Safe Harbor Statement
This presentation includes statements that are, or may be deemed, “forward-looking statements.” In some cases, you can identify forward-looking statements by terminology including “anticipates,” “believes,” “can,” “continue,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “should,” “will,” “would” or the negative thereof or other variations thereon or other comparable terminology.

We operate in a very competitive and rapidly-changing environment and new risks emerge from time to time. As a result, it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You are cautioned not to place undue reliance upon such forward-looking statements as predictions of future events.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We direct you to our Annual Report on Form 10-K for the year ended December 31, 2017, our subsequent current reports on Form 8-K and our other filings with the Securities and Exchange Commission.

Any forward-looking statement included in this presentation speaks only as of the date hereof. Except as required by law, we do not undertake any obligation to update or revise, or to publicly announce any update or revision to, any of the forward-looking statements, whether as a result of new information, future events or any other reason after the date of this presentation. For all forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.
Clinical-stage, immuno-oncology company focused on the development of next-generation, targeted therapies based on proprietary NK-Engager TriKE and TetraKE and Bispecific ADC platforms.
2019: POSITIONED TO BE A TRANSFORMATIONAL YEAR

2 proprietary technology platforms driving next-generation immuno-oncology pipeline

NK-Engager **TriKE** and **TetraKE**

1 program entering Phase 1 1H‘19

2 preclinical programs entering clinic by 2H‘19/1H‘20

**Bispecific-ADC**

1 lead program in Phase 2 study

Results expected 1Q‘19

Exclusive license to broad IP estate covering oncology pipeline with exclusive rights to TriKE and TetraKE platform, Bi-Specific ADC platform.
## IMMUNO-ONCOLOGY PIPELINE OVERVIEW

<table>
<thead>
<tr>
<th>Product Candidates</th>
<th>Platform</th>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Market</th>
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<tbody>
<tr>
<td>GTB-3550</td>
<td>TriKE</td>
<td>Myeloid Malignancies</td>
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<td>GTB-C3550</td>
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<tr>
<td>GTB-1615 / others</td>
<td>TriKE/TetraKE</td>
<td>Carcinoma &amp; Cancer Stem Cells</td>
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<tr>
<td>GTB-1550</td>
<td>Bispecific ADC</td>
<td>B-cell Leukemias &amp; Lymphomas</td>
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### Company Overview

#### Amgen’s T-cell cell engager

- Approved for marketing December 2014

#### CAR-T therapy breakthroughs

- Include utilization of intracellular domain to induce T-cell proliferation before re-infusion into patients

#### NK Cell engager-based companies:

- Signed lucrative agreements with large pharmaceutical companies

#### Comparison

- **TriKEs/TetraKEs** engage NK cells which may have potential advantages

- Designed to engage NK cells and provide activating cytokine to stimulate NK cell activity and proliferation

- Designed to engage NK cells AND provide activating cytokine to stimulate NK cell activity and proliferation

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<table>
<thead>
<tr>
<th>Company/Product</th>
<th>Highlight</th>
<th>Comparison</th>
<th>Value Indicator</th>
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<tbody>
<tr>
<td><strong>BlynCyto</strong></td>
<td>Amgen’s T-cell cell engager approved for marketing December 2014</td>
<td>TriKEs/TetraKEs engage NK cells which may have potential advantages</td>
<td><strong>$175 Million 2017 Sales</strong>¹</td>
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<tr>
<td>KitePharma</td>
<td>CAR-T therapy breakthroughs include utilization of intracellular domain to induce T-cell proliferation before re-infusion into patients</td>
<td>Designed to engage NK cells and provide activating cytokine to stimulate NK cell activity and proliferation</td>
<td><strong>$11.9 Billion Acquisition</strong>²</td>
</tr>
<tr>
<td>Gilead</td>
<td>NK Cell engager-based companies: Signed lucrative agreements with large pharmaceutical companies</td>
<td>Designed to engage NK cells AND provide activating cytokine to stimulate NK cell activity and proliferation</td>
<td><strong>$96M upfront + $5B milestones Collaboration</strong>³</td>
</tr>
<tr>
<td>Affimed</td>
<td>Dragonfly</td>
<td><strong>$695 Million Collaboration</strong>⁴</td>
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TRI- AND TETRA-SPECIFIC NATURAL KILLER CELL ENGAGER PLATFORM
NATURAL KILLER CELL TARGETING: POTENTIAL TO BE THE NEXT FRONTIER IN CANCER IMMUNOTHERAPY

We are innovating a novel immunotherapy built upon 20+ years of NK and cytokine research

- **1994**: IL-2
  - Used to stimulate post-transplant immunity
  - Approved for myeloma and kidney cancer

- **1995**: IL-2+ Autologous NK cells
  - Used to stimulate post transplant immunity

- **2010**: IL-2+ Autologous NK cells
  - Used to treat refractory AML

- **2010**: rhIL-15+ Allogeneic NK cells
  - Used to treat refractory AML

- **2013**: IL-15 complexes
  - Post-transplant relapse

- **TriKEs & TetraKEs**: Potential for hematologic malignancies, sarcomas and solid tumors

NK cells are immune cells that we believe can be harnessed to target cancer cells without some of the limitations associated with T-cells and/or CAR-T

1: Expect to begin First in Human clinical trial with most advanced TriKE product candidate in 1H 2019
BIKES VERSUS BITES: DIFFERENT IMMUNE CELL ENGAGEMENT

BiTE Mediated Killing

BiKE Mediated Killing

TriKE and TetraKE Platform
TRIKE CONSTRUCT STARTED WITH BISPECIFIC KILLER CELL ENGAGER (BIKE)

Schematic Representation of BiKE Engaging an NK Cell and Targeting a CD33+ AML Tumor Cell
TriKEs effectively make NK cells tumor antigen specific without genetic manipulation while IL-15 induces potent NK cell activation and proliferation\(^{(1)}\)
**Structure of BiKE and TriKE’s**

**Addition of IL15 to TriKE**

1633 BiKE

- VH
- VL
- HMA
- VH
- VL

sFV16sFV133.pET21d

161533 TriKE

- VH
- VL
- IL15
- VH
- VL

sFV16sFV133.pET21d

Anti-CD16

Anti-CD33

CD1633 BiKE

CD161533 TriKE
Other NK Cell Engager Construct: 
Lacks Specific Activation/ Proliferation Moiety

non-functional monomer

non-covalent dimerization
(head-to-tail)

Tetravalent functional homodimer (≈110kDa)
AML Mouse Model Has Generated Compelling Data Supporting the TriKE Concept

Demonstration that IL-15 in the TriKE drives NK cell survival and proliferation

(1) Clin Cancer Res. 2016 Jul 15;22(14):3440-50
GTB-3550: MOST ADVANCED TRIKE

Targeting
CD33+ Myeloid Malignancies

Phase 1 Study
Expect to initiate 1H’ 19

Phase 1 Study Design

~60 patients
Relapse/Refractory AML, High Risk MDS and Advanced Systemic Mastocytosis

Dosing
4 days continuous infusion followed by 3 days off repeated X 3 weeks
Potential for Enhanced NK cell activity\(^1\): “fast follower” to GTB-3550

**GTB-C3550: NEXT-GENERATION TRIKE**

- Designed with humanized, single-domain V\(_{H}\) anti-CD16
- Potentially More

1: Felices et. al., Second Generation Camelid TriKE Induces Improved NK Cell Mediated Targeting of AML in Preclinical Models; American Society of Hematology 2017; Poster
GTB-1615: TetraKE Targeting EPCAM+ Carcinomas and CD133+ Cancer Stem Cells

Working towards being in the clinic with a solid tumor product candidate in 2019

TetraKE-Mediated Cancer Stem Cell Killing
POTENTIAL BENEFITS OF TRIKE AND TETRAKE THERAPEUTICS

• Tumor antigen targeting without the need for genetic modifications as in certain cell therapies

• Potential in hematologic and solid tumors

• Broad potential applicability
  – Attractive bio-distribution; important for solid tumor potential
  – Non-immunogenic and quick clearance properties
  – Can be engineered to target a variety of tumor antigens

TriKEs are the protein version of CAR-T with multiple clinical and practical advantages”

DR. JEFFREY MILLER
Deputy Director of the Masonic
BISPECIFIC ANTIBODY DRUG CONJUGATE PLATFORM
Bispecific Antibody Drug Conjugate (ADC) Platform

- Bi-specific, tumor antigen-directed single-chain fusion proteins
- Simultaneously targets two antigens on select cancer cells
  - Can modify to target numerous tumor antigens
- Platform amenable to multiple types of payloads
  - Most advanced using diphtheria toxin
    - De-immunized DT\textsuperscript{1} and other payloads available
- Designed for enhanced efficacy\textsuperscript{2}
- Potential to minimize off-target effects

\textsuperscript{1} Toxins 2018, 10, 32; \textsuperscript{2} Clin Cancer Res 2005;11(10) 3879-3889
GTB-1550: LEAD BI-SPECIFIC ADC PROGRAM

Targeting

- CD19 & CD22 antigens on select cancer cells
- Indication: B-cell lymphomas and leukemias
- Payload: Modified Diphtheria Toxin
- Positive results from 25 patient Phase 1 trial

Ongoing Phase 1/2 Study Design

- ~18 patients
- NHL/ALL patients
- Investigator-led, two-stage

1: Toxins 2018, 10, 32; 2 Clin Cancer Res 2005;11(10) 3879-3889
Of the 9 patients who had measurable drug levels; 2 had durable responses

All adverse events (AEs) were grade 1-2 and transient
  – Most common were weight gain, low albumin, elevated liver enzymes, and fever

Panel A: 40% decrease in intra-abdominal mass in 77 year old patient with refractory chronic lymphocytic leukemia
  – Patient had Partial Response (PR) following single course

Panel B: Resolution of subcutaneous nodule in 53 year old patient with refractory marginal zone lymphoma
  – Patient had Complete Response after 2nd course
  – CR is ongoing for over 3 years
**GTB-1550: PHASE 1/2 TRIAL DESIGN – CURRENTLY IN PHASE 2 COMPONENT¹**

<table>
<thead>
<tr>
<th>Day</th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>8</th>
<th>15</th>
<th>17</th>
<th>19</th>
<th>22</th>
<th>29</th>
<th>50</th>
<th>1 yr</th>
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<tbody>
<tr>
<td>GTB-1550 at assigned dose IV on day 1, 3, 5, and 8 and day 15, 17, 19, 22</td>
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**Study Design**
- Continuation Phase 1 dose/schedule but with a higher number of doses (4 versus 8 doses)
- Two-stage design to confirm safety and activity level
- Open label
- Up to 34 patients
- Indication: B-cell lymphomas and leukemias

**Clinical Site**
- Masonic Cancer Center, University of Minnesota

**Principal Investigator**
- Veronika Bachanova, M.D., Ph.D.

**Co-Principal Investigators**
- Jeffery S. Miller, M.D.
- Aleksandr Lazaryan, M.D., M.P.H., Ph.D.

¹: Toxicity and Day 29 disease reassessment measured for evaluable patients in each of two stage trial design (Phase 1 and Phase 2 components). Patients evaluable for response receive at least five doses.
GTB-1550: PRELIMINARY CLINICAL RESULTS FROM PHASE 1/2 INTERIM DATA REVIEW

- Data snapshot included review of toxicity profile, disease reassessment at Day 29
  - 13 patients met evaluation criteria of at least 5 doses – 4 ALL, 9 NHL

- >50% of patients (7 of 13) exhibited clinical benefit as defined by stable disease, partial remission or complete response at Day 29

- Efficacy signal most pronounced in ALL
  - 75% (3 of 4) exhibiting clinical benefit – 1CR, 1PR and 1SD

- Adverse events were mostly grade-1 and grade-2 and reversible
  - Four patients with dose limiting toxicity – 1 grade-4 low platelet count, 2 grade-3 increase liver function tests and 1 grade-3 capillary leak

- Bi-specific ADC Clinical Advisory Board
  - Masonic Cancer Center -- Dr. Jeffrey Miller, Deputy Director, Dr. Veronika Bachanova, Dr. Daniel Vallera
  - Dr. Mark R. Litzow, M.D., Professor of Medicine in the Division of Hematology at Mayo Clinic
  - Dr. Arthur E. Frankel, M.D., Chief of Medical Oncology at Mitchell Cancer Institute (USA-MCI)

Note: Toxicity and Day 29 disease reassessment measured for evaluable patients in each of two stage trial design (Phase 1 component and Phase 2 component). Patients evaluable for response receive at least five doses. Expect to enroll additional ALL patients.
Corporate Overview
## Financial Profile: GTBP (OTCQB)

<table>
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<tr>
<th>Metric</th>
<th>Value</th>
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<tbody>
<tr>
<td>Market Cap&lt;sup&gt;1&lt;/sup&gt;</td>
<td>~$42M</td>
</tr>
<tr>
<td>Shares Outstanding</td>
<td>~50.4M</td>
</tr>
<tr>
<td>Average Volume&lt;sup&gt;1&lt;/sup&gt;</td>
<td>~252K</td>
</tr>
</tbody>
</table>

1: Based on Jan. 4, 2019 closing price of $0.84 per share
UPCOMING POTENTIAL MILESTONES FOR GROWTH

GTB-3550
Phase 1 study expected to initiate 1H'19

GTB-1550
Topline data from Phase 1/2 study expected 1Q'19

TRIKE & TetraKE
Two programs entering clinic by 2H'19/1H'20

Uplisting to national exchange

Potential NASDAQ listing

Potential business development opportunities