.8%	2.8%	3.8%	4.8%	c		0.7%	1.8%	2.8%	3.8%	4.8%
÷	1%	10.2	23.8	37.5	51.1	64.7	ti	1%	3.7	8.7	13.7	18.7	23.6
ıfla	2%	10.3	24.1	37.8	51.6	65.4	fla	2%	3.8	8.8	13.8	18.8	23.9
e Ľ	3%	10.4	24.3	38.2	52.1	66.0	<u> </u>	3%	3.8	8.9	14.0	19.0	24.1
rice	4%	10.5	24.6	38.6	52.6	66.7	<u>ü</u>	4%	3.8	9.0	14.1	19.2	24.3
٩.	5%	10.6	24.8	39.0	53.1	67.3	P.	5%	3.9	9.1	14.2	19.4	24.6

Source: Company data and Nordea

Source: Company data and Nordea

The graph below ilustrates the value added from the omitted indications, if CLS is able to initiate sales within these. In the calculation, we assume that the product will reach the market in liver, kidney, lung and melanoma cancer in 2020 and that CLS's global market share within these will expand to ~3% in 2030. If CLS, for example, is able to initiate sales in liver cancer in addition to the base-case indications, we calculate that its fair equity value per share increases to SEK 8.4-11.2. Thus, we find that particularly significant upside can be derived from entering the lung cancer segment, which alone would increase the valuation range to SEK 11.8-15.2. If all of these potential market opportunities are included, we calculate a fair value range of SEK 13.3-17.0 per share. Succesfull outcome in the trials for the omitted indicaions, or letters of intent signed with hospitals, would de-risk an investment in CLS, which could prompt a lower cost of capital, thus fuel a further increase in valuation.

#### DCF VALUE ADDITION PER SHARE FROM SALES IN OTHER CANCER INDICATIONS

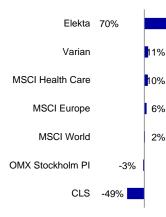


Source: Nordea estimates

## Share price performance

We compare CLS's performance with Elekta and Varian as peers, as well as with the leading indices relevant to CLS, namely the OMX Stockholm PI, MSCI World, MSCI Europe and MSCI Health Care. The performance is calculated from changes in the share price denominated in SEK. We note that CLS has declined over the past two years. Conversely, Elekta and Varian have seen their share prices increase by 69% and 64%, far outpacing MSCI World and MSCI Health Care. YTD, CLS's share price has declined ~49%, likely affected by the announced share issue in late May.

#### 2018 YTD PERFORMANCE



SHARE PRICE PERFORMANCE FOR SELECTED CLS PEERS AND INDICES

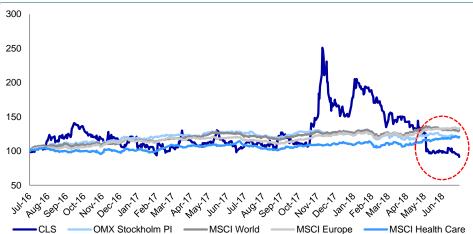
	-1W	-1M	-3M	YTD	-1Y	-2Y
Elekta	0%	2%	29%	70%	44%	69%
Varian	<u>-2%</u>	-5%	0%	11%	15%	64%
CLS	0%	-6%	-33%	-49%	-18%	-7%
Market indexes						
OMX Stockholm Pl	0%	-2%	0%	-3%	-6%	17%
MSCI World	-1%	-1%	1%	2%	6%	27%
MSCI Europe	-2%	-1%	5%	6%	13%	31%
MSCI Health Care	-1%	2%	8%	10%	10%	21%
*Percentage return is calculated	from SEK return to	ensure compa	arability			

Source: Thomson Reuters and Nordea

In the chart below, we highlight the indexed share price compared with MSCI World, MSCI Europe, MSCI Health Care and OMX Stockholm PI. We note that the share price decline that CLS has experienced since late 2017 has made it underperform all of these indices over the last two years.

Source: Thomson Reuters and Nordea

Measured on share price, CLS has underperformed leading broad equity indices over the last two years CLS'S INDEXED PRICE PERFORMANCE VS. LEADING GLOBAL EQUITY INDICES



Source: Thomson Reuters and Nordea

# **Company overview**

CLS is an early-stage company within oncology that has succeeded in developing the world's first device-based laser immunotherapy (imILT) to treat solid cancer tumours. The imILT method enables oncologists to conduct minimally-invasive cancer treatments, not only leading to tumour destruction, but also stimulating the patient's immune system to attack tumour cells as the treatment releases antigens. This makes it relevant for patients suffering from cancer metastasis. In addition to the immunotherapy-based imILT treatment, CLS's products also allow for tumour removal through focal laser ablation (FLA). FLA works at higher temperatures than imILT and does not have immunotherapeutic effects as a consequence, but effectively destroys the tumour. CLS's CE-marked and FDA-approved TRANBERG products are approved for use in Europe and the US.



CLS is a Swedish medical technology company that offers cancer treatment through its innovative TRANBERG cancer immunotherapy system

imILT and FLA are the two primary treatment methods possible with the TRANBERG system

A lot of effort is focused on clinical studies aiming to validate the CLS-developed treatment methods

# Introduction

CLS is a Swedish medical technology company founded in 2006 and headquartered in Lund. In addition, the company has subsidiaries in Boston, USA and in Berlin, Germany. CLS was established around Professor Karl-Göran Tranberg's discovery that laser beams not only have the ability to destroy tumour cells through heat, but also to stimulate the immune system to fight metastatic cancer. Based on this discovery, CLS developed TRANBERG, a system for treatment of solid tumours. The TRANBERG system comprises a mobile laser unit and a set of applicators related to it. There are two treatment methods for which TRANBERG device is applicable:

- Immunostimulating interstitial laser thermotherapy (imILT) The principle behind this method is to heat up the targeted tumour steadily, in a controlled manner, at a temperature around 46 degrees Celsius. At this temperature, the tumour is slowly destroyed while producing antigens. These antigens stimulate the immune system to fight similar tumour cells that have spread to other parts of the body. According to CLS, the method is applicable to several types of cancer (eg breast, liver, pancreas, skin, lung, kidney and prostate). The company is currently conducting studies that aim to validate the treatment effect in different cancer indications and to prove safety of the procedure.
- Focal Laser Ablation (FLA) This is a clinically accepted method based on the same laser technique as imILT; however, the tumour is heated up to higher temperatures in a shorter time to quickly destroy local tumour without stimulating the immune system

CLS is currently focused on conducting clinical studies to validate the effectiveness of imILT and the TRANBERG system. The tests have so far been successfully used for treatment of breast cancer and malignant melanoma. The evaluation of the FLA method began in early 2017 through cooperation with the University of Texas Medical Branch. The first treatments of early-stage prostate cancer and enlarged prostate were performed with satisfactory outcomes.

In 2016, CLS was awarded a grant of SEK 20 million through the EU's Horizon2020 programme to conduct clinical studies in pancreatic cancer treatment, which should conclude in 2018.

CLS went public on Aktietorget in 2009

The company has established partnerships with a number of relevant medical institutions and universities

Two important milestones in the European and American market expansion plans were reached when CLS received CE-mark and FDA approval for its products

In 2016 CLS was awarded a SEK 20m grant from the EU Horizon2020 programme for three clinical studies

At the beginning of 2017, the company decided to move its shares from Aktietorget to Nasdaq First North

In 2017, CLS established its first subsidiary in Germany through acquiring Laser- und Medizin-Technologie GmbH

2018 brings the extended EC certificate, including FLA

# **Company history**

CLS was founded in 2006 by Karl-Göran Tranberg, Pär Henriksson and Lars-Erik Eriksson. The company was established on Professor Karl-Göran Tranberg's discovery that laser beams used in cancer treatment are not only able to destroy cancer tumours, but also to stimulate the immune system to fight metastatic cancer. The intention behind founding CLS was to develop a commercial product based on this discovery, with a vision of worldwide usage by oncologists. In the year it was founded, the company entered into a partnership with a Swedish prototype developer and secured itself the first round of funding. One year following its establishment, CLS won Venture Cup Syd, a competition that supports the most promising business ideas and helps bring them to life.

In 2009, the company took its first step into the public market by entering Aktietorget, a Swedish trading platform. In the same year, it received another round of funding, amounting to SEK 5m, followed by SEK 16m in a third round of funding in 2010. In the same year, CLS completed its work on the first product prototype.

The following years were marked by several major events. In 2011, CLS entered into new partnerships. CLS partnered with INTERmedic, a Spanish development and production partner, and an American laser fibre supplier. In 2012, INTERmedic produced CLS's first product, while CLS also obtained another round of funding, amounting to SEK 20m.

2013 brought new milestones for CLS. The company received CE-marking for its TRANBERG system, thereby allowing sales in Europe. 2013 was also the year when CLS launched its first clinical studies aimed at developing supplementary treatment kits for outpatient use. Later, in 2014, CLS released a treatment kit enabling percutaneous treatment of tumours located up to 35 centimetres deep in the body. In 2014, CLS further filed for FDA 510K approval of its TRANBERG system. The approval was granted in 2015, a major milestone for CLS, as it allowed for sales in the US market. CLS further initiated clinical tests of imILT treatment in pancreatic cancer at the University Hospital of Verona and Institut Paoli-Calmettes in Marseille.

In 2016, the company received SEK 20m in a grant from Horizon 2020, an EU Research and Innovation programme striving to encourage innovation and economic growth through financial aid to promising research initiatives. According to CLS, the funding from the grant will cover the work on three clinical studies. 2016 was also the year where CLS managed to complete its first post-market clinical follow-up report. The report was based on eight imILT treatments conducted with the TRANBERG system. The studies showed that there were no significant side effects connected to the treatment. In 2016, CLS entered into cooperation with the Department of Radiology at the University of Texas Medical Branch (UTMB) for use of its TRANBERG system in FLA treatments. UTMB placed its first order for CLS's products in 2017, and the first treatments of prostate cancer using by FLA were conducted.

Besides receiving the first product orders in 2017, the company conducted two separate share issues, raising SEK ~2.5m and SEK ~12.5m. The company further acquired Laser- und Medizin-Technologie GmbH (LMTB), a German laser technology company. The acquisition provided CLS with important patents regarding company's diffusion fibre technique.

In Q3 2017, CLS entered into collaboration with a Swedish veterinary clinic where the TRANBERG system will be evaluated to verify its ability to perform laser therapy on cancerous tumours in dogs.

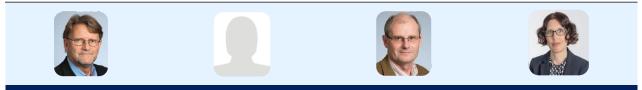
In early 2018, CLS received approval for an extended patent application in the US, securing better protection for its imILT treatment. Additionally, CLS managed to receive an extended CE certificate, thereby permitting the use of the TRANBERG system in FLA treatments in the European market.

#### **Executive management and board of directors**

Executive management and board have relevant abilities to further develop the company scientifically as well as businesswise

The executive management of CLS is made up of seven members. It is headed by Lars-Erik Eriksson, who is also a board member of the company. Eriksson has nearly 30 years of broad experience as an entrepreneur in Sweden, as well as on the international scene. The management team combines extensive medical background with broad business experience. This is likely to serve as a solid foundation for the future.

#### **EXECUTIVE MANAGEMENT**



Lars-Erik Eriksson	Mats Ekelund	Stephan Dymling	Marie Grey
Position	Position	Position	Position
Chief Executive Officer	Chief Medical Officer	Chief Technical Officer	Chief of Quality Assurance & Regulatory Affairs
Other Appointments	Other Appointments	Other Appointments	Other Appointments
Board member at Elano Aktiebolag and Salitre AB, as well as partner at Ed-Consult Handelsbolag	Docent at Lund Universitet	Board member at BibbInstruments AB	
Previous background	Previous background	Previous background	Previous background
Previously CEO and Chief Accountant for Sparbankerne in Sweden. Since the 90s he has been active as an entrepreneur in Sweden and internationally, and board member of several companies within the Ikano-group	Has academic experience from being Docent at Lund Universitet within surgery, combined with long practical experience from working with R&D at Ferring Pharmaceuticals and AstraZeneca	with more than 30 years of experience within this area. He has	Doctor in applied biochemistry, and holds a degree within civil engineering
No. of shares	No. of shares	No. of shares	No. of shares
A-shares: 200 000, B-shares: 717 312	2	B-shares: 27 631	





Dan J. Mogren	Karin Peterson	Gunilla Savring		
Position	Position	Position		
Chief Commercial Officer	Chief Product Officer	Investor Relations		
Other Appointments	Other Appointments	Other Appointments		
-	Board member at Luxera AB	Board member at aXichem AB		
Previous background	Previous background	Previous background		
Has more than 20 years of experience within business and product development, and 15 years of experience within international marketing of medical devices	Has a clinical background and more than 20 years of experience within medical engineering. Previous experience covers development and sales as well as establishment of distribution networks	Has several years of experience after holding occupations at Axis, Precise Biometrics and SwtichCore. She has been involved in management, communication, investor relations and as a board member over the years		
No. of shares	No. of shares	No. of shares		
B-shares: 30 461	none	B-shares: 8 837		
Source: company data				

Source: company data

The board of directors currently consists of six members. In our view, the board of directors comprises members who possess the right capabilities to take the company to the next level in terms of scientific development, as well as business expansion.

BOARD OF DIRECTORS			
Hans von Celsing		Lars-Erik Eriksson	Ola Jeppsson
Position		Position	Position
Chairman of the board		Board member and CEO	Board member
Other Appointments		Other Appointments	Other Appointments
Chairman at BiOxyDyn, Mirada-Medical, Pe Medical and Partner Fondkommission. Boa member at Gelexir Health Care and Sonow	ard	Board member at Elano and Salitre, as well as partner at Ed-Consult Handelsbolag	Board member at the Swedish Fulbright Alumni Association Board
Previous background		Previous background	Previous background
Vice President at Elekta (1986-98), where h the expansion to the US and Asia. He start Celsing Neuroventures Capital in the late 9 where he was CEO until 2007. He is chairm and advisor to several Medtech companies Europe and the US	ted von 90s man	Previously CEO and Chief Accountant at Sparbankerne in Sweden. Since the 90s he has been active as an entrepreneur in Sweden and internationally, and board member of several companies within the Ikano-group	Has several years of experience within the medtech industry, having held positions at Siemens and Elekta. He has spend the last five years leading Amrops Global Life Science practice, focusing on leadership recruitment to the Life Science sector
No. of shares		No. of shares	No. of shares
B-shares: 10 000		A-shares: 200 000, B-shares: 717 312	
Rolf Kiessling Position		Arne Ferstad	Karl-Göran Tranberg Position
Board member		Position Board member	Board member
Other Appointments Chairman at Accuro Immunology and board member at NK-CELL KONSULT KIESSLIN		Other Appointments CEO at Ankor Consultants. Chairman at AroCell, CombiGene, Aggancio Research and Medfield Diagnostics. Board member at Peptonic and NeuroVive Pharmaceuticals	Other Appointments CEO and board member at KG Tranberg Medical
Previous background		Previous background	Previous background
Has been a professor in experimental onco Karolinska Institutet in Stockholm since 199 Kiessling and his team work on developing immunotherapies to cure cancer diseases	94.	Has been leading Baxter Healthcare's operations in the Nordic and Benelux regions, as well as having held leading R&D positions at Baxter. He has broad experience within biotechnology, including business and drug development internationally	Professor and retired chief surgeon at Lunds University Hospital. He has developed the imILT method, and published several papers about the treatment method.
No. of shares		No. of shares	No. of shares
no shares Source: company data		B-shares: 15 000	A-shares: 200 000, B-shares: 1 207 499
	Shai	reholders	
Strong base of retail investors and founders among the top shareholders	share share repre Trant	sent thousands of primarily Swedish re berg is the third-largest shareholder thr	nd B-shares one vote. The two largest ts Avanza and Nordnet, which together

With 9.4% of the voting rights, he holds the largest individual voting power, and has thus retained a good portion of control over the company. There are no additional agreements of any kind between the shareholders that could potentially result in their joint influence over the company. The table below presents an overview of company's ownership and voting rights breakdown.

	SHAREHOLDER STRUCTURE AS OF MARCH 31, 2018							
Founder Karl-Göran Tranberg has retained a large amount	Shareholder	Number of A- shares	Number of B- shares	Ownership	Voting rights			
	KG Tranberg Medical AB	200,000	1,207,499	4.9%	9.4%			
of control over the company,	Elano Aktiebolag	200,000	723,916	3.2%	8.0%			
with 9.4% of the voting power	Försåakringsaktiebolaget, Avanza Pension	0	2,665,942	9.3%	7.8%			
that 5.170 of the found power	Nordnet Pensionsförsäkring AB	0	2,263,701	7.9%	6.6%			
	Six Sis AG, W8IMY	100,000	57,900	0.6%	3.1%			
	Bagge, Richard	100,000	0	0.4%	2.9%			
	Ålandsbanken AB, W8IMY	0	494,786	1.7%	1.5%			
	Bodestig, Karl Johan	0	280,263	1.0%	0.8%			
	Swedbank Försäkring	0	279,037	1.0%	0.8%			
	Aktiebolaget Possessor	0	264,332	0.9%	0.8%			
	Others	0	19,858,367	69.2%	58.2%			
	Total	600,000	28,095,743	100%	100%			
	Sourco: company data							

Source: company data

### Product portfolio

CLS's product is the TRANBERG Thermal Therapy System, which is composed of a mobile laser unit and designated disposable material (laser applicators and accessories). It has CE-marking and FDA 510K approval. It is used for the laser treatment of solid cancer tumours and is utilised in two types of treatment methods: the imILT method and FLA method. The whole systems provided by CLS (the laser unit together with fibre applicators) works with the use of MR-guidance and MRthermometry, without interferences. Additionally, in the case of CT/US-guided procedures, the system allows for receiving comprehensive tissue temperature feedback, thereby improving treatment precision. The system is intended to be used by medical professionals.

#### TRANBERG | CLS Mobile Laser Unit

The system is a small user-friendly laser unit, equipped with two 19-inch touch screens with graphical user interface. The purpose of the laser unit is to ensure safe and efficient imILT treatment. The system functions by continuously measuring the tissue temperature and guiding the user. This allows for precise, minimally-invasive, safe treatment.

#### TRANBERG | Laser applicators and accessories

Laser applicators used in the treatment with the use of TRANBERG system facilitate adaptation to nearly any type of image guidance. Owing to the unique diffusing fibre technology developed by CLS, the amount of heat delivered to the tissue is optimised. The use of this technique has made external cooling unnecessary, which results in significantly lower procedure times. The applicator portfolio comprises of 16 noncooled gauge laser applicators.

# Strategy

The primary income source in CLS's sales model are its disposable kits that are used during each treatment procedure, while a minor part of revenues is expected to come from sales of TRANBERG mobile laser units and technical service. According to CLS, the disposable kits are priced at the health economic value of the imILT/FLA treatment. The company classifies the disposable kits as premium products that generate significant benefits to healthcare providers in the treatment of solid cancer tumours.

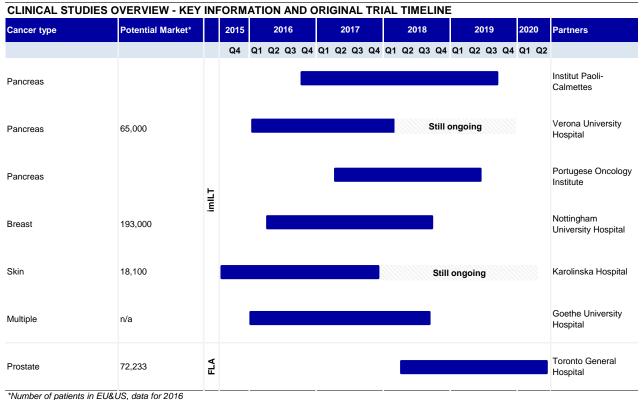
CLS is currently conducting clinical studies in order to evaluate imILT and the TRANBERG system. The timeline for these studies is shown in the graph below for each cancer indication. Based on the obtained regulatory approval, the mechanism of action and the technology used in the device, CLS expects that imILT can be used in treatment of all kinds of solid malignant tumours. The exceptions are tumours located in hollow organs. Additionally, clinical studies bring CLS closer to decision-makers within customer organisations, such as interventional radiologists and treatmentresponsible specialists.

The TRANBERG system consists of a mobile laser unit together with laser applicators and accessories

The system offers monitoring functionalities and allows for providing precise and safe treatment

Laser applicators enable optimisation of heat delivered to the tumour, making additional cooldown procedures obsolete

Numerous clinical studies aimed at evaluation of imILT clinical outcomes and getting acknowledgment in the medical community



Source: company data and Nordea

The goal set by CLS is to establish its TRANBERG product portfolio in the global market for thermal cancer treatment, CLS has managed to achieve approval from FDA in the US and a CE-mark from the EU for its products, making them available for sales in these markets.

CLS's strategy to generate market attention is to identify, approach and gather support from key opinion leaders (KOLs), consisting of medical oncologists, surgical oncologists, radiologists and even immunologists. Management believes that support from key decision-makers in these markets could increase market penetration rates and accelerate future growth. CLS highlights the following as KOLs:

- Treatment: Medical and surgical oncologists
- End-users: Radiologists and tumour surgeons
- Procurement: Purchase managers
- Compensation: Invoicing and administration employees

CLS managed to generate its first sales in the US during 2017. The first order was received in Q1 2017, followed by five additional orders during the year. Currently, CLS is focused on expanding FLA treatment in the US, where it established a sales office in 2014. Currently, CLS targets early-stage prostate cancer as the only indication for treatment in the US, where two hospitals have been signed as distribution partners. One partner is the Department of Radiology at the University of Texas Medical Branch; the second is unnamed.

The strategy in Europe is to establish the TRANBERG system for imILT treatment. Through the use of KOLs, CLS seeks to complete the ongoing clinical trials in pancreas, skin and breast cancer, and establish a number of reference centres for its thermal treatment solution. CLS believes that cooperation with such reference centres could drive volume growth and expansion into multiple geographical markets. The initial sales focus is targeted towards academia and the private health care sector within oncology, as these customers have the best prerequisites for rapid market

#### CLS aims to establish the **TRANBERG** system in the global thermal cancer treatment market

Market attention is to be generated through association with key opinion leaders within oncology and hospitals serving as reference clinics

CLS targets customers within academia and private health care; studies within dog cancer are currently being conducted

Five hospitals have signed a letter of intent to serve as a reference clinic for CLS's treatment solution

CLS was granted SEK 20m from Horizon2020, with the last part of the funding set to be recognised in 2018

Total orders of SEK 965,000 have been received from a number of new customers penetration, according to CLS's management. With headquarters in Lund, Sweden, subsidiaries in Berlin and Boston, as well as a Spanish production and development partner, CLS is well positioned geographically to drive European growth, in our view.

Even though the strategy is primarily targeted towards Europe and the US, management states that entry into the Asian market is a long-term objective. In particular, the markets in China, Japan and South Korea have been highlighted as having significant sales potential. CLS will approach these markets through local distribution partners, who can finance the costs related to establishment and regulatory approval either entirely or partly. The expectations regarding the signing of distribution partners have not been communicated yet, as management believes the uncertainty in terms of the timeline is too large to give any reliable guidance.

The goal in 2018 is to finish clinical studies in CT/ultrasound imILT treatment with TRANBERG products, and then determine which indication and patient group the company will focus on in a larger clinical study to test the products effectivity.

# Previous achievements

In the table below, we highlight past noticeable milestones that CLS has achieved. As of Q1 2018, letters of intent have been signed with four different hospitals in imILT and an agreement with UTMB regarding FLA. These will function as reference clinics for the TRANBERG product portfolio, thereby helping CLS to expand its market reach.

The first major milestone was achieved in Q1 2016, when CLS was granted funding of SEK 20m by the EU through the Horizon2020 initiative. The Horizon2020 funding will be used in three clinical studies. The funding will be received in parts, as the studies progress.

Of the total funding, SEK 9m were granted in 2016, with SEK 3m being recognised in the 2016 financial year, and the remaining SEK 6m in 2017. CLS received another part of the funding in December 2017, totalling SEK 7.9m. The remaining funding is to be recognised in 2018, according to management.

Another milestone was passed when the FDA in Q1 2017 approved the diffuse fibres used in FLA. Afterwards, CLS initiated sales of its fibres and applicator kits to several hospitals across the US. The University of Texas Medical Branch, with whom CLS has signed a letter of intent, has been the most prominent customer in terms of volumes with two separate orders. CLS has received additional orders from Desert Medical Imaging, Laser Prostate Centres of America (LPCA) and two unnamed customers. The latest order was received from an unnamed leading hospital in the US, regarding applicator kits used in FLA. In total, these orders have provided CLS with SEK 1,365,000 in revenue.

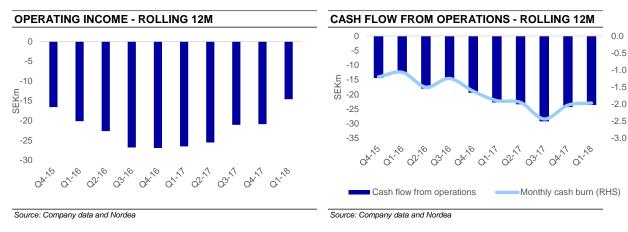
CLS - K	EY MILESTONES		
Period	Desciption	Product/Treatment	Cash, SEK
2015 Q4	Letters of intent signed with University Hospital of Verona and Portuguese Oncology Institute in Porto	- / imILT	-
2016 Q1	Letters of intent signed with Nottingham University and Institut Paoli-Calmettes in Marseille	- / imILT	-
2016 Q1	Approval of application for funding through EU's Horizon2020 programme	-	20,000,000
2016 Q3	Letter of intent signed with the University of Texas Medical Branch	- / FLA	-
2017 Q1	Acquisition of Medizin-Technologie GmbH, which provided CLS with patents in diffuse fibres	-	-
2017 Q1	FDA application for diffuse fibres approved, allowing CLS to sell the fibres in the US	-	-
2017 Q2	First product order received for diffuse fibres from an unnamed US hospital.	Diffuse fibres / FLA	50,000
2017 Q4	Order received by University of Texas Medical Branch for applicator kits used in FLA	Applicator kit / FLA	100,000
2017 Q4	Orders received from three US hospitals, University of Texas Medical Branch, Desert Medical Imaging and an unnamed customer	Applicator kit / FLA	650,000
2017 Q4	CLS initiated tests of TRANBERG Thermal Therapy System in a vetinary setting, for treatment of cancer in dogs	-	-
2018 Q1	Order received from Laser Prostate Centers of America for applicator kits used in FLA	Applicator kit / FLA	55,000
2018 Q1	Order received from University of Texas Medical Branch for a TRANBERG mobile laser unit		
2018 Q2	Order received by University of Texas Medical Branch for applicator kits used in FLA	Applicator kit / FLA	400,000
2018 Q2	Order received from a leading US hospital for applicator kits used in FLA	Applicator kit / FLA	110,000

Source: Company data and Nordea

## **Financial history**

# Dependent on external funding during the early-stage activities

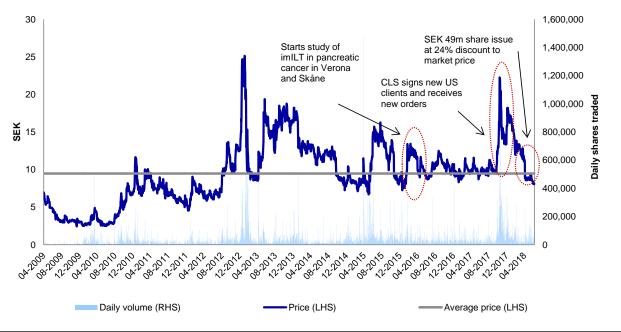
CLS has a limited operational history. 2017 was the first year when CLS recorded revenues. It is still in the phase, focusing on obtaining all of the necessary approvals, conducting clinical studies, establishing relationships and gaining acknowledgment. Therefore, its operating profit, as well as operating cash flows, showed negative values in the recent years. Because of its early-stage profile, CLS has mainly depended on funding through frequent equity issues. Cash raised from equity issues reached SEK 36m in 2017. CLS's cash position reached SEK 16m as of the end of 2017. In Q2 2018, the company announced a new share issue, which brought in SEK 49m. With a SEK ~2m monthly burn rate, CLS has operational funding for approximately one year of operation. We include one last equity issue in the 2019 estimates at a value of SEK 48m, after which CLS will be self-sustaining.



# Share price performance and liquidity

In the table below, we present the share price history and liquidity of CLS's share since its first listing in April 2009. In general, we note that the liquidity has averaged 44,427 daily trades since the IPO. The liquidity has been fairly constant since mid-2010, although trades have jumped significantly from time to time. The share price has traded quite evenly around its mean, albeit with a few large price jumps. In the graph below, we highlight newsflow items that significantly impacted the share price performance. Most recently, the share price dropped ~20% when CLS announced a new share issue of SEK 49m, with on offering price of SEK 8.5. We note that the share price has been extremely volatile in the past, further illustrated by a price gain of 123% between 6 October 2017 and 13 November 2017.





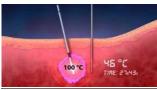
Source: Thomson Reuters and Nordea

# Scientific concept

CLS's scientific concept is based on thermal heating, which has been shown to have a palliative and curative effect on tumours. Both its imILT and FLA treatments have been granted regulatory approval in Europe and the US. Currently, seven hospitals are conducting clinical trials of imILT and FLA in several solid tumour indications, and CLS has previously obtained positive results in animal and human studies. Patents for the development and control of the fibres and temperature regulation technique have been granted in Sweden, the US and Europe, thereby securing CLS's product portfolio and treatment solutions for the coming years.

Heating of solid tumours has shown to produce antigens that prompt a response from the immune system

imILT TUMOUR ABLATION



Source: Company data

imILT has proved successful in combination with other treatment solutions

#### Treatment with imILT and FLA is conducted through the use of MR-imaging

# Thermal cancer treatment in general

CLS's scientific concept is based on thermal heating, which has been shown to have a palliative and curative effect on tumours, according to the company. Currently, CLS offers two treatment solutions: imILT and focused laser ablation (FLA). imILT is focused on solid cancer indications in breast, liver, pancreas, skin, lung and prostate cancer, whereas the FLA method is developed for treatment of early-stage prostate cancer.

The imILT treatment is percutaneous and minimally invasive, allowing the patient to leave the hospital just a few hours after the surgery. The optic laser fibre is inserted in the tumour and heats the tissue to a constant 46°C for 30 minutes until it dies. This method has useful benefits in treatment of metastatic cancers, as a temperature at 46°C has been shown to maximise the release of antigens by the tumour. This triggers a tumour-specific immune response, instructing the immune system to attack similar tumours in the body. More specifically, the tumour antigen is exposed to cells from the adaptive immune system, which activates T-cells. These turn cytotoxic and attack tumour cells that contain similar tumour antigens. These antigens are released both during and after the treatment, providing a beneficial microenvironment for development of tumour immunity. The treatment process is controlled as the system generates temperature feedback, which allows the user to maintain the optimal temperature at the tumour border, thereby enabling control of the ablation size. According to CLS, imILT treatment could potentially be useful in combination with other treatments, such as surgery, radiation therapies, vascular occlusion therapies and cytostatic and immunomodulatory medicines.

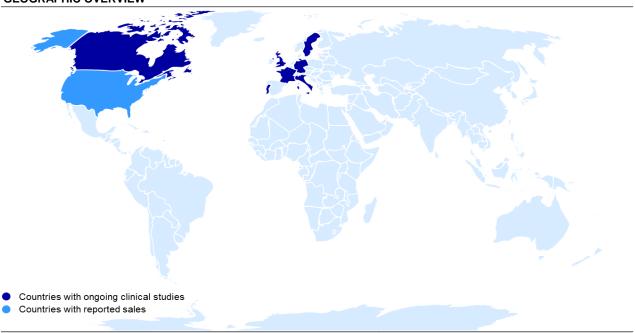
The FLA treatment is conducted similarly to imILT, albeit at a higher temperature, with a greater effect and with a shorter treatment time. The greater effect does not allow for production of intact antigens, and the treatment type does therefore not have any immunotherapeutic effects, in contrast to imILT.

The treatment is conducted through MR-scans that allow for the precise placement of the laser fibres. The aim is to remove the dead tumour tissue without damaging surrounding tissue, as is often the case with other treatments of prostate cancer. Although CLS mentions that the treatment could potentially be used in all sorts of solid tumour indications, the company has chosen to focus on early-stage prostate cancer initially.

According to American Cancer Society (ACS) and National Cancer Institute (NCI), thermal cancer treatment can change the tumour cells by either destroying it or sensitising it towards other treatments, such as radiation and chemotherapy. The prospect of thermal treatment is thus positive in a sole use or combined setting, increasing the potential use of CLS's products. However, according to both ACS and NCI, thermal treatment is still in a too-early stage for widespread usage and more tests need to be completed. The difficulty in correctly measuring the temperature within the tumour is one of the primary obstacles, according to ACS and NCI, as this increases the risk of damaging nearby health tissue.

In our view, this is the largest opportunity and value proposition for CLS. The company's products are developed towards a precise and minimally-invasive treatment solution of tumours. We further believe that the ability to work in combined settings broadens the potential market use for thermal treatment, as it goes beyond merely functioning as a competing solution to already established treatment types, such as radiation and chemotherapy. A combination study of imILT is currently being undertaken at the Karolinska Hospital in Stockholm.





Source: Company data and Nordea Markets

#### MOBILE LASER UNIT



Source: Company data

**TRANBERG** mobile laser unit

CLS's mobile laser unit system, TRANBERG, is designed to increase the efficiency and precision of the treatment process through image-guided, high-precision thermal therapy procedures. It measures the temperature within the tumour and surrounding areas continuously and guides the user step by step. The treatment system automatically controls the treatment timer and laser effect. The laser light and fibre applications work with MR-guidance and MR-thermometry with minimal interferences. It is further equipped with a comprehensive tissue temperature feedback system for precision in a CT/US-guided procedure. The system is designed as a mobile unit to ease the usage for surgeons and interventional radiologists.

It was originally designed only for imILT treatments, but CLS later developed it to support treatment through FLA. According to CLS, the user of the unit has the option to choose between the treatment types on the unit.

CLS has designed the system so that only CLS can activate it, and only CLS's own laser fibres work with the unit, thereby protecting against the use of competing laser units.

# **TRANBERG Laser Applicator Kit**

The laser applicator kit is the primary income source for CLS...

CLS's primary income source is from repeat sales of its laser application kit, where one new unit is needed in every treatment, each at a list price of EUR 2,200. The kit consists of a probe, a laser applicator with an introducer and either a radial or diffuser fibre. Each of these parts is needed in the treatment process, and thus is sold as a package and not individually. The kit is intended for use in both FLA and imILT treatments. ... as it is a single-use disposable needed in each treatment

The portfolio of laser applicators includes 3mm and 12mm non-cooled laser applicators, thereby allowing for adoption of CLS's products to almost all types of image-guided treatments. The diffuse fibre technology used by CLS optimises the heat distribution in the tissue and removes the need for external cooling, which significantly saves procedure time, according to CLS. Precision is a key benefit, as up to five sensors can be applied simultaneously to improve the mapping of the temperature in the targeted cells, while the surrounding sensitive structures are monitored. The products allow for minimally-invasive image-guided treatments with MR-scanning.

#### Applicator kit components

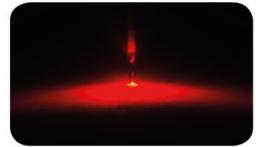
The products allow for minimally-invasive treatment

- Probe: Measures the temperature at a high precision. During treatment, at least one probe is needed to control the temperature and laser effect, and provide a safe treatment. Besides monitoring the temperature, it controls the treatment time.
- Laser applicator with introducer: The applicator is introduced before the fibre is used, based on the size of the tumour, its position and accessibility. It can be used both in a minimally-invasive treatment and in open surgery. In June 2017, CLS launched a new system that allows for treatment without using a temperature probe. This would simplify the work by the surgeon, as it would only require handling of one needle.
- Fibre: Cooled fibres are the most used option within laser ablation to avoid burning the tissue surrounding the tumour being treated. According to CLS, cooled fibres are difficult to place and are composed of many expensive smaller parts. Therefore, CLS has focused on developing easy-to-use fibres for larger solid tumours as an alternative. The developed fibres can treat solid tumours in a size up to 40x40mm, and is even available for use in other systems than CLS's own TRANBERG system, thereby improving the sales opportunities. CLS's fibre portfolio consists of a radial and diffuse fibre.
  - 0 Radial: The laser light is sent out radially at a lower effect, and is usable in treatment of smaller tumours. For larger tumours, the treatment frequency would need to be increased.
  - Diffuse: The laser light is sent out along the fibre and treats the tumour with a greater effect. It is most suitable for larger solid tumours.



Source: Company data

LASER LIGHT BY RADIAL FIBRE



Source: Company data

Four hospitals have signed a letter of intent with CLS, agreeing to act as reference clinics for CLS

# **Clinical studies**

CLS currently has clinical studies ongoing at seven hospitals. Two of these are included in a study programme initiated by the company. The programme was initiated in 2014, but has been delayed due to difficult inclusion criteria for patients, as well as competition from other ongoing clinical studies. The company is working on easing the recruitment process of patients, as the company reports an unchanged interest from the hospitals in finishing the studies.

The purpose of the programme is to validate CLS's imILT treatment process, and provide evidence of anti-tumour immunity. imILT has, according to CLS, proved to work successfully in combination with surgical treatment, and based on experience from other local ablative treatments, there is reason to believe that imILT can work together with other oncology treatments. CLS has previously announced that it is evaluating multiple combination opportunities both pre-clinically and in ongoing clinical trials.

In October 2017, CLS initiated a partnership with a veterinary clinic in Helsingborg and Sveland, a research company, to test cancer treatment in dogs. CLS will supply the equipment needed for the test, and management states that it views the study as extremely interesting, as it can result in a broader application of its product portfolio.

Hospital	Country	Treatment	Indication	Start	Original estimated end	Status	Estimated Enrolment	Туре	Lol*
Institut Paoli-Calmettes	France	imILT	Pancreas	Oct-16	Oct-19	Recruiting	5	Horizon2020	x
J W Goethe Hospital	Germany	imILT	Solid tumours	Feb-16	Aug-18	Recruiting	30	CLS Study	
Karolinska Sjukhuset	Sweden	imILT	Skin, malignant melanoma	Oct-15	Dec-17	Recruiting	5	CLS Study	
Nottingham University Hospital	UK	imILT	Breast cancer	Jun-16	Aug-18	Recruiting	5	Horizon2020	x
Portuguese Oncology Institute of Porto	Portugal	imILT	Pancreas	May-17	Apr-19	Recruiting	20	Horizon2020	x
University Hospital of Verona	Italy	imILT	Pancreas	Feb-16	Mar-18	Recruiting	10	-	x
Toronto General Hospital	Canada	FLA	Prostate	Apr-18	Apr-20	Ongoing	25	-	x

# **CLS: CLINICAL STUDIES OVERVIEW**

\*Letter of Intent

Source: Clinicaltrials.gov and Nordea

CLS received SEK 20m in funding from the EU through the Horizon2020 programme

Originally, three hospitals were included in the study programme: J W Goethe Hospital, Karolinska Sjukhuset and Skånes Universitetsjukhus. However, in March 2018, the study at Skånes Universitetssjukhus was cancelled. According to CLS, it was not possible to conduct any treatments, as there were too few patients available for enrolment in the study. The studies focus on tumours in lung, kidney, liver, skin and pancreas cancer, as highlighted in the table above.

The SEK 20m Horizon2020 programme funding is being used to finance three of the company's ongoing clinical studies: a study at Institut Paoli-Calmettes in France, which studies imILT in pancreas cancer; a study in the UK at Nottingham University Hospital, which is aimed at breast cancer; and, a study at the Portuguese Oncology Institute of Porto, where imILT is being tested against multiple solid tumours.

The Horizon2020-funded studies were initiated in August 2016, and are expected to run for the following 24 months, hence until August 2018.

Of the seven hospitals currently involved in clinical trials, four have signed a letter of intent with CLS, meaning that these hospitals will function as reference clinics for CLS after the studies are completed. This includes Institut Paoli-Calmettes, Portuguese

Oncology Institute of Porto, Nottingham University Hospital and the University Hospital of Verona.

Of the tests, we highlight the two ongoing clinical tests of stage III pancreatic cancer, a stage where surgical removal is not an applicable option. According to CLS, the median survival time for inoperable cancer is significantly less than a year, often nine months. However, the first seven patients in CLS's study have shown an average survival rate of just above 15 months, according to an update provided by CLS in June 2018, pointing to a positive survival trend. Furthermore, FLA is currently being tested with 25 patients at the General Hospital in Toronto.

CLS will provide an interim-update on the clinical trials commencing at the Portuguese Oncology Institute of Porto and the Institut Paoli-Calmettes in November 2018. According to data available from clinicaltrials.org, the tests will be completely finalised in 2019 Q2 and Q3 accordingly. The interim test results will provide an interesting data point regarding the strength of CLS' treatment method, and the potential for grabbing market shares upon actual market launch.

#### Previous test results

CLS has previously been able to show positive test results from treatment of pancreatic cancer liver metastasis using imILT, as well as anti-tumour effects and immunological responses in several solid tumour indications.

Previous tests in rats have shown that imILT is capable of creating an abscopal effect after treatment. One of two simultaneous colorectal cancer tumours were treated, and in both tumours anti-cancer effects were observed a week after treatment.

Furthermore, CLS has conducted successful tests in mice, after having adapted the equipment and procedure to smaller tumour targets than those present in rats. The study was constructed by inoculating a tumour cell subcutaneously, followed by another inoculation of a tumour of the same cell type a week after the first. When the first tumour reached 100m<sup>3</sup>, it was treated with imILT, while the untreated tumour served as a control. The conclusion was that imILT induced a long-term anti-tumour effect, although the population size of the test was small and conducted with a short follow-up time, which introduces some noise into the results.

One of the largest early clinical successes was achieved in May 2017 when the imILT method was successfully used to treat metastatic liver cancer, without the patient experiencing any side effects. The patient was a 53-year old man who had been diagnosed with pancreatic cancer two years earlier, which had turned metastatic (stage IV). He was first treated with chemotherapy, while imILT was used against one of three liver metastases. The patient was treated for 30 minutes at a maximum temperature of 44-45°C. He was cured and discharged from the hospital three days after treatment, and only experienced some local pain and a slight temperature increase. At a follow-up performed eight months later, the patient showed stable disease with metastases that where non-active. According to CLS, the instrument used worked as intended.

So far, CLS have used imILT to treat a total of 12 patients suffering from pancreatic cancer. The treatments were conducted at the Portuguese Oncology Institute of Porto, Institut Paoli-Calmettes and the Verona University Hospital. According to CLS, it has received good feedback from doctors, regarding its system.

# **Regulatory approval**

CLS has obtained CE-marking and FDA 510K approval for its TRANBERG system and single-use disposable laser kits, allowing sales in Europe and the US, for both imILT and FLA treatments.

In March 2017, CLS obtained FDA market approval for its diffuse laser fibre, used in treatment of larger cancer tumours. In April 2018, the FDA conducted an evaluation of

Positive results have previously been obtained in both animal and human studies

Stage IV metastatic liver cancer was treated in one patient who showed no signs of side effects following the treatment

imILT has been granted a CE-mark in Europe and approval by the FDA in the US CLS's production site in Sweden, where CLS received a positive review. The FDA will publish a final report of the visit in the following months, but the initial remarks increase our confidence in its ability to market TRANBERG in the US.

A CE-mark signifies that a product has been assessed to meet the safety, health and environmental protection requirements of the EU, and is thus able to be sold in the European Economic Area (EEA).

In order to be granted market approval by the FDA, companies have to file a 510(K) application. Companies who intend to sell in the US market must notify the FDA at least 90 days in advance, which allows the FDA to determine the required control of the product and whether or not market approval can be granted. The FDA classifies all products in Class I, II or III, with different requirements attached. The FDA will assess the safety and effectiveness of the product, and compare it with already-approved equivalents.

Despite having passed the European and US requirements for regulatory approval, CLS notes that treatment with its imILT is not covered by insurance companies or national payment systems as of today. This indicates that either the patient or respective hospital will have to bear the treatment costs. According to CLS, it could take a few years to achieve the health economic evaluations needed for gaining access to such replacement costs, which in our view could result in hospitals choosing other alternatives until then.

#### **Patent overview**

As a medical technology company, both the patents granted and those in the pipeline are of significant importance to CLS. Currently, the company has a Swedish, American and European patent. The patent protects CLS's innovations related to development and control of the fibres, as well as temperature control in the tissue. A patent application regarding the same functionalities have been filed in China. The patent has been strengthened by applying for an expansion to cover the treatment protocol for imILT as well. The expansion application was filed in the US, Europe and China, and will expire in 2027, if granted. In March 2017, this patent was granted in Europe by the European Patent Office (EP).

Patents for the development and control of fibres and temperature devices have been granted in the US and Europe

APPROVED PATENTS									
Number	Description	Approved	Awaiting approval	Filed	Expir				
SE532142C	Apparatus for determining thermal properties in a tissue	SE		2007	202				
EP 2532319 B1	Divisional application to EP2532319A1	EP, ES, FR, GB, IE, IT, PL, TR	DE	2008	2028				
US 8,753,381 B2	Apparatus and methods for determining a property of a tissue	US		2007	2027				
EP 2532319 A1	Apparatus and methods for determining a property of a tissue	EP		2007	2027				
201480023179.0	Apparatus And Method For Controlling Immunostimulating Laser Thermotherapy		СН	2013	2027				
Source: Company data a									
	Divisional application to US 8,753,381 B2		US	2007					
PCT/EP2014/058934	Apparatus and Method For Controlling Immunostimulating Laser Thermotherapy		AU, BR, CN, JP, KR, US, EP	2013					
200880115360.9	Apparatus and methods for determining a property of a tissue		СН	2007					
EP16204195.8	Apparatus and Method for Controlling Laser Thermotherapy		EP	2016					

Source: Company data and Nordea

# **Market overview**

The global oncology market is experiencing strong underlying structural growth with new types of treatment options, such as immunotherapies, driving sales. Immunotherapies are expected to reach USD 119bn in 2021, according to CLS. CLS's cancer treatment solutions offer a differentiated alternative compared to competitors, and should benefit from the increased immunotherapy focus. CLS's imILT treatment is approved in the US and Europe for use in the most prevalent cancer indications, with an addressable market estimated at EUR 1,200m in 2017, according to CLS. CLS aims to obtain 5-8% of the global addressable market within ten years. Furthermore, a focal laser ablation treatment solution is currently being tested for use in early-stage prostate cancer, a market that generated USD 8.1bn sales in 2017.

14.1 million new cancer incidents were registered in 2012, while 8.2 million people died from cancer

Global oncology spending totalled USD 103bn in 2017 and is expected to reach USD 181bn in 2022

US and Europe accounted for approximately two-thirds of global oncology spending in 2017

Europe and Asia are the regions where cancer is most prevalent, with 24% and 46% of all cases being registered in these regions

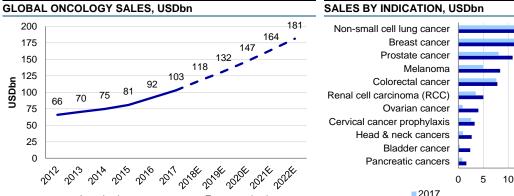
#### **Cancer overview**

Cancer is one of the leading causes of death globally, being responsible for around one of six deaths, according to WHO. In 2012, there were 14.1 million new cancer cases registered, 8.2 million deaths and 32.6 million people living with cancer globally. According to Evaluate, global oncology spending reached USD 103bn in 2017, and is expected to reach USD 181bn in 2022, growing at a 12% CAGR between 2017 and 2022.

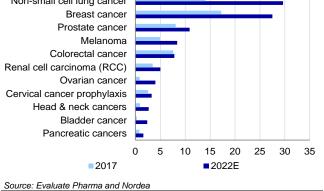
Cancer consists of around 200 different diseases, but all are characterised by a normal cell transforming into a tumour cell. The transformation occurs when the cells start to grow uncontrollably. Our genes control the cell production, instructing them to grow and reproduce in the right proportions. However, when a gene becomes damaged, it can result in the cell misinterpreting these instructions, and then growing and dividing out of control. Besides uncontrolled cell growth, research indicates that the cells must exist in an inflammatory microenvironment, which acts as a breeding ground and protects them from attacks from the body's immune system. These two indications are required in combination before a cancer can develop.

Based on data from Evaluate, non-small cell lung cancer (NSCLC) and breast cancer accounted for the majority oncology spending in 2017, and are expected to account for an even larger part in 2022. Spending within regions differ, with the US and Europe accounting for about two thirds of total sales. The US is expected to increase its share of the global oncology sales towards 2022 together with the 'Rest of World', while Europe is expected to account for a small part, although its spending is still expected to grow. The data reveals that lung cancer is both the most prevalent and has the highest mortality rate of all cancer incidences. Europe and Asia (China and East & Central Asia) are the regions in which cancer in general is most prevalent. 24% of all cancer incidents are found in Europe, while 46% are found in Asia. However, the majority of all mortalities occur in Asia, as treatment options appear better and more efficient in Western economies. 52% of all cancer-related fatalities occur in Asia, while 21% occur in Europe and only 9% in North America.

Most often, cancers develop as a solid tumour, meaning that the mass of cells does not contain liquid areas. When such a mass is malignant, it is defined as solid tumour cancer. The cancer type leukaemia, arising from rapid production of white blood cells, is an example of a non-solid cancer. Besides developing locally, cancer has the ability to spread to other organs and distant parts of the body, which is the main reason why cancer is extremely dangerous. When the cancer has spread to areas other than where it developed originally, it is defined as a metastatic cancer, or stage IV cancer. Metastatic cancer is more difficult to treat than a cancer that has not spread.

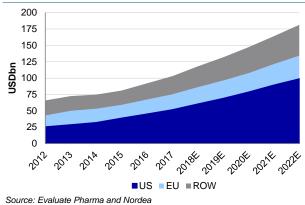


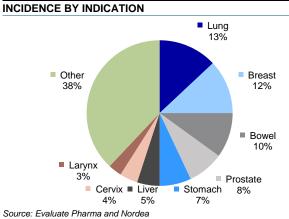
Forecasted sales



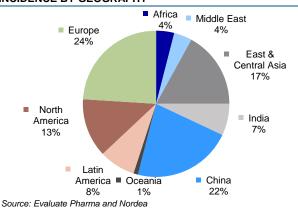
#### Source: Evaluate Pharma and Nordea **GLOBAL ONCOLOGY SALES PER REGION**

Actual sales





**INCIDENCE BY GEOGRAPHY** 



#### Source: Evaluate Pharma and Nordea MORTALITY BY INDICATION

2013

2012

2014

2015

2010 2017 20184 20198 202012 20214

**REGIONAL DIVISION** 

100%

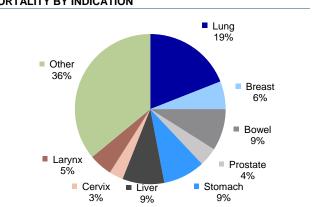
80%

60%

40%

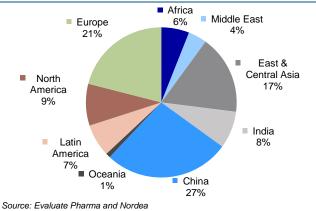
20%

0%



■US ■EU ■ROW

#### Source: Evaluate Pharma and Nordea MORTALITY BY GEOGRAPHY



20225

Immunotherapies are expected to become significant growth drivers within oncology spending

CLS expects immunotherapies to generate global sales of USD 119bn in 2021

CLS's solutions are approved in the US and Europe, but management targets regulatory approval in China, Japan and Korea as long-term goals

In the US and Europe, CLS believes that the addressable market amounts to ~560,000 patients yearly...

...corresponding to a market size of EUR 1,200m

Within new treatment types that are expected to drive future growth in oncology sales, CLS highlights immunotherapies. It is a biological treatment type that stimulates the body's natural defence mechanism, the immune system, to identify and attack cancer cells. It works both as a palliative and curative treatment. Several tests with immunotherapies are currently being conducted, albeit with mixed results. When immunotherapies succeed, it results in a more long-term effect than other cancer treatments, increasing the patients' life expectancy. However, in some cases, the unleashed immune system attacks not only the damaged cancer cells, but also healthy cells and organs, and thus presents significant risks. However, cancer treatment with immunotherapies has been hailed as a breakthrough in cancer treatment, and the market is expected to reach global sales USD 119bn in 2021, according to CLS. According to research from the IQVIA institute, immunotherapies are among the fastest growing areas in oncology R&D. According to the study, the US has been fastest in adopting immuno-oncology treatments, but France and Germany have had the highest usage per capita. Canada, Spain, Japan and the UK have had lower usage per capita, although the usage trend in these markets is increasing. With the TRANBERG system, CLS aims to obtain a share of this growing immunotherapy market.

# CLS

Currently, CLS's products are CE-marked and FDA approved, thus allowing for sales in Europe and the US. The products are currently being tested within several solid tumour indications. The long-term goal is to make CLS's treatment method available in Asia as well, specifically China, Japan and Korea where management sees large potential. The data from evaluate reveals that 46% of all cancer indications occur in Asia, while ~70% of global oncology spending in 2017 was in the US and Europe, thus highlighting the Asian market opportunity.

CLS's offerings are targeted towards usage in an interventional magnetic resonance imaging (iMRI) setting versus most cancer treatment options today that use a CT scan (Computed Tomography). According to CLS, the use of iMRI is growing, as it allows for minimally-invasive treatment of patients. By using iMRI, CLS argues that it can reach new levels of surveillance and control of the temperature in the tumour, thereby affecting the treatment result positively.

There are approximately 500 large cancer centres globally, of which 300 exist in the US and Europe. CLS believes that the majority of these can be categorised as potential future customers.

# imILT

As the prospects of digital image analysis within the health care sector are being improved continuously, CLS believes that the future outlook for its imILT system is promising. The US market is highlighted as the most promising market opportunity for imILT, owing to more homogenous legislation and business-oriented mind-sets in the American health care sector than in other markets. According to CLS, the weaker economic development in European countries compared with the US further increases the positive US outlook.

The company estimates that the addressable market consists of 6 million patients yearly on a global scale. In the US and Europe, CLS estimates that the addressable market amounts to approximately 560,000 patients yearly, corresponding to a EUR 1,200m market size. imILT is currently approved for use in the US and Europe, for treatment of solid tumours. It is currently being tested in breast, liver, skin, lung, kidney and prostate cancer. The long-term goal is to make imILT usable on all solid tumour indications and obtain 5-8% of the global addressable market within ten years.

	EUROPEAN AND US MA	RKET POTENTIAL PER INDICATION FOR imILT				
	Cancer	Patients	Market, EURm			
The long-term goal is to	Skin	18,100	40			
• •	Lung	107,000 - 175,000	235 - 385			
obtain 5-8% of the global	Pancreas	56,000 - 65,000	123 - 143			
addressable market	Breast	193,000	425			
	Kidney	28,100	62			
	Prostate	72,233	159			
	Liver	10,263	23			
	Total	~560,000	~1,200			
	Source: Company data					
	treatments. The above there are a great numb immunotherapy check CLS, these inhibitors ha patients, and there has treatments in breast, p been more encouragin have shown that for th combination of these w amount of treatments	mILT can be used on its own or in combination indications have been chosen as the initial ta- per of patients suffering from these, and as ot point inhibitors have had varying results so fa- ave shown non-satisfying results in 60-65% of been no effect when it has not been combinancreas, prostate and bowel cancer. However g in metastatic NSCLC, kidney and skin cancer ose patients who did not respond to checkpor with imILT could give a reinforced effect, whill needed and the risk of side effects.	argets by CLS, as ther ar. According to of the treated ed with other or, results have er. Test studies pint inhibitors, a			
	Focal laser ablation (FLA)					
CLS's FLA treatment is targeted for use in early-stage prostate cancer	CLS's focus with FLA is to treat early-stage prostate cancer. It is targeted towards patients where a local tumour has been confirmed, but it is too small to remove by surgery. In such a situation, doctors often prefer to let the tumour grow, until it reaches a size where surgery becomes an option. According to CLS, FLA targets an					

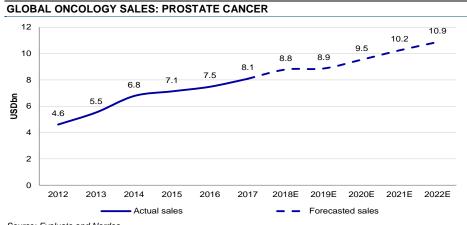
The technology is used already in Europe and the US

Global spending on prostate cancer totaled USD 8.1bn in 2017, and are expected to reach USD 10.9bn in 2022

The majority of prostate cancer sales are generated by products targeting advanced state cancer, compared with CLS's early-stage solution

reaches a size where surgery becomes an option. According to CLS, FLA targets an interesting market, as the pace of tumour growth differs between individuals and the side effects can result in eg incontinence, impotence and bowel problems. Treatment in this early stage thus provides an alternative treatment option in a growing market segment.

The technology used in FLA exists in both Europe and the US, with the initial tests of CLS's method being conducted at the University of Texas Medical Branch (UTMB). As the technique is already applied in the market, CLS believes that it will be able to reach the market faster, without the same amount of testing and validation needed as for imILT. According to data from Evaluate, global sales regarding prostate cancer treatments reached USD 8.1bn in 2017, and are expected to grow at a 7.6% CAGR to USD 10.9bn in 2022. The majority of the sales are from hormone therapies, where Johnson & Johnson's Zytiga and Astellas Pharma's Xtandi covered ~64% of the market in 2017. However, most of the products making up the prostate cancer market target advanced stage cancer, compared to CLS's FLA method that targets the early stage. Hence, the FLA treatment provides a differentiated treatment type, compared to the largest competitors within the prostate cancer market.



We argue that CLS's main competitors consist of other medtech developers within cancer treatment delivery

CLS's revenue model is based on recurring sales of its treatment kit, which have a unit cost of EUR 2,200...

...whereas the competitors' revenue is generated from large upfront payments for the treatment systems hardware

## **Competitor overview**

CLS defines its main competitors to the imILT system as both substitutionary and complementary oncology treatments. Products used in combination with surgery or ablation products used instead of surgery are considered competing products.

We consider other medtech product developers working within delivery of cancer treatments as main competitors. Such developers include Elekta and Varian, although their product offerings differ. Both companies offer treatment solutions within radiotherapy, used curatively against solid tumours. The solutions destroy the tumour by precisely targeting it with ionising radiation compared with the TRANBERG system, which uses laser heating. Even though it competes in the same market, CLS's revenue model differs from those of Elekta and Varian. CLS's model is built primarily on recurring revenue from sales of its disposable treatment kit. A new kit is needed for each treatment and has a list price of EUR 2,200 per unit. CLS forecasts that sales of the TRANBERG laser unit will account for a smaller part of the generated revenue.

The revenue models of Elekta and Varian are based on one-time payments for their treatment systems and recurring revenue from subsequent service contracts. The initial payment is thus lower for CLS's TRANBERG kit, but the subsequent payments are lower for Elekta's and Varian's products.

#### AN ELEKTA RADIOTHERAPY SYSTEM



A VARIAN RADIOTHERAPY SYSTEM

Source: Elekta

Source: Varian

As CLS is a relatively young company with limited financial history, we take a closer look at these more mature companies with competing cancer treatment solutions.

#### Elekta

Elekta is a Swedish medtech company specialised in equipment and software designed to enhance the delivery of radiation therapy, radiosurgery and brachytherapy.

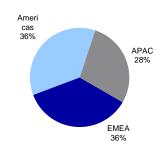
The company is a leader within the radiotherapy market, and offers treatment solutions that bring together diagnostic MR imaging with high precision radiation therapy. As of today, its solutions are installed in more than 3,900 hospitals globally.

Elekta has a global reach, illustrated by the 2017 sales split. Americas and EMEA accounted for 36% each, while the remaining 28% was generated in Asia-Pacific. Unlike the other benchmarked company, Elekta reports using a split financial year. To ensure comparability, we have calendarised its historical financials.

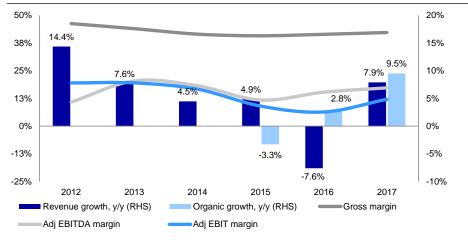
A leading company within radiation therapy, with solutions installed in more than 6,000 hospitals globally \*Calenderised

Source: Company data and Nordea





#### **ELEKTA GROWTH AND MARGINS\***



<sup>\*</sup>Calenderised

Source: Company data and Nordea

ELEKTA FINANCIALS*								
SEKm	2012	2013	2014	2015	2016	2017		
Revenue	9,727	10,471	10,938	11,469	10,596	11,434		
Gross profit	4,502	4,606	4,541	4,677	4,391	4,832		
EBITDA	1,965	2,173	2,028	1,405	1,030	1,818		
EBIT	1,624	1,773	1,555	767	406	1,117		
One-offs, opex	271	271	271	271	271	271		
Adj. EBITDA	1,053	2,139	1,992	1,349	1,624	1,976		
Adj. EBIT	1,895	2,044	1,826	1,038	677	1,388		
Revenue growth, y/y	14.4%	7.6%	4.5%	4.9%	-7.6%	7.9%		
Organic growth, y/y	-	-	-	-3.3%	2.8%	9.5%		
Gross margin	46.3%	44.0%	41.5%	40.8%	41.4%	42.3%		
EBITDA margin	20.2%	20.8%	18.5%	12.3%	9.7%	15.9%		
Adj EBITDA margin	10.8%	20.4%	18.2%	11.8%	15.3%	17.3%		
EBIT margin	16.7%	16.9%	14.2%	6.7%	3.8%	9.8%		
Adj EBIT margin	19.5%	19.5%	16.7%	9.1%	6.4%	12.1%		

\*Calenderised

Source: Company data and Nordea

#### Varian

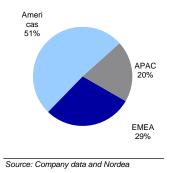
A US-based supplier of radiation therapy equipment

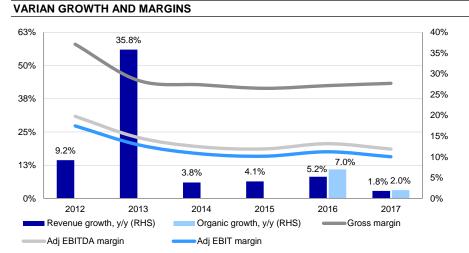
Primarily exposed to the American market, with 51% of 2017 sales generated from the Americas region Varian is a US-based company specialised within production of equipment and software used in treatment of cancer through radiotherapy, radiosurgery, proton therapy and brachytherapy. With sales of USD 2,668m in 2017, Varian is the largest supplier of radiation therapy, with Elekta as its closest competitor. Its primary revenue source is the Americas region, where 51% of 2017 revenues were generated; 29% were generated in EMEA with the remaining 20% in APAC.

According to its latest strategy update, Varian seeks to leverage its leadership position within radiation therapy to expand into multiple indications and created an integrated cancer care solution. The company currently offers a treatment solution that expands from diagnosing to long-term follow-up after treatment. Varian has managed to grow its revenue at a CAGR of 9% during 2012-17. However, the expanding revenue has come at the cost of profitability, illustrated by the adjusted EBIT margin that has eroded from 27.3% in 2012 to 15.7% in 2017. This corresponds to an average decline of 2 pp yearly.

We note that Varian divested its Image Components division in 2016, and has restated the results back to 2015 accordingly. No restated financials were available for 2012-14; hence, we have excluded the division from these years' financials in the figures below.







Source: Company data and Nordea

VARIAN FINANCIALS								
USDm	2012	2013	2014	2015	2016	2017		
Revenue	1,696	2,304	2,393	2,491	2,621	2,668		
Gross profit	984	1,023	1,023	1,032	1,113	1,156		
EBITDA	524	528	464	464	515	419		
EBIT	463	465	401	396	435	342		
One-offs	0	0	0	0	25	77		
Adj. EBITDA	524	528	464	464	540	495		
Adj. EBIT	463	465	401	396	460	418		
Revenue growth, y/y	9.2%	35.8%	3.8%	4.1%	5.2%	1.8%		
Organic growth, y/y	-	-	-	-	7.0%	2.0%		
Gross margin	58.0%	44.4%	42.8%	41.4%	42.5%	43.3%		
EBITDA margin	30.9%	22.9%	19.4%	18.6%	19.6%	15.7%		
Adj EBITDA margin	30.9%	22.9%	19.4%	18.6%	20.6%	18.6%		
EBIT margin	27.3%	20.2%	16.8%	15.9%	16.6%	12.8%		
Adj EBIT margin	27.3%	20.2%	16.8%	15.9%	17.6%	15.7%		

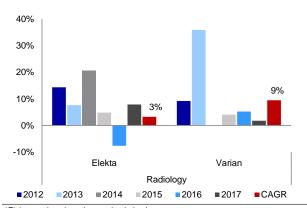
\*Adjusted for divestment of Image Components division in 2016 and 2017. Financials 2012-15 is restated by Nordea Source: Company data and Nordea

## Comparing profitability

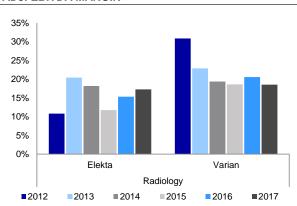
In the tables below, we highlight the revenue and margin trends from the benchmarked companies. Although the benchmarking does provide insight into the historical performance and profitability of companies within CLS's field, it is difficult to extract any noticeable implications.

We find that both peers have achieved positive growth over the past six years, with Varian's 9% 2012-17 CAGR outpacing Elekta's 3%. Gross margins have been rather steady and equally at ~45% for both companies, although Varian has shown better profitability than Elekta as measured by adjusted EBITDA and EBIT margins.

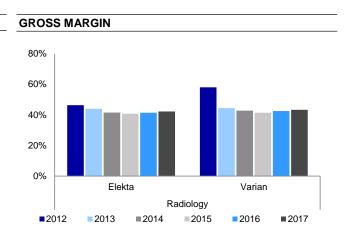
#### **REVENUE GROWTH**



\*Elekta numbers have been calenderised Source: Company data and Nordea

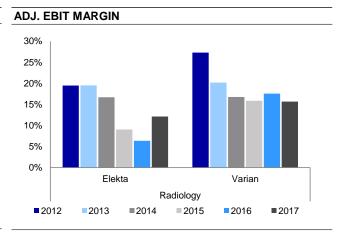


#### ADJ. EBITDA MARGIN



\*Elekta numbers have been calenderised

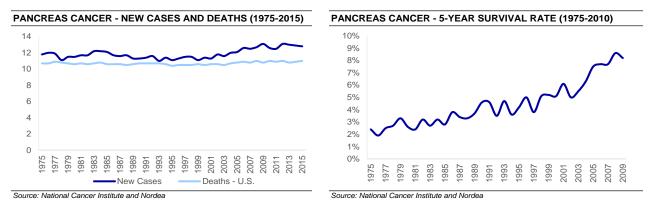
Source: Company data and Nordea

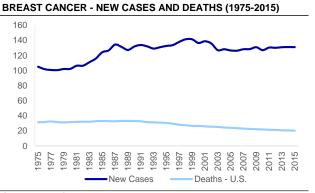


\*Elekta numbers have been calenderised Source: Company data and Nordea \*Elekta numbers have been calenderised Source: Company data and Nordea

# Tendencies in CLS's addressable market

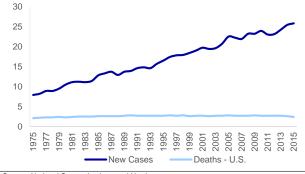
Among the cancer types that are identified by CLS as its addressable market, we observe different tendencies in terms of their incidence, as well as survival rates. Some of the cancer types (i.e. prostate, skin and breast) are already well-treatable and their survival rates have risen sharply over the past decades, reaching over 90%. On the other hand, there are tumour types where there is still a lot of room for improvement and mortality rates are still high. An extreme case is pancreatic cancer, where the five-year survival rate is still only around 8%. This cancer is an area where CLS sees a large sales potential, as the need for alternative treatment options is high. Detailed overview of new cases, deaths and survival rates for all the cancer types from CLS's addressable market can be found below. The numbers are per 100,000 persons.



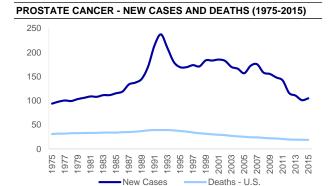


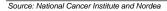
Source: National Cancer Institute and Nordea

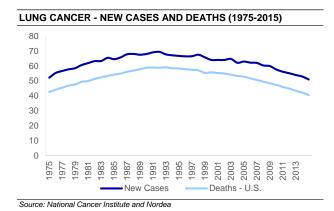


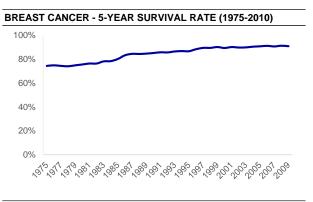


Source: National Cancer Institute and Nordea

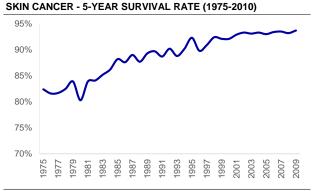




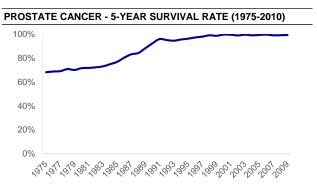




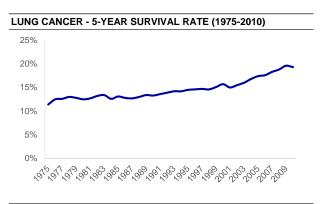
Source: National Cancer Institute and Nordea



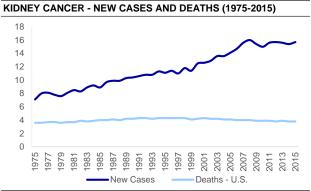
Source: National Cancer Institute and Nordea



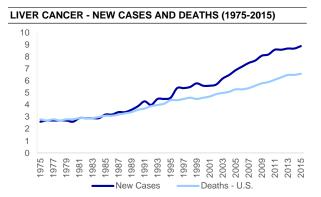
Source: National Cancer Institute and Nordea

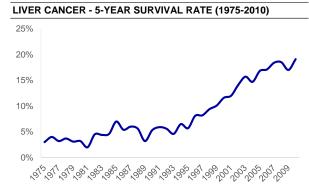


Source: National Cancer Institute and Nordea



Source: National Cancer Institute and Nordea





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KIDNEY CANCER - 5-YEAR SURVIVAL RATE (1975-2010)

80%

70%

60%

50%

40%

30%

20%

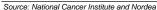
10%

0%

,01

Source: National Cancer Institute and Nordea

Source: National Cancer Institute and Nordea



## **Historical financials**

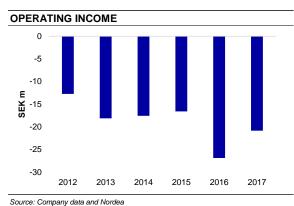
CLS is in the early stages of commercialisation, with its first revenue having been generated in 2017. Costs are increasing as the company is involved in numerous clinical studies and generally scaling up operations. The company's liquidity has historically been dependent on issuing new equity to its investors. In 2017, the cash position was strengthened with SEK 36m from an equity issue, and the company raised SEK 49m in capital from a share issue in late May 2018. On a rolling 12-month basis, the monthly burn rate has been SEK ~2m over the past ten quarters. With the SEK 49m share issue, CLS should have enough operational funding for approximately the next year.

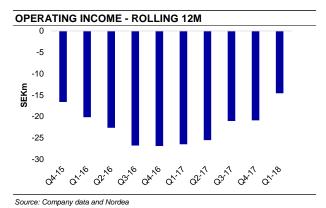
## Group financials

As an early-stage company, CLS has limited operational history, but the company recently reported its first sales CLS is a company in the early stages of the commercialisation, with 2017 being the first year with recognised revenue, which totalled SEK 0.6m from its first orders.

CLS has been investing intensely in developing products and scaling up operations in general. To prove the efficiency and safety of its offerings, CLS has initiated numerous clinical studies that test its products in several solid tumour indications. Consequently, the operational profit has been negative so far.

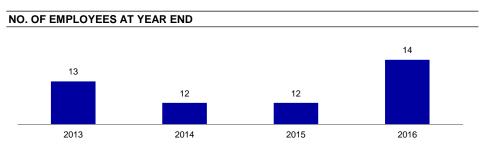
In 2017, operating income was SEK -21m, an improvement compared with SEK -27m in 2016. We note that operating income has improved despite opex increasing from SEK 31m in 2016 to SEK 32m in 2017, as revenue has started to materialise.





# The employee base reached 14 FTEs in 2016

The number of employees at the end of 2016 amounted to 14, which was the highest number observed in the company so far. Seven of these are executive management. The number includes also employees in the company's foreign subsidiaries, as well as external consultants. No count has been provided for 2017 and 2018 at the time of writing.



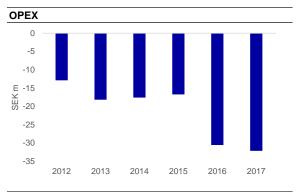
Source: Company data and Nordea

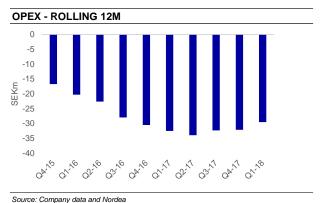
Opex is showing a growing trend in recent years due to intensified investments in clinical studies and scaling up of operations

#### **Cost structure**

The transparency within the operational cost structure is limited and most of the opex falls under the category of 'other external expenses'. In 2016, opex increased sharply and almost doubled from 2015, reaching SEK ~31m. In 2017, the costs increased further to SEK ~32m. The reason for the observed upswing in costs is doubled spending under the category of 'other external expenses'. We argue that these costs can be attributed to the LMTB acquisition and intensified investment in clinical studies, although we cannot give an exact split owing to the limited transparency. However, the costs related to personnel are outlined, where we observed a significant rise in staff costs in 2016 and 2017 associated with new staff from the acquisition and hiring of new management personnel.

The rolling 12-month figures show a decrease in opex costs in the last three quarters of 2017 due to decreasing other external expenses.





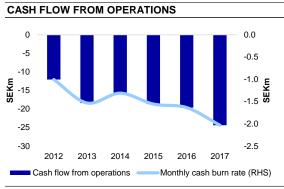
Source: Company data and Nordea

#### **Cash flows**

Cash flows from operations have shown negative results for the previous financial years. Hence, the monthly cash burn has also shown a downward trend reaching SEK -2m at the end of 2017.

On a LTM rolling basis, we see an upward swing in the cash flow from operations for the last quarter, which was caused by positive changes in working capital in Q1 2018.

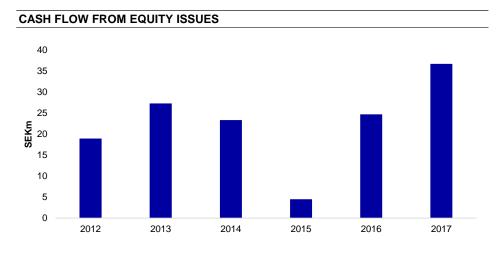
To compensate for the cash burn, the company has frequently raised capital through equity issues.





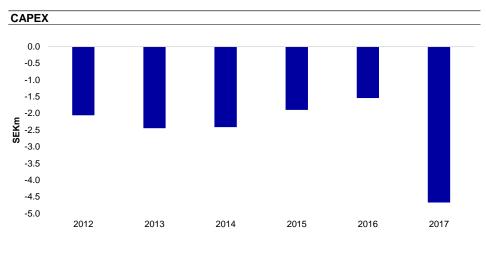
Source: Company data and Nordea

Source: Company data and Nordea



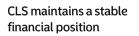
Source: company data and Nordea

Between 2012 and 2016, there was little fluctuation in capex, which was maintained at around SEK ~2m yearly. Capex was primarily spent in investments in patents and licences for CLS's products and treatment methods. In 2017, capex was at SEK 4.7m, which we primarily attribute to the purchase of LMTB.

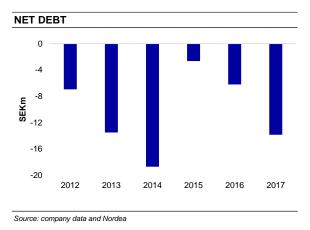


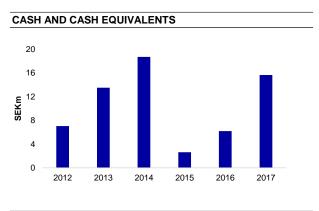
Source: company data and Nordea

#### **Financial position**



CLS has been cash positive since 2012, despite undertaking a SEK 2m loan in 2017. As of the end of 2017, SEK 0.4m of debt was classified as short-term debt and SEK 1.4m as long-term debt, while SEK 0.2m was repaid. CLS further increased the level of its short-term investments to SEK 13.6m.





Source: company data and Nordea

### **Financing overview**

The table below presents a detailed overview of CLS's equity progression between 2012 and 2018. The most recent issue commenced in April 2018, where the company announced that it would carry out a new issue of B-shares, and ended up raising SEK 49m. The subscription price was SEK 8.50 per share. The proceeds are expected to be used for further acceleration of market launch of TRANBERG system.

#### **DEVELOPMENT OF EQUITY CAPITAL FOR YEARS 2012-2018**

Year	Event	Change in the number of shares	Change in share capital	Total number of shares	Total share capital
2018	Oversupscription*	3,157,900	292,106	39,027,578	3,610,051
2018	New share issue	7,173,935	663,589	35,869,678	3,317,945
2017	New share issue	1,470,588	136,029	28,651,079	2,650,224
2017	New share issue	3,397,561	314,274	27,180,491	2,514,195
2016	New share issue	89,978	8,323	23,782,930	2,199,920
2016	Offset share issue	285,714	26,429	23,692,952	2,191,597
2016	New share issue	3,120,965	288,689	23,407,238	2,165,169
2015	New share issue	642,850	59,464	20,286,273	1,876,479
2014	New share issue	2,595,427	240,077	19,643,423	1,817,016
2013	Exercise of warrants	57,000	5,273	17,047,996	1,576,939
2013	New share issue	2,427,285	224,524	16,990,996	1,571,666
2012	Exercise of warrants	797,924	73,808	14,563,711	1,347,142
2012	Exercise of warrants	20,262	1,874	13,765,787	1,273,334
2012	New share issue	596,667	55,192	13,745,525	1,271,460
2012	Exercise of warrants	22,681	2,098	13,148,858	1,216,268
2012	New share issue	1,694,600	156,751	13,126,177	1,214,171
2012	New share issue	416,666	38,542	11,431,577	1,057,420

\*Assuming that the oversubscription option is fully utilised

Source: Company data

# **Estimates**

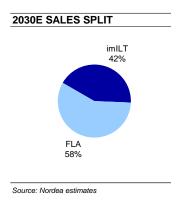
Our estimates point towards total sales of SEK12m in 2018 and SEK 15m in 2019 for CLS, while the first profit is expected to roll in during 2023. We base our revenue model on a top-down approach, using the addressable amount of patients within each cancer indication to determine a potential market size. We expect that the initial sales of imILT will be generated by pancreatic and breast cancer patients, as four hospitals treating these indications have signed a letter of intent to use CLS's products, upon successful outcome of the ongoing clinical studies. Sales of FLA products are already ongoing within early-stage prostate cancer.

imILT MAR	KET POTENTIAL
2017	Patients
Skin	18,100
Lung	107,000 - 175,000
Pancreas	56,000 - 65,000
Breast	193,000
Kidney	28,100
Prostate	72,233
Liver	10,263
Total	~560,000
Source: Compar	y data

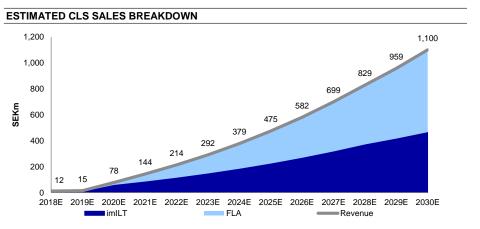
## **Model description**

We base our revenue model on a top-down approach, using estimates for the targeted market size as provided by the company. We divide our model into imILT and FLA, and further into the different treatable indications. Four of the hospitals that are currently testing imILT have signed a letter of intent, thereby committing to sell and promote CLS's products depending on successful outcomes of these studies, while sales of FLA in treatment of early-stage prostate cancer are ongoing. Even though other hospitals are testing the treatment method in several indications, we take a conservative stance and only model potential future revenue from hospitals and clients that have signed a letter of intent or where sales have already commenced.

CLS has previously communicated that list price per applicator kit is EUR 2,200, where one unit is needed for each treatment. Accordingly, we estimate the addressable market by multiplying the price by the number of treatable patients within each indication. We assume that patient growth and price inflation will trend in line with the overall economic situation, and thus use a 3% growth rate in both cases. We do not assign any value to indications in which CLS has no customers and no letters of intent and has not completed the clinical studies, as we view the risk of not reaching sales as too large. For indications in which customers have been signed, we assume that CLS's market share will move towards the long-term goal of ~5%, as communicated by the company's management.



### **Revenue estimates**



Source: Nordea estimates

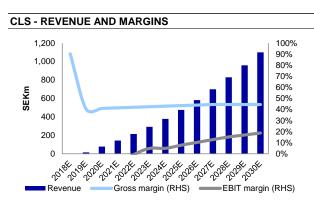
ESTIMATED	SALES	BY CLS											
SEKm	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	12	15	78	144	214	292	379	475	582	699	829	959	1,100
growth	218%	24%	415%	85%	49%	37%	30%	25%	22%	20%	19%	16%	15%
imILT	0	8	59	85	115	148	184	224	268	317	371	416	466
growth	-	-	654%	45%	34%	28%	25%	22%	20%	18%	17%	12%	12%
FLA	2	7	19	58	99	144	195	251	313	382	458	542	635
growth	218%	271%	158%	212%	70%	46%	35%	29%	25%	22%	20%	18%	17%
Horizon2020	10	0	0	0	0	0	0	0	0	0	0	0	0

Source: Nordea Estimates

We estimate that total sales will reach SEK 12m in 2018 and increase to SEK 15m in 2019 In the tables and charts above, we present our revenue estimates for 2018-30, from sales of imILT and FLA products. Based on our assumptions, FLA will comprise the largest part of the revenue, reaching a 58% share in 2030. However, our current estimates of imILT only take sales within pancreatic and breast cancer into account, although CLS aims to sell the product for use in several other cancer indications. With no customers signed and as the studies have yet to finish, we omit any sales in these indications until more confidence in its potential in these diseases has been gained.

In the Benchmark chapter, we analysed two companies working with competitive solutions. From this analysis we found that the average gross margin over the past five years among these companies was ~45%, while the average EBIT margin was ~15%. We use these as long-term approximate targets for CLS, although we note that their business model differs from these two peers.

According to our estimates, CLS will turn profitable in 2023, where we model total sales of SEK 292m, with gross profit and EBIT margins of 43% and 5%, equalling SEK 124m and SEK 14m.



**CLS - EBIT** 250 200 150 SEKm 100 50 0 -50 -100 20244 20235 20254 20274 2022 20264 20214 20284 20184 20204 20

Source: Nordea estimates

imILT

We include sales of imILT treatments within pancreatic and breast cancer in valuation, as letters of intent have been signed by customers in these indications Of the four hospitals that have signed a letter of intent with CLS, the Portuguese Oncology Institute, Institut Paolo-Calmettes and University Hospital of Verona focus on pancreatic cancer, while Nottingham University Hospital targets breast cancer. Based on clinical reports for the studies within pancreatic cancer, we believe that the studies will end in late 2018 and early 2019, thus initiating sales in 2019. According to the hospitals, they treat a combined 16,400 patients yearly. Assuming that CLS will be able to attain ~5% of these patients in line with the overall market share assumption, we estimate that CLS should be able to reach an initial 0.5% market share of the total number of addressable patients within the US and Europe in 2019.

Source: Nordea estimates

With a 0.5% market share in 2019E, we estimate that CLS will generate SEK 8m over the year within pancreatic cancer. In line with the company's strategic goal, we model that CLS will reach a market share in Europe and the US of approximately 5% ten years after launch. With a 5% market share in 2030, we estimate peak sales of SEK 150m. In the tables below, we present a scenario analysis of sales in 2021E and

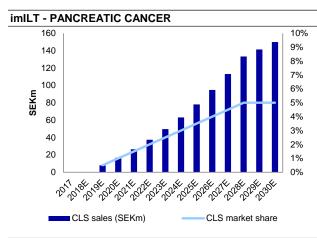
Sales of imILT within pancreatic cancer are expected to begin in 2019, while sales to breast cancer patients are expected to start in 2020 2030E. If assuming constant price inflation at 3%, we note that peak sales in 2030E could reach SEK 132-168m, based on varying market share assumptions.

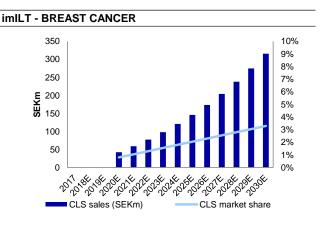
According to the latest clinical update, patients for the study of imILT in breast cancer at Nottingham University Hospital will be recruited during 2018. The study has an expected duration of 12 months. We therefore expect that most tests will be conducted during 2019, and that the first sales to breast cancer patients will be recorded in 2020.

Nottingham University Hospital states that they treat approximately 35,000 patients yearly. Again assuming that imILT will be used by 5-8% of these patients, we calculate that CLS should be able to attain 0.80% of the total European and US market initially, from sales to Nottingham University Hospital.

With a 0.80% market share, we estimate that CLS will generate SEK 42m in sales during 2020. As only one hospital has signed a letter of intent within breast cancer so far, we assume slightly less aggressive market share expansion compared with pancreatic cancer at the three hospitals signed.

We estimate that CLS will reach a ~3% market share in 2030, with sales peaking at SEK 316m. From the sensitivity table, we find that peak sales could range from SEK 263m-371m, depending on how successfully imILT is in gaining market shares within the breast cancer market, and assuming constant 3% price inflation.





Source: Nordea estimates

Source: Nordea estimates

iml	LT: PA	NCREATIC	CANCER	, 2021E SA	LES	
SEK	ſm		Mar	rket share		
ç		1.0%	1.3%	1.5%	1.8%	2.0%
Price inflation	1%	17	22	26	30	35
If	2%	17	22	26	31	35
8	3%	18	22	26	31	35
Ë	4%	18	22	27	31	36
_	5%	18	22	27	31	36

-	0			
Source:	Company	data	and	Nordea

iml	LT: BR	EAST CAN	ICER, 2021	IE SALES		
SEK	ſm		Mai	rket share		
c		0.6%	0.8%	1.1%	1.3%	1.6%
Price inflation	1%	30	44	58	72	85
ıfla	2%	31	45	58	72	86
e i.	3%	31	45	59	73	87
ic	4%	31	45	60	74	88
Ē	5%	32	46	60	74	89

Source: Company data and Nordea

iml	imILT: PANCREATIC CANCER, 2030E SALES											
SEK	ím		Mar	ket share								
Ę		4.5%	4.8%	5.0%	5.3%	5.5%						
Price inflation	1%	132	140	147	154	162						
ufl	2%	134	141	149	156	163						
ë	3%	135	142	150	157	165						
,Ĕ	4%	136	144	151	159	167						
	5%	138	145	153	161	168						

Source: Company data and Nordea

iml	LT: BI	REAST CAN	CER, 2030	E SALES		
SEK	(m		Mar	ket share		
c		2.8%	3.1%	3.3%	3.6%	3.8%
inflation	1%	263	286	310	333	357
ufla	2%	265	289	313	336	360
	3%	268	292	316	340	364
Price	4%	271	295	319	343	367
٩	5%	273	298	322	346	371

Source: Company data and Nordea

## FLA

Sales of diffuse fibres and applicator kits for FLA treatment is CLS's sole revenue source as of 2017

We estimate CLS should gain a 1.3% market share of the addressable FLA market in 2021, resulting in sales of **SEK 151m** 

CLS's FLA treatment is the current sole revenue driver. CLS estimated that the total addressable patient pool within Europe and the US totalled 400,000 patients in 2017. With a list price of EUR 2,200 for each fibre and applicator kit, we calculate an addressable market size of EUR 880m in 2017, or SEK ~8,624m. In 2017, CLS received three separate orders for diffuse fibres and applicator kits, resulting in sales of SEK 604,000 over the year. Based on our assumptions of the FLA market potential in the US and Europe, the achieved sales in 2017 correspond to a ~0.007% market share.

We expect that the FLA-related products will gain further market traction, reaching a 0.02% share in 2018, 0.1% in 2019 and jumping to 0.5% in 2021, when we expect the study at the Toronto General Hospital to be concluded. From these assumptions, we model sales of SEK 2m in 2018E, SEK 7m in 2019E, SEK 19m in 2020E and SEK 58m in 2021E.

The forecast sales and market shares are presented in the chart below. We have further conducted sensitivity analyses on the 2021E sales, when the Toronto General Hospital sales are expected to commence, and long-term sales in 2030E. Assuming that the price inflation of 3% will remain constant, our analysis indicates that sales in 2030E could vary from SEK 525m to SEK 748m.

FLA - EARLY STAGE PROSTATE CANCER



Sales of FLA products are expected to reach SEK 793m in 2030 in our base case

Source: Nordea estimates

.1% (		share 0.5%			SEK	m		Mar	ket share		
.1% (	0.3%	0.5%	EKm Market share						Ket Share		
		0.5 /0	0.8%	1.0%	c		2.7%	3.0%	3.2%	3.5%	3.7%
11	29	57	86	114	tio	1%	525	574	622	671	720
12	29	58	87	115	ıfla	2%	530	579	628	678	727
12	29	58	87	116	. <u> </u>	3%	535	585	635	684	734
12	29	59	88	118	j <u>č</u>	4%	541	591	641	691	741
12	30	59	89	119	ā	5%	546	596	647	697	748
	12 12	12     29       12     29       12     29       12     30	12         29         58           12         29         58           12         29         59           12         30         59	12         29         58         87           12         29         58         87           12         29         59         88           12         30         59         89	12295887115122958871161229598811812305989119	12     29     58     87     115     Image: constraint of the second secon	12     29     58     87     115 <b>b b</b> 12     29     58     87     116 <b>b 3%</b> 12     29     59     88     118 <b>b 4%</b> 12     30     59     89     119 <b>5%</b>	12     29     58     87     115 $\frac{10}{2}$ 2%     530       12     29     58     87     116     3%     535       12     29     59     88     118     4%     541       12     30     59     89     119     5%     546	12     29     58     87     115     12     2%     530     579       12     29     58     87     116     3%     535     585       12     29     59     88     118     2%     541     591       12     30     59     89     119     5%     546     596	12     29     58     87     115     10	12     29     58     87     115 <b>u 2%</b> 530     579     628     678       12     29     58     87     116 <b>u 3%</b> 535     585     635     684       12     29     59     88     118 <b>u 4%</b> 541     591     641     691       12     30     59     89     119 <b>5%</b> 546     596     647     697

Limited transparency in CLS's cost structure makes the split between R&D and SG&A costs

Opex is estimated to grow

from SEK 32m in 2017 to SEK 39m in 2018

uncertain

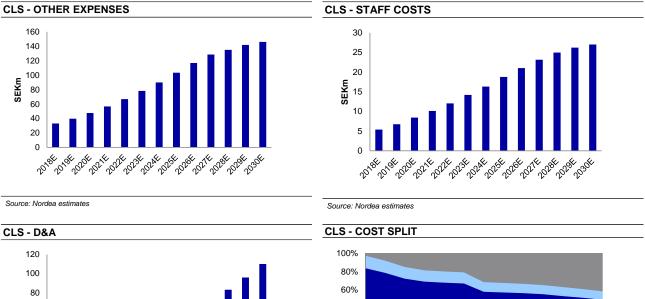
## **Cost structure**

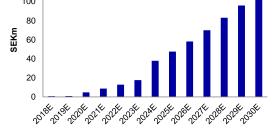
The cost pool is split into staff costs, depreciation and amortisation and other external costs. Being an early-stage company, we attribute the majority of costs within other external costs as R&D, although R&D costs have not been specified by CLS. We argue that this cost pool will continue to comprise large R&D spending, owing to the ongoing studies. However, according to the company, its products are developed and ready for sales, and we thus argue that selling and distribution costs will accelerate in the coming years, accounting for a larger part of the cost pool. This is in line with the press release published by CLS in early May 2018, regarding the share issue of 7,173,935 new B-shares. According to management, the proceeds from this issue are earmarked for marketing and distribution in the US and Europe, in order to establish the products and increase market shares. The residual proceeds will be used to

finance development and studies of CLS products in combined treatments and establishment of strategic partnerships. However, the actual split between these costs remains uncertain, as no guidance or elaborate details have been provided by the company.

Other external costs comprised ~80% of total opex in 2017... In order to scale up operations and increase market shares, we estimate that total opex will increase from SEK 32m in 2017 to SEK 39m in 2018E. We attribute the main proportion of costs to R&D and SG&A pooled together in other operating costs. We estimate this cost pool to reach SEK 33m in 2018 and SEK 40m in 2019. As of 2017, around 14 people are employed at CLS, which resulted in staff costs of SEK 0.18m. As the next step for the company is to scale up operations and push the product in the market, we model staff costs as reaching SEK 5.4m in 2018E and SEK 6.7m in 2019E.

...which we expect to decline to ~50% as the share of staff costs and D&A increases The split among the cost pools is presented in the bottom right chart below. In 2018, we estimate other operational expenses to comprise ~80% of total opex. However, we model this share to decline towards ~50% in the long run, as both staff costs and D&A are likely to increase as the company grows.





Other external expenses
 Staff costs
 Depreciation and amortization

40%

20%

0%

20184

Source: Nordea estimates

CLS raised SEK 49m in a share issue in early May 2018, providing operational funding for the next year

We estimate CLS's cash position to reach SEK 32m in 2018 and SEK 37m in 2019

### **Cash flow**

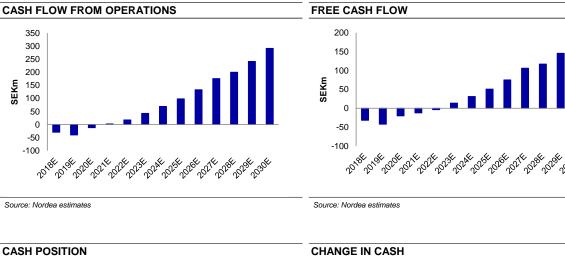
In late May 2018, the company raised SEK 49m in capital through a share issue. The proceeds will secure operational funding for approximately the next year.

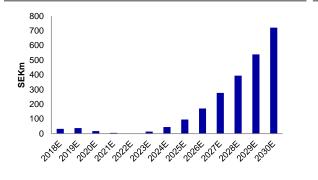
20212 0022

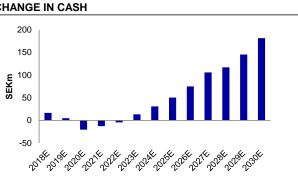
2023 mak

2022 2026 With week

Based on the current burn rate of SEK ~2m per month, this share issue should provide the capital necessary for the next year of operations, after which we estimate a new equity issue. We estimate that CLS will raise SEK ~48m in 2019, after which the cash flow from operations will provide liquidity at a self-sustaining level. We estimate that CLS's cash position will reach SEK 32m in 2018 and SEK 37m in 2019. As previously noted, we expect sales of imILT to be initiated in 2019 and 2020. According to our model, this should result in a positive cash flow from operations as of 2021, while we estimate free cash flow to turn positive in 2023.







Source: Nordea estimates

Source: Nordea estimates

#### Of those indications not yet included in the valuation, sales of imILT products to lung cancer patients provide the largest value potential

#### Large value potential within lung cancer

Besides pancreatic and breast cancer, CLS is currently studying imILT in malignant melanoma (skin cancer), lung, kidney and liver cancer. As previously stated, we have omitted potential sales in these indications, as the studies have been delayed and no customers have signed letters of intent or placed any orders. In this section, we provide a "what-if" analysis, and assess to what degree a successful launch in each of these indications could impact estimated sales and the derived DCF-based value range per share.

In the tables below, we provide sensitivity analyses of the long-term sales potential within these four indications. Based on the current clinical status of the studies, we assume that the products will be ready for sales in 2020, and that they will gain a 0.25% market share in the initial year. As a base case, we assume that this will expand to ~3% in 2030.

From the tables, we find that lung cancer provides the largest market opportunity for CLS. From our base-case assumptions, we estimate that long-term sales within this indication could reach SEK 191.8m in 2030, although varying from SEK 51.3m to SEK 337.7m depending on price inflation and how well the product performs in terms of market shares.

imILT	: SKIN	CANCER,	2030E S	ALES			imILT	: LUNG		R, 2030E S	SALES		
SEKm			Ma	rket share			SEKm						
۲		0.7%	1.8%	2.8%	3.8%	4.8%	5		0.7%	1.8%	2.8%	3.8%	4.8%
ţi	1%	6.6	15.4	24.1	32.9	41.7	ţi	1%	51.3	119.7	188.0	256.4	324.8
Price inflatio	2%	6.6	15.5	24.4	33.2	42.1	ıfla	2%	51.8	120.9	189.9	259.0	328.0
. <u>.</u>	3%	6.7	15.7	24.6	33.6	42.5	<u>,</u>	3%	52.3	122.0	191.8	261.5	331.3
j <u>č</u>	4%	6.8	15.8	24.9	33.9	42.9	<u>ič</u>	4%	52.8	123.2	193.6	264.1	334.5
ā	5%	6.8	16.0	25.1	34.2	43.4	ā	5%	53.3	124.4	195.5	266.6	337.7

Source: Company data and Nordea estimates

Source: Company data and Nordea estimates

imILT	: KIDN	EY CANCI	ER, 2030E	SALES			imILT	: LIVEF		R, 2030E S	SALES				
SEKm			Ma	rket share			SEKm			Ma	rket share				
۲		0.7%	1.8%	2.8%	3.8%	4.8%	Ē		0.7%	1.8%	2.8%	3.8%	4.8%		
ţi	1%	10.2	23.8	37.5	51.1	64.7	tio	1%	3.7	8.7	13.7	18.7	23.6		
ıflat	2%	10.3	24.1	37.8	51.6	65.4	fla	2%	3.8	8.8	13.8	18.8	23.9		
e ir	3%	10.4	24.3	38.2	52.1	66.0	<u> </u>	3%	3.8	8.9	14.0	19.0	24.1		
rice	4%	10.5	24.6	38.6	52.6	66.7	<u>i</u>	4%	3.8	9.0	14.1	19.2	24.3		
₽.	5%	10.6	24.8	39.0	53.1	67.3	2	5%	3.9	9.1	14.2	19.4	24.6		

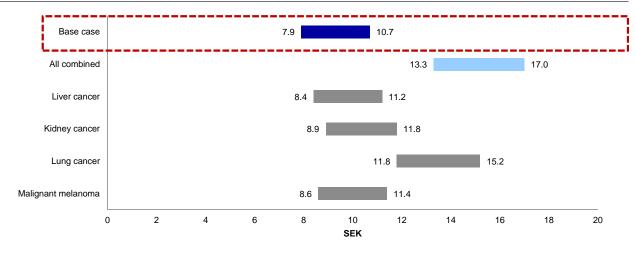
Source: Company data and Nordea estimates

Source: Company data and Nordea estimates

The fair value range would become SEK 13.3-17.0, if all four omitted indications were included in sales In the chart below, we outline the value potential of sales in each of the four indications in terms of DCF-value per share. The add-on value range from each indication is calculated from including sales from the indication while continuing to omit sales in the three remaining indications. We further provide an estimate of the fair value range if sales in all indications were to be included simultaneously.

Our value ranges are based on varying EBIT margin and sales growth assumptions, as described in the valuation section in our base-case valuation. We find that if we include sales in all of the tested indications, our DCF-derived fair value range would increase to SEK 13.3-17.0 per share, up from SEK 7.9-10.7. Sales of imILT within lung cancer represent the majority of this value increase. Including sales to lung cancer patients in our base case would result in a fair value range of SEK 11.8-15.2. We thus emphasise our view that focus should be directed towards imILT use in lung cancer, as this offers the largest valuation potential among the potential indications omitted from the base-case estimates.

#### DCF VALUE ADDITION PER SHARE FROM SALES IN OTHER CANCER INDICATIONS



Source: Nordea estimates

## **Detailed estimates**

INCOME STATEMENT ESTIMATES								
SEKm	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Revenue	12	15	78	144	214	292	379	475
Growth, y/y								
Cost of goods sold	-1	-9	-46	-84	-124	-168	-216	-268
Gross profit	11	6	32	60	90	124	163	207
Gross profit margin	90.4%	40.5%	41.0%	41.5%	42.0%	42.5%	43.0%	43.5%
Other external expenses	-33	-40	-48	-57	-67	-78	-90	-103
Staff costs	-5	-7	-8	-10	-12	-14	-16	-19
EBITDA	-27	-40	-24	-7	11	32	57	84
EBITDA margin	n.m	n.m	n.m	n.m	5.1%	10.8%	14.9%	17.8%
Depreciation and amortization	-1	-1	-5	-9	-13	-18	-38	-47
EBIT	-28	-41	-29	-16	-2	14	19	37
EBIT margin	n.m	n.m	n.m	n.m	n.m	4.8%	4.9%	7.8%
Financials - net	0	0	0	0	0	0	0	C
Pre-tax profit	-28	-41	-29	-16	-2	14	19	37
Tax payments	0	0	0	0	0	0	0	C
Tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net profit	-28	-41	-29	-16	-2	14	19	37
Net profit margin	n.m	n.m	n.m	n.m	n.m	4.8%	4.9%	7.8%
Performance metrics								
Growth, y/y								
Revenue	218%	24%	415%	85%	49%	37%	30%	25%
Gross profit	-3%	-44%	422%	87%	51%	38%	31%	27%
EBITDA	n.m	n.m	n.m	n.m	n.m	191%	79%	49%
EBIT	n.m	n.m	n.m	n.m	n.m	n.m	32%	98%
EPS	n.m	n.m	n.m	n.m	n.m	n.m	32%	98%

Source: Nordea estimates

## **Risk factors**

In this section, we list the main risk factors that we find relevant for CLS. The purpose of this is not to provide a comprehensive picture of all the risks that the company may face, but instead to highlight those that we find most relevant. The main risks applicable to CLS relate to its high dependence on the results of clinical trials, obtaining regulatory approvals and its financial position.

## **Regulatory** approvals

CLS is highly dependent on relevant regulatory approvals CLS, as a medical technology company, strongly depends on the outcomes of clinical trials and related regulatory approvals, as well as government decisions. There is therefore a risk that the trials might not go in favour of CLS. If the expected approvals were only approved partially, or not approved at all, it would limit CLS's ability to sell products in the expected geographic markets, thereby burdening its future earnings potential. Moreover, in some countries, CLS will be highly dependent on whether the national insurance system, either private or public, grants approval to CLS's treatment method for compensation and that the method is introduced in compliance with national clinical guidelines for individual treatment. If such compensation were not to be in place in some markets, it would have a significant negative impact on future sales growth.

## Competition

Multinational corporations with large financial resources pose a threat to CLS

Some of the major players in the cancer immunotherapy market are multinational companies with significant financial resources. Their intensified investment and product development can impair CLS's sales. Furthermore, companies with global operations, which currently work in areas adjacent to those of CLS, may decide to establish themselves within the CLS's business area. Another factor that could possibly affect CLS unfavourably is a potential use and development of competing methods by CLS's peers in the market. This could pose a risk of negative sales and earnings effects for the company in the future.

## Financing needs and capital

The company has a very limited history of financials and is currently in a stage where the market's acceptance of CLS's products is not fully confirmed yet. Further product development requires capital. Delays in product development and market breakthroughs can result in increased costs for CLS and impair future earnings. The company may need to acquire additional capital in the future, and there is a risk that that the required capital cannot be obtained at favourable conditions, or not at all. If capital cannot be acquired, the company's future development and revenues may be affected negatively, and the company may need to restructure or reduce the scope of its business.

## Limited operational history

CLS has been an active company since 2006, but operations have so far been limited to early-stage development activities, such as developing the product, raising capital and conducting preclinical and clinical studies. It is therefore difficult to evaluate the long-term financial viability of the business. Additionally, in order to perform further commercialisation of the product, the company might need to recruit personnel with new areas of competence.

## **Clinical studies**

Clinical trials are risky and there are no guarantees that they will be successful, despite promising results in earlier trials. Even in the event of positive results, there is a risk that regulatory bodies might interpret the outcomes differently. Trials are also time-consuming and expensive, and require a certain expertise. It can take several

CLS is highly dependent on the future inflow of capital

Due to limited operational history, it is difficult to assess CLS's long-term viability years to complete a trial, and regulatory bodies may delay or terminate trials at any time. Also, finding patients suitable for the studies may be cumbersome and CLS has struggled with that in the past years.

### Key people and staff

CLS's employees have great competence and extensive experience within the company's business area. Therefore, a loss of one or more key employees can have negative consequences for CLS's business and there is a risk that knowledgeable personnel cannot be recruited if a need arises. That can lead to slowdowns in product development.

### Dependency on subcontractors and distributors

CLS entered into agreements with a number of partners. It is also quite likely that it will continue to extend its network of contractors. There is a risk of some of the company's suppliers or manufacturers choosing to step out of the partnership, which would cause negative effects on the company's business. There is also a risk that some of contractors would not meet CLS's quality requirements, which can affect its earnings unfavourably.

## Intellectual property and patents

CLS is highly dependent on its know-how and intellectual property. It strives to protect itself through confidentiality agreements with its employees, consultants and partners, as well as numerous patent applications. However, it is not possible to be fully protected from unauthorised disclosure of information. Additionally, the company could be brought to trial for alleged infringement of competitors' patents. Legal disputes can be very costly and time-consuming for the company even if the outcome is positive for CLS in the end.

### New treatment methods

In the whole medical industry, a massive amount of resources are invested in the development of cancer treatment methods, both in pharmaceutical area as well as medical equipment. Even though CLS constantly conducts extensive research and has gathered a considerable amount of clinical documentation, there is a risk of new treatment methods being developed. That would pose a threat to CLS's products and would affect company's operations, earnings and financial position.

Clinical trials are time-consuming and expensive

The company is highly dependent on competent and specialised personnel

Protecting CLS's intellectual property is key to the company's success

If new revolutionary treatment methods are developed, CLS's products could lose market value

## **Reported numbers and forecasts**

#### INCOME STATEMENT

INCOME STATEMENT											
SEKm	2010	2011	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E
Net revenue	n.a.	n.a.	0	0	0	0	4	11	12	15	78
Revenue growth	n.a.	n.a.	n.a.	-90.3%	-56.3%	n.m.	n.m.	208.5%	7.8%	24.1%	415.2%
of which organic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
of which FX	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
EBITDA	0	0	-13	-18	-18	-17	-27	-21	-27	-40	-24
Depreciation and impairments PPE	0	0	0	0	0	0	0	0	0	0	-1
EBITA	0	0	-13	-18	-18	-17	-27	-21	-28	-40	-25
Amortisation and impairments	0	0	0	0	0	0	0	0	-1	-1	-4
EBIT of which associates	n.a. 0	n.a. 0	-13 0	-18 0	-18 0	-17 0	-27 0	-21 0	-28 0	-41 0	-29
Associates excluded from EBIT	0	0	0	0	0	0	0	0	0	0	(
Net financials	0	0	0	0	0	0	0	0	0	0	(
Pre-tax profit	0	0	-13	-18	-17	-17	-27	-21	-28	-41	-29
Reported taxes	0	0	0	0	0	0	0	0	0	0	
Net profit from continued operations	0	0	-13	-18	-17	-17	-27	-21	-28	-41	-29
Discontinued operations	0	0	0	0	0	0	0	0	0	0	(
Minority interests	0	0	0	0	0	0	0	0	0	0	(
Net profit to equity	0	0	-13	-18	-17	-17	-27	-21	-28	-41	-29
EPS	n.a.	n.a.	-0.87	-1.16	-1.03	-0.82	-1.14	-0.81	-0.86	-1.15	-0.81
DPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
of which ordinary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
of which extraordinary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Profit margin in percent							705 404	100 70/	000 101	007.00/	04.00
EBITDA	n.a.	n.a.	n.m.	n.m.	n.m.	n.m.	-735.1%	-183.7%	-226.4%	-267.6%	-31.2%
EBITA EBIT	n.a.	n.a.	n.m.	n.m.	n.m.	n.m.	-736.6%	-185.3% -185.3%	-227.4% -232.4%	-268.6%	-32.2%
EBII	n.a.	n.a.	n.m.	n.m.	n.m.	n.m.	-736.6%	-100.3%	-232.4%	-273.6%	-37.2%
Adjusted earnings											
EBITDA (adj)	0	0	-13	-18	-18	-17	-27	-21	-27	-40	-24
EBITA (adj)	0	0	-13	-18	-18	-17	-27	-21	-28	-40	-25
EBIT (adj)	0	0	-13	-18	-18	-17	-27	-21	-28	-41	-29
EPS (adj)	n.a.	n.a.	-0.87	-1.16	-1.03	-0.82	-1.14	-0.81	-0.86	-1.15	-0.81
Adjusted profit margins in percent											
EBITDA (adj)	n.a.	n.a.	n.m.	n.m.	n.m.	n.m.	-735.1%	-183.7%	-226.4%	-267.6%	-31.2%
EBITA (adj)	n.a.	n.a.	n.m.	n.m.	n.m.	n.m.	-736.6%	-185.3%	-227.4%	-268.6%	-32.2%
EBIT (adj)	n.a.	n.a.	n.m.	n.m.	n.m.	n.m.	-736.6%	-185.3%	-232.4%	-273.6%	-37.2%
Performance metrics											
CAGR last 5 years											
Net revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	146.8%	299.1%	391.7%	266.4%
EBITDA	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m
EBIT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m.	n.m
EPS	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m.	n.m
DPS	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m
		11.111.	11.111.	11.111.	11.111.	11.111.		11.111.	11.111.	11.111.	11.111
Average last 5 years							/				
Average EBIT margin	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-2,352%	-665.0%	-405.3%	-316.7%	
Average EBITDA margin	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-2,342%	-661.9%	-401.3%	-312.2%	-116.5%
VALUATION RATIOS - ADJUST	ED EARN	IINGS									
SEKm	2010	2011	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E
P/E (adj)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m
EV/EBITDA (adj)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m
EV/EBITA (adj)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m
EV/EBIT (adj)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m
((((((((((((((((((((((((((((((((((	ma.			11.0.			11.0.	11.0.			
VALUATION RATIOS - REPOR		INGS									
			2012	2012	2014	204F	2010	2 047	20405	20405	20205
SEKm	2010	2011	2012	2013	2014	2015	2016	2,017	2018E	2019E	2020E
P/E	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.m.	n.m.	n.m
EV/Sales	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	22.0	17.4	3.6
	n 2	20	<b>n</b> 0	-	-		-				

Source: Company data and Nordea estimates

EV/EBITDA

EV/EBITA

EV/EBIT

FCF yield

Payout ratio

Dividend yield (ord.)

n.a.

0.0%

n.m.

n.m.

n.m.

0.0%

0.0%

-10.8%

n.m.

n.m.

n.m.

0.0%

0.0%

-14.2%

n.m.

n.m.

n.m.

0.0%

-6.8%

0.0%

BALANCE SHEET											
SEKm	2010	2011	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E
Intangible assets	0	0	12	14	17	18	20	24	25	26	28
of which R&D	0	0	0	0	0	0	0	0	0	0	0
of which other intangibles	0	0	12	14	17	18	20	24	25	26	28
of which goodwill	0	0	0	0	0	0	0	0	0	0	0
Tangible assets	0	0	0	0	0	0	0	1	1	2	3
Shares associates	0	0	0	0	0	0	0	0	0	0	0
Interest bearing assets	0	0	0	0	0	0	0	0	0	0	0
Deferred tax assets	0	0	0	0	0	0	0	0	0	0	0
Other non-IB non-current assets	0	0	0	0	0	0	0	0	0	0	0
Other non-current assets	0	0	0	0	0	0	0	0	0	0	0
Total non-current assets	0	0	12	14	17	19	20	25	26	28	31
Inventory	0	0	0	0	0	0	0	3	3	4	22
Accounts receivable	0	0	0	0	0	0	0	0	1	2	12
Other current assets	0	0	1	1	2	1	1	1	1	2	9
Cash and bank	0 0	0 0	7 8	14 15	19 20	3 4	6 7	16 20	32 38	37 45	17 60
Total current assets Assets held for sale	0	0	0	0	20						
Total assets	0	0	20	29	37	n.a. 22	n.a. 27	n.a. <b>45</b>	n.a. 65	n.a. <b>73</b>	n.a. 91
Total assets	U	U	20	29	31	22	21	43	00	13	91
Shareholders equity	0	0	17	26	32	19	17	33	54	61	32
Of which preferred stocks	0	0	0	0	0	0	0	0	0	0	0
Of which equity part of hybrid debt	0	0	0	0	0	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0	0	0	0	0	0
Total Equity	0	0	17	26	32	19	17	33	54	61	32
Deferred tax	0	0	0	0	0	0	0	0	0	0	0
Long term interest bearing debt	0	0	0	0	0	0	0	1	2	1	1
Pension provisions	0	0	0	0	0	0	0	0	0	0	0
Other long-term provisions	0	0	0	0	0	0	0	0	0	0	0
Other long-term liabilities	0	0	0	0	0	0	0	0	0	0	0
Convertible debt	0	0	0	0	0	0	0	0	0	0	0
Shareholder debt	0	0	0	0	0	0	0	0	0	0	0
Hybrid debt	0	0	0	0	0	0	0	0	0	0	0
Total non-current liabilities	0	0	0	0	0	0	0	1	2	1	1
Short-term provisions	0	0	0	0	0	0	0	0	0	0	0
Accounts payable	0	0	2	2	4	2	3	3	3	4	19
Other current liabilities	0	0	1	1	1	1	7	7	6	8	39
Short term interest bearing debt	0	0	0	0	0	0	0	0	0	0	0
Total current liabilities	0	0	3	3	5	3	10	11	9	11	58
Liabilities for assets held for sale		0	0	0	0		0	0	0	0	0
Total liabilities and equity	0	0	20	29	37	22	27	45	65	73	91
Balance sheet and debt metrics											
Net debt	0	0	-7	-14	-19	-3	-6	-14	-31	-36	-16
Working capital	0	0	-2	-2	-4	-2	-9	-5	-3	-3	-15
Invested capital	0	0	10	13	13	17	11	19	23	25	16
Capital employed	0	0	17	26	32	19	17	34	56	62	33
ROE	n.m.	n.m.	-148.6%	-84.9%	-60.7%	-65.0%	-147.6%	-84.9%	-63.7%	-71.9%	-62.7%
ROIC	n.m.	n.m.	-196.0%	-124.5%	-107.7%	-87.2%	-151.5%	-108.5%	-103.5%	-134.2%	-112%
ROCE							-157.6%	-60.7%			-87.9%
NUCE	n.a.	n.a.	-74.2%	-69.6%	-55.7%	-85.3%	-157.0%	-00.7%	-50.6%	-66.6%	-07.9%
				o =				0 =			o =
Net debt/EBITDA	n.m.	n.m.	0.6	0.7	1.1	0.2	0.2	0.7	1.1	0.9	0.7
Interest coverage	n.a.	n.a.	-806.7	-99.7	-482.5	-15,744	-490.0	-410.4	-771.9	-1,146.3	-802.6
Equity ratio	n.m.	n.m.	85.2%	89.4%	85.4%	87.4%	62.5%	73.4%	83.6%	82.7%	34.9%
Net gearing	n.m.	n.m.	-40.6%	-51.8%	-59.2%	-13.5%	-36.3%	-41.9%	-56.9%	-59.5%	-50.1%

Source: Company data and Nordea estimates

CASH FLOW STATEMENT											
SEKm	2010	2011	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E
EBITDA (adj) for associates	0	0	-13	-18	-18	-17	-27	-21	-27	-40	-24
Paid taxes	0	0	0	0	0	0	0	0	0	0	0
Net financials	0	0	0	0	0	0	0	0	0	0	C
Change in provisions	0	0	0	0	0	0	0	0	0	0	0
Change in other LT non-IB	0	0	0	0	0	0	0	0	0	0	C
Cash flow to/from associates	0	0	0	0	0	0	0	0	0	0	C
Dividends paid to minorities	0	0	0	0	0	0	0	0	0	0	0
Other adj to reconcile to cash flow	0	0	0	0	0	0	0	0	0	0	0
Funds from operations (FFO)	0	0	-13	-18	-18	-17	-27	-21	-27	-40	-24
Change in NWC	0	0	1	0	2	-2	7	-3	-2	0	12
Cash flow from operations (CFO)	0	0	-12	-18	-16	-19	-20	-24	-29	-40	-12
Capital expenditure	0	0	-2	-2	-2	-2	-2	-5	-3	-2	-8
Free cash flow before A&D	0	0	-14	-21	-18	-21	-21	-29	-32	-42	-20
Proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0	0
Acquisitions	0	0	0	0	0	0	0	0	0	0	0
Free cash flow	0	0	-14	-21	-18	-21	-21	-29	-32	-42	-20
Dividends paid	0	0	0	0	0	0	0	0	0	0	C
Equity issues / buybacks	0	0	19	27	23	4	25	37	49	48	0
Net change in debt	0	0	0	0	0	0	0	2	0	0	0
Other financing adjustments	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments	0	0	2	0	0	0	0	0	0	0	0
Change in cash	0	0	7	6	5	-16	4	9	17	5	-20
Cash flow metrics											
Capex/D&A	n.m.	n.m.	1,722%	2,100%	4,292%	3,557%	2,889%	2,656%	350%	267%	167%
Capex/Sales	n.a.	n.a.	n.a.	n.a.	n.a.	-1,614%	-42%	-41%	-21%	-16%	-10%
Key information											
Share price year end (/current)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8	8	8
Market cap.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	298	298	298
Enterprise value	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	267	262	282
Diluted no. of shares, year-end (m)	0.0	0.0	14.6	17.0	17.0	23.4	23.8	28.7	35.9	35.9	35.9

Source: Company data and Nordea estimates

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#### **Completion date**

9 July 2018, 16:17 CET