



# IDEA2 Kickoff Workshop

John Priatel, PhD – Founder  
June 20-21st, 2019

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# DEDICATED TEAM

Proven expertise in cancer immunology



**Salim Dhanji, PhD**  
**CEO and Founder**

Formerly Director of Preclinical Research at Qu Biologics Inc. with 10 years of industry experience. Postdoctoral fellowship at the Princess Margaret Cancer Hospital  
Expertise in lymphocyte biology, cancer, and autoimmunity



**Ken Harder, PhD**  
**Founder**

Professor, Department of Microbiology and Immunology, UBC. Canada Research Chair Tier II in Host Pathogen/Tumour Immunology  
Expertise in cancer, biochemistry, hematopoiesis, and innate immunity



**John Priatel, PhD**  
**Founder**

Assistant Professor, Department of Pathology and Laboratory Medicine. UBC Staff Scientist, BC Children's Hospital Research Institute.  
Expertise in T cell biology of infection, autoimmunity, and cancer

Founders have over 80 scientific publications and patents and >\$2 million in funded research

# CURING CANCER

The promise of cancer immunotherapy

- Immuno-Oncology (IO) or cancer immunotherapy - major area of cancer research
  - Market expected to reach **\$120B** by 2021 (Markets and Markets)
  - All large pharma companies have 1<sup>st</sup> gen IO programs
- Most important class of 1st gen IO drugs called **checkpoint inhibitors** turn off the “brakes” in cancer killing T cells
  - Durable responses in several cancers but only in a subset of patients
  - Other suppressive pathways still engaged
- How do we improve the response rate?
- Develop 2<sup>nd</sup> gen IO drugs targeting other pathways that can synergize with checkpoint inhibitors to increase response rate

# SOLUTION

Overcome resistance – boost activity



Humanized antibody  
targeting G-CSF

- ME Therapeutics founded with goal of developing next generation IO treatments
- Research focused on myeloid cells which play a major role in resistance to first generation IO drugs
- Developed humanized therapeutic antibody against key driver of myeloid cell immune suppression
- Target – G-CSF
- Goal – inhibit G-CSF for a stronger anti-tumour immune responses

# WHY TARGET G-CSF?

Multifaceted role of G-CSF in immune suppression

- G-CSF:
  - Strongly associated with poor survival in lung, breast, and colon cancer
  - Induces suppression of cancer killing T cells
  - Promotes metastases
  - Resistance to targeted cancer therapies (**VEGF** inhibitors)
- Activates several key cancer resistance pathways at once
- G-CSF inhibition can potentially remove multiple barriers to the success of current cancer therapy with one drug

# THERAPEUTIC and IP

Humanized G-CSF blocking antibody

6

**Therapeutic = humanized, high affinity anti-human G-CSF  
antibody → ME1B11**

- Ready for manufacture
- Provisional patent filed in 2017 (composition and use) on 2 lead antibodies (PCT filed 2018)
- IP 100% owned by ME Therapeutics
- Freedom to operate

# SAFETY and EFFICACY

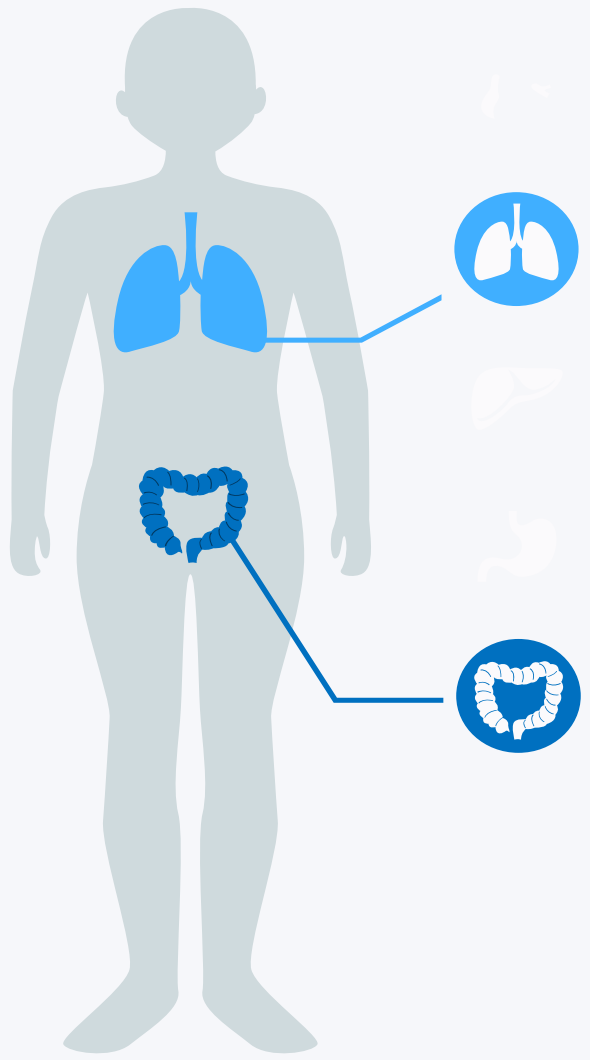
G-CSF can safely be blocked without undesired consequences

- G-CSF inhibition in vivo can **safely normalize** the effects of G-CSF on granulocytes in the blood
- Treatment does not cause neutropenia (on target side effect) even with 100% removal of detectable G-CSF
- Treatment safely and effectively blocks the effect of tumour-induced G-CSF on immune cells
- **Reduces cancer growth and metastases** in vivo and reduces immune suppression in the tumour
- Targeting the G-CSF pathway shown to be **safe in the clinic**
- Safety of therapy **easily monitored** with existing blood tests and any potential toxicity can be overcome with available drugs

# MARKETS

Blockbuster potential

- IO drugs target immune system and not tumour directly
  - Many potential indications
- Our leads: Lung and colorectal cancer
- Lung cancer is responsive to IO but low response rate
  - Largest potential market
- Colorectal cancer – under-served by IO but G-CSF likely plays significant role in resistance to current treatments
- Either market has blockbuster potential



**Lung cancer**  
234,000 new cases annually (US)  
Annual immunotherapy cost \$150,000  
Assume 5% of patients treatable  
**\$1.8 billion in annual revenue**



**Colorectal cancer**  
140,000 new cases annually (US)  
Annual immunotherapy cost \$150,000  
Assume 5% of patients treatable  
**\$1.1 billion in annual revenue**



# COMPANY

What makes us unique

9



Founded in September 2014

6 PhDs on team (3 scientists and 3 founders)

Raised \$860,000 CAD to date (\$380,000 dilutive)

Own 100% of our intellectual property

# CONTACT

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CEO and founder



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