GBC AG
Investment Research

# Research Report (Initial Coverage)

# Defence Therapeutics

defence
THERAPEUTICS

## Uniquely Positioned with versatile ACCUM™

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## Enormous upside potential

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## Next generation of cancer treatment

## Target price: CAD 11.02 (7,60 EUR)

## Rating: BUY

**IMPORTANT NOTICE:**
**Please note the disclaimer/risk notice**
**as well as the disclosure of possible conflicts of interest pursuant to § 85 WpHG and Art. 20 MAR from page 42**

**Notice pursuant to MiFID II regulation for research "Minor Non-Monetary Contribution": This research meets the requirements for classification as "Minor Non-Monetary Contribution". For further information, please refer to the disclosure under "I. Research under MiFID II".**

**Date and time of completion of the study: 09/02/2022 (9:32 pm)**
**Date and time of first transmission: 10/02/2022 (11:00 am)**
**Validity of the course target: until max. 31/12/2022**

# Defence Therapeutics Inc.*5a,5b,6a,7,11

**Rating: BUY**
**Target price: CAD 11.02 (7.60 EUR)**

Current price: 4.90
04.02.2022 / CSE
Currency: CAD

**Master data:**
ISIN: CA24463V1013
WKN: A3CN14
CSE: DTC
OTCQB: DTC.F
DB: DTC
Number of shares[3]: 47.0
Marketcap[3]: 230.3

[3] in m / in m CAD / fully diluted
Free float: 60.0%

Primary listing: Canada CSE
Secondary listing: Deutsche Boerse, OTCQB

Accounting Standard: IFRS

FY End: 31/03/

**Analysts**:

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* Catalogue of possible conflicts of interest on page 43

**Company profile**

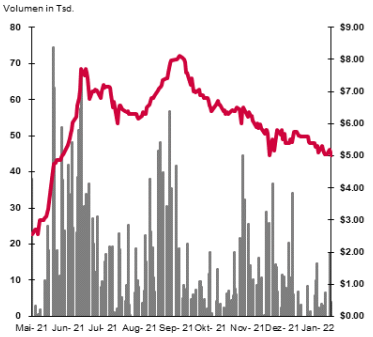
Industry: Biotechnology

Focus: Research and development of biologicals and biosimilar therapeutic drugs for cancer and infectious diseases.

Foundation: 2017

Headquarter: Vancouver (British Columbia - Canada)

Board of Directors: Sebastien Plouffe (CEO), Patrick Joseph Meagher (CFO), Dr. Moutih Rafei (VP R&D), Dr. Raimar Lobenberg, Dr. Sarkis Meterissian, Dr. Riam Shammaa. Additional Management: Dr. Simon Beaudoin (CTSO), Carrie Cesarone (Corporate Secretary)




Defence Therapeutics is a pre-clinical biotechnology company using its own proprietary biological drug enhancer to improve the efficacy and safety of a multitude of biological/biosimilar-based pharmaceuticals used in the treatment of cancer and infectious diseases.

The company's primary asset is its owned proprietary platform termed ACCUM™ Technology. This technology enhances intracellular accumulation of any molecule of pharmacological interest with various applications in oncology and vaccine design against infectious diseases. This enhanced absorption could result in higher treatment efficiency and lower unwanted side effects.

The company has 47.0M shares fully diluted, with almost 40% insider and employee's ownership, and sufficient cash resources to support their current research up to a phase 1 trial.

**Latest development: January 26, 2022**
The Company announced the development of AccuVAC-PT009, a new protein-based HPV vaccine, leading to a humoral response bypassing Gardasil-9 (Merck) immunogenicity in animals. Compared to Gardasil-9, AccuVAC-PT009 triggers an impressive 27- and 36-fold increase in antibody titer at 4- and 6-weeks post-immunization respectively.

| | Admission probability | Fair value (in CADm) |
|---|---|---|
| AccuTOX-002B | 3.4% | 74.75 |
| AccuVAC-D002 | 3.4% | 62.27 |
| AccuVAC-PT001/AccuVAC-IN003 | 6.3% | 109.39 |
| AccuVAC-PT009 | 8.6% | 130.68 |
| AccuADC-001/AccuADC-002 | 3.4% | 93.66 |
| Overhead Costs | | -31.86 |
| Warrants | | -41.42 |
| | **Total** | **397.47** |

| **Financial calendar** |
|---|
| 10/02/2022 Interim financials |
| 17/02/2022 IIF International Investment Forum |
| 03/05/2022 MKK Munich Capital Markets Conference |
| 10/05/2022 Interim financials |

| ****last research from GBC:** |
|---|
| Date: Publication / Target price in CAD / Rating |

** The research studies listed above can be viewed at www.gbc-ag.de or requested from GBC AG, Halderstr. 27, D86150 Augsburg, Germany.

## EXECUTIVE SUMMARY

- **Proprietary platform technology with proven enhanced intracellular delivery.** Promotes delivery of target product without non-specific protein/antigen degradation or interference.
- **Strong versatility of the Accum™ platform.** The company has published promising pre-clinical results in eleven different indications with various applications in ADCs, Cancer Vaccines, and ID Vaccines.
- **Uniquely positioned.** Accum™ technology is the next generation of cancer treatment.
- **Massive upside potential.** All their current research is pre-clinical and have shown remarkable results.
- **Growth opportunity.** The company is far from done unlocking the full potential of Accum™ technology.
- **Attractive capital structure.** The company has only 47.0M shares fully diluted
- **Well financed.** The company has currently enough cash on hand to complete their planned Phase I studies.
- **Strong and Extensive experienced team** in pre-clinical/clinical, business development, CMC and regulatory.
- **Major milestones to be achieved within the next 6-12 months** with many GLP ongoing studies and planned filing of Phase I studies for both Melanoma and breast cancer.
- **Flexible business model:** From royalties to JVs or full development. Accum™ technology allows for an optimized business model for each indication and possible near-term revenues.

**Based on our DCF model we have determine a price target of 11.02 CAD (7.60 EUR) per share and a BUY rating.**

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# COMPANY

## Factsheet

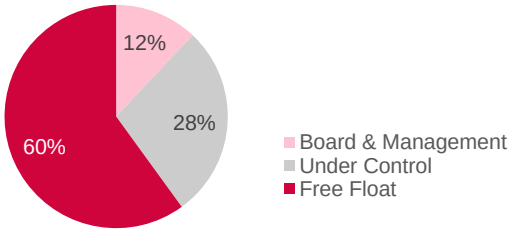
### *Corporate structure*

**Corporate Headquarters**
1680 – 200 Burrard Street Map
Vancouver, British Columbia V6C 3L6
Canada

Defence Therapeutics is a biotechnology company with corporate offices in Vancouver (BC) British-Colombia and in Montreal (QC) with 5 employees working on and off site. Their internal R&D and studies are conducted exclusively in the Laboratory of Dr. Moutih Rafei at Université de Montreal. The company was incorporated on July 17. 2017 and went public on May 7, 2021. There are no subsidiaries.

| **Shareholder structure** | |
|---|---|
| Board & management | 12 % |
| Under control | 28 % |
| Free float | 60 % |
| **Total** | **100 %** |

*Sources: Defence Therapeutics Inc., GBC AG*




| **Outstanding shares in M.** | |
|---|---|
| Common shares | 36.042.774 |
| Warrants (avg.@$1.15) | 9.402.400 |
| Options (avg.@$1.53) | 1.560.000 |
| **Total** | **47.005.174** |

*Sources: Defence Therapeutics Inc., GBC AG*

Exchanges: CNSX:DTC, DB:DT, OCPK:DTCF.F
The Company intends to submit a Nasdaq listing application in the second quarter of 2022.

### *Company history*

After publishing their discovery, Dr. Beaudoin and his team worked on the Accum molecule for another three years until Defence Therapeutics bought the rights to the ACCUM™ technology in 2020.

Since then, the company has discovered new characteristics for ACCUM™ and expanded its potential uses. Defence Therapeutics plans to use the ACCUM™ Technology to transport drugs or biological compounds into tumor target cells to increase their accumulation.

**Historical developments**

| Date | Product | Headline |
|---|---|---|
| Jan-26-2022 | HPV vaccine | Defence Therapeutics Inc. Announces the Development of AccuVAC-PT009 |
| Jan-10-2022 | AccuTOX | Defence Therapeutics Inc. begins ind-enabling testing of its Accutox lead compound against breast cancer |
| Dec-13-2021 | CRISPR | Defence Therapeutics Inc. Accum™ boosts by 9x the delivery effectiveness of CRISPR/Cas9 protein to target cells |
| Nov-03-2021 | COVID Vaccine | Defence Therapeutics Inc. reports successful completion of its COVID-19 vaccine AccuVAC-PT001 toxicology studies in rabbits |
| Oct-13-2021 | ADC | Defence Therapeutics Accum™ variants in vitro study increases the potency of T-Deruxtecan ADC by 5x on breast cancer |
| Oct-06-2021 | DC Vaccine | Defence Therapeutics prepares for Phase I trial to test its DC cancer vaccine, AccuVAC-D002, against melanoma |
| Sep-29-2021 | AccuTOX | Defence Therapeutics Inc. to finalize its objectives to initiate a phase I Trial against breast cancer. |
| Sep-20-2021 | COVID Vaccine | Defence Therapeutics Inc. Announces Development of "Non-Injectable" Second Generation Covid Vaccine, AccuVAC-IN002 |
| Sep-14-2021 | COVID Vaccine | Defence Therapeutics Announces Success in Testing Its Covid19 Accuvacpt001 Vaccine in A Nonrodent Model |
| Sep-07-2021 | HPV vaccine | Defence Therapeutics Inc Announces Development Program to Engineer New HPV Vaccine Initiated |
| Aug-31-2021 | Corporate | Defence Therapeutics Inc. Files Acid-Based Hydrogels USA Provisional Patent Application |
| Aug-18-2021 | ADC | Defence Therapeutics Selects the Best 8 Accum Variants to Optimize Its ADC Therapeutic |
| Aug-08-2021 | Corporate | Defence Therapeutics Inc. Announces Agreement with the PharmaLex GmbH |
| July-06-2021 | COVID Vaccine | Defence Therapeutics Inc. Announces Antibody Response Induced by Defence Therapeutics AccuVAC-PT001 Vaccine Crossreacts with All Tested SARS-CoV-2 Variants |
| July-06-2021 | COVID Vaccine | Defence Therapeutics Inc. Provides Update from AccuVAC-PT001 Vaccine Cross-Reacts with All Tested SARS-CoV-2 Variants |
| June-29-2021 | Corporate | Defence Therapeutics Inc. Signs a Collaboration Agreement with the Curie Institute for Testing the Accum-T-DM1 ADC Therapeutic in PDX Models of Breast Cancer |
| June-22-2021 | Cancer Vaccine | Defence Therapeutics Inc. Announces Major Breakthrough Advances in its Pre-Clinical Research Program on its Accutox Molecules as Potent Anti-Cancer Agents |
| June-07-2021 | Corporate | Defence Therapeutics Inc. Announces Establishment of Collaboration with HUS Comprehensive Cancer Center |

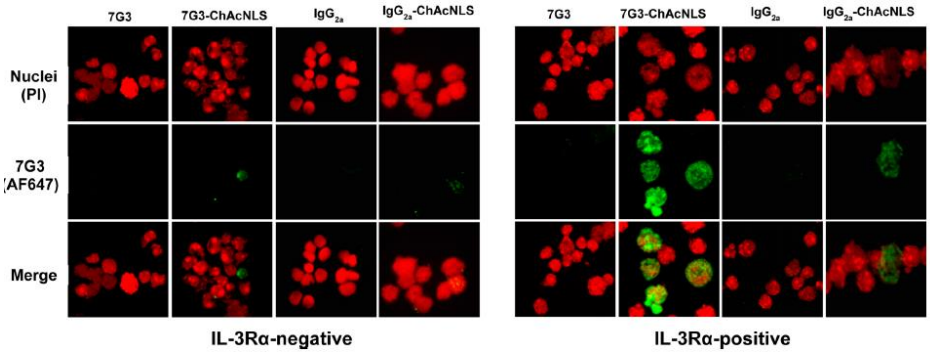
*Sources: Defence Therapeutics, GBC-AG*

## Business Model

### *Accum Technology – The Genesis*

In 2016, Dr. Simon Beaudoin et al. published a paper called: "ChAcNLS, a Novel Modification to Antibody-Conjugates Permitting Target Cell-Specific Endosomal Escape, Localization to the Nucleus, and Enhanced Total Intracellular Accumulation[1] in the Molecular Pharmaceutics journal. This publication announced the design of an optimized monoclonal antibody (mAb), ChAcNLS. The study results showed that ChAcNLS conjugated to the mAb 7G3 provides it with the ability to retain nanomolar affinity, escape the endosomal-lysosomal pathway and reroute to the nucleus, while increasing its intracellular accumulation with a high target cell selectivity[1].

**Total Intracellular Accumulation**




*Source: S. Beaudoin et al.*

In other words, Dr. Beaudoin discovered a new method to enhance the intracellular accumulation of antibody conjugate (ADC). This discovery could increase the payload delivery of targeted cells while leaving healthy cells unharmed. Typically, payloads faced degradation once entering a cell, due to the endosome entrapment difficulty, a well-known defense mechanism to protect the cell from outsiders' attacks.

### *What is the ACCUM Technology?*

Accum is a molecule composed of two parts: a bile acid and a nuclear localization signal (NLS). A payload (ADC/antigen) can also be linked to the molecules function group. The specific combination of the bile acid and the nuclear localization activity of the NLS enables the escape of the therapeutic agent from the endosome/lysosome entrapment and helps it efficiently localize the nucleus inside the cytoplasm[1].

**ChAcNLS molecule**


*Source: Defence Therapeutics*

More technically, it combines Cholic Acid, known role in dietary lipid breakdown, with the peptide CGYGPKKKRKVGG, which contains the nuclear localization sequence (NLS)

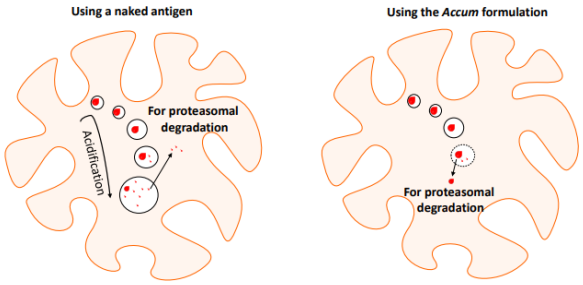
[1] S. Beaudoin et al., Mol Pharm., Bioconjug Chem., 2018; V. Lacasse et al., Mol Ther Methods Clin Dev. 2020.

from the SV-40 large T-antigen and is known as ChAcNLS when discovered. It was then given Accum as a commercial name.

### *How does ACCUM Technology work?*

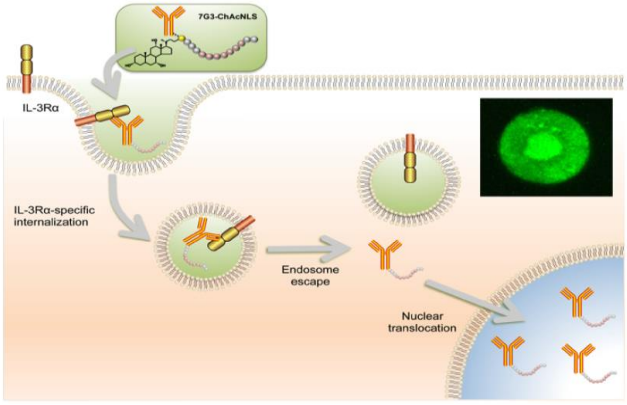
ACCUM Technology protects the linked antigen or ADC of degradation in the endosome. The endosome ensures payload movements within a given cell. When a payload is not recognised by the endosome, it creates an acidic answer, lowering the pH to ~4/5. This leads to the activation of specific enzymes to initiate non-specific antigen degradation[2] and consequently degradation/destruction of the payload. Accum helps the payload escape the endosome and therefore reach its final intracellular destination unharmed, the nucleus.

**Outcomes in antigen degradation**




*Source: Defence Therapeutics*

**ACCUM™ intracell detailed mechanism**




*Source: Defence Therapeutics*

By protecting the enclosed molecule from intracell degradation, the Company looked at the possibility of attaching different Antigen and ADC to understand if this attribute was specific to the attached molecule. The results obtained confirmed the Company's hypothesis and led to the ACCUM™ molecule being viewed more as a platform from which different medications could be created, enhanced, or made less toxic.

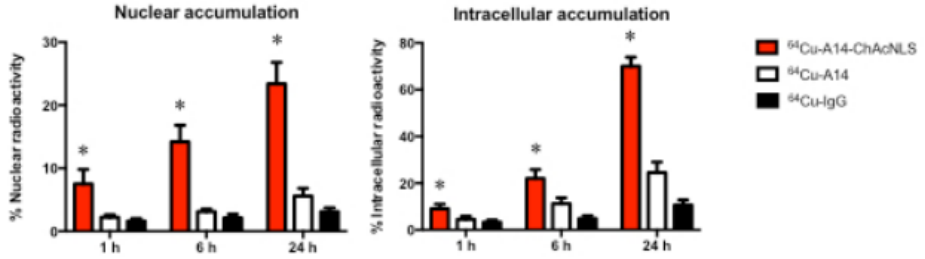
### *ACCUM promising results*

In 2018, a new publication from M. Paquette et al.[3], confirmed the high potential of ACCUM for targeting and accumulation in tumour cells. They constructed 3 molecules, 64Cu-A14-ChAcNLS, 64Cu-A14-NLS, and 64Cu-A14 and evaluated their performance by employing

[2] Rodriguez A. et al. Nature Cell Biology, 1999; I. Dingjan et al. Scientific Reports 2016; P. Kozik et al. Cell Reports, 2020
[3] 10.1021/acs.bioconjchem.8b00077

mechanistic studies for endosome escape coupled to nuclear routing and determining whether this delivery system results in improved 64Cu cellular accumulation.

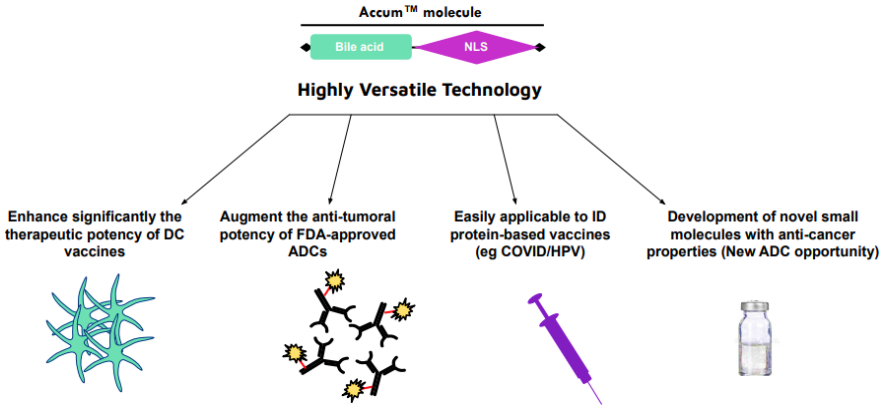
As seen underneath, the accumulation enhancement of 64Cu-A14-ChAcNLS is far greater then for 64Cu-A14 and 64Cu-IgG. The percentage accumulation is presented in the nucleus (left panels) and total intracellular space (right panels) relative to the total amount of radioactivity used during the treatment of IL-5Rα-positive invasive bladder cancer cells[4].




Source: (3)

By enhancing the intracell delivery of the attached compound, ACCUM technology is positioning itself as a very versatile solution for many industrial hurdles. Currently, Defence Therapeutics is focussing specifically on four challenges: Enhancing the therapeutic potency of DC vaccines, augmenting the anti-tumoral potency of FDA-approved Antibody-Drug Conjugates (ADCs), enhancing the effectiveness of protein-based vaccines, and developing a new Accum-derived molecules with anti-cancer properties.

**ACCUM Molecule versatility**




*Source: Defence Therapeutics*

### *ACCUM, the platform of the future*

To better understand the full potential of Accum, we like to compare it to the new BMW electric car platform named Neue Klasse. Just as this platform will serve as the base to develop and manufacture new fully electric SUVs, sedans, and sports cars for the BMW group, Accum allows the creation of multiple therapies according to specific needed characteristics. Moreover, just as parts and platform-sharing is a common practice in the automotive industry, Accum will most definitely be used by other pharmaceutical companies under specific agreements.

[4] Beaudoin, S., Paquette, M., Fafard-Couture, L., Tremblay, M.A., Lecomte, R., Guérin, B., Leyton, J.V. Initial Evaluation of Antibodyconjugates Modified with Viral-derived Peptides for Increasing Cellular Accumulation and Improving Tumor Targeting. J. Vis. Exp. (133), e55440, doi:10.3791/55440 (2018).

## Key Management and Directors[5]

**Sébastien Plouffe, CEO and Director.**
Experienced finance professional and entrepreneur with over 25 years of experience in both capital markets and project development. Worked for more than 10 years as a successful VP Senior Investment Advisor with Canadian brokerages firms BMO Nesbitt Burns and Canaccord Genuity Wealth Management, from which he has accumulated considerable expertise in most aspects of raising and managing capital. Over the last 15 years, Mr. Plouffe was instrumental in the success of various Canadian and International private and public companies in sectors such as biotech, mining, and technology.

**Dr. Moutih Rafei, VP Research & Development and Director**
Dr. Rafei is an immunologist by training focused on the field of immuno-oncology. He has accumulated profound knowledge and insight in the fields of T-cell development, stem cell biology and cell therapy, cancer immunotherapy as well as autoimmune diseases. With a PhD in Experimental Medicine from McGill University, Dr. Rafei is a leader in the development of immune-related therapies for catastrophic illnesses and has uncovered many seminal discoveries. Dr Rafei received over 20 awards and recognitions in the last 15 years. His research has resulted in over 35 high impact peer-reviewed publications, 7 reviews, 2 book chapters, 1 monograph, and 6 patents. He also served as a senior advisor and consultant to various biotech companies and venture capital groups and contributed heavily to the development of various immune-related products currently being tested in clinical trials.

**Joseph Meagher, CFO & Director (CPA, CA, C.Dir.)**
Chartered Professional Accountant (CPA, CA) since 2008, obtaining the Chartered Director (C.Dir.) designation from The Directors College (a joint venture between McMaster University and The Conference Board of Canada) in 2017. Joseph currently serves as the CFO for several publicly listed companies namely Gatling Exploration Inc., Pacton Gold Inc., Bessor Minerals Inc., Kanadario Gold Inc., and Huntsman Exploration Inc. Previous experience includes Staff Accountant and Manager.

**Dr. Simon Beaudoin, CTSO & Accum Co-Founder,**
Dr. Beaudoin has a MSc and PhD in Biochemistry from the University of Sherbrooke. As co-founder of Defence Technologies, Simon's expertise in biochemistry, and molecular and cellular biology greatly contributed to the conceptualization, realization, and valorization of the Accum™ technology platform. With strong expertise in immuno-conjugation and, more particularly, in the development and optimization of antibody-drug conjugates (ADC) for anti-cancer applications, and radio-immuno-conjugates for therapeutic and/or TEP imaging applications, his impressive work has been covered in many highly respected journals. Simon is also the recipient of 15 peer-reviewed awards and scholarships.

**Dr. Raimar Löbenberg, Director and Chairman**
Dr. Löbenberg holds a BSc degree in Pharmacy from the Johannes Gutenberg-University, Mainz, Germany and a PhD in Pharmaceutics from the Johann Wolfgang Goethe-University, Frankfurt, Germany. He joined the University of Alberta in 2000 where he is the Founder and Director

[5] CapitalIQ

of the Drug Development and Innovation Centre, Faculty of Pharmacy and Pharmaceutical Sciences. Dr. Löbenberg's research interests are in biopharmaceutics to predict the oral performance of drugs and botanicals and inhalable nanoparticles to treat lung diseases such as lung cancer, tuberculosis or leishmaniasis. He is a cofounder of RS Therapeutics Inc., a foam-based topical drug delivery company. Dr. Löbenberg's recent notable positions include: President of the Canadian Society for Pharmaceutical Sciences; Vice Chair and current member of the United States Pharmacopeia Dietary Supplement Expert Committee; current Vice Chair of the Specialty Committee of Traditional Chinese Medicine in Pharmaceutics of the World Foundation of Chinese Medicine Science; and current member of the Health Canada Scientific Advisory Committee on Pharmaceutical Sciences and Clinical Pharmacology and the Scientific Advisory Panel on Opioid Analgesic Abuse.

**Dr. Sarkis Meterissian, Director**

Dr. Meterissian is a Professor of Surgery and Oncology (tenured), Director of the Breast Center of the MUHC and Head of the MUHC Breast Tumor Site Group. From 2007-2009 he was President of the Canadian Society of Surgical Oncology and from 2013 to 2015 he was President of Breast Surgery International. He has also served as the Medical Advisory Board Co-Chair of the Quebec Breast Cancer Foundation since 2012. He is involved in several clinical and basic science research projects related to breast cancer. In 1999, along with Dr. Morag Park (the Director of the Goodman Cancer Center), he set-up the McGill Functional Genomics Group which includes an extensive solid and liquid tissue bank for breast cancer. This Tumor Bank has led to several landmarks papers including the discovery of the Stromal-derived Protein Predictor (SDPP) published in Nature Medicine in 2008. He is also on the Scientific Committee of the McPeak-Sirois group representing the MUHC. This is a Clinical Trials Research Group bringing together the large cancer centers in the province. As part of this group, he has recently set-up a Breast Cancer Metastases Registry supported by major pharma.

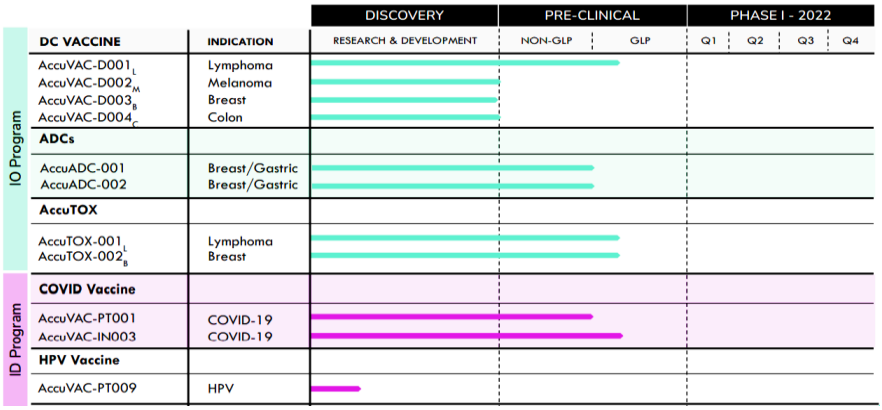
**Dr. Riam Shammaa, Director**

Dr. Riam Shammaa, MD, is a pioneer scientist in the fields of cell therapy and biologics and holds several patents in the field. He conducted the first successful spinal discs repair using stem cells in Canada. Dr. Shammaa founded several companies in the biotechnology field including Pallianera Pharma and Intellistem Technologies. Dr. Shammaa has led the development of multiple successful therapeutics to the market. Dr. Shammaa is managing director of Regen Capital, with an investment portfolio in biotech, healthcare, fintech and Ag-tech. Dr. Shammaa worked in research at McGill University and in the private sector before completing his residency in family medicine at McGill University. He went on to complete a fellowship in Sports medicine at the University of Toronto. He is a published author and a world-renowned expert in cell therapy and translational medicine.

## PRODUCT PIPELINE

The company is currently developing five distinct products, all leveraging their ACCUM™ Technology. All are currently in Pre-Clinical or Discovery phases. All products in development have shown tremendous potential in rodent and non-rodent animal models, exhibiting long sought for unique characteristics.

**Product pipeline**




*Source: Defence Therapeutics*

### IO Program 1: The dendritic cell (DC) vaccine program

The main benefit of cancer immunotherapy, compared to other treatment strategies, is to elicit long-lasting immunity while adapting to tumors immune-editing.[6] Cellular immunotherapy can be accomplished using various approaches including Adoptive T-cell therapy (ACT), DC vaccination, and Natural Killer (NK) cell therapy[7].

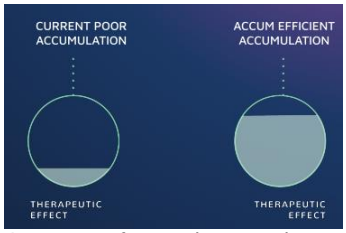
DCs act as carriers between the two main immunity strategies in vertebrates, the innate and adaptative immune systems. These cell scan capture and present antigens to T- and B-cells of the immune system. By doing so, responding lymphocytes initiate the adaptative immune defence. These cells are present in all tissues that have contact with the external environment, such as the skin, nose, lungs, stomach, intestines.

Exploiting DCs to potentiate a host's anti-tumor immunity has been one of most promising and widely used cancer immunotherapies. However, DC-based cancer vaccines have not yet achieved the promised success in clinical trials[8].

As discussed earlier, by limiting pH-mediated degradation within the endosome, captured antigens are delivered to the cytoplasm in their natural form using the Accum technology. As a result, proteasomal degradation produces a greater number of immunogenic and stable peptides that are present on DCs surface to stimulate a strong T-cell activation response.
By increasing the immune response, the dosage required to achieve the same results can be significantly diminished, consequently lowering undesirable side effects, and increasing the immunization period.

[6] https://doi.org/10.1186/s12916-016-0623-5
[7] https://doi.org/10.1016/j.mehy.2020.110365
[8] Yao Y, Fu C, Zhou L, Mi QS, Jiang A. DC-Derived Exosomes for Cancer Immunotherapy. Cancers (Basel). 2021 Jul 21;13(15):3667. doi: 10.3390/cancers13153667. PMID: 34359569; PMCID: PMC8345209.

**Potential of Accum Technology**

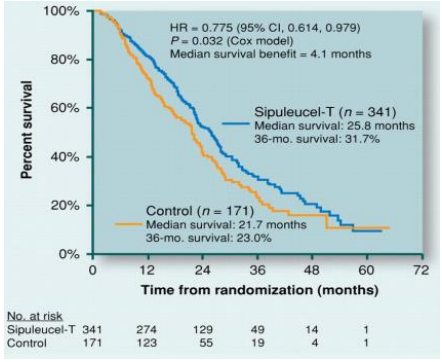



*Source: Defense Therapeutics*

Given that one DC activates between 1000 and 3000 T-Cells, we can extrapolate the potential of using ACCUM™ technology. An ACCUM-based vaccine could elicit an exponential number of T-cell responses compared to current DC vaccines.

There is currently only one FDA-approved DC vaccine: the Dendreon's Provenge against prostate cancer commercialised in 2010. This vaccine provides a median survival benefit of 4.1 months. One can agree that there is still a great potential for improving this number as well as the development of other (similar) vaccines. This highlights, in short, the current state of DC vaccines and the possibilities for ACCUM in this sector.

**Sipuleucel-T survival rate**



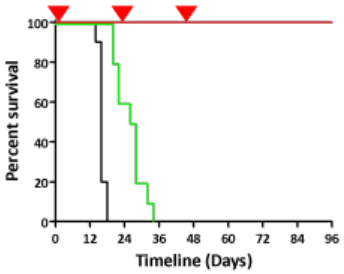

*Source: Defence Therapeutics*

Defence Therapeutics is currently developing four DC vaccines for lymphoma, melanoma breast cancer and colon cancer, to enhance their elimination. If proven successful, the ACCUM technology could lead to complete tumor eradication. **This is the reason why the ACCUM technology is considered the next-generation weapon of choice in our fight against cancer.**

### *IO 1.1 AccuVAC-D001$_L$ DC vaccine for Lymphoma*

**Latest result: EG.7 tumour cells study completed**
AccuVAC-D001$^L$-vaccinated mice were inoculated with EG.7 (lymphoma) cells ($5x10^5$) at day 21, 42 ($5x10^6$), and day 63 ($2x10^6$). As shown in the figure below, no tumors could develop (red line), which led to a 100% survival up to three months post-vaccination.

**EG.7 injected mouse survival rate**



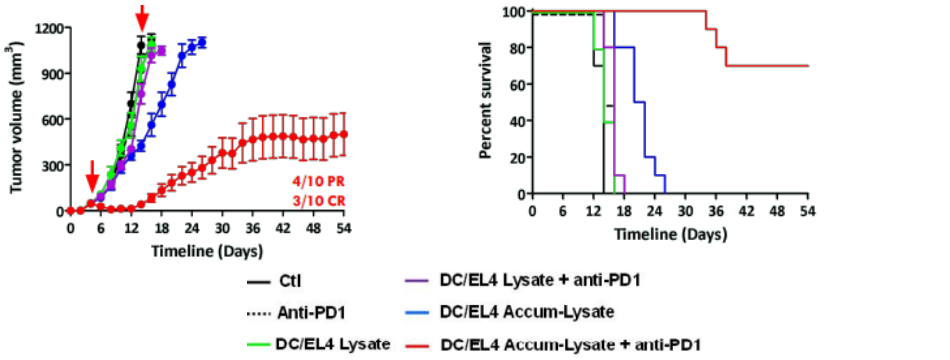

*Source: Defence Therapeutics*

Following these results, the Company conducted a second study, analysing the survival rate using EL4 Lymphoma SC implantation ($5x10^5$) cells at day 0, followed by 6 PD1 (200ug/dose) injections during day 7 to 16. The mice also received injections of 3 $x10^5$ DCs from day 4 to 12.

As shown in the figure below, 3 out of 10 mice exhibited a complete response, whereas 4 out of 10 animals had a partial response (tumour growth control) with an overall survival of 70%.

**EL4 Lymphoma Tumour volume**

**EL4 Lymphoma positive mouse survival rate**




*Source: Defence Therapeutics*

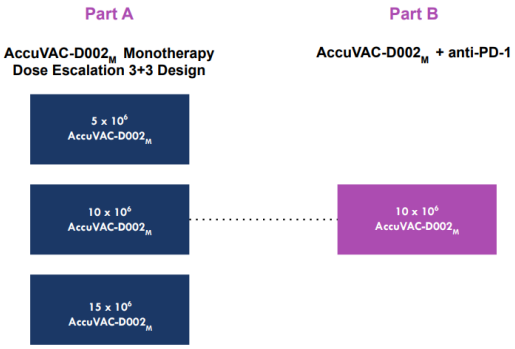
Within the near future, we believe the Company will prioritize research for Melanoma indication. However, Melanoma and Lymphoma research could also be conducted similarly and hopefully, the Company could start a Phase I trial for Lymphoma in 2023.

### *IO 1.2 AccuVAC-D002$_M$ DC vaccine for Melanoma*

**Latest result: GLP results expected anytime**

Defence Therapeutics has already provided information on it's Phase I trial 3+3 Design study that will be conducted in the UK:

**AccuVAC-D002$_M$ Phase I trial design**




*Source: Defence Therapeutics*

This treatment is one of the Company's most advanced as we expect the release of the Good Laboratory Practices (GLP) study within the next few months and the Company to file for a Phase I study before Year End.

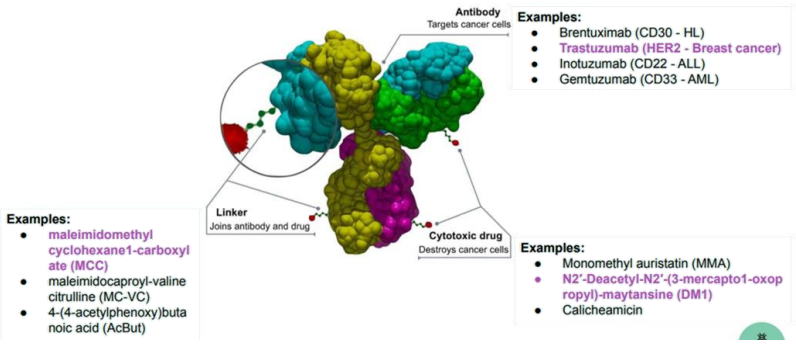
### *IO 1.3 AccuVAC-D003$_B$ DC vaccine for Breast and AccuVAC-D004$_C$ for Co-Ion Cancer*

Both treatments are currently in early research and development stages. However, we could project the Company to conduct early pre-clinical studies as the next step within the next 6 months. We believe the results could be as conclusive as for AccuVAC-D001$_L$ and AccuVAC-D002M and lead to a GLP compliant study early 2023.

## IO Program 2: The ADC program

ADCs represent one of the fastest growing anticancer drugs. This approach comprises a mAb conjugated to the cytotoxic payload via a chemical linker. The mAb is directed toward a target antigen on the cancer cell surface, reducing systemic exposure and therefore toxicity. ADCs are complex molecules that require careful attention to various components. Selection of an appropriate target, an mAb, cytotoxic payload, and the way the antibody is linked to the payload are key determinants of the safety and efficacy of ADCs.

**ADCs' structure**




*Source: Defence Therapeutics*

One of the major and most common challenge for the successful development of ADC vaccines is the antigen/ADC degradation in the target cell endosomes. The drug developer has then two options: increase the dosage, which results in increased side effects or keep the dosage untouched with the consequence of a less than expected efficiency. These two scenarios can lead directly to FDA denial.

The ACCUM™ platform, developed by Defence Therapeutics aims at tackling directly this issue. Solving the (limited nucleus) delivery hurdle would have a profound effect on the ADC drug development sector leading to possible approval of already, FDA declined ADCs, or increased probabilities of approval for new ones.

The sum of all these attributes puts the ACCUM™ Technology at the center of future cancer treatment pathways including the design of enhanced ADCs.

### *IO 2.1 AccuADC-001 ADC Vaccine*

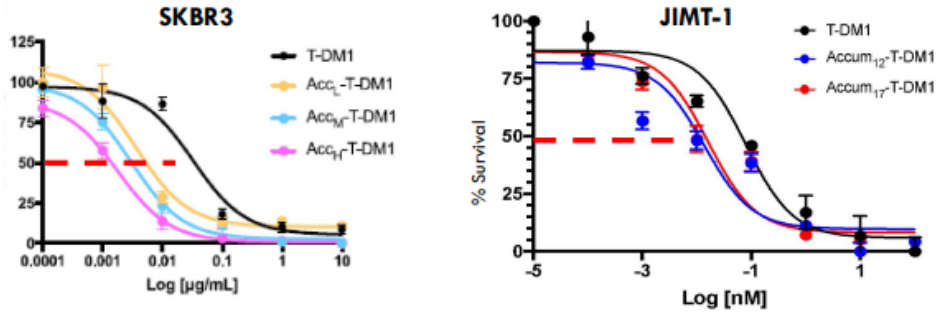
**Latest result: GLP study initiated**
Trastuzumab, commercially known as Kadcyla®, is a mAb used to treat HER2-positive metastatic breast cancer and stomach cancer. It was approved for medical use in the United States in September 1998, and in the European Union in August 2000.

However, a significant proportion of patients do not respond to this therapy or develop a resistance soon after starting it.

The Company has conducted a study looking specifically at the efficiency of ACCUM linked to Trastuzumab-DM1 used against SKBR3 and JIMT1 cells, seeking to over-come resistance to HER2-overexpressing breast cancers.

The results were conclusive as the Company's treatment increased the potency of current Kadcyla®, ADC by 10 to 100-fold as seen in the below graph.

**Survival rate of cancer cells treated with ACCTDM1 variants**




*Source: Defence Therapeutics*

Even more importantly, one single injection of Accum-Kadcyla®, at 3mg/kg in orthotopic JIMT-1 breast cancer cells in mice has resulted in a significant reduction in tumour volume compared to Kadcyla®-only, treated cells.

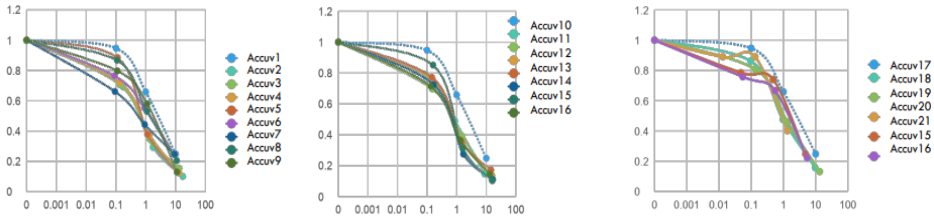
**Kadcyla-only vs. Accum-Kadcyla treated JIMT-1 cells**


*Source: Defence Therapeutics*

Following this success, the company is currently working to improve its ADC program by developing more variants of the Accu-T-DM1 to maximise its potency to counter HER2 cells developed immunity against Trastuzumab. The research for the most potable variant will be conducted in collaboration with the HUS Comprehensive Cancer Center in Helsinki, Finland.

Defence Therapeutics has also concluded a collaboration agreement with the Curie Institute in Paris to evaluate the therapeutic efficiency of Accu-T-DM1 ADC in patient-derived xenograft (PDX) models of breast cancer. We expect the results to be published before Year End.

**JIMT-1 potency per Accu-T-DM1 variant**



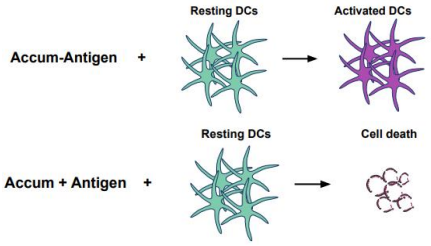

*Source: Defence Therapeutics*

As seen in the previous graph, Accum variants have significant differences in potency against JIMT-1 cells. The Collaboration with the HUS Center could prove decisive in the future of this treatment.

## IO Program 3: AccuTOX program

With the obtained success based on the use of Accum on both antigens and ADCs, the Defence team decided to test whether Accum should be directly linked or not to the antigen. For this purpose, an experiment was designed whereby Accum was mixed with the antigen prior to DC pulsing. All treated DCs died in the mixing group, which led to the discovery of an anti-cancer property for Accum. The use of Accum as an anti-cancer molecule is referred to as the AccuTOX program and can selectively kill a wide range of cancer cells.

**Defence Therapeutics two AccuTOX approaches**



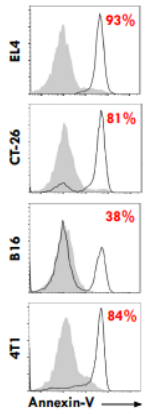

*Source: Defence Therapeutics*

### *IO 3.1 AccuTOX-001$_L$ for Lymphoma*

**Latest result: GLP study initiated**

The Company has shown promising results with their AccTOX-001$_L$ treatment as shown underneath with the Annexin A5 affinity essay.

**Annexin A5 affinity essay**




EL4 Murine Lymphoblast cells – Death rate: 93%

CT-26 colorectal carcinoma cells – Death rate 81%

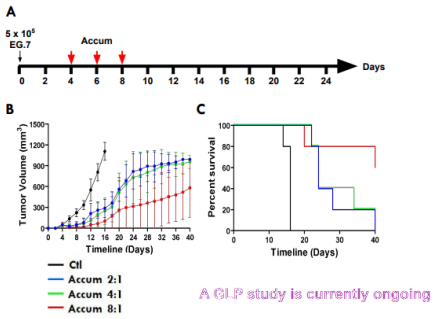
B16 Melanoma cells – Death rate 38%

4TI metastatic breast tumour cells – Death rate 84%

*Source: Defence Therapeutics*

Additionally, as a standalone treatment, the Company has achieved even more impressive results:

**Dosage and results of AccuTOX-001$_L$ study**




*Source: Defence Therapeutics*

The mouse, injected with EG.7 T cell lymphoma at day 0, receives doses of AccuTOX-001$_L$ on day 4, 6, and 5. The impact on the Tumour volume and survival rate, as seen above, shows enormous potential as it significantly decreases the tumour volume and considerably raises the survival rate, especially for an 8:1 concentration dosage.

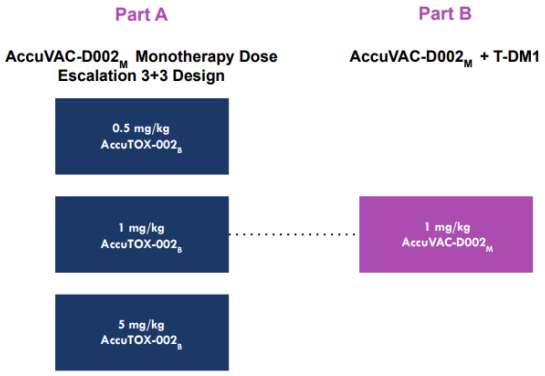
If these results were to be confirmed with the ongoing GLP study, we would expect the Company to pursue the filing of a Phase I trial within 18 months.

### *IO 3.2 AccuTOX-002$_B$ for breast cancer*

**Latest result: final step in GLP study initiated**
This treatment is one of the Company's most advance as we expect the release of the GLP study within the next few months and the Company to file for a Phase I study before Year End.

Defence Therapeutics has already provided information on it's Phase I trial 3+3 Design study following conclusive positive results:

**AccuTOX-002$_B$ Phase I trial design**




*Source: Defence Therapeutics*

The Company will strengthen their data by demonstrating through this phase I trial how potent AccuTOX-002B is at the killing of breast cancer in various animal models, including the use of patient-derived xenografts (PDX). The secondary objectives would be to compare the potency of AccuTOX-002 as stand-alone or combination therapy with currently used immune-checkpoint inhibitors[9].

To ensure reproducibility, Defence Therapeutics performs both internal and external studies, ensuring neutral analysis and interpretation of results, reproducibility, consistency in dosage schedules and regimens, variability in animals for study, methods of randomization and nuances in laboratory technique that may influence results[10]. The Company will also display the potency of their treatment in previously characterised PDX models to ensure a good translation from mice to human studies.

## ID Program 1: COVID vaccine program

The Company is currently developing two protein-based COVID vaccines with different characteristics: AccuVAC-PT001 (an injectable vaccine) and AccuVAC-IN003 (an intranasal vaccine formulation).

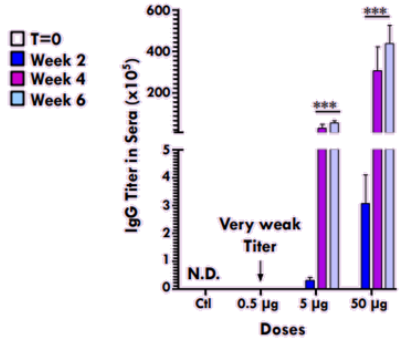
### *ID 1.1 AccuVAC-PT001 injectable covid vaccine*

**Latest result: GLP study to be completed Q2 2022**

[9] Defence Tehrapeutics press release
[10] 10.1258/jrsm.2008.08k033

On September 14, 2021, I Company announced the completion of non-GLP study on rabbits with astonishing results. Rabbits were injected with 3 doses at week 0 and 2. They were then bled at week 2, 4 and 6. The results show a non-equivocal immune response, with a high concentration of IgG COVID antibodies over 16 weeks. The research also showed that the immunogenicity from both mice and rabbits were highly comparable.

**Concentration of IgG COVID antibodies**




*Source: Defence Therapeutics*

The Company should receive the GLP study results in Q2 2022. If these results were to confirm the Company's internal research outcomes, we believe Defence Therapeutics could already file for a Phase I study by 2022 Year End, as COVID studies are currently accelerated due to the current state of emergency.

### *ID 1.2 AccuVAC-IN003: an intranasal vaccine formulation*

**Latest result: GLP study currently ongoing**

The COVID-19 is spread in three main ways[11]:

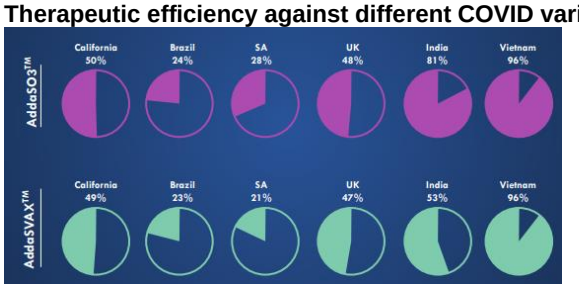
- Breathing in air when close to an infected person who is exhaling small droplets and particles that contain the virus.
- Having small droplets and particles that contain viruses land on the eyes, nose, or mouth, especially through splashes and sprays like a cough or sneeze.
- Touching eyes, nose, or mouth with hands that have the virus on them.

The biggest challenge faced by the scientific community to end the COVID-19 sanitary crisis is to reduce the virus transmission. This is the main reason behind the social distancing and facemask recommendations.

AccuVAC-IN003 is a transmission-blocking vaccine designed to stop infection directly when virus cells reach mucosal tissues. This vaccine would, therefore, prevent infection rather than help to fight it once the virus entered the body. If this solution could prove functional, this could end the virus transmission and thus, the COVID crisis, once proven that the vaccine would also work on new variants.

[11] https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

**Therapeutic efficiency against different COVID variants**

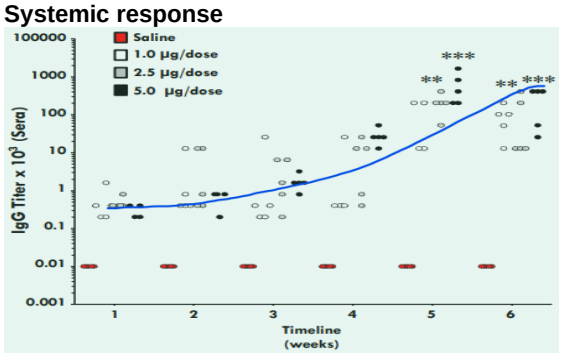



*Source: Defence Therapeutics*

The best feature of this early development vaccine is that it would act on both mucosal sites and systemic immunity, providing a full protection against the virus as opposed to lowering the pathophysiology of the virus.

The vaccine is delivered intranasally with a special adjuvant (designed for intranasal vaccination). Results show a level of dose-dependent systemic immunity (figure below).

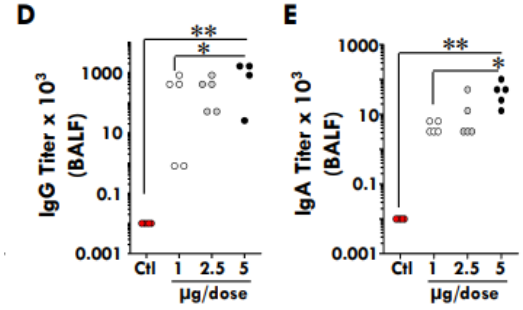
**Systemic response**




*Source: Defence Therapeutics*

This vaccine does not only trigger the production of IgGs systemically but at the mucosal sites as well (site of virus entry) as shown below.

**Mucosal response**




*Source: Defence Therapeutics*

We expect the Company to receive the results of the GLP study soon. The Company has the same objective as for their other COVID vaccine in development which is filing a Phase I trial demand by 2022 Year End.

Such vaccine would have significant advantages over the current COVID-19 vaccine offer. The number of doses required could be limited to 2. The form, a spray, would make it easier to distribute as it would not require any professionals and could be self administrated, even in remote location. Its biggest competitive advantage is obviously its unique mucosal immunity. The vaccine is also more stable.

**AccuVAC-IN003 advantages over other types of vaccines**

| Technology Platforms | DTC"s AccuVac-IN003 | RNA | DNA | Viral Vectors |
|---|---|---|---|---|
| Expected No. of doses | 1 to 2 | 2 to 3 | 2 | 1 to 2 |
| Route of Administration | Intransal spray | Injection | Injection + Electroporation | Injection |
| Mucosal Immunity | Yes | No | No | No |
| Stability | √√√√ | √ | √√√ | √√√ |
| Ease of Use | √√√√ | √√√ | √ | √√√ |

*Source: Defence Therapeutics*

## ID Program 2: HPV Vaccine program

HPV vaccines can lead to potent protection against HPV. This virus has more than 200 related viruses, of which more than 40 are spread through direct sexual contact. Three vaccines that prevent infection with disease-causing HPV have been licensed in the United States: Gardasil, Gardasil 9, and Cervarix.

Defence Therapeutics has hypothesized that their Accum technology could be used with the current vaccines in order to improve their efficiency.

### *ID 2.1 AccuVAC-PT009 vaccine for HPV*

**Latest result: vaccine achieves a higher humoral response than Gardasil-9**
On January 26, 2022, the Company published **staggering results** for their AccuVAC-PT009 HPV vaccine. The vaccine was created using the same 9 HPV-derived L1 proteins as in Gardasil-9. Gardasil-9 covers HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58. It is important to note that Gardasil-9 remains ineffective against 10 other HPV types.

The Company compared its newly engineered vaccine immunogenicity to a group of Gardasil-9 immunized animals. The results are unequivocal. ACCUVAC-PT009 HPV vaccine triggered a **27- and 36-fold increase in antibody** at a 4- and 6-weeks post-immunization.

We believe these results would not only provide an opportunity to reduce even more the rate of infection – currently 4.3% for American teenagers and 12.1% for American women in their early twenties – but also to **improve the range of protection** by adding more HPV types L1 proteins that are currently not included in the Gardasil-9 vaccine.

Defence Therapeutics AccuVAC-PT009 could lead to improving the immunogenicity of the commercialized Gardasil-9 and lowering the dosing regimen without affecting the humoral response.

We could expect the Company to perform, in the near future, the same study with the second commercialized HPV vaccine Cervarix. Additionally, Defence Therapeutics will continue developing their own vaccine.

## Continuous R&D

Due to its versatility, ACCUM™ could be used in many treatments. From being a treatment itself to simply raise the efficiency of an existing medication, we expect the Company to

continue fundamental research and explore new possible uses of the ACCUM™ Technology.

**Patent Portfolio**
The company is building an extensive patent portfolio as seen in the table underneath:

**List and status of all patent application filed**

| NRFC Ref. | Official No. | Title | Case Status | Country | Property Type |
|---|---|---|---|---|---|
| 10252701-1AU | 2017233725 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending | Australia | Patent |
| 10252701-1CA | 3017950 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending | Canada | Patent |
| 10252701-1EP | 17765615.4 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending | European Patent Office | Patent |
| 10252701-1IL | 261765 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending | Israel | Patent |
| 10252701-1JP | 2018-568469 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending | Japan | Patent |
| 10252701-1US | 16/085141 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending / Examination Report Received | United States | Patent |
| 10252701-1USPR | 62/308457 | MODIFIED ANTIBODY-CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Expired at end of life | United States | Patent |
| This first series of patent applications are directed to the description of the first generation of ACCUM™ construction. | | | | | |
| 10252701-2USPR | 63/256726 | CONJUGATES ENHANCING TOTAL CELLULAR ACCUMULATION | Pending | United States | Patent |
| This new provisional application discloses alternative NLS components to the ACCUM™ construction. | | | | | |

*Source: Defence Therapeutics*

A patent application has been filed by the company in every relevant jurisdiction. All patents are currently pending and under investigation. We anticipate that the Company will begin receiving approvals before the end of 2022.

Following the acquisition of the ACCUM™ rights in a 2020 agreement, The Company has agreed to pay a royalty payment of three percent (3%) calculated on the net revenues and all commercial activities involving the Accum Invention and four percent (4%) calculated on the net revenues and all commercial activities involving any new inventions that the Company acquires through exercise of its exclusive option to acquire new inventions pursuant to the Amended IP Assignment and Royalty Agreement.

**Historical Agreement**

| Date | Agreement | Details |
|---|---|---|
| May-20-2020 | Amended IP Assignment and Royalty Agreement | assigning the Accum Invention and any related intellectual property to the Company in exchange for consideration consisting of a (i) a $25,000 cash payment, (ii) the issuance of 2,085,714 Common Shares (iii) certain milestone payments payable in connection with various clinical and regulatory milestones relating to the Accum Invention and any related or derivative inventions and (iv) a royalty payment of three percent (3%) calculated on the net revenues and all commercial activities involving the Accum Invention and four percent (4%) calculated on the net revenues and all commercial activities involving any new inventions that the Company acquires through exercise of its exclusive option to acquire new inventions pursuant to the Amended IP Assignment and Royalty Agreement. |
| Dec-01-2020 | Option and Right of First Refusal Agreement | WASSC Technology has granted the Company a two-year option to purchase the WASSC Technology and various assets and intellectual property |

| | |
|---|---|
| | rights associated therewith for a sum of $75,000 and an agreement to incur certain additional future expenditures in connection with the development of the WASSC Technology totaling a minimum of $300,000. The Option and Right of First Refusal Agreement also includes a 5-year right of first refusal in favor of the Company with respect to the WASSC Technology. |

*Source: Defence Therapeutics, GBC-AG*

## MARKET AND MARKET ENVIRONMENT

As described, ACCUM™ is a platform technology, which could be used in different applications and indication areas. In the following market section and, building on this, in the prognosis and evaluation section of this research study, we first draw on the applications of the current project pipeline. Even if an expansion to further applications and indication areas is possible due to the platform character, this should only be considered as additional potential, which is not quantified here.

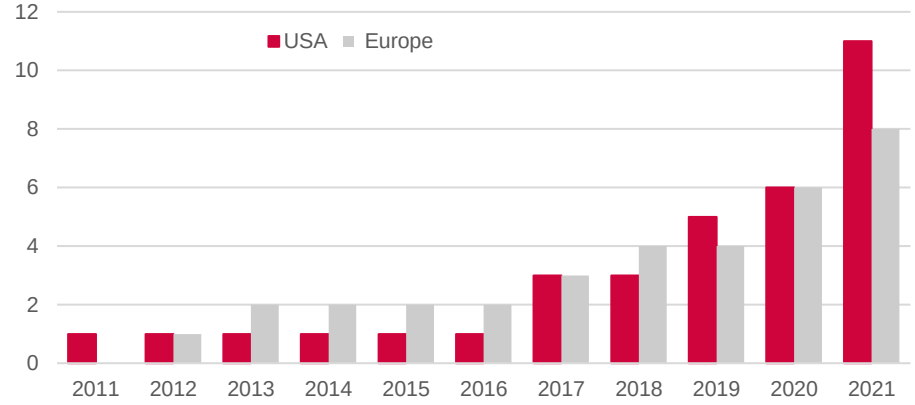
### Market environment Immuno-Oncology Program

#### *Antibody Drug Conjugates (ADC)*

Surgery, radiation and the use of cytostatics (chemotherapy) have established themselves as treatment options in tumor therapy. A major disadvantage of cytostatic drugs is their limited specificity, which means they not only target tumor cells but healthy cells as well, which results in severe side effects. In order to overcome this problem, antibody therapies have been increasingly developed in the last few years, whereby higher selectivity and lower toxicity can be achieved in tumor therapy. These molecules are referred to as antibody-drug conjugates, whereby an effective toxin is coupled to an antibody. The antibody is designed to recognize and bind a tumor antigen specific to cancer cells. The toxin (active ingredient) is then released in close proximity to the tumor cell.

There are currently 11 ADCs approved in the USA, and 8 currently marketed in Europe. A look at their approval timeline highlights the fact that those significant developments have mostly taken place here in recent years:

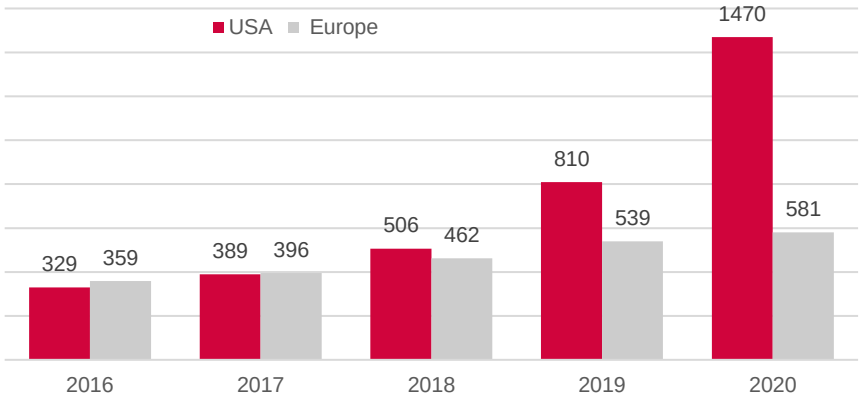
**Number of antibody therapeutics granted a first approval in either the US or EU**




*Source: An Insight into FDA Approved Antibody-Drug Conjugates for Cancer Therapy; Advances and Limitations of Antibody Drug Conjugates for Cancer; GBC AG*

In the last 2 years, the ADC sales have skyrocketed both in the US and Europe. The strong increase was particularly noticed in the USA with a dynamic sales growth of 45.3% (CAGR) between 2016 and 2020. In Europe, a CAGR of 12.8% was reported for the same period.

**ADC sales in the USA and Europe (in USD million)**




*Source: Biopharma PEG; GBC AG*

At the same time, the approval pipeline for ADC is very extensive both in the USA and Europe. According to our own research (clinical.trials.gov), there are currently 100 ADC trials in the second or third approval phase in the USA only. With an approval probability of slightly less than 50 %, there should be a significant jump in approved ADCs in the coming years.

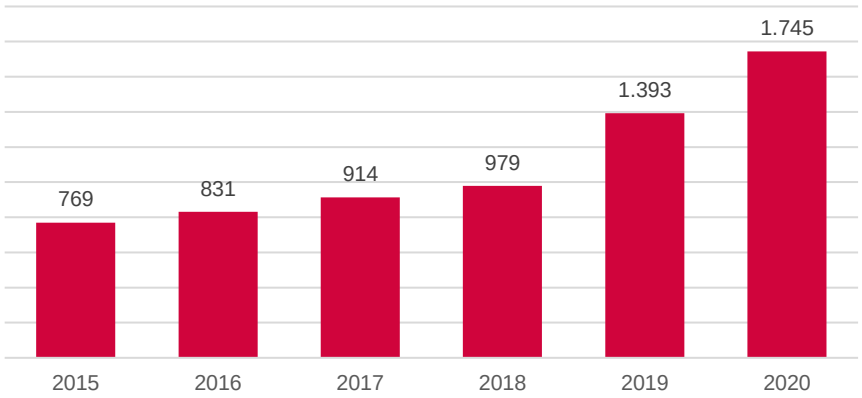
On this basis, and also in view of the increasing need for effective tumour therapy, the global ADC market is expected to develop dynamically. According to Grand View Research, the ADC market is expected to grow to USD 23.9 billion by 2028, which corresponds to a very dynamic CAGR of 23,7%. The rising prevalence of tumour diseases along with the globally aging society are seen as key factors in this development. In addition, the extensive approval pipeline combined to the fact that most if not all previous challenges associated with ADC development are considered as important market drivers.

### *ADC program based on Kadcyla*

As outlined in the previous chapter of this study, linking ACCUM to trastuzumab emtansine, commercially known as Kadcyla, (an ADC approved in the USA and Europe for the treatment of breast cancer), is expected to significantly improve its efficacy. Study results to date indicate a 100-fold improvement in its therapeutic effect, resulting in superior tumor regression. According to Defence Therapeutics' product pipeline, the focus of the current ADC program is against breast cancer, where an efficacy study on the reference product Kadcyla is to be conducted. A derivation of the market potential of the ADC program could therefore be based on the market potential of Kadcyla.

Kadcyla (active ingredient trastuzumab emtansine) was first approved in 2013. Roche generated total sales of CHF 1.75 billion in 2020. Particularly in the last two years, high growth momentum (CAGR 2018 - 2020: 33.5 %) was achieved. According to Roche, the recent dynamic growth is due to the transition of breast cancer patients to the new treatment standard, Kadcyla:

**Sales revenue with Kadcyla**




*Source: Roche; GBC AG*

## Vaccinations with DCs

Besides the use of standard-of-care, various strategies have been implemented. One of these consists of developing a cellular cancer vaccine. Since DCs are very efficient at presenting antigens to responding T cells, extensive research has been conducted to exploit these cells for the design of an effective cancer vaccine. In principle, this therapy promises a high degree of success, coupled with very few side effects. DCs are a component of the human immune system and are specialized in capturing and presenting antigens to the immune system. The DCs used in the vaccine are derived from the tumour patient's blood and are then loaded with the tumour material (tumour antigens) so the immune system is activated to kill/destroy the target tumor. Since these are the patient's own cells, this form of therapy is said to be very well tolerated.

Worldwide, only sipuleucel-T (trade name: Provenge) was approved by the FDA in 2010 as a DC vaccine for the treatment of patients with certain progression forms of prostate cancer. After the initial introduction of this new form of therapy led to great hope regarding a paradigm shift in tumour control, no further vaccines have followed. Various factors, such as the immunosuppressive microenvironment of tumours or the lack of reliable prognostic biomarkers, have so far prevented the success of DC vaccines. (*Source: Personalised Dendritic Cell Vaccines-Recent Breakthroughs and Encouraging Clinical Results*) Even the approved sipuleucel-T leads to a prolongation of patient survival by about 4.5 months on average compared to standard therapy, according to study results.

However, the improved understanding of the tumour microenvironment as well as the increased knowledge of the DC subsets form the basis for the development of more effective vaccines. The combination of the DC vaccine with the ACCUM technology, which has shown very promising results in animal models so far, should also be considered in this context. Especially when used in combination with a checkpoint inhibitor (α-PD1), the DC vaccines developed by Defense Therapeutics are expected to develop high efficacy.

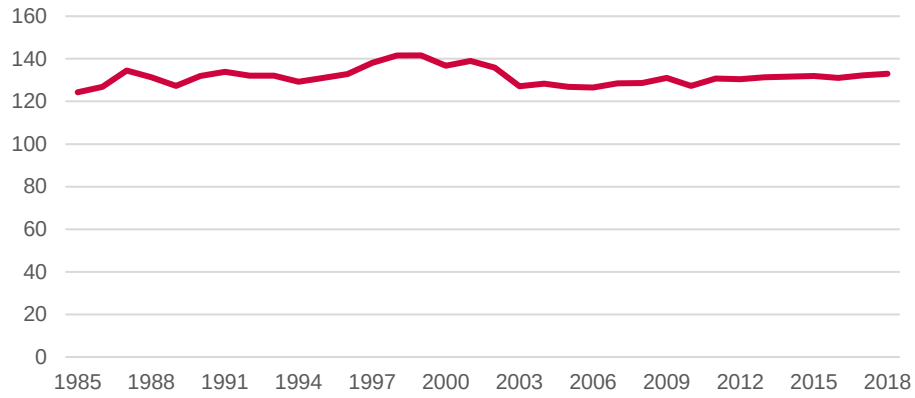
### *Indication areas for the immuno-oncology program*

Overall, the Company's immuno-oncology program proves to be very versatile, particularly with regard to the choice of indication area. For example, new indication areas can be addressed with the selection of the ADC or the tumour antigen, which again underlines the platform character of the ACCUM technology. Initially, however, the ADC program and AccuTOX will focus on the indication area of breast cancer and the indication area of melanoma in oncological vaccine development. Phase I trials (breast cancer in Canada and melanoma in the UK) are scheduled to begin in the coming year.

### *Indication area breast cancer*

The indication area of breast cancer initially addresses one of the most common cancers. According to incidence statistics, the average lifetime risk of developing breast cancer in women is 12 to 13 %. This means that about one in eight women will develop breast cancer during their lifetime. The risk of developing the disease increases with age, with the average age of onset being around one year 64. It is estimated that in the USA, for example, a total of 281,550 new cases of breast cancer will be diagnosed in 2021. In Europe, the estimated number of new cases in 2020 is around 355,457. Based on the total female population, the incidence rate in the USA is 128.8 (new cases per 100,000) and in Europe 144.9 (new cases per 100,000) and can thus be described as significant. The incidence rate has remained stable over the past years, so that, in view of the increasing population, there is an increasing number of new breast cancer diagnoses in absolute terms.

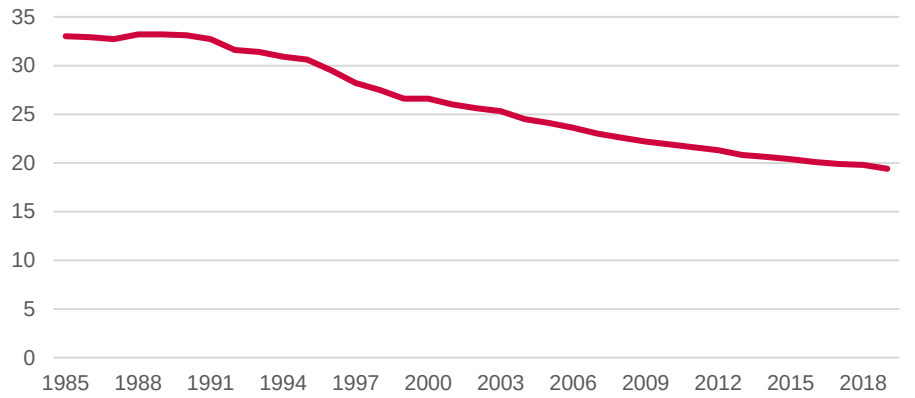
**Incidence rate of breast cancer in the USA (per 100,000)**




*Source: National Cancer Institute; GBC AG*

Although mortality rates have decreased due to more widespread use of screening for early detection and overall improvements in treatment, breast cancer is still associated with high death rates. In the US, 43,600 breast cancer deaths are projected for 2021, more than any other cancer. In Europe, 91,826 deaths are expected.

**Breast cancer death rate in the USA (per 100,000)**




*Source: National Cancer Institute; GBC AG*

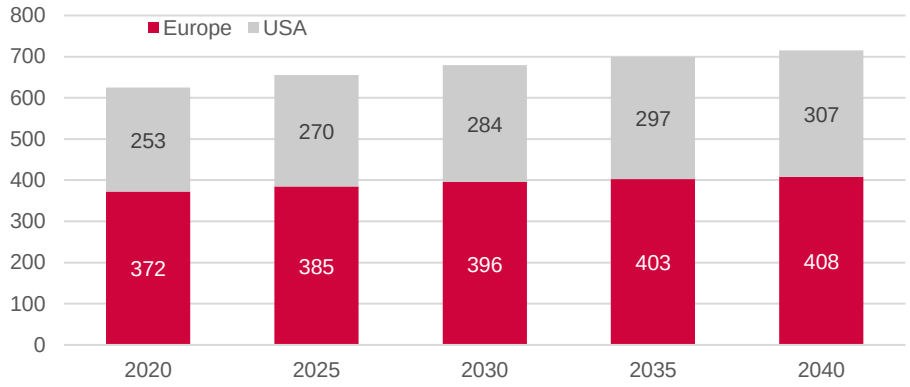
Since 1985, the death rate in the USA has visibly improved from 33.0 per 100,000 to 19.4 per 100,000. This is due, among other things, to new developments in therapy. Depending on the stage of the cancer, the mainstays of treatment for breast cancer are surgical

removal, radiation, chemotherapy, hormone therapy and the so-called novel targeted therapy. The latter includes Kadcyla (active ingredient trastuzumab emtansine), which is approved as a targeted therapy for the treatment of HER2-positive breast cancer.

To determine the market size for this indication area, we include the average direct treatment expenditure. Based on the data available for the USA, the costs for breast cancer treatment depend on the stage of the disease and range from USD 48,500 (stage 0) to USD 182,655 (stage IV) (source: Webmd). We do not have any studies for Europe, so we are guided by the US figures.

The fact that the total market volume for the diagnosis and treatment of breast cancer is extraordinarily large is also due to the high incidence figures. According to data from Globocan, the WHO agency for cancer research, the number of new cases in the USA will rise to around 307 thousand by 2040. In the WHO-defined regions of Northern; Southern and Western Europe, the number of new cases is expected to increase from 372.2 to 408.3 thousand between 2020 and 2040:

**Prognosis incidence breast cancer**



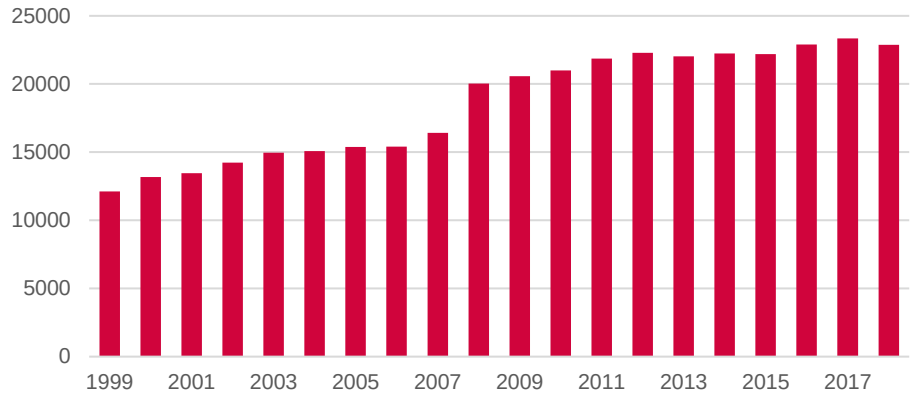

*Source: Globocan, GBC AG*

Starting from the middle of the cost range, the total market volume in these two regions is expected to increase from USD 72.3 billion to USD 82.6 billion. This estimate does not take into account any further developments in therapy, which are usually accompanied by corresponding cost increases.

### *Melanoma as an important indication area*

The first clinical trial in the field of DC vaccines will take place this year in the UK in the indication area of melanoma and we are therefore concentrating on this indication both in the context of this market study and in the evaluation potential. Malignant melanoma is the most dangerous type of skin cancer, with an expected incidence of 106,110 in the USA and 122,634 in Europe. In the USA, melanoma is responsible for 5.6% of all cancers. The main risk factor is considered to be ultraviolet radiation, especially in combination with recurrent intense sun exposure. The increasing exposure to UV radiation as well as demographic effects (median age at diagnosis is 65 years) have led to a visible increase in incidence and thus in the number of cases in recent years. For example, the number of new melanoma diagnoses in Germany almost doubled between 1999 and 2018. In parallel, the incidence rate in the USA has also visibly increased from 14.1/100,000 to 22.4/100,000 between 1992 and 2019.

**Incidence of melanoma in Germany**




*Source: krebsdaten.de; GBC AG*

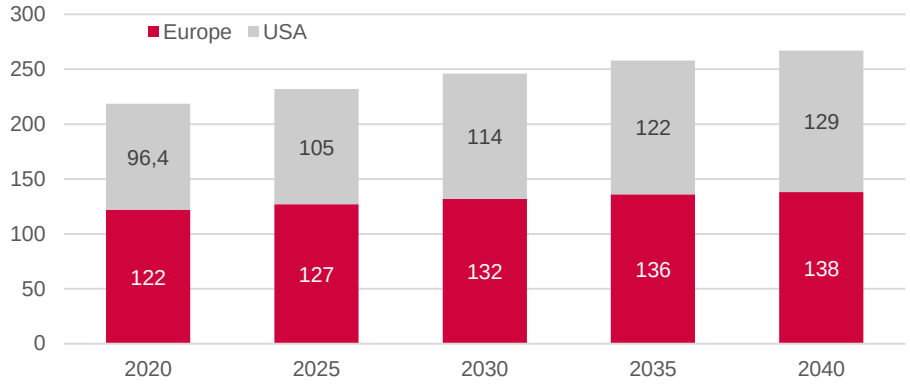
In principle, melanoma is a cancer with a good prognosis. The median 5-year survival rate is above 90 %, as is the 10-year survival rate. According to US statistics, the prognosis has steadily improved over the past decades. Compared to 1992, when the death rate after a melanoma diagnosis was 2.7/100,000, this had improved to 2.0/100,000 in 2019. The reasons for this are the improved and earlier screenings. However, therapeutic improvements were also achieved in advanced disease patterns, after a longer phase of stagnation. In addition to the standard therapy of surgical removal, targeted therapies and immunotherapies have established themselves as promising in recent years.

Although personalised DC vaccines are not yet approved for the treatment of melanoma, ongoing studies are yielding promising results. In a study at the Melanoma Center in Boston, all melanoma patients (advanced disease stage) show a high and long-lasting T-cell response after a personalised vaccination (https://www.curemelanoma.org/blog/article/personalized-vaccines-for-melanoma-an-update). This means that an activation of the immune system against melanoma cells was achieved in all patients. These are promising results for Defence Therapeutics' DZ vaccine programme.

The total costs of a melanoma disease strongly depend on the stage of the disease. In the early stages of the disease, these costs are significantly below 20,000 USD, whereas very advanced stages (stage III and IV) are associated with treatment costs of significantly more than 150,000 USD each (source: Melanoma costs: A dynamic model comparing estimated overall costs of various clinical stages). However, since the majority of melanoma patients are diagnosed at an early stage of disease, the average cost of treatment ranges from USD 11,863 to USD 13,588 (source: NCBI). Overall, the treatment volume in the USA is expected to be USD 1,350 billion. In Europe, the market volume, with around 122,000 new cases, amounts to a total of € 2.7 billion (source: Cost-of-illness of melanoma in Europe - a modelling approach).

According to Globocan data, a steady increase in new cases is expected in both regions. By 2040, there are expected to be around 138 thousand new melanoma diagnoses per year in Europe and around 129 thousand per year in the USA.

**Prognosis incidence breast cancer**




*Source: Globocan; GBC AG*

According to our calculations, the total market volume in both regions should increase from USD 4.28 billion to USD 5.09 billion by 2040. However, this does not take into account further therapy developments, which are likely to be accompanied by cost increases, especially for higher-grade melanoma diseases.

## Market Environment Infectious Disease (ID) Program

The infectious diseases program includes two Covid-19 vaccine developments and the development of a vaccine against HPV. As the two Covid-19 vaccines are currently the most advanced, we have only identified the market potentials for these and subsequently the sales and valuation potentials.

Since the start of the Covid 19 pandemic, a total of five vaccines have been approved in Europe and three in the USA. Approved in both regions are the vaccines from Pfizer/BioNTech (BNT162b2), Moderna (mRNA-1273) and Johnson & Johnson (Ad26.COV2.s). In Europe, the vaccines from AstraZeneca (AZD1222) and, since December 2021, from Novavax (NVX-CoV2373) are also approved.

**Approved vaccines in Europe and the USA**

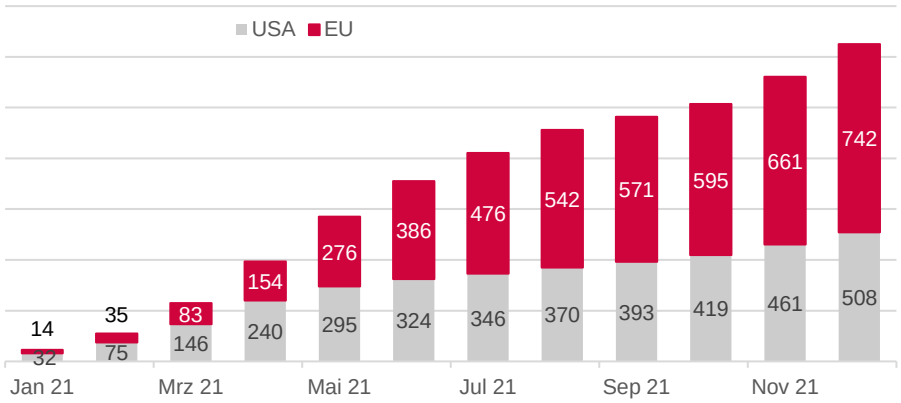
| Vaccine type | Europe | USA |
|---|---|---|
| mRNA | BNT162b2 (BioNTech/Pfizer) | BNT162b2 (BioNTech/Pfizer) |
| mRNA | mRNA-1273 (Moderna) | mRNA-1273 (Moderna) |
| vector-based | Ad26.COV2.s (Janssen/Johnson&Johnson) | Ad26.COV2.s (Janssen/Johnson&Johnson) |
| vector-based | AZD1222 (AstraZeneca/University of Oxford) | |
| protein-based | NVX-CoV2373 (Novavax) | |

*Source: FDA; EMEA; GBC AG*

In parallel, 31 vaccine candidates are currently in the clinical approval phase in the USA and Europe. As far as we know from our research, only one vaccine candidate with intranasal administration has been accepted for clinical approval so far. However, in the case of the approval planned by Altimmune, Inc., the test subjects had not produced sufficient antibodies, which had led to a halt in development in study phase 1.

Since the vaccines were first licensed in Europe and the US, the number of doses administered has risen sharply. By the end of 2021, a total of 508 million Covid 19 vaccinations had been administered in the US and 742 million in the EU.

**Doses administered in the USA and Europe (in millions)**




*Source: Bloomberg; ECDC (European Center for Disease Prevention); GBC AG*

According to the vaccine manufacturers, the vaccines approved in Europe and the USA are expected to have generated sales of around USD 75 billion in 2021. Not all manufacturers have published forecasts for the current 2022 business year, so there is no visibility from the producer side. Due to the dynamic pandemic development, no reliable data is available from independent research houses either.

From the scientific side, however, there is hope that the pandemic will develop into an endemic in the foreseeable future. Here, the only temporary immunisation after the disease or vaccination plays an important role. Whether recurrent vaccinations are necessary in the context of a Covid 19 endemic is not yet clear. There are currently no findings on the extent to which reinfections are sufficient as a natural booster in an endemic situation (see cold viruses) or whether reinfections take a severe course. In this case, regular booster vaccinations would have to be administered. Furthermore, questions about the occurrence of new mutations as well as about the speed of mutations in the endemic disease have not yet been clarified. With the current state of knowledge, vaccinations should continue to play an important role, also in the endemic phase of the current Corona pandemic.

Novel effective vaccination methods, i.e., those currently being developed by Defence Therapeutics Inc. could play an important role in this scenario. Especially the pipeline project of intranasal vaccination (application into this nose to generate immunity of the mucosa there) appears promising in this context.

### *HPV vaccination program*

Infections with the HPV virus are among the most common sexually transmitted infections. The prevalence, i.e. the existing number of infections, is for example in the USA in the age group 15 to 59 years at a total of 40.0 % (source: Estimated Prevalence and Incidence of Disease-Associated Human Papillomavirus Types Among 15- to 59-Year-Olds in the United States). The incidence, or number of new HPV infections occurring, is a very high 1,222/100,000 overall, and measured against that, a total of 42 million people were infected with HPV in the United States in 2018, according to the study cited in the source. Based on this high number of infections, it is assumed that most sexually active people become infected with HPV at least once in their lifetime (source: RKI).

While infections with the low-risk HPV types are usually responsible for genital warts, the high-risk types (HPV 16 and 18) can lead to malignant tumors. In this regard, infection with HPV is one of the proven causes of cervical cancer and there is also evidence that HPV

contributes to the development of other cancers. Cervical cancer is nearly 100% associated with HPV infection and ranks ninth among the most common cancers in women worldwide. In the U.S., an estimated 293,000 women had cervical cancer in 2018, and the incidence is 14,480 annually. In Europe, the incidence is approximately 58,000, particularly due to high incidences in Eastern Europe.

With a median five-year survival rate of just over 66%, cervical cancer has a significantly worse prognosis than breast cancer, for example (five-year survival rate: 90.3%). Although prognosis has improved significantly since the mid-1970s, due to screening procedures and improved therapies, no significant improvements in death rates have been achieved in the past decade (source: National Cancer Institute).

An important tool for combating HPV and thus ultimately cervical cancer is prevention by means of the approved prophylactic HPV vaccines. In the USA, after GlaxoSmithKline withdrew its product Cervarix from the US market, only Gardasil 9 (Merck) is currently used. In Europe, three HPV vaccines (Gardasil, Gardasil 9 and Cervarix) are currently licensed. Although the Gardasil 9 vaccine covers most of the high-risk types, it still leaves many HPV types unaddressed. According to the CDC, HPV vaccination has reduced the rate of HPV infection in U.S. teenagers by half (from 11.5% to 4.3%) and in U.S. women in their early twenties by one-third (from 18.5% to 12.1%), so there is further potential for improvement here, which is being addressed by Defence Therapeutics.

Globally, the HPV vaccination market should grow to $4.47 billion by 2026 from $3.25 billion in 2021, representing a CAGR of 6.6% (source: Research and Markets).

# FORECAST & VALUATION

## Historical development of the company

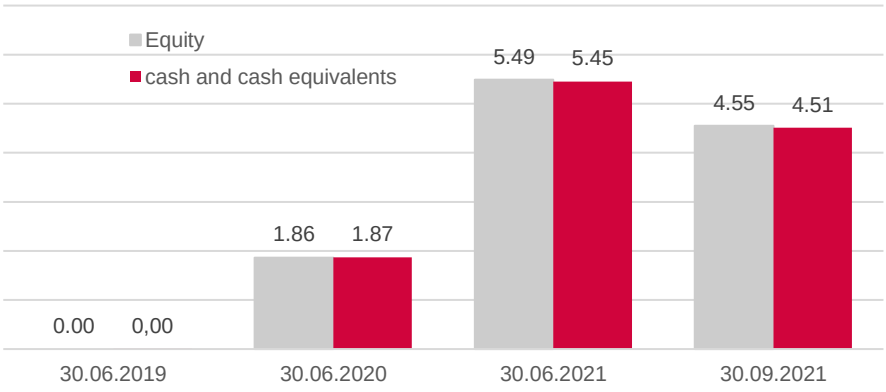
| in CAD million | FY 18/19 | FY 19/20 | FY 20/21 | Q1 21/22 |
|---|---|---|---|---|
| Total expenditure | 0.04 | 0.67 | 2.86 | 1.53 |
| After-tax result | 0.00 | -0.67 | -2.86 | -1.53 |
| | | | | |
| Free cash flow | 0.00 | -0.18 | -2.29 | -1.50 |
| Financing cash flow | 0.00 | 2.04 | 5.88 | 0.56 |
| Cash and cash equivalents | 0.00 | 1.87 | 5.45 | 4.51 |
| | | | | |
| Equity | 0.00 | 1.86 | 5.49 | 4.55 |

*Source: Defence Therapeutics Inc.; GBC AG*

Due to the still early development phase of the ACCUM molecule and the associated pipeline products, Defence Therapeutics Inc. naturally does not have any product-related revenues. Expenses are also considered low as the Company's pipeline products are currently still in the preclinical development phase. In the past three fiscal years, including the first three months of the current fiscal year 2021/2022 (fiscal year-end June 30), total expenditures add up to CAD 5.10 million, the majority of which amounting to 2.12 million CAD for research and development. The increasing number of research agreements (University of Montreal, Clinical Research Institute HUCH Ltd/HUS Comprehensive Cancer Center at Helsinki, Institut Curie, Pharmalex GmbH) have recently led to an increase in related expenses.

For North American early-stage development companies, financing through the issuance of shares or warrants is a typical picture. The accumulated cash burn (free cash flow) of CAD 3.97 million since the start of operations was offset by a cash inflow of CAD 8.48 million generated from the capital measures. Despite the cash burn, both cash and cash equivalents and shareholders' equity improved:

**Cash and cash equivalents and equity (in CAD million)**




*Source: Defence Therapeutics Inc.; GBC AG*

# FORECASTS AND EVALUATION

## Explanation of the valuation model

We use a sum-of-parts valuation approach for the company valuation of Defence Therapeutics Inc. In this approach, we value all pipeline projects separately and then add them together to arrive at a fair total enterprise value. We have identified as material pipeline projects those which, according to consultations with the company, are the most advanced and for which the transition to the first clinical trial phase is most likely to take place.

For our valuation, we generally assume a project development up to market approval, which allows us to determine the intrinsic value. We are aware that the scenario of a long-term market development is not realistic for Defence Therapeutics Inc. A respective out-licensing or sale of the project after reaching a certain clinical development stage is to be considered as a much more likely scenario. However, such transactions cannot be planned from the current standpoint due to the lack of concretization. However, even in the case of out licensing or a sale after reaching certain milestones, the fair project value, which includes a commercialization scenario, is likely to be used as a valuation benchmark.

We draw on five relevant projects as the basis for our evaluation:

- AccuTOX-002 (indication area: breast cancer)
- AccuVAC-D002M (indication area: melanoma)
- AccuVAC-PT001 (indication area: covid vaccine)
- AccuVAC-PT009 (indication area: HPV vaccine)
- AccuADC-001/ADC002 (indication area: breast cancer/stomach cancer)

Even if the pipeline contains, for example, further projects in the area of DC vaccines, we consider this merely as additional upside potential and therefore do not include them in our assessment. The same applies to novel applications, such as the combination of ACCUM™ technology with applications around CRISPR. By its very nature, the platform character of ACCUM™-technology goes hand in hand with a potential multitude of applications and developments. If there are any notable research or product launches, we will include them in our assessment.

In communication with the Company, we were informed about a possible date for the entry into clinical approval of the five relevant pipeline projects. Based on this, we have used standard market timeframes for the development of drugs and have thus determined the respective start of the study phases as well as the market entry. We have used available statistics for FDA approval as customary time periods. For oncology (breast cancer; melanoma, gastric cancer) and infectious diseases, we have the following data:

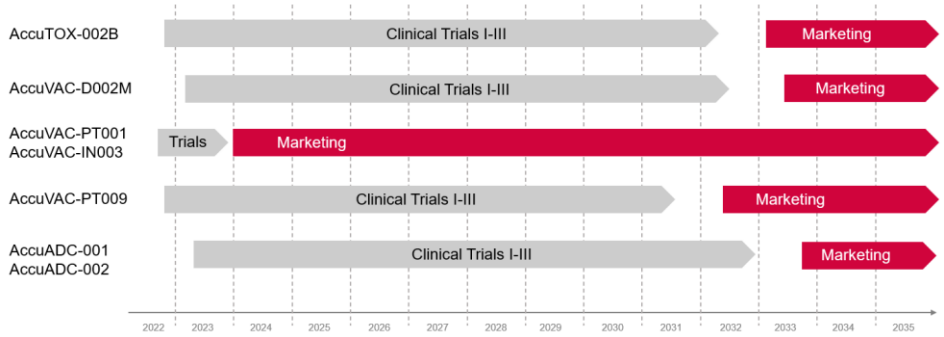
| | Oncology | Infectious diseases |
|---|---|---|
| Phase I to II | 2.7 years | 2.0 years |
| Phase II to III | 3.7 years | 3.5 years |
| Phase III to submission | 3.1 years | 3.1 years |
| Submission to market approval | 0.8 years | 1.2 years |
| **Total** | **10.3 years** | **9.8 years** |

*Source: Clinical Development Success Rates and Contributing Factors 2011 - 2020; GBC AG*

We have assumed a significantly faster time to market for the development project AccuVAC-PT001 (indication: Covid vaccine). Due to the potentially still high demand for Covid19 vaccines, we continue to assume that new developments can be brought to market in a speedy approval process. Among other things, the testing phases, which usually

take place one after the other, can be combined and significant time gains achieved as a result. In addition, information can be submitted to the regulatory authorities during the ongoing study phase as part of a so-called "rolling review". This has enabled the vaccines approved in Europe and the USA to be launched on the market after a comparatively short period of time. We assume the following timetable for the five pipeline projects:

**Development and approval timeline of Defence projects**




*Source: Defence Therapeutics Inc.; GBC AG*

This schedule illustrates the still early stage of development of the ACCUM™ approval projects. Accordingly, there is still a high degree of uncertainty regarding the probability of occurrence of the timetable, the probability of market approval, and the sales potential derived from the market. In order to adequately account for this uncertainty, we use statistical approval probabilities determined depending on the study phase:

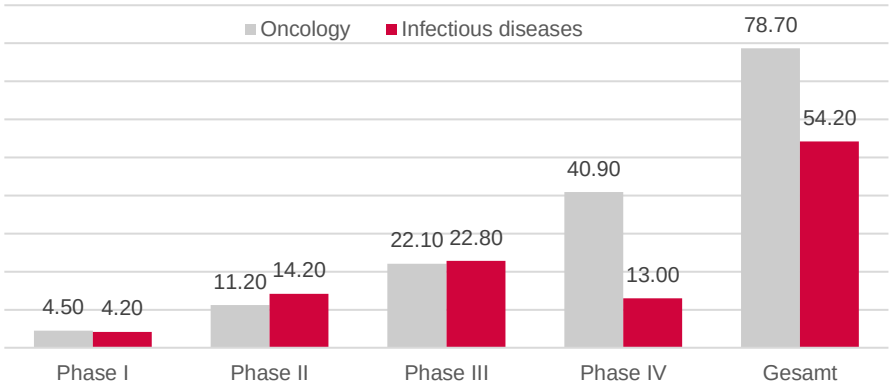
| | Oncology | Infectious diseases | Vaccinations |
|---|---|---|---|
| Phase I to II | 48.8% | 57.8% | 52.0% |
| Phase II to III | 24.6% | 38.4% | 32.2% |
| Phase III to submission | 47.7% | 64.0% | 58.1% |
| Submission to market approval | 92.0% | 92.9% | 100.0% |
| **Combined** | **5.3%** | **13.2%** | **9.7%** |

*Source: Clinical Development Success Rates and Contributing Factors 2011 - 2020; GBC AG*

However, the development projects of Defence Therapeutics Inc. are currently still before entering the clinical trial phase I. In our research, we were unable to find any statistics on the entry of preclinical developments into the clinical trial phase. We assume here a probability of 65%, which we have chosen. The reason we go above 50% here is the company's announcements to date, which point to a very successful preclinical development. Most recently, the company reported very promising data on AccuVAC-PT009 (indication area: HPV vaccine) on 26 January 2022. According to the press release, AccuVAC-PT009 triggered a 27- to 36-fold increase in antibody titre four to six weeks after immunisation compared to the approved Gardasil-9.

Finally, development from an early stage is associated with very high development expenditure. We have taken these into account, separately for the individual approval phases, as classic project investments. Statistical evaluations for FDA approval are also available for this. Naturally, the financial requirements in the early clinical trial phases are lower than in the third and fourth (post-marketing approval trial) phases. As described, we do not assume that Defence Therapeutics Inc. will independently accompany the drug development up to the cost-intensive phases.

**FDA approval costs (in USD million)**




*Source: ASPE: Examination of Clinical Trial Costs and Barriers for Drug Development; GBC AG*

## Assumptions for the pipeline projects

The main factors for determining the project-related fair value are comparable to those of an investment calculation. First, we take into account the necessary costs for clinical development and, once market approval has been obtained, these are offset by the earnings (potential sales less costs) from product commercialization. The fair enterprise value, taking into account the statistical probability of success, corresponds to the present value of the project cash flows for the estimation period, plus the present value of the terminal value.

### *AccuTox-002*

AccuTox-002 is to be developed and tested as a "naked" ACCUM™ molecule for the treatment of breast cancer. A possible start of marketing and thus the first project revenues could occur in 2033, taking into account an average clinical development period. Until then, we assume total development costs of CAD 99.16 million (equivalent to USD 78.70 million) for the project, which we allocate to the individual study phases. We use the annual sales of the ADC drug Kadcyla, which is approved for the treatment of breast cancer, as the basis or benchmark for the marketing sales we assume from 2033 onwards. Although this is a different technology, Kadcyla, similar to what AccuTox-002 would be if approved, is a novel therapy in the treatment of breast cancer. In our view, this provides good comparability.

### *AccuVAC-D002*

The first clinical trial in the field of DC-vaccines is scheduled to take place this year in the UK in the indication area of melanoma and we are therefore only including the AccuVAC-D002 development program in our assessment. However, other indication areas that are in preclinical development can also be transferred to the clinical study phase in the near future. We have included total development costs of CAD 99.16 million for this project up to market approval, which according to our timetable could not be available until 2033. The only DC-vaccine approved to date (trade name Provenge) could be used as a basis for the possible market potential after market approval. However, we do not have any current data for this. According to Defence Therapeutics Inc., Dendreon generates annual sales revenues of more than USD 400 million from the sale of Provenge. It should be taken into account here that Provenge has only led to an extension in the survival of prostate patients of an average of 4.5 months compared to standard therapy. If a DC-vaccine linked to the Accum™ technology is successful in gaining regulatory approval, a significantly higher

efficacy can be assumed. As of the approval date, we include sales revenue of more than CAD 420 million in our calculation.

### *AccuVAC-PT001/AccuVAC-IN003*

The Covid-19 vaccine program, consisting of AccuVAC-PT001 (subcutaneous injection) and AccuVAC-IN003 (intranasal vaccine), is the program with the fastest development potential. While Covid-19 vaccine candidates must also pass the standard three clinical trial phases, these can be completed much more quickly. For example, for faster testing of Covid 19 vaccines, Phase I and Phase II can be combined and within a few weeks of the start of Phase I, the next phase of the study can already be underway. We have assumed a clinical approval period of 1.3 years for the project assessment and, based on the expected entry into study phase I in November 2022, we anticipate the start of marketing from December 2023. The associated study costs of CAD 68.29 million are accordingly spread over a shorter period.

According to vaccine manufacturers, sales totaling USD 75 billion were generated in Europe and the USA in 2021. However, this was a year particularly impacted by the Covid 19 pandemic, in which a very high level of vaccination readiness was also observed. For the sales expectations of this project, it is also important to keep in mind the uncertainties regarding further pandemic developments. For example, it is not yet clear whether recurrent vaccinations will be necessary to combat pandemics or endemics. In addition, there are a number of vaccine candidates in the development pipeline, which means that multiple vaccines could be approved.

### *AccuVAC-PT009*

In the HPV vaccine program, the Company recently reported very promising data showing a significantly higher number of antibodies compared to the currently approved vaccine Gardasil-9. This means that the entry into clinical approval, which we assume will be at the end of the current year 2022, can be regarded as somewhat more likely. This program is also expected to take 9.8 years for approval, and we thus assume, as a basis for calculation, market approval in mid-2032. Even though the results so far show a clear superiority over the approved HPV vaccines, we use the current market volume as a basis for calculation. Currently, this is €3.25 billion and annual growth (CAGR) of 6.6% is assumed. We make significant deductions here and include sales revenues averaging around CAD 540 million for the valuation of this project in the marketing phase.

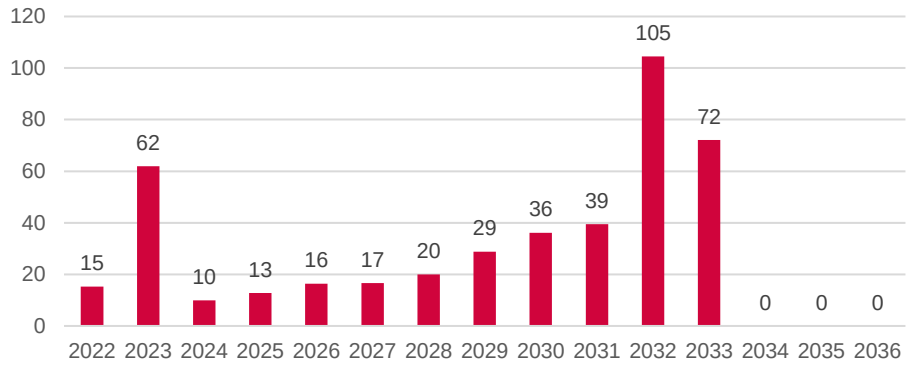
### *AccuADC-001/AccuADC-002*

The Company's ADC program currently comprises two development projects AccuADC-001 and AccuADC-002 for the indications breast cancer and colorectal cancer. Both projects are expected to jointly enter the clinical trial phase around the turn of the year 2023/2024. With a statistically determined study period of 10.3 years for the oncology area, market approval would then be possible in October 2033. In deriving the sales potential, we include the reference product Kadcyla, which generated sales of CHF 1.75 billion (USD 1.88 billion) in 2020. With corresponding safety discounts, we expect sales revenues of around CAD 900 million on average from the time of marketing in our estimation period.

## Rating

The modeling of the projects shows that the first years are characterized by expenses related to clinical development. By the time of approval, total expenses amount to CAD 434 million, which can be broken down as follows according to our modeling:

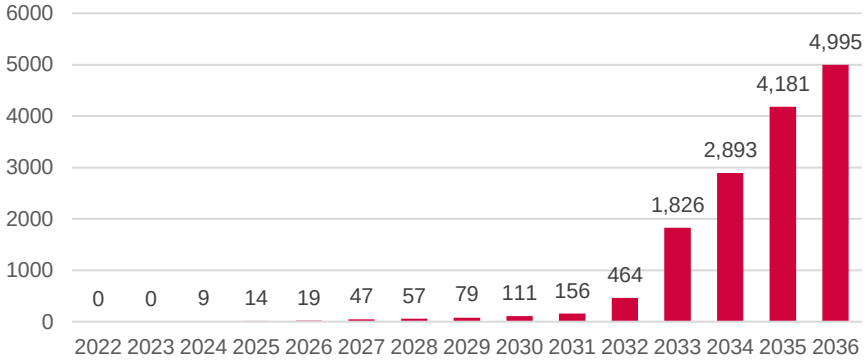
**Cumulative clinical development expenses (in CAD million)**




*Source: GBC AG*

The visible increase in development costs in 2023 is related to the assumed short development period of the Covid 19 vaccine. Here, we have spread the development costs over a significantly shorter period. As a result, the first revenues could be generated as early as 2024:

**Cumulative sales of Defence projects (in CAD million)**




*Source: GBC AG*

This cumulative presentation of revenues and research expenses is only a consolidated presentation for illustrative purposes. As mentioned, it is not expected that the Company will develop projects to market approval, but rather partnering, sale or out-licensing in an early study phase is a realistic scenario.

We have determined a separate fair value for each project, taking into account the project-related probability of occurrence. To determine the future cash flow, we compared the potential revenue with the development costs and operating costs. We discounted the operating cash flow of the specific estimation period (2022-2036) and the terminal value using weighted average cost of capital (WACC).

### *Determination of the cost of capital*

The weighted average cost of capital (WACC) of Defence Therapeutics Inc. is calculated from the cost of equity and the cost of debt. For the calculation of the cost of equity, the fair market premium, the company-specific beta and the risk-free interest rate have to be determined.

The risk-free interest rate is derived from current yield curves for risk-free bonds in accordance with the recommendations of the Fachausschuss für Unternehmensbewertungen und Betriebswirtschaft (FAUB) of the IDW. This is based on the zero bond interest rates published by the Deutsche Bundesbank using the Svensson method. To smooth short-term market fluctuations, the average yields of the previous three months are used, and the result rounded to 0.25 basis points. **The currently used value of the risk-free interest rate is 0.25%. This value represents the lower limit currently used by us.**

We use the historical market premium of 5.50% as a reasonable expectation of a market premium. This is supported by historical analyses of stock market returns. The market premium reflects the percentage by which the stock market is expected to yield better than low-risk government bonds. According to the GBC estimation method, a beta of 2.14 is currently determined. Using the assumptions made, we calculate a cost of equity of 12.04% (beta multiplied by risk premium plus risk-free interest rate). As we assume a sustainable weighting of 100% for the cost of equity, the weighted average cost of capital (WACC) is 12.04%.

### *Model result*

In total, the total value of the projects we have determined is CAD 471.01 million. This breaks down as follows:

| | Market approval | Admission-probability | Fair project value (in CAD million) |
|---|---|---|---|
| AccuTOX-002B | 2033 | 3.4% | 74.75 |
| AccuVAC-D002 | 2033 | 3.4% | 62.27 |
| AccuVAC-PT001/AccuVAC-IN003 | 2023 | 6.3% | 109.39 |
| AccuVAC-PT009 | 2032 | 8.6% | 130.68 |
| AccuADC-001/AccuADC-002 | 2033 | 3.4% | 93.66 |
| | | **Total** | **470.75** |

However, the project values do not include the overhead costs (costs for administration, stock exchange listing, rent, personnel costs for management, etc.) of Defence Therapeutics Inc. We have determined these, analogous to the determination of the project values, on the basis of concrete estimates (period 2022 - 20236) as well as a terminal value by means of perpetuity. The fair value of the overhead costs to be deducted amounts to CAD 31.86 million. In addition, we have valued the outstanding warrants/options using a Black-Scholes model and determined a value of CAD 41.54 million.

| in CADm | |
|---|---|
| Fair Value Projects | 470.75 |
| Fair Value Overhead Costs | -31.86 |
| Fair Value Warrants/Options | -41.54 |
| **Fair Value Company** | **397.47** |
| Number of shares | 36.04 |
| **Fair Value per Share** | **11.02 CAD** |
| **Fair Value per Share** | **7.60 EUR** |

With 36.04 million shares, we have a fair value per share of CAD 11.02 (EUR 7.60). Based on the current share price of CAD 4.90 (Canadian Securities Exchange) and EUR 3.23 (Frankfurt), the price potential is high, and we therefore assign a BUY rating.

# APPENDIX

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| | |
|---|---|
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