

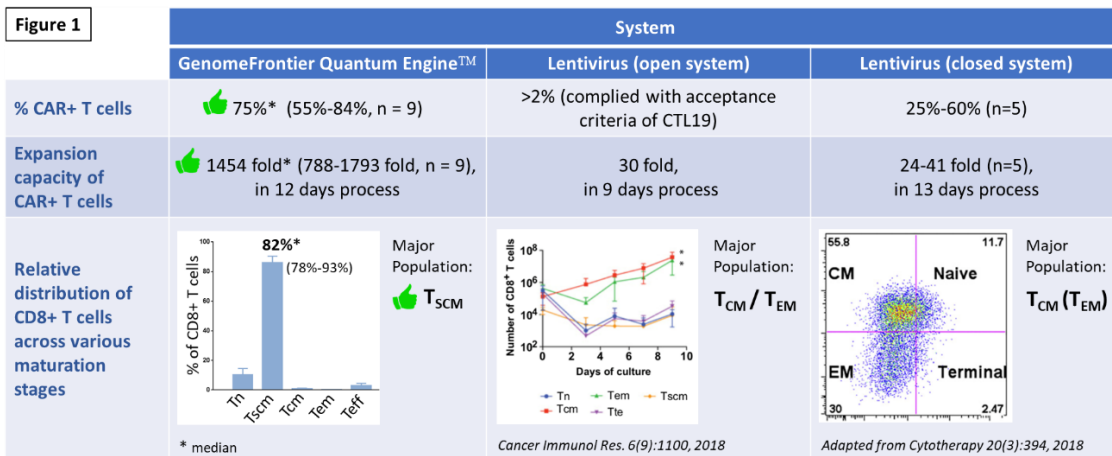
GenomeFrontier Therapeutics, Inc. – committed to the development of **advanced, **affordable** and **accessible** immune cell therapies for efficacious cancer treatments**

Defining unmet needs in gene therapy

- Viral vector is currently the most common vehicle for gene therapy due to its high gene delivery efficiency.
- However, use of viral vectors are associated with several disadvantages including (1) virus-associated safety risks, (2) high manufacturing costs, and (3) limited payload capacity of viral vectors, which severely restrict the repertoire of genes that can be encoded.
- A virus-free vector obviates these shortcomings. It is safer than viral vectors due to lower immunogenicity and lower risk of genome toxicity. Moreover, virus-free vector has the capacity to carry larger fragments of genetic material and the manufacturing costs of virus-free vectors are also markedly lower than those required for viral vector production.
- However, despite the advantages of virus-free vectors, it remains a challenge to efficiently deliver these vectors into immune cells such as T cells and also to efficiently integrate genes into the genome for stable expression. Electroporation is currently the most efficient method for delivery of virus-free vectors into immune cells, but electroporated cells become fragile with markedly reduced viability and expansion capacity.
- Therefore, there is clearly an unmet need for major improvements in this area of gene therapy.

Quantum Engine™ addresses the unmet needs

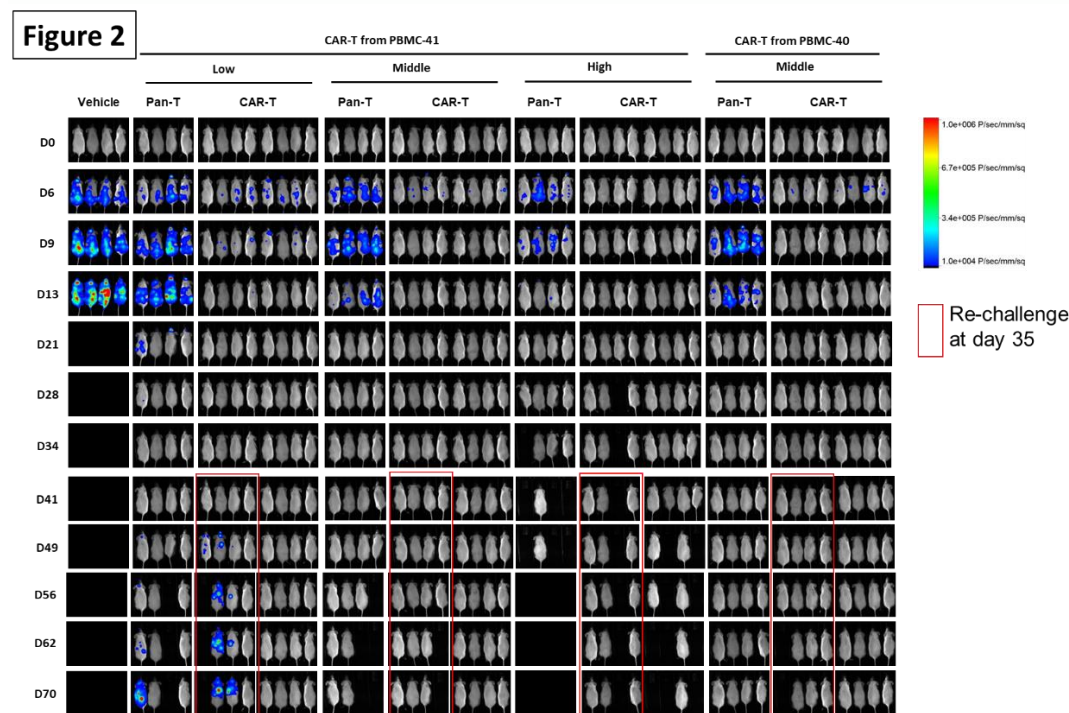
- GenomeFrontier Therapeutics, Inc. (GF) addresses these unmet needs of conventional gene therapy by integrating four platforms: Quantum Nufect™, Quantum pBac™, iCellar™ and G-Tailor™, which improve vector delivery, therapeutic gene integration, cell expansion capacity and gene design, respectively. Synergistically, these platforms form the Quantum Engine™ for producing virus-free, gene-modified cells optimal for immune therapy.
- International (PCT) and Europe, Australia, Canada, Malaysia and Taiwan patent applications have been filed to protect Quantum Engine™'s core technologies. The applications cover at least 12 jurisdictions including the United States, China, Japan, Korea, and Australia. Notices of allowance/patents have already been issued in Europe, Malaysia and in Taiwan.
- GF has successfully utilized the Quantum Engine™ to produce dual-targeting (CD19, CD20) CAR-T cells that contain a safety switch control gene (GF-CART01). As shown in Figure 1 below, when compared with CAR-T cells that have been produced using the lentivirus system, Quantum Engine™ produces a markedly higher % (median of 75%) of CAR+ T cells that are also more robustly expanded (median of 1454 fold increase). Quantum Engine™ also produces a majority population of T_{SCM} cells (median of 82%) that are thought to represent the most therapeutically efficacious T cell population.
- The company plans to utilize GF-CART01 cells for the treatment of patients with B cell malignancies. IND-enabling preparation of GF-CART01 cells including GMP/GTP production, pre-clinical studies and pre-IND consultation is planned for 2021. Filings of IND applications in the United States and in Taiwan are planned for 2022.



T_{SCM} cells = memory stem T cells that are thought to be the most therapeutically efficacious T cell population
T_{CM}, T_{EM} = potentially less therapeutically efficacious T cell populations

Adoptive transfer of GF-CART01 cells dose-dependently eradicates Raji tumors in mice

- As shown in Figure 2, GF-CART01 cells produced from donors PBMC-40 and PBMC-41 and adoptively transferred into Raji-bearing mice completely eradicated Raji tumor cells by Day 21 post transfer. The treated mice remained tumor free for at least 70 days. GF-CART01 cells' anti-tumor efficacy was also dose-dependent, as can be demonstrated in IVIS images of mice injected with low, mid and high doses of PBMC-41 GF-CART01 cells. Importantly, even with tumor rechallenge (red boxes), GF-CART01mid and high dose groups remained tumor free.



Additional ongoing endeavors to broaden the repertoire of “GPS-guided” immune cells, and to provide affordable, accessible and effective immune cell therapies

- The company continues to pursue R&D projects to value create for Quantum Engine™ and all of its associated platforms and products.
- GF is at the development stage for the next CAR-/TCR- T system for production of allogenic gamma-delta CAR-/TCR- T cells.

- The company is also focusing on the automation and decentralization of CAR-T cell manufacture with the long-term goal of providing affordable and effective CAR-T cell therapies that are widely accessible to patients in need. We are in collaboration with ADVA Bio to develop a desktop automatic and closed virus-free CAR-T cell production system.

Company Information

Founded	Established in Cayman in January of 2018. In July of 2018, spun-off to a wholly-owned Taiwanese company for conducting R&D in Taiwan
Focus	Licensing-out or collaboration to bring GenomeFrontier's proprietary virus-free gene and cell therapy pipelines from R&D to phase I/II clinical trials
Major Investors	Capital: 3,565,050 USD; Total shares: 83,490,000 62.33% from the management team and family and friends 7.5% from National Development Fund of Executive Yuan, Taiwan through the "Industrial Innovation and Transformation Fund" 12.6% from GICC Biomedical Co., Taiwan

Management Team

 Avery Wu, Chairman / General Manager 30+ years of company establishment, corporate governance and business development - Former Executive VP, Genuine C&C, Inc., Taiwan - Former executive VP, Aries, Inc., Taiwan - Former Chairman, Hubei Xinsheng Inc., China - Former chair/president, Shanghai Haipon Inc., China - B.S., National Chung Hsing University, Taiwan	 Jeff Hsu, Ph.D., Director, Intellectual Properties, IP Expert in Biological Product 16 years of experience in R&D and 8+ years of patent prosecution experience in the biotechnology fields - Registered United States Patent Agent - Owner of BOKSON IP Consulting, USA - Former Visiting Expert at Academia Sinica - Former Biotechnology Patent Examiner in USPTO - Ph.D., State University of New York at Buffalo, US
 Sareina Wu, Ph.D., Founder and CSO, Pioneer of Virus Free Gene Delivery 30+ years of R&D experience in Biomedical Sciences - Former President of Celgenomics, LLC USA - Former Faculty, Medical College of Georgia, US - Former Assistant Research Professor, Chang Gung Univ. - Ph.D., Vanderbilt University, US	 Peter Chang, Ph.D./MBA, Director, Business Development 10+ years of experience in cancer research including 5 years in CAR-T cell therapy research in Memorial Sloan Kettering Cancer Center, US - MBA, Quantic School of Business and Technology - AngelHack HACKcelerator Entrepreneurship Program - Ph.D., Cornell University
 Karen Wen, Ph.D., COO/Chief Strategy Officer, Biological Product Manufacturing and CMC Expert 25+ years experience in corporate governance, business development, R&D, manufacturing and GMP/GDP quality system - Co-Founder and President of Mycenax Biotech Inc., a CDMO and biosimilar-based company, Taiwan - Research Fellow and ISO plant for IND of Development Center for Biotechnology, Taiwan - Ph.D., Old Dominion Univ. & Eastern Virginia Med. School, US	 Martin Chen, Chief Integration Officer, ICT and Company M&A Expert 30+ years in IC design, company establishment and M&A - Vertex Networks, Chairman & CEO (1995~2001); Helicomm Inc., Chairman & CEO (2002~ 2005); RetiCorp, Chairman & CEO (2005 ~ 2010); Oplink, COO (2010~2012); Trubuzz Inc., Chairman (2013~2019); HBMT, INSTO, BoD member
 Clark Su, Financial Consultant 30+ years of experience in Venture Capital industry - Secretary General, Taiwan Private Equity Association and Taiwan Angel Investment Association - Former Secretary General, Taiwan Venture Capital Association and the vice president of Champion Venture Capital - MBA, National Cheng-Chi University, Taiwan	

Scientific Advisory Board

 Yun Yen, M.D., Ph.D. - Chair and Professor of the Ph.D. Institute for Cancer Biology and Drug Discovery, Taipei Medical University, Taiwan - President Emeritus of Taipei Medical University 30+ years of clinical and basic research experience in hematology, bone marrow transplantation and oncology; a clinical oncology, cancer drug development, translational medicine expert - Former Acting Director/Interim Chair/Professor, City of Hope, USA; former affiliated positions at USC and Cal Tech; a member of Russian Academy of Engineering and a fellow of US National Academy of Inventors - Medical degree from Taipei Medical College; Ph.D., Thomas Jefferson University, USA	 Cassian Yee, M.D. - Professor in the Departments of Melanoma Medical Oncology and Immunology, Co-Director of the Adoptive Cellular Therapy Platform and Director of Solid Tumor Cell Therapy at UT MD Anderson Cancer Center 20+ years of clinical and basic research experience, pioneered Endogenous T Cell (ETC) therapy for the treatment of patients with cancer. - Corresponding or lead author in > 80 publications, many in top-tier journals; Inventor of > 15 worldwide patents related to immunotherapy-based cancer treatments globally - Medical degree from University of Manitoba, Canada; Residency at Stanford and fellowship at Fred Hutchinson Cancer Research Center, USA; elected member of the American Society of Clinical Investigators, recipient of Clinical Translational Scientist Award from Burroughs Wellcome Fund, CPRIT Clinical Investigator award, co-Leader of the Stand Up to Cancer-American Association for Cancer Research / Cancer Research Institute Immunotherapy Dream Team and Member of the Parker Institute for Cancer Immunotherapy
 Tzu-Chen Yen, M.D., Ph.D. - Former Chair, Center for Advanced Molecular Imaging and Translation, Chang Gung Memorial Hospital, Linkou Branch, Taiwan - Senior physician and Professor, Department of Nuclear Medicine, CGMH, Taiwan - Professor, Department of Medicine, Chang Gung Univ., Taiwan - Commission Member, International Commission on Radiation Units & Measurements - Medical degree from National Yang-Ming University; Ph.D., Institute of Clinical Medicine, National Yang-Ming University, Taiwan	 Ruey Kuen Hsieh, M.D. - Superintendent of Evergreen Health Precision Clinic - President of Taiwan Cancer Totalcare Foundation; Chairman of Taiwan Cooperative Oncology Group, Data Safety Review Board; Associate Editor of the Asian Pacific Journal of Clinical Oncology - Former Director of the Cancer Center, Clinical Research Center, Head of Medical Oncology and Hematology, and Senior Consultant to the Superintendent at Mackay Memorial Hospital, Taiwan; Former President of Chinese Oncology Society, Taiwan Cancer Totalcare Information Society, and Taiwan Society of Cancer Palliative Medicine - Medical degree from National Yang-Ming Medical University, Taiwan; Clinical Fellowship at University of Rochester Cancer Center, USA; Medical Oncologist Training Program at Academia Sinica; Board certified in Internal Medicine, Hematology, and Medical Oncology