Destroying Cancer at the Speed of Light®

March 18, 2024

TSXV:TLT | OTCQB:TLTFF

Forward-Looking Statements

Forward-Looking Statements ("**FLS**") contained in this presentation deal with the future revenue potential, business opportunities and/or strategic initiatives of Theralase® Technologies Inc. ("**Theralase®**" or the "**Company**"); including, information, analyses and/or projections as to future corporate developments that reflect the current expectations of the Company's management.

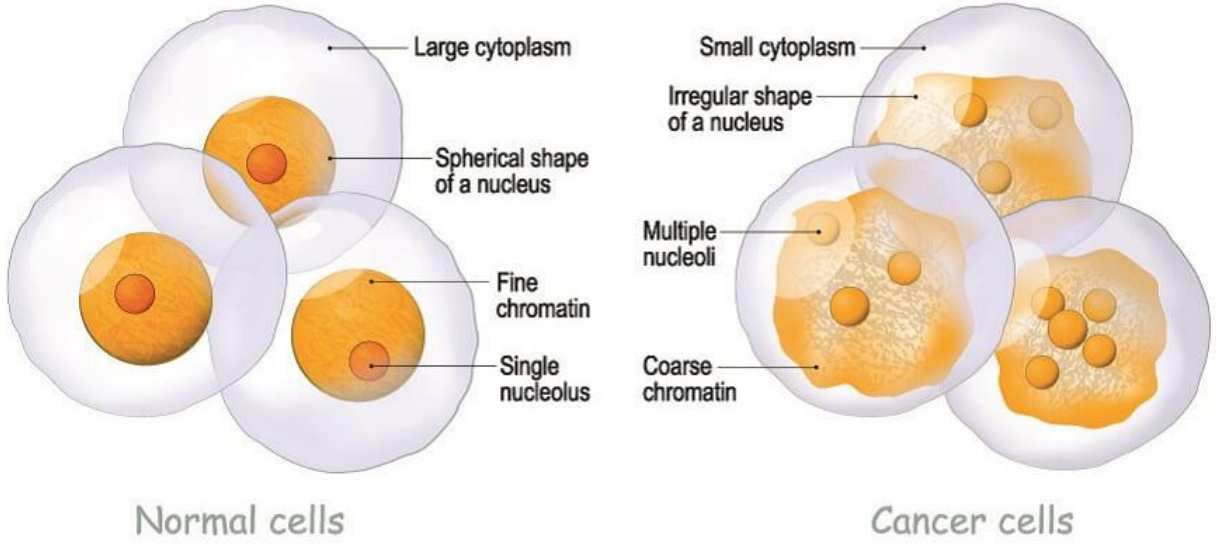
Such FLS, refer to the Company's ongoing preclinical, clinical and/or medical device research and development efforts; including, but not limited to assumptions about Theralase®'s: business operations, continued performance on a basis consistent with prior years; ability to access financing from time to time on favourable terms, or at all; ability to retain executive management, senior management, key personnel and/or key consultants or the non-disruptive replacement of them on reasonable terms; reasonably stable operating and/or general administrative expenses; future success of current or proposed research and development initiatives, achievement of commercialization activities and/or milestones; market success of its products over its competition; successful and timely achievement of regulatory and/or certification approvals; uncontested protection over its intellectual property in the markets in which it does business; market acceptance and/or revenue generation of its products; operation in stable economic environments (Canada, the United States and internationally); ability to access currency, exchange rates, interest rates and/or commodity prices at reasonable rates.

No conclusions as to the successful outcome of the ongoing and planned research and development initiatives in which the Company is involved are intended or implied; nor can they be foreseen or predicted prior to definitive corporate announcements as to their outcome. Any statements that refer to expectations, projections, future events or achievement of strategic initiatives are FLS. Although Theralase®'s management believes that the expectations reflected in any FLS made in this presentation are reasonable, such statements are based on a number of assumptions, which may prove to be incorrect; including, but not limited to assumptions related to the risks and factors set out in the Company's current Annual Information Form ("**AIF**") and documentation available on SEDAR under the Company's profile at www.sedar.com. Accordingly, no assurances can be given that any of the events or circumstances contemplated by such FLS will transpire or occur or, if any of them transpire or occur, what impact they will have on Theralase®'s results of operations or financial condition. Furthermore, the FLS contained in this presentation are made as of the date hereof for the purpose of providing, potential investors with information regarding the Company's future plans for its business and expected milestones. The Company does not undertake any obligation to update publicly or to revise any of the included FLS, whether as a result of new information, future events or otherwise, unless as required by applicable laws. The FLS contained in this presentation are expressly qualified by this cautionary statement.

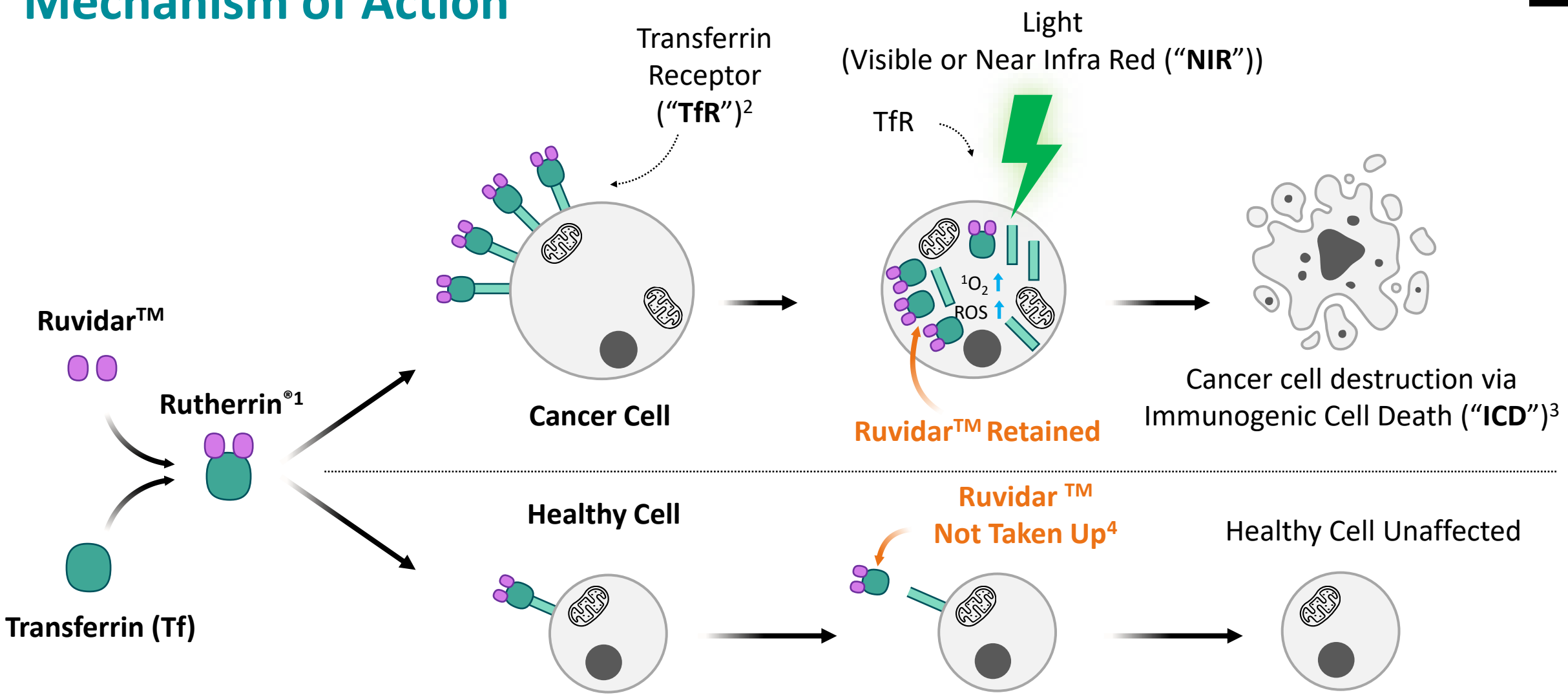
The Company's financial disclosure includes non-International Financial Reporting Standards ("**IFRS**") financial measures as supplemental indicators of the Company's financial and operating performance. The Company believes these supplemental financial measures reflect the Company's on-going business in a manner that allows for meaningful period-to-period comparisons and analyses of trends in its business. Accordingly, the Company believes that such financial measures may also be useful to potential investors in enhancing their understanding of the Company's operating or future performance. These non-IFRS measures are not recognized under IFRS and do not have standardized meanings prescribed by IFRS; therefore, it is unlikely that these measures will be comparable to similarly titled measures reported by other issuers. Non-IFRS financial measures should be considered in the context of the Company's IFRS results. The Company cautions readers to consider these non-IFRS financial measures, in addition to, and not as an alternative for, measures calculated in accordance with IFRS. The financial statements of the Company are prepared in accordance with IFRS and are reported in Canadian dollars. All currency amounts in this presentation and all references incorporated are expressed in Canadian dollars, unless otherwise indicated.

What is Cancer?

- Cancer occurs when cells have DNA damage and become immortal.
- Normal cells grow—and then die—when they are given signals to do so.
- Cancer cells ignore these signals and continue to multiply, leading to tumours and eventually death if not destroyed.
- We have approximately 30 trillion cells in our bodies with over 200 different types, leading to over 100 known types of cancer
- All cells require iron to grow. Since cancer cells grow at a much higher rate than healthy cells, they require significantly more iron, which is absorbed through their composite greater number of transferrin receptor sites.
- Theralase® uses this weakness to specifically target cancer cells versus health cells with our technology.



Mechanism of Action



1) Kaspler P, Lazic S, Forward S, Arenas Y, Mandel A, Lilge L. A ruthenium(ii)based photosensitizer and transferrin complexes enhance photo-physical properties, cell uptake, and photodynamic therapy safety and efficacy. Photochem Photobiol Sci. 2016 Apr;15(4):481-95. doi: 10.1039/c5pp00450k. Epub 2016 Mar 7. PubMed PMID: 26947517
2) Jeong SM, Hwang S, Seong RH. Transferrin receptor regulates pancreatic cancer growth by modulating mitochondrial respiration and ROS generation. https://doi.org/10.1016/j.bbrc.2016.02.023
3) Kawamoto M., Horibe T., Kohno M., Kawakami K. A novel transferrin receptor-targeted hybrid peptide disintegrates cancer cell membrane to induce rapid killing of cancer cells. BMC Cancer. 2011; 11: 359
4) Seymour GJ, Walsh MD, Lavin MF, Strutton G, Gardiner RA. Transferrin receptor expression by human bladder transitional cell carcinomas. Urol Res. 1987;15(6):341-4. doi: 10.1007/BF00265663. PMID: 3324443.

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Company

Scientific Research

Patented light-activated Photo Dynamic Compounds ("**PDCs**") researched and developed over the last 20 years

Optimized to destroy cancer, bacteria and viruses, while sparing healthy cells[1]

Pipeline

Primary
Non-Muscle Invasive Bladder Cancer ("**NMIBC**")[2]

Secondary
GlioBlastoma Multiforme ("**GBM**")[3]

Non-Small Cell Lung Cancer ("**NSCLC**")[4]

Vaccine for various enveloped viruses[5]

Clinical Stage

Phase II NMIBC registration clinical study interim clinical data (63/100 patients treated):

64% Complete Response ("**CR**") for the primary objective[6]

36% CR duration for the secondary objective[6]

Very high safety profile for the tertiary objective (n=63 patients)[6]

FDA Fast Track Designation Granted[7]

Management Team

Extensive preclinical and clinical research, pharmaceutical drug, laser design, manufacturing and commercialization experience[1]

Partnered with leading scientific and clinical researchers from renowned research hospitals[1]

Intellectual Property

28 issued patents and 17 patents pending for PDC and laser technology in the United States, Canada and internationally[1]

Composition of matter patent expires in US in 2033 (Potentially 2038 with extension)

1) Annual Information Form – September 20, 2023
2) Press Release - Theralase Commences Phase II NMIBC Clinical Study – April 25, 2019
3) Press Release - Theralase® Demonstrates Significant Advantage in Treatment of Brain Tumours – June 11, 2018
4) Press Release - Theralase® Advances Anti-Cancer Technology in Destruction of Human Lung Cancer– March 5, 2018
5) Press Release - February 7, 2022 – Theralase® Demonstrates Proof-of-Concept for Canadian-Made COVID-19 Vaccine
6) Press Release - Theralase® Provides Update on Phase II Bladder Cancer Clinical Study – January 15, 2024
7) Press Release - Theralase® Granted FDA Fast Track Designation for NMIBC Phase II Clinical Study – November 23, 2020

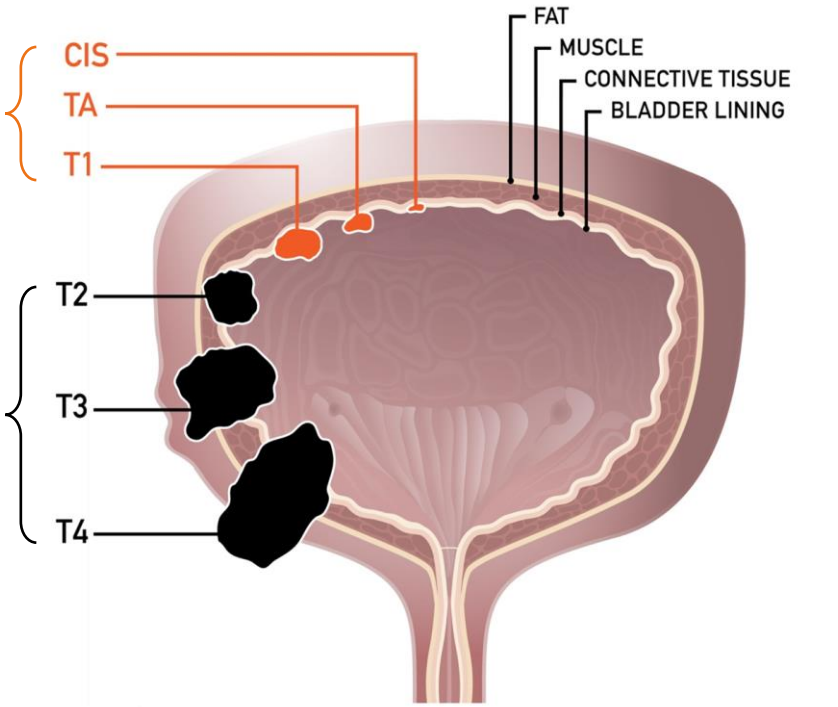
Bladder Cancer

10th Most Common Cancer Worldwide

6th and 17th most common cancer in men and women, respectively[1]

Non-Muscle Invasive Bladder Cancer ("NMIBC")

Muscle Invasive Bladder Cancer ("MIBC")



Annually 573,000 new cases of bladder cancer internationally in 2020[1]

Annually 82,290 in US, 13,300 in Canada, 151,000 in Europe[2,3]

1) World Cancer Research Fund International. Bladder cancer statistics. www.wcrf.org/cancer-trends/bladder-cancer-statistic
2) National Cancer Institute. Surveillance, Epidemiology and End Results Program. Cancer Stat Facts: Bladder Cancer. https://seer.cancer.gov/statfacts/html/urinb.html
3) Key Statistics for Bladder Cancer – American Cancer Society (2023); Canadian Cancer Society (2022) and Bladder Cancer – European Cancer Patient Coalition (2019)

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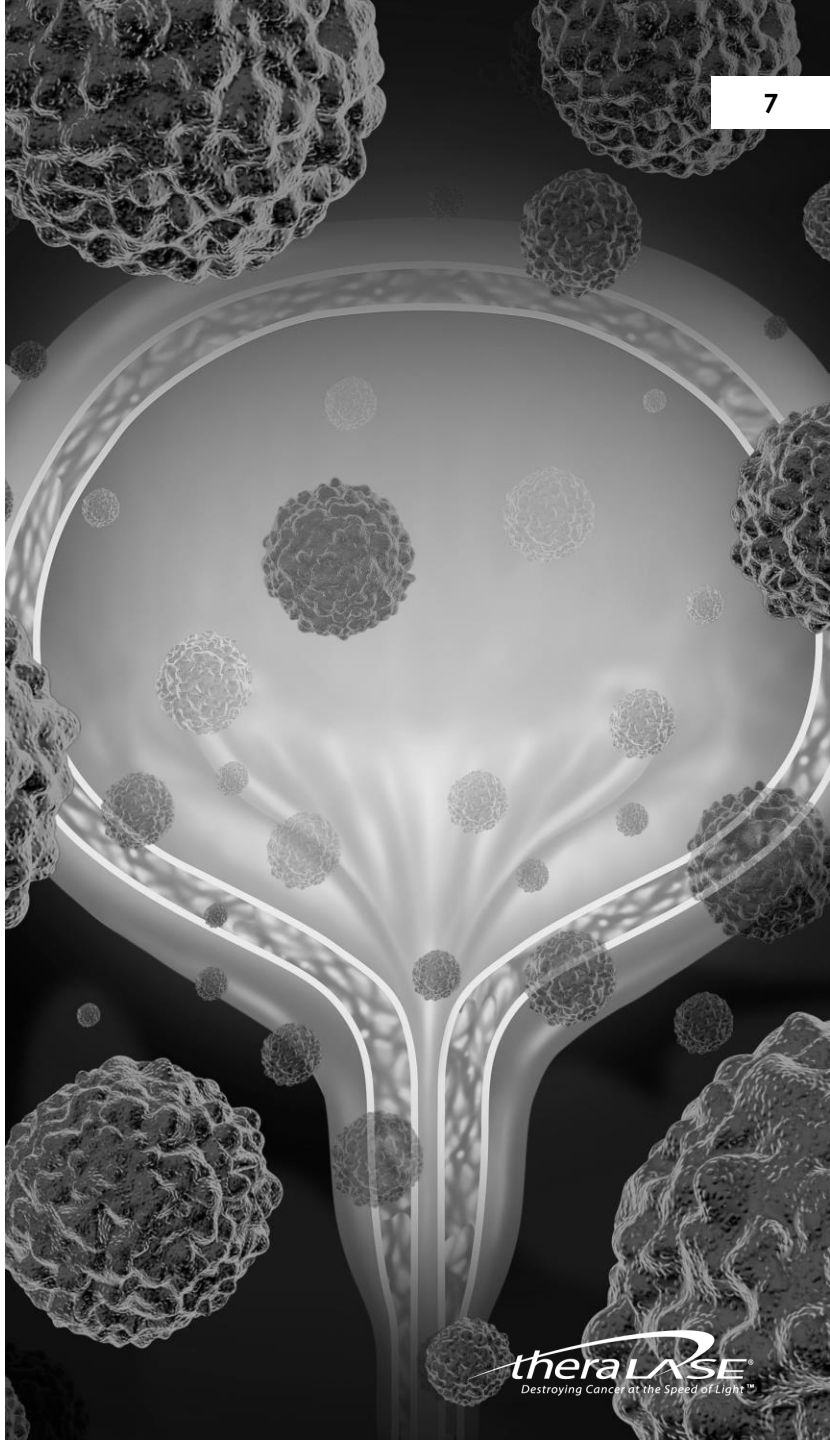
Current Treatment Landscape

- Bacillus Calmette Guérin ("**BCG**") is the standard of care treatment for NMIBC
- 75% of bladder cancers classified as NMIBC[1] and 5 to 10% of bladder cancers classified as Carcinoma In-Situ ("**CIS**")[2]
- High initial efficacy BCG up to 75%[2,3] (25% failure rate)
- BCG is not durable[4,5] with ½ of BCG treated patients recurring within 1 year[6] (BCG-Unresponsive[5])
- Up to 40% patients progress from BCG-Unresponsive CIS to MIBC within 5 years[7,8,9,10]
- ½ of patients who progress, develop metastatic disease, resulting in death in nearly all cases
- Radical cystectomy is the current standard of care for BCG-Unresponsive CIS

There is a critical need for effective bladder-sparing therapies for BCG-Unresponsive NMIBC [11]



1) Ripoll, J., Ramos, M., Montaño, J. et al. Cancer-specific survival by stage of bladder cancer and factors collected by Mallorca Cancer Registry associated to survival. BMC Cancer 21, 676 (2021). https://doi.org/10.1186/s12885-021-08418-yhttps://seer.cancer.gov/statfacts/html/urinb.html(accessed 04-Dec-2019)

2) Librenjak D, Novaković ZS, Milostić K. Carcinoma in situ of urinary bladder: incidence, treatment and clinical outcomes during ten-year follow-up. Acta Clin Croat. 2012 Jun;51(2):201-7. PMID: 23115943.

3) Chang SS. AUA/SUO guideline [manuscript]. 2016 (Number shown includes patients with CIS only. Publications do not report the percentage of patients with concomitant CIS±Ta, T1)

4) Steinberg RL, et al. Bladder Cancer 2015;1:105-126

5) Nepple KG et al. J Urol. 2010 Nov; 184:1915-1919

6) Hussain MHA. J Clin Oncol. 2009;27:5680-5684

7) Chanåg SS. AUA/SUO guideline [manuscript]. 2016

8) Hussain MHA. J Clin Oncol. 2009;27:5680-5684

9) van den Bosch S. Eur Urol. 2011;60:493-500

10)Kamat AM, et al. Lancet 2016;388:2976-2810

11) Li R, Sundi D, Zhang J, Kim Y, Sylvester RJ, Spiess PE, Poch MA, Sexton WJ, Black PC, McKiernan JM, Steinberg GD, Kamat AM, Gilbert SM. Systematic Review of the Therapeutic Efficacy of Bladder-preserving Treatments for Non-muscle-invasive Bladder Cancer Following Intravesical Bacillus Calmette-Guérin. Eur Urol. 2020 Sep;78(3):387-399. doi: 10.1016/j.eururo.2020.02.012. Epub 2020 Mar 4. PMID: 32143924; PMCID: PMC7771323.

Market Opportunity

$1.1[5] Billion Annually

7,706[7] x $200,000[1] = $1.54 Billion Annually

Social Demand

Patients willing to pay between $USD 50k to $USD 150k per Quality Adjusted Life Year ("**QALY**") for treatment

(2 Years = $USD 100k to $USD 300k (Average = $USD 200k)[1]

Innovation Demand

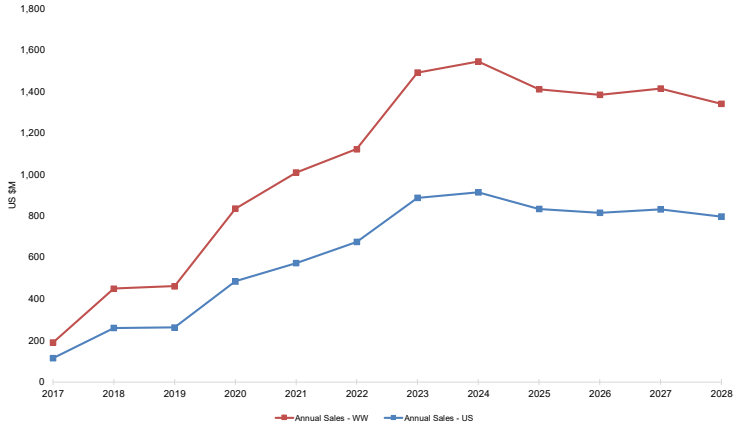
Bladder cancer patients face low Quality of Life after radical cystectomy, high morbidity and high mortality[2]

Financial Demand

From diagnosis to death, it costs between $USD 89,000 to $200,000 to treat a bladder cancer patient[3]

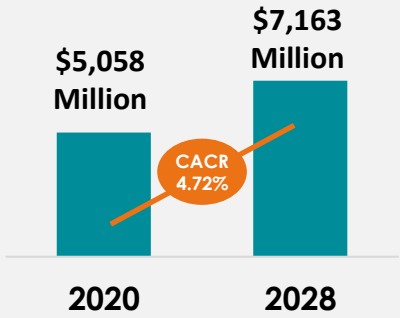
Bladder cancer has the highest lifetime treatment costs per patient of all cancers[4]

KEYTRUDA Sales - Bladder Cancer[8]



Market Opportunity Estimated Between $1.1 to $7.2 Billion Annually

Global Bladder Cancer Market[6]



1) Willingness to pay per QALY for competitor drug, Pembrolizumab. Source: Cost-effectiveness of Pembrolizumab in Second-line Advanced Bladder Cancer, July 2018
2) Tyson MD 2nd, Barocas DA. Quality of Life After Radical Cystectomy. Urol Clin North Am. 2018 May;45(2):249-256. doi: 10.1016/j.ucl.2017.12.008. Epub 2018 Feb 21. PMID: 29650140.
3) Sievert KD, Amend B, Nagele U, et al. Economic aspects of bladder cancer: what are the benefits and costs?. World J Urol. 2009;27(3):295–300. doi:10.1007/s00345-009-0395-z
4) Ida K, Miyake M, Murakami K et al. Bacillus Calmette-Guérin-unresponsive non-muscle invasive bladder cancer outcomes in patients without radical cystectomy. Int J Clin Oncol. 2021 Nov;26(11):2104-2112. doi: 10.1007/s10147-021-01988-8. Epub 2021 Jul 27. PMID: 34313904
5) 2025 estimated bladder cancer market (US, France, Germany, Italy, Spain, UK & Japan). Source: Global Data: Bladder cancer market size to more than triple to over $1.1 billion by 2025, April 2017
6) Global Bladder Cancer Market Size By Type (Diagnosis, Treatment), By Cancer Type (Transitional Bladder Cancer, Invasive Bladder Cancer, Superficial Bladder Cancer), By Geographic Scope And Forecast, Mar 2022
7) Key Statistics for Bladder Cancer – American Cancer Society (2023); Canadian Cancer Society (2022) and Bladder Cancer – European Cancer Patient Coalition (246,590 x 5% CIS x (25% Initial Failure Rate + (75% x 50% recurrence)) = 7,706)
8) Evaluate Pharma – Revenue Data – December 1, 2022

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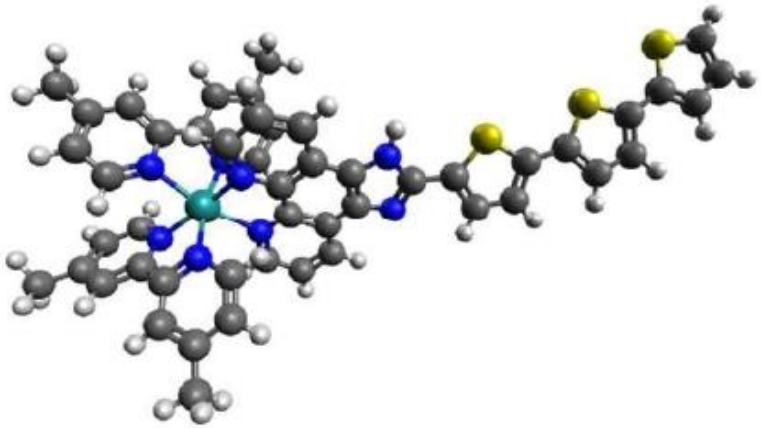
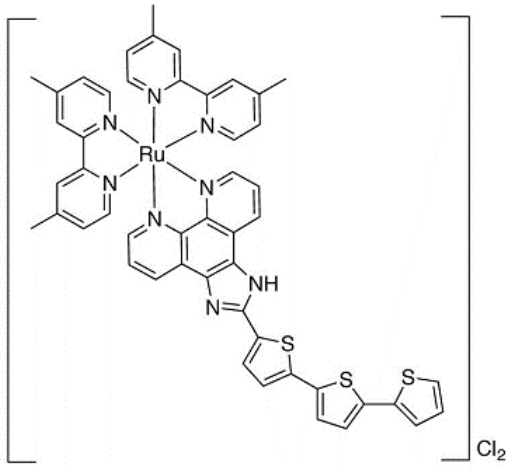
Ruvidar ™ (TLD-1433)

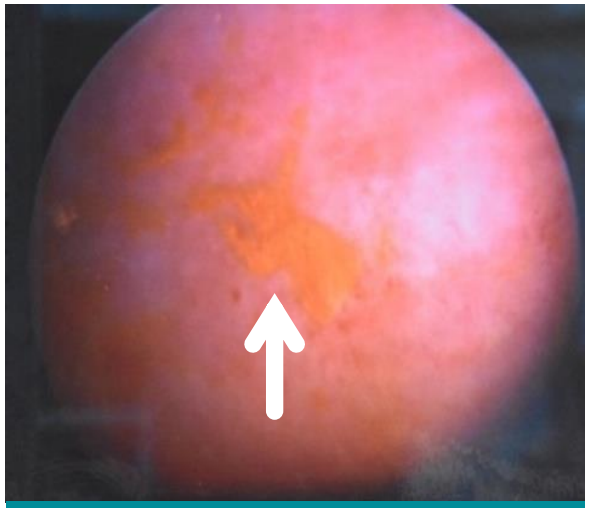




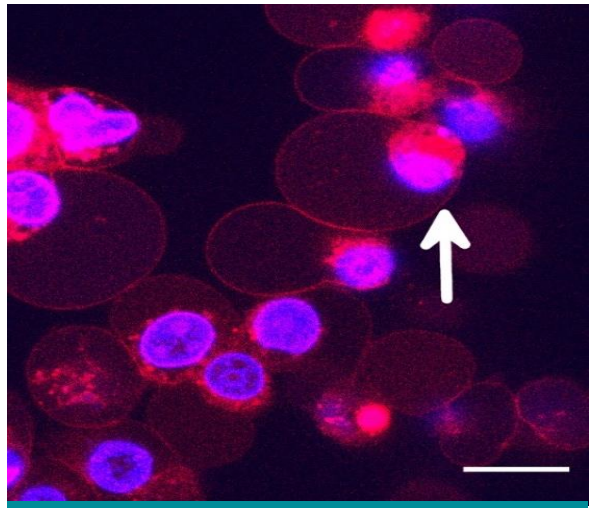
- Ruthenium based PDC
- Designed to destroy solid core tumours (i.e.: bladder, brain, lung and breast) when absorbed by the cancer cell and light activated[1]
- GMP manufactured in kilogram batches with high yield and high purity (98%)
- < 0.5 grams used for NMIBC Study Treatment

1) Kaspler P, Lazic S, Forward S, Arenas Y, Mandel A, Lilge L. A ruthenium(ii)based photosensitizer and transferrin complexes enhance photo-physical properties, cell uptake, and photodynamic therapy safety and efficacy. Photochem Photobiol Sci. 2016 Apr;15(4):481-95. doi: 10.1039/c5pp00450k. Epub 2016 Mar 7. PubMed PMID: 26947517

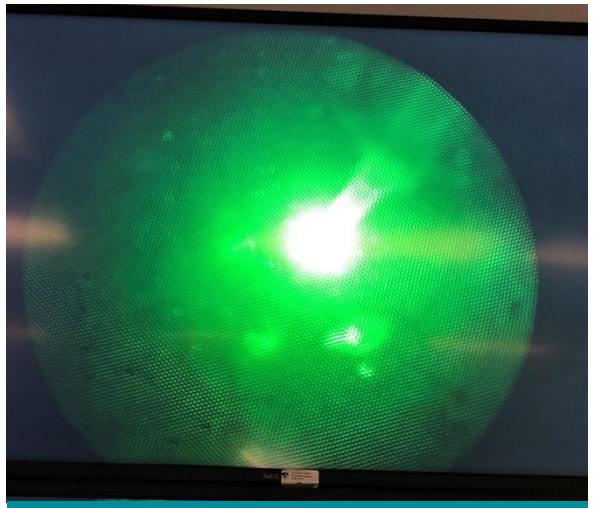
Study Treatment



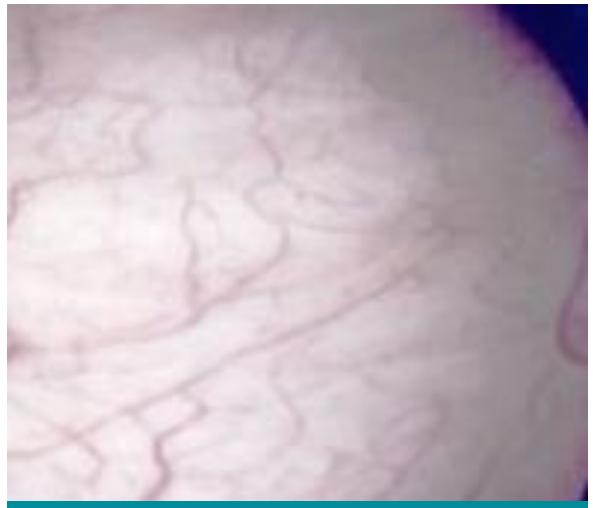
Ruvidar™ instilled in bladder via catheter demonstrating absorption into CIS[1]



Ruvidar™ localizes preferentially inside bladder cancer cells[2,3]



Green laser light activates Ruvidar™ through fiber optics



Bladder cancer cells destroyed by the production of singlet oxygen and / or Reactive Oxygen Species ("**ROS**")[2]

1) Phase Ib NMIBC clinical study patient cystoscopy photograph, after instillation of Study Drug, prior to TLC-3200 Light Activation, showing TLD-1433 localization to bladder cancer tumours
2) Kalinina S, Breymayer J, Reeß K, Lilge L, Mandel A, Rück A. Correlation of intracellular oxygen and cell metabolism by simultaneous PLIM of phosphorescent TLD1433 and FLIM of NAD(P)H. J Biophotonics. 2018 Oct;11(10):e201800085. doi:10.1002/jbio.201800085. Epub 2018 Jul 9. PubMed PMID: 29877627.
3) Seymour GJ, Walsh MD, Lavin MF, Strutton G, Gardiner RA. Transferrin receptor expression by human bladder transitional cell carcinomas. Urol Res. 1987;15(6):341-4

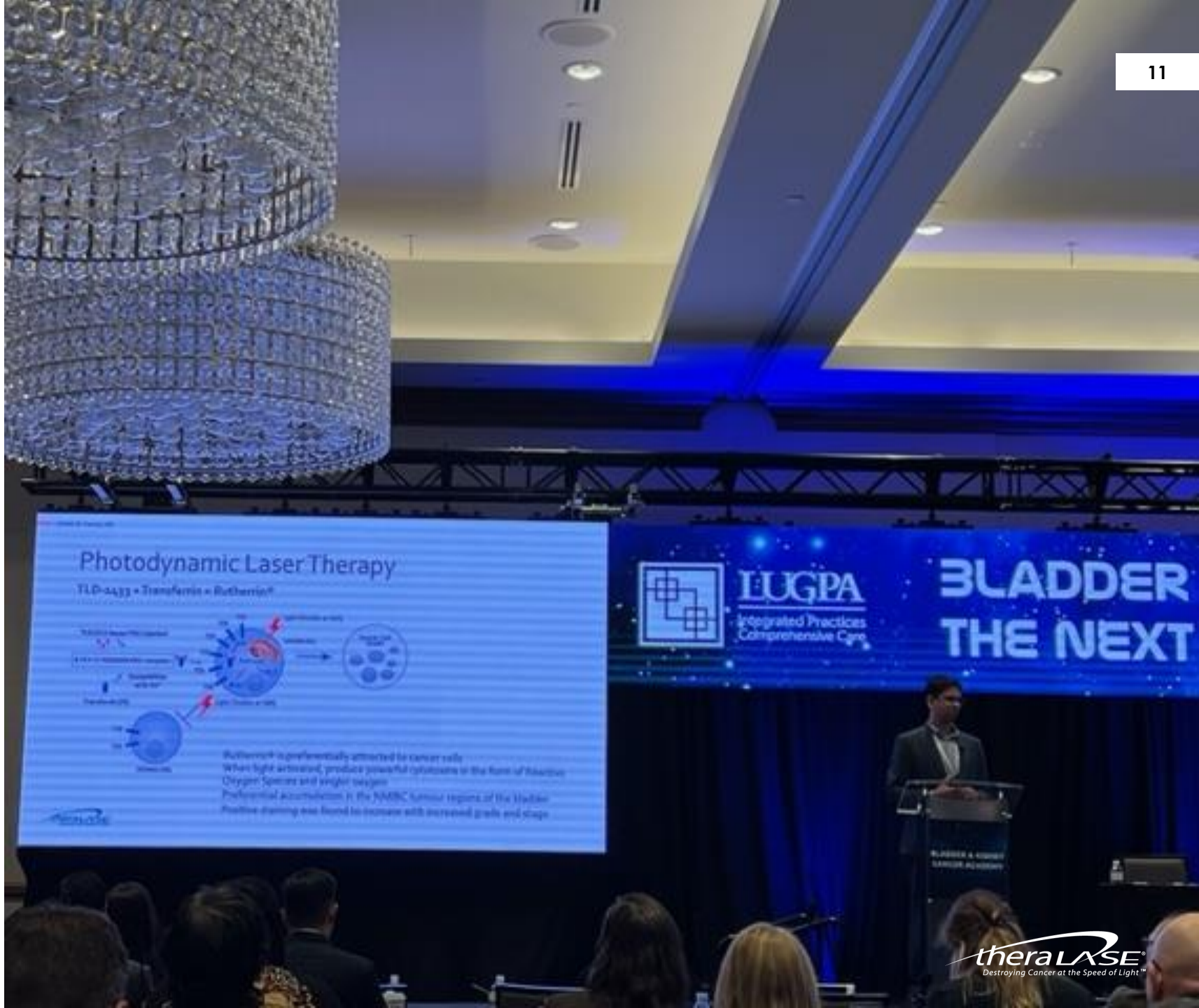
Clinical Target

A clinically meaningful initial Complete Response Rate ("**CRR**") for Carcinoma In-Situ ("**CIS**") or recurrence-free rate (for papillary tumors) of at least:

- 50% at 6 months
- 30% at 12 months
- 25% at 18 months

is recommended. (International Bladder Cancer Group ("**IBCG**"))[1]

Theralase®'s objective is to exceed these guidelines.



1) Kamat AM et al. J Clin Oncol. 2016; 34: 1935-1944

Phase II NMIBC Clinical Study[1]

Study design consistent with FDA Guidance:

"In BCG-Unresponsive NMIBC, a single-arm clinical trial with Complete Response Rate ("**CRR**") and duration of response as the primary endpoint can provide primary evidence of effectiveness to support a marketing application"[2]

Primary Objective

Initial Efficacy

(CR achieved at any point in time)

1) Negative cystoscopy and negative cytology
2) Positive cystoscopy (low grade disease) and negative cytology
3) Negative cystoscopy and positive cytology (if random bladder biopsies are negative)

Secondary Objective

Duration of Efficacy

(12 months duration of CR after diagnosis of initial CR)

15 months from primary Study Procedure

Patient followed for up to 36 months to show duration of response

Tertiary Objective

Safety

Incidence and severity of Adverse Events ("**AEs**") > Grade 3, directly related to the Study Drug or Study Device, that do not resolve within 450 days post primary study procedure

Grade 1 = Mild
Grade 2 = Moderate
Grade 3 = Severe
Grade 4 = Life-threatening
Grade 5 = Death

1) Clinical Protocol TLD-1433-2 (Version 11.0). July 21, 2020
2) "BCG-Unresponsive Nonmuscle Invasive Bladder Cancer: Developing Drugs and Biologics for Treatment – Guidance for Industry". February 2018. www.fda.gov/media/101468/download

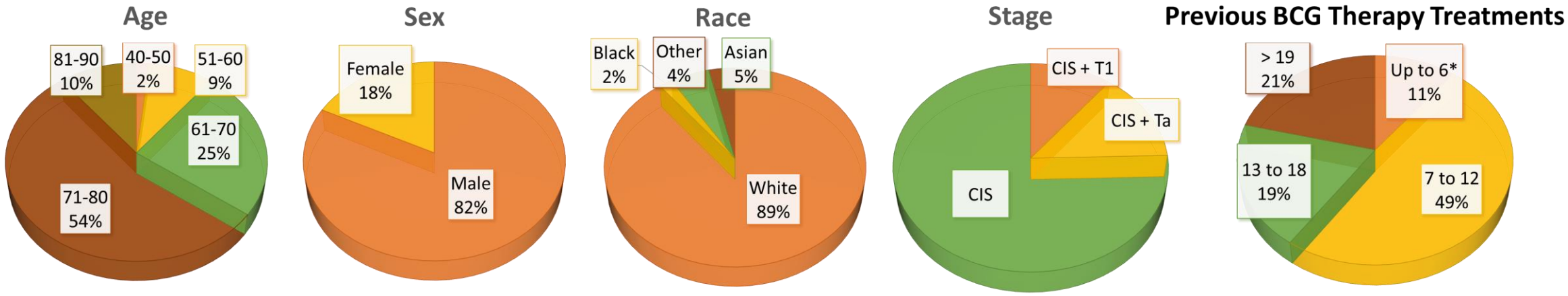
Study Design

- Approximately 100 patients with BCG-Unresponsive NMIBC CIS
- 10 clinical study sites currently enrolling patients in Canada and the United States (Up to 15 in 2024)
- Patient provided primary Study Procedure on Day 0 (1 hour of drug instillation, 1 to 1.5 hours of light activation)
- Outpatient procedure
- Surgeon has the option to deliver up to 2 more re-induction Study Procedures, if the patient recurs
- Patient followed up quarterly for 2 years and then semi-annually for 3 years

UHN
London Health Sciences Centre
McGill University Health Centre
nova scotia health authority
THE UNIVERSITY OF BRITISH COLUMBIA
CURC Carolina Urologic Research Center, LLC
WISCONSIN UNIVERSITY OF WISCONSIN–MADISON
UROLOGY SAN ANTONIO
THE UNIVERSITY OF CHICAGO
UA UROLOGY ASSOCIATES, P.C.

Phase II NMIBC Interim Clinical Data[1]

Patient Demographics



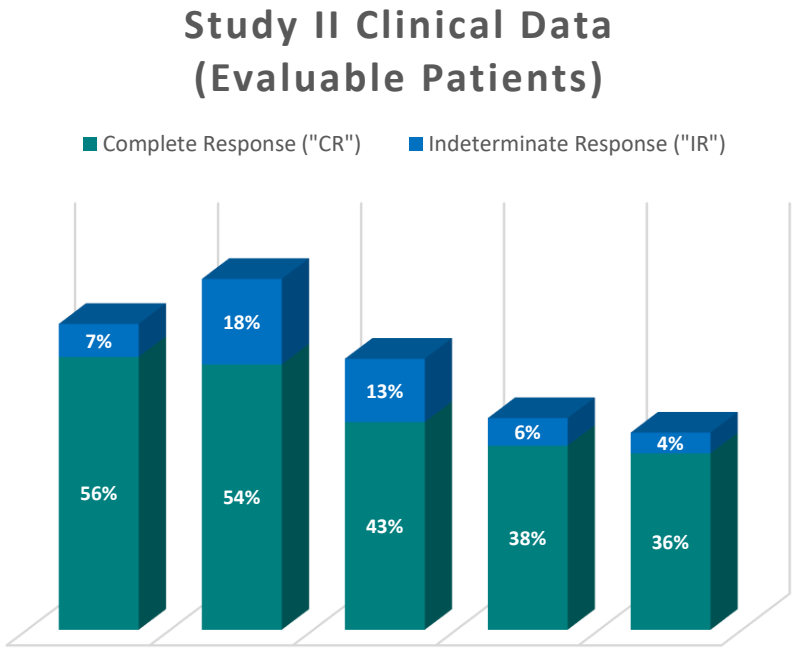
Ruvidar ™ has been demonstrated to achieve complete responses in patients, previously treated with and who failed therapy with: BCG, systemic PD-L1 immunotherapies and chemotherapies, intravesical oncolytic viruses and intravesical chemotherapies (gemcitabine with or without docetaxel).

1) Press Release - Theralase® Provides Update on Phase II Bladder Cancer Clinical Study – January 15, 2024

Phase II NMIBC Interim Clinical Data[1]

Assessment	Primary Objective Performance		Secondary Objective Performance		Tertiary Objective Performance	
	#	%	#	%	#	%
Complete Response ("CR")	38	64%	17	36%	59	100%
Indeterminate Response ("IR")	6	10%	2	4%	0	0%
Total Response (CR and IR)	44	75%	19	40%	59	100%
Evaluable Patients	59		47		59	

Assessment	Patient Assessment Visit									
	90 Days		180 Days		270 Days		360 Days		450 Days	
	#	%	#	%	#	%	#	%	#	%
Complete Response ("CR")	33	56%	31	54%	23	43%	20	38%	17	36%
Indeterminate Response ("IR")	4	7%	10	18%	7	13%	3	6%	2	4%
Total Response (CR and IR)	37	63%	41	72%	30	56%	23	43%	19	40%
Evaluable Patients	59		57		54		53		47	



Note: The data analysis is only a representation of the data accrued to date and does not intend to represent a tendency or portray any conclusion as to the effectiveness, duration or safety of the investigational treatment.

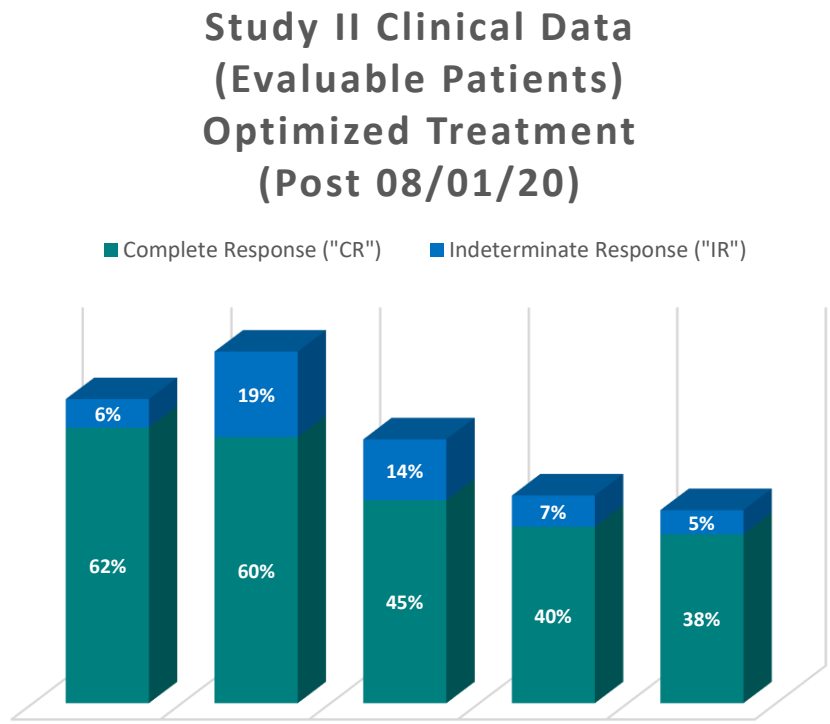
Note: Indeterminate Response ("**IR**") is defined as negative cystoscopy (no evidence of Urothelial Cell Carcinoma ("**UCC**") in the bladder) and positive urine cytology (detection of cancer in the urine, without a negative confirmatory bladder biopsy, suggesting UCC in the renal system other than the bladder)

1) Press Release - Theralase® Provides Update on Phase II Bladder Cancer Clinical Study – January 15, 2024

Phase II NMIBC Interim Clinical Data[1]

On August 1, 2020, the Company optimized the Study II Treatment. For patients that received the optimized Study II Treatment the CR, IR and Total Responders are detailed below by assessment visit.

Assessment	Patient Assessment Visit (Optimized Treatment - Post August 1, 2020)									
	90 Day		180 Day		270 Day		360 Day		450 Day	
	#	%	#	%	#	%	#	%	#	%
Complete Response ("CR")	29	62%	28	60%	20	45%	17	40%	14	38%
Indeterminate Response ("IR")	3	6%	9	19%	6	14%	3	7%	2	5%
Total Response (CR and IR)	32	68%	37	79%	26	59%	20	47%	16	43%
Total Evaluated	**47**		**47**		**44**		**43**		**37**	



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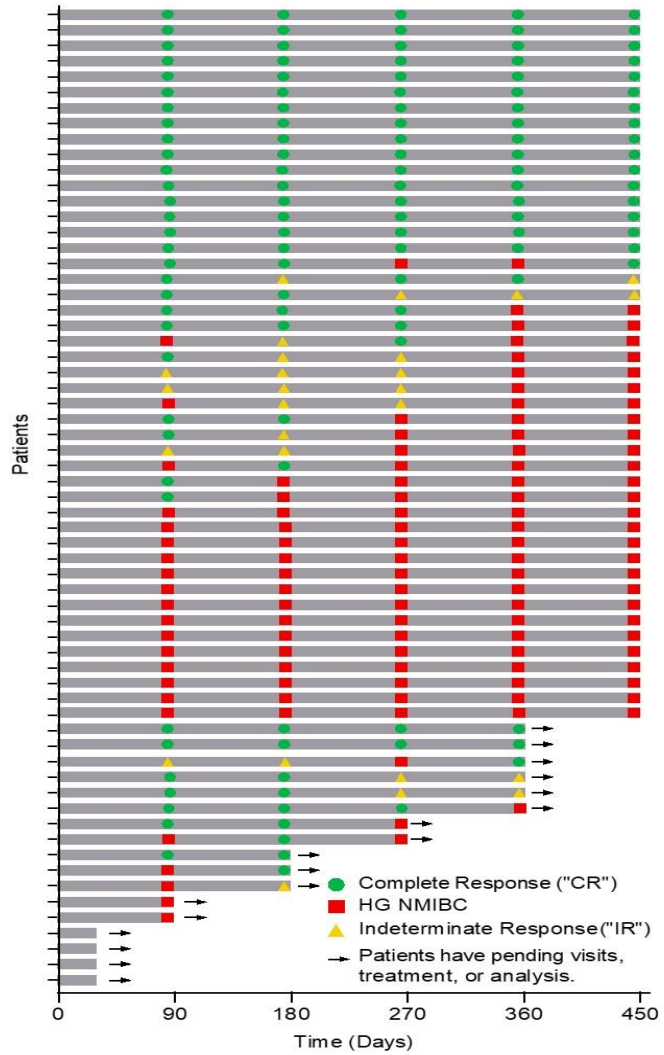
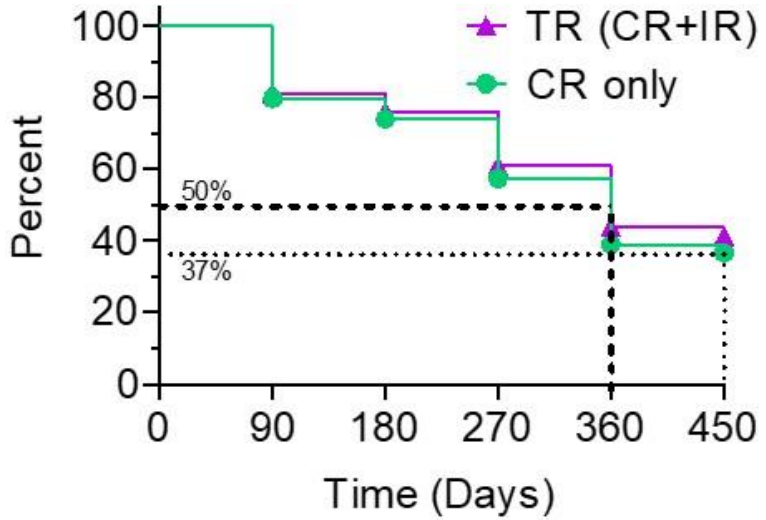
1) Press Release - Theralase® Provides Update on Phase II Bladder Cancer Clinical Study – January 15, 2024

Phase II NMIBC Interim Clinical Data[1]

Swimmer's Plot:



Kaplan-Meier Curve



- > 80% of patients remained in Study II after 90 days, following the initial Study II Treatment.
- For all evaluable patients, 41% of Total Response ("**TR**") have a duration of response ≥ 450 days, while 37% of Complete Response ("**CR**") evaluable patients have a duration of response ≥ 450 days.
- For optimized evaluable patients, 44% of TR patients have a duration of response ≥ 450 days and 39% of CR have a duration of response ≥ 450 days.

1) Press Release - Theralase® Provides Update on Phase II Bladder Cancer Clinical Study – January 15, 2024

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Phase II NMIBC Interim Clinical Data[1]

Serious Adverse Events

For 63 patients treated in Study II, there have been 13 Serious Adverse Events ("**SAEs**") reported:

- 2 – Grade 2 (resolved within 1 and 1 days, respectively)
- 7 – Grade 3 (resolved within 1,2, 3, 4, 4, 82 and unknown days, respectively)
- 3 – Grade 4 (resolved within 3, 6 and 8 days, respectively)
- 1 – Grade 5

Theralase® believes all SAEs reported to date are unrelated to the Study II Drug or Study II Device, as reviewed and confirmed by the independent Data Safety Monitoring Board ("**DSMB**").

Note: A SAE is defined as any untoward medical occurrence that at any dose: Is serious or life-threatening, requires inpatient hospitalization or prolongation of existing hospitalization, results in persistent or significant disability/incapacity, is a congenital anomaly/birth defect or results in death.

1) Press Release - Theralase® Provides Update on Phase II Bladder Cancer Clinical Study – January 15, 2024

FDA Approved Drugs Versus Ruvidar™

Company/ FDA Approved Drug (Date of Approval)	Number of Patients	Initial Complete Response ("CR")	Durable CR (15 months)	Pros	Cons	Annual Cost ($USD 000s)
Anthra Pharmaceuticals Valrubicin[1, 2] (1981)	90	21%	7.7%	First intravesical drug approved by the FDA for NMIBC.	Not a BCG-Unresponsive population. Not recommended by US uro-oncologists	$44 to $66 (weekly for six weeks)
Merck Pembrolizumab (Keytruda*)[3,4] (2020)	96	40%	18.9%	First immunotherapy drug approved for BCG-Unresponsive NMIBC CIS.	Patients must have PD-L1 expression to generate a response. Only applicable to 20 to 40% of patient population. Associated with serious adverse events, not recommended.	$150 (every 3 weeks for 24 months)
Ferring Adstiladrin[5] (2023)	98	51%	23.5%	First intravesical oncologic virus approved for BCG-Unresponsive NMIBC CIS.	Response of 3.9% CR at 24 months.	$159 to $262 (once every 3 months) $60 per installation
Theralase® Ruvidar™ [6] (Estimated for 2026)	63/100	64% CR (75% TR)	36% (40% TR) (43% optimized TR)	High initial efficacy and high duration of efficacy at 15 months. A majority of patients achieve CR after only 1 procedure. Demonstrated 8 years shelf life.	Not currently FDA approved	$Unknown (Single treatment)

1) Steinberg G, Bahnson R, Brosman S, Middleton R, Wajsman Z, Wehle M. Efficacy and safety of valrubicin for the treatment of Bacillus Calmette-Guerin refractory carcinoma in situ of the bladder. The Valrubicin Study Group. J Urol. 2000 Mar;163(3):761-7. Erratum in: J Urol. 2008 Jan;179(1):386. PMID: 10687972.

2) Dinney CPN et al. Intravesical valrubicin in patients with bladder carcinoma in situ and contraindication to or failure after bacillus Calmette-Guérin. Urol Oncol. 2013 Nov;31(8):1635-42

3) Balar, A.V., et al., Pembrolizumab monotherapy for the treatment of high-risk non-muscle-invasive bladder cancer unresponsive to BCG (KEYNOTE-057): an open-label, single-arm, multicentre, phase 2 study. Lancet Oncol, 2021. **22**(7): p. 919-930.

4) Press Release – Merck's KEYTRUDA® (pembrolizumab) Showed a Complete Response Rate of Nearly 40 Percent in Patients with High-Risk Non-Muscle Invasive Bladder Cancer (NMIBC) Unresponsive to Standard of Care – October 20, 2018

5) FDA Press Announcement. FDA Approves First Gene Therapy for the Treatment of High-Risk, Non-Muscle-Invasive Bladder Cancer.

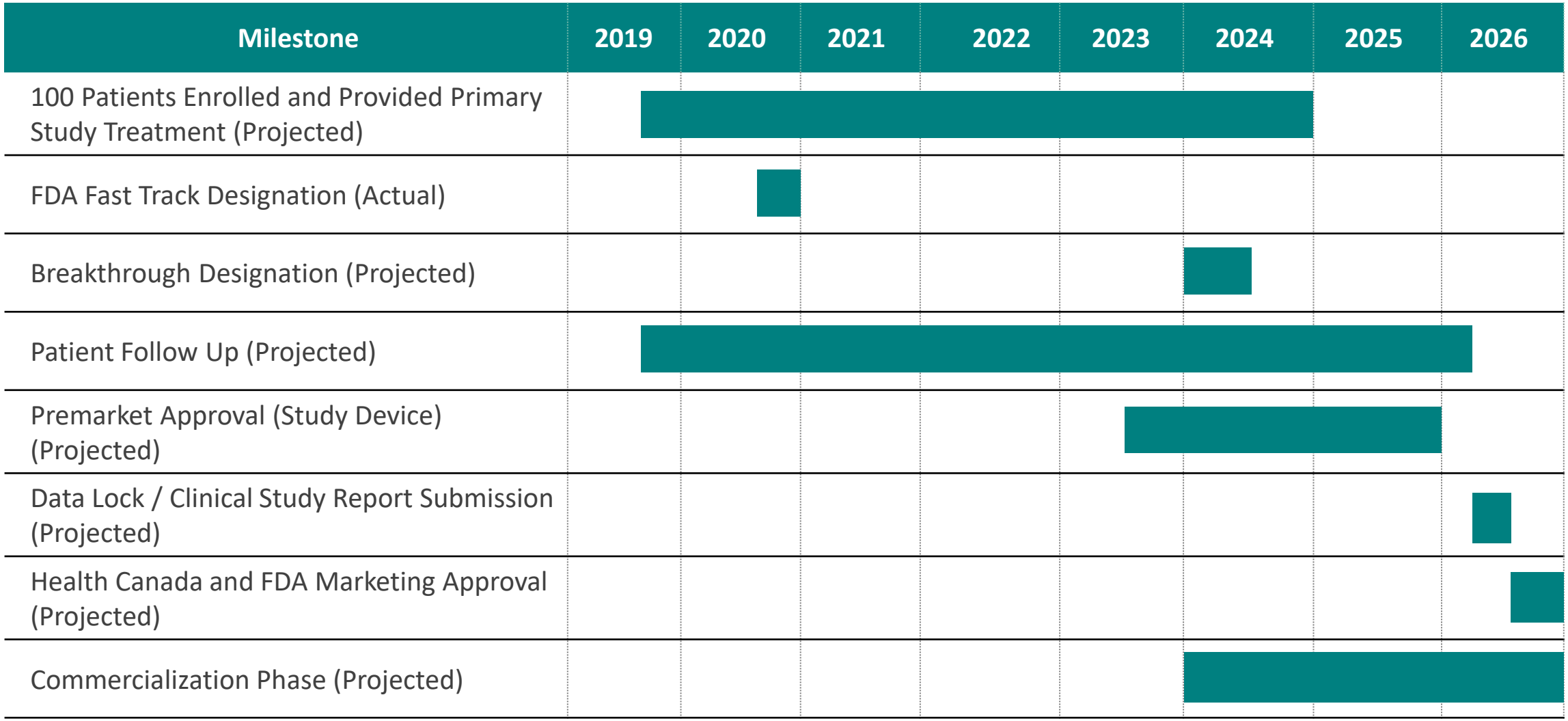
6) Press Release - Theralase® Release's 3Q2023 Interim Financial Statements - November 29, 2023

Competitive (Non-FDA Approved) Drugs Versus Ruvidar™

Competitive Drug (Non-FDA Approved)	Number of Patients	Initial Complete Response ("CR")	Durable CR (15 months)	Pros	Cons	Annual Cost ($USD 000s)
Immunity Bio BCG + N803 [1] (Intravesical SL-15 agonist) (Estimated for 2026)	83 / 200	71%	45%	High initial efficacy and duration of efficacy.	Combinational product, combined with standard of care BCG. Unknown contribution of BCG in the patient population. Received FDA Complete Response Letter, working on resolving manufacturing issues with a biological drug. Difficult to protect as BCG is FDA approved. Not currently FDA approved.	$Unknown (Primary: weekly for 6 weeks, with another re-induction if no response)
Johnson and Johnson Slow-Release Gemcitabine [2] (Intravesical chemotherapy) (Estimated for 2026)	54/80	76.7% (23/30)	26% (6/23)	High initial efficacy. Early stage with more clinical data to be collected.	Previous studies have shown that Gemcitabine may result in little to no difference in the risk of progression compared to saline. Serious adverse events associated with chemotherapy. Not currently FDA approved.	$Unknown (Dosed every 3 weeks for 24 weeks, followed by every 12 weeks through week 96)
CG Oncology Cretostimogene grenadenorepvec [3] (Intravesical oncolytic immunotherapy) (Estimated for 2026)	66/116	75.7%	50.0% (9 months)	High initial efficacy.	Biological drugs are prone to manufacturing issues. Not currently FDA approved. Gene therapy is not readily adopted by all uro-oncologists due to complexities.	$Unknown (6 weekly treatments, then 6 weekly treatments or 3 weekly treatments based on response, then 3 weekly treatments every 12 weeks)
enGene EG-70 (detalimogene voraplasmid) [4] (Non-viral gene therapy) (Estimated for 2028)	Not reported	73% (16/22)	Not reported	High initial efficacy. Early stage with more clinical data to be collected.	Phase Ib clinical study. Phase II clinical study just commenced.	$Unknown Unknown treatment schedule

1) Steinberg G, Bahnson R, Brosman S, Middleton R, Wajsman Z, Wehle M. Efficacy and safety of valrubicin for the treatment of Bacillus Calmette-Guerin refractory carcinoma in situ of the bladder. The Valrubicin Study Group. J Urol. 2000 Mar;163(3):761-7. Erratum in: J Urol. 2008 Jan;179(1):386. PMID: 10687972.
2) SunRISe-1: TAR-200 Monotherapy in Patients With BCG Unresponsive High-Risk Non–Muscle-Invasive Bladder Cancer (HR NMIBC). ESMO 2023. Uro Today. October 20, 2023
3) Balar, A.V., et al., Pembrolizumab monotherapy for the treatment of high-risk non-muscle-invasive bladder cancer unresponsive to BCG (KEYNOTE-057): an open-label, single-arm, multicentre, phase 2 study. Lancet Oncol, 2021. 22(7): p. 919-930.
4) Press Release – enGene Reports First Quarter 2024 Financial Results and Recent Corporate Progress – March 11, 2024

Regulatory Timeline



Regulatory Strategy: Study Drug (IND / NDA) - Study Device (PMA) – Drug / Device Combination

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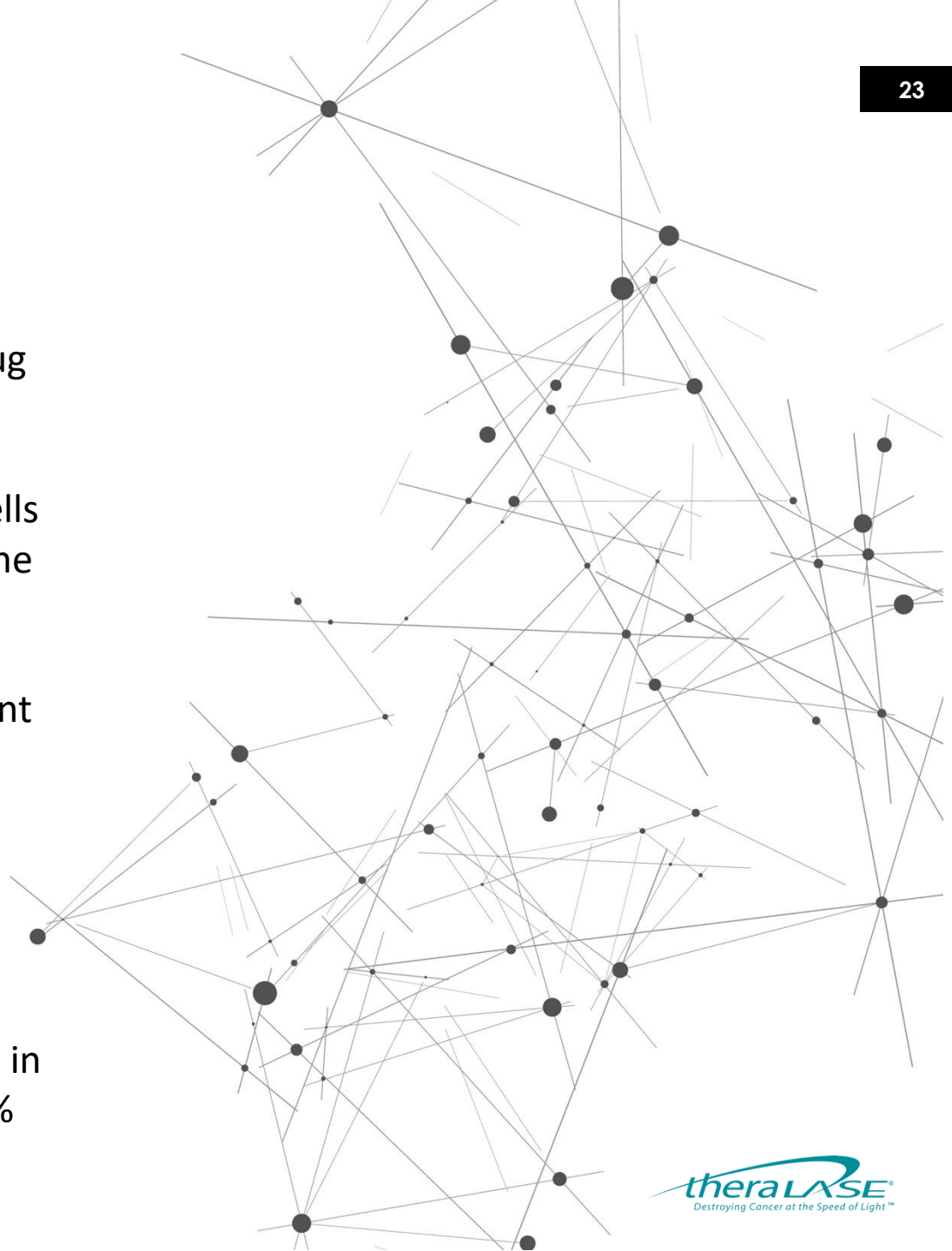
Capital Structure

TSXV:TLT			03/15/2024
Common share price	$CAN 0.21	Warrants	87,194,853
Market Capital	$CAN 49.4 M	Options	18,500,000
Shares Outstanding	235,127,528	Finder Units	2,041,941
Fully Diluted	344,906,263	Insider Ownership	12.75% Fully Diluted

VENTURE 50 2023 VENTURE 50 2020 VENTURE 50 2019 2015 venture50 TMX TSX Venture Exchange

Investment Highlights

- Potential next standard of care treatment for bladder cancer (10th most common cancer in the world (6th in men))
- Unique value proposition combining a patented light-sensitive drug and proprietary laser system
- Able to directly destroy bladder cancer, leaving healthy bladder cells intact and providing a secondary response through activation of the immune system
- 63/100 patients enrolled and provided the primary study treatment in a FDA Phase II registration clinical study
- If FDA approved, Theralase® will gain access to cancer markets estimated to be $1 to $7 B annually.
- Interim data to date better than FDA approved Keytruda® (Pembrolizumab) (60% improvement in CR and 90% improvement in duration of CR) and Adstiladrin® (25% improvement in CR and 53% improvement in duration of CR)



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