



Programmed Cellular Immunotherapies

Overview of Immuno-Oncology Programs

February 2019

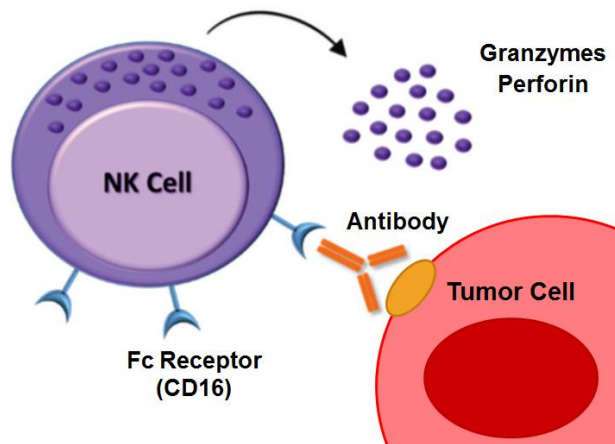
Forward-Looking Statements



This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the Company's advancement of and plans related to the Company's product candidates, clinical studies, and research and development activities, the Company's progress, plans and timelines for its manufacture, preclinical development and clinical investigation of its product candidates, the timing for the Company's receipt of data from its clinical trials and preclinical studies, the Company's clinical development and regulatory strategy, the therapeutic and market potential of the Company's product candidates, the scope and enforceability of the Company's intellectual property, and the Company's financial condition and sufficiency of its cash for funding its operations. These and any other forward-looking statements in this presentation are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk that results observed in prior studies of its product candidates, including clinical trials of ProTmune™, FATE-NK100, FT500 and FT516, will not be observed in ongoing or future studies involving these product candidates, the risk of a delay in the initiation of, or in the enrollment or evaluation of subjects in, any clinical studies, the risk that the Company may cease or delay manufacture, or preclinical or clinical development, of any of its product candidates for a variety of reasons (including requirements that may be imposed by regulatory authorities on the manufacture of its product candidate, on the initiation or conduct of clinical trials or to support regulatory approval, difficulties or delays in subject enrollment in current and planned clinical trials, difficulties in manufacturing or supplying the Company's product candidates for clinical trials, and any adverse events or other negative results that may be observed during preclinical or clinical development), and the risk that the Company's expenditures may exceed current expectations for a variety of reasons. These statements are also subject to other risks and uncertainties as further detailed in the Company's most recently filed periodic report, and subsequent periodic reports filed by the Company, under the Securities Exchange Act of 1934, as amended, any of which could cause actual results to differ materially from those contained in or implied by the forward-looking statements in this presentation. The Company is providing the information in this presentation as of the date hereof and does not undertake any obligation to update any forward-looking statements contained in this presentation unless required by applicable law.

Proven Role of Cells in Cancer Immunotherapy

Antibody-Dependent Cellular Cytotoxicity (ADCC)



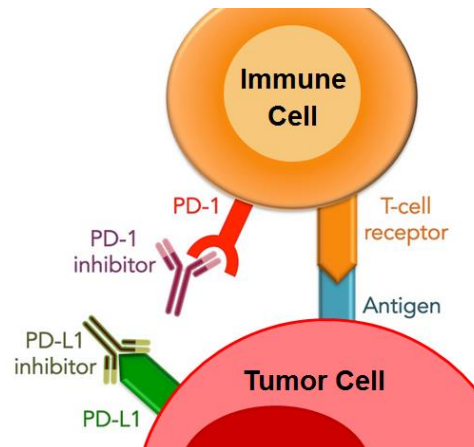
Rituxan
Rituximab

Herceptin
trastuzumab

ERBITUX
CETUXIMAB

DARZALEX

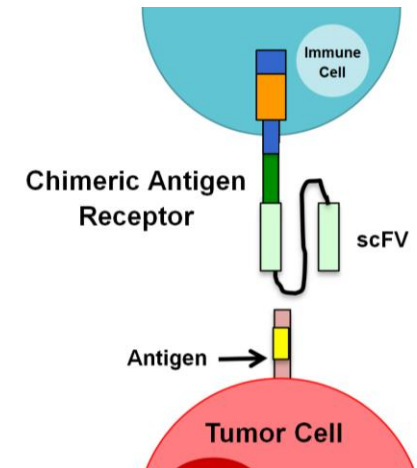
Immune Checkpoint Blockade



OPDIVO
(nivolumab)

KEYTRUDA
(pembrolizumab)

Targeted / Activated Cell Products



Juno THERAPEUTICS **Kite** Pharma

NOVARTIS

Fate
THERAPEUTICS

Cell-based Cancer Immunotherapy

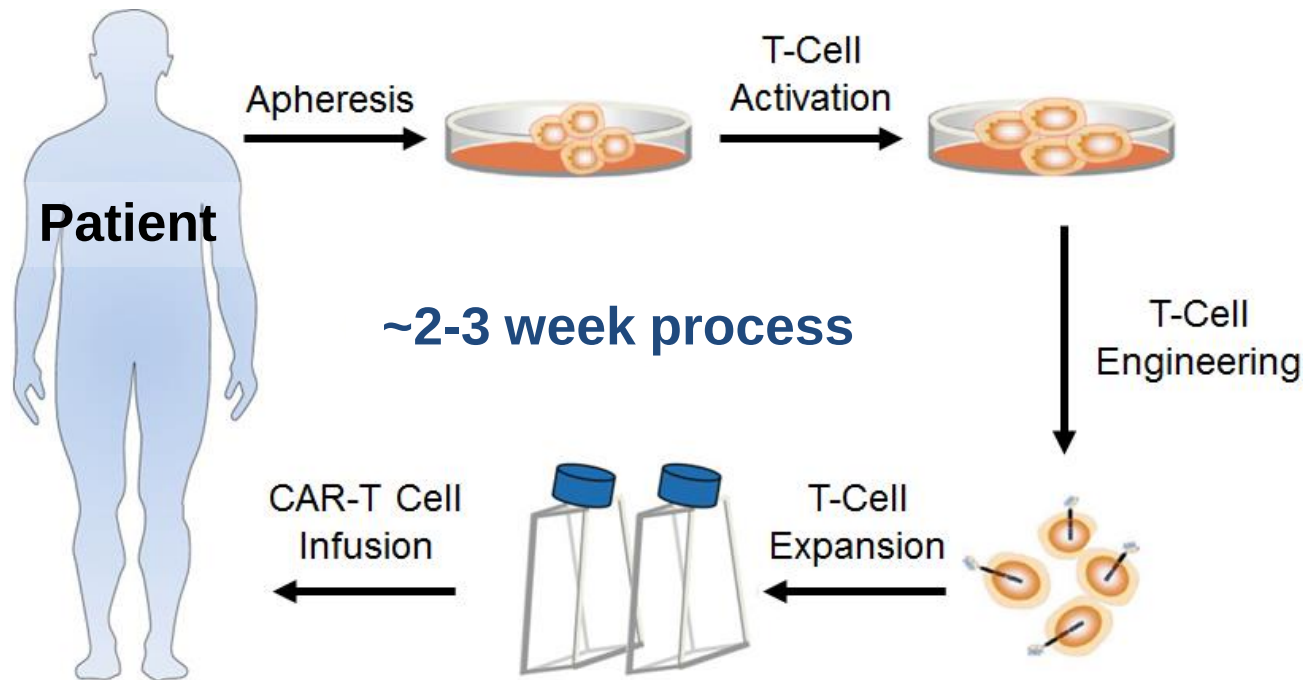
Therapeutic Vision for Long-Term Durable Responses



Intervention Strategy	Considerations
Early	• Differentiated safety profile • Effective with well-tolerated regimens
Often	• Multi-dose, multi-cycle paradigm • Cost-effective manufacture
Combinations	• Augment established agents' MOA • Deliver multiple complementary MOAs

First Innings of Cell Therapy Development

Patient-derived CAR-T Cell Immunotherapy



Impaired Starting Material | **Random & Variable** Engineering | **Complex** Logistics
Heterogeneous Drug Product | **Expensive** | **Single-dose** Limitation

How do we Build on Early Successes and Transition From a Personalized Process to the Delivery of Optimized Cell Products?

Fate Therapeutics

Our Approach to Next-Generation Cellular Immunotherapy



"2.0" Donor-derived Cell Products



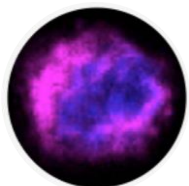
Donors

Cells from healthy donors with selected traits



Molecules

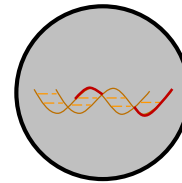
Ex vivo pharmacologic modulation to program biological properties



Cell Products

Cell products with optimized therapeutic function

"3.0" Off-the-Shelf Cell Products



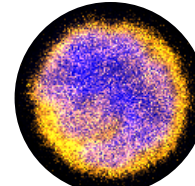
iPSC Cell Line

Renewable pluripotent cell lines with engineered functionality



Master Bank

Ex vivo expansion / differentiation to derive clonal cell populations



Cell Products

Off-the-shelf engineered cell products for 1000s of patients

Fate Therapeutics

Our First-in-Class Cellular Immunotherapy Pipeline



Product	Description	Indication	R&D	Preclinical	Clinical	Partner
Off-the-Shelf Cell Products derived from Clonal Master iPSC Line						
FT500	iNK	+/- CPB in Solid Tumors	IND Cleared by FDA			
FT516	hnCD16 iNK	+/- mAb in Hematologic Malignancies	IND Cleared by FDA			
FT596	CAR19 + hnCD16 + IL15/R iNK	Hematologic Malignancies				
FT538	CD38-less + hnCD16 + IL15/R iNK	+ anti-CD38 mAb in Multiple Myeloma				
FT819	TCR-less, TRAC-targeted CAR19 iT	Hematologic Malignancies				
FT8xx	Engineered CAR iT	Hematologic Malignancies				
FT8xx	Engineered CAR iT	Solid Tumors				
FT301	Engineered immuno-suppressive cell	Not disclosed				
Donor-derived Cell Products						
ProTmune	Allogeneic mPB cell graft	Hematologic Malignancies	RBC Phase 2			
NK100	Adaptive Memory NK	AML	Phase 1 Dose Escalation			
NK100	Adaptive Memory NK	Recurrent Ovarian	Phase 1 Dose Escalation			
NK100	Adaptive Memory NK	+/- mAb in Solid Tumors	Phase 1 Dose Escalation			



Immuno-oncology



Immuno-regulation

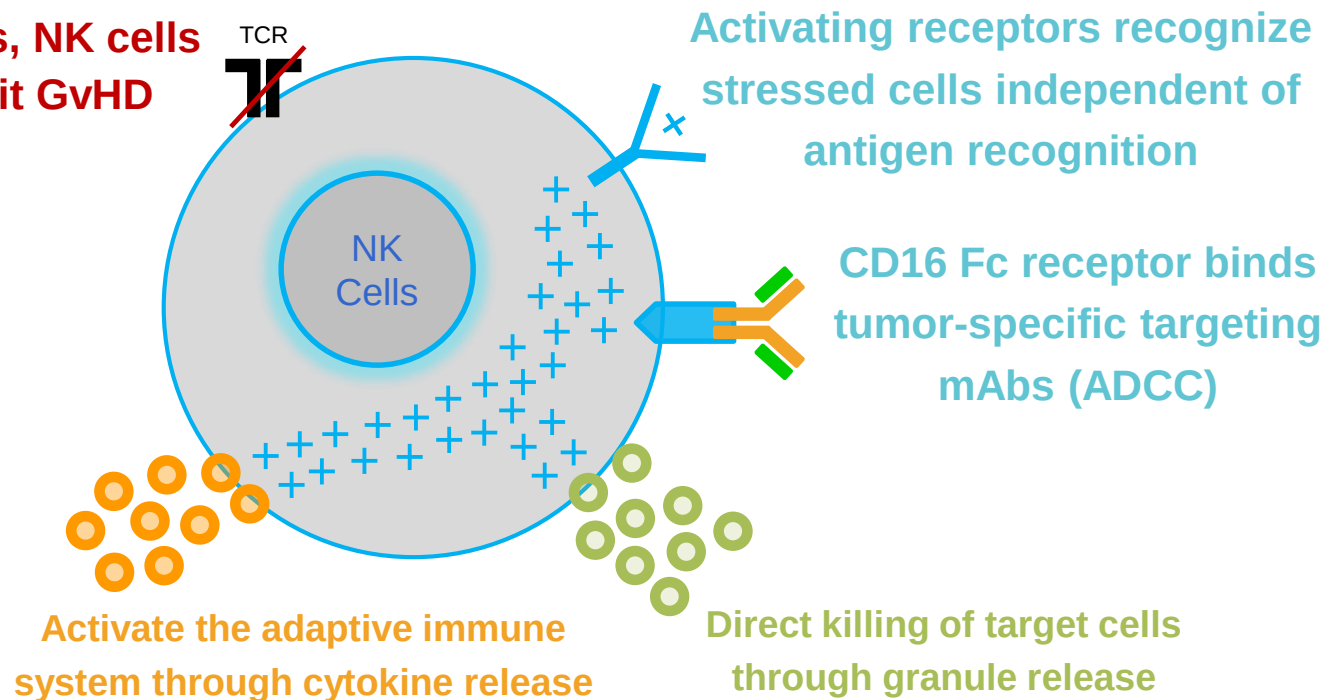
CPB = checkpoint blockade mAb = monoclonal antibody

Natural Killer Cells

Unique Anti-Tumor Activity of Allogeneic NK Cells

- Multi-faceted effector function
 - Anti-tumor activity is not dependent on antigen recognition
- Use of healthy donor cells has been shown to be safe and well-tolerated
 - No reports of GvHD, cytokine release syndrome or neurotoxicity

Unlike T cells, NK cells
do not elicit GvHD



FATE-NK100

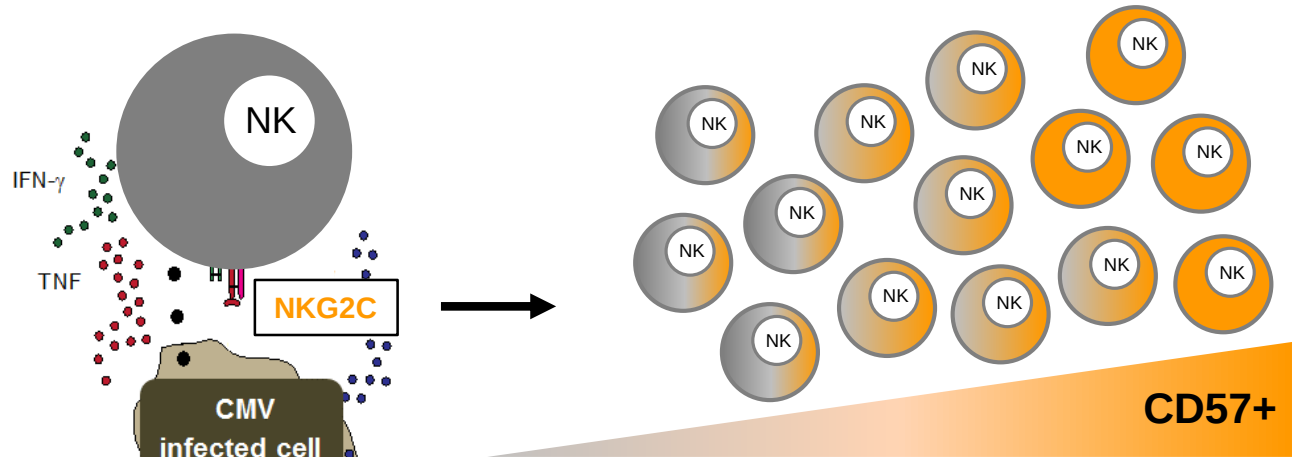
First-in-Class Adaptive Memory NK Cell Cancer Immunotherapy



Jeffrey S. Miller, MD



UNIVERSITY OF MINNESOTA
Driven to DiscoverSM



Formation of Adaptive Memory NK Cells

*Correlated with reduced relapse risk and
superior disease-free survival in HCT*

A Potent Subset of Activated NK Cells with Unique Anti-Tumor Attributes

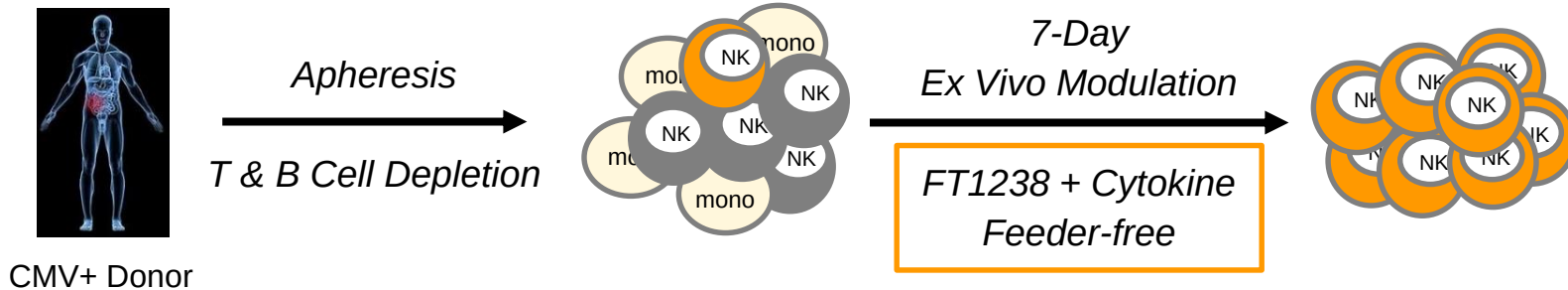
Heightened Effector Function

Enhanced Persistence

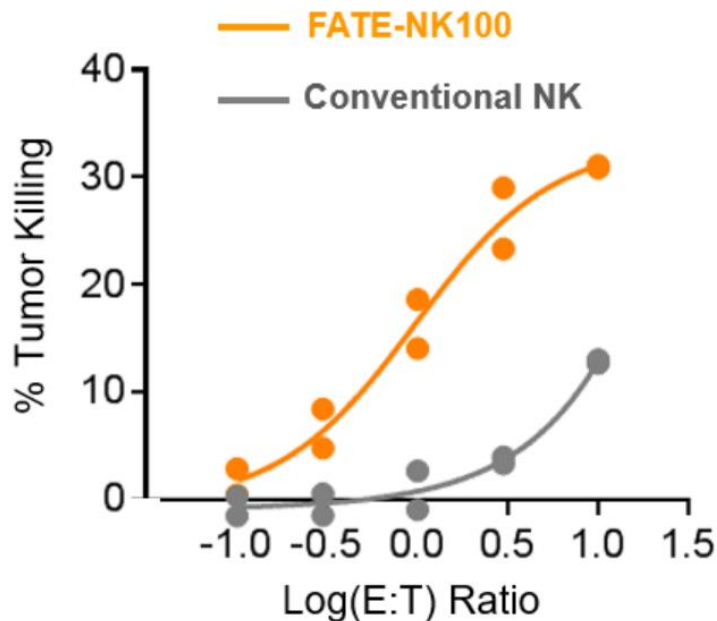
Resistant to Immune Checkpoint Pathways

FATE-NK100

Realizing the Potential of Adaptive Memory NK Cells



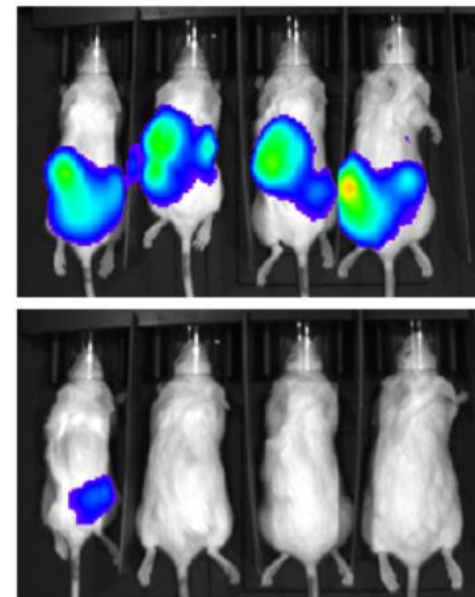
Patient-Derived Primary AML Blasts



E:T = Effector (NK) to Target (Tumor)

Luc-SKOV3 Tumor Image Analysis

Day 21



Herceptin

**FATE-NK100
+ Herceptin**

FATE-NK100

Multi-pronged Clinical Development Strategy



VOYAGE ¹ ***Refractory / Relapsed AML***

- Single IV infusion; up to 3 dose levels (DLs)
- 10-patient expansion at MTD
- Key read-outs: NK cell persistence; anti-leukemia activity; CRs

APOLLO ¹ ***Recurrent Ovarian***

- Single IP infusion; up to 3 dose levels (DLs)
- 10-patient expansion at MTD
- Key read-outs: NK cell persistence; ORR by RECIST

DIMENSION ***Advanced Solid Tumors***

- Single IV infusion; up to 3 dose levels (DLs)
- 3 arms: mono; + cetuximab; + trastuzumab
- Key read-outs: NK cell persistence; ORR by RECIST

¹ Investigator-initiated clinical trial at Masonic Cancer Center, University of Minnesota

FATE-NK100

Initial Clinical Data: Dose-Escalation Phase



14 subjects treated with FATE-NK100 had one-month follow-up¹

All subjects refractory / failed multiple lines of therapy

All subjects presented with progressive disease

- **Encouraging evidence of anti-cancer activity as a single-dose monotherapy²**
 - DIMENSION: 3 of 5 subjects had SD
 - APOLLO: 1 of 4 subjects had SD
 - VOYAGE: 3 of 4 subjects achieved morphologic leukemia-free state
- **Differentiated safety profile vs. CAR T-cell therapy**
 - No FATE-NK100 DLTs; one SAE (Grade 3 abdominal pain)
 - No reports of GvHD / CRS / neurotoxicity
- **Established POC for multi-dose treatment paradigm**
 - 3 subjects received second dose of NK100
 - Well-tolerated with persistence
 - All 3 subjects had disease control extending out for multiple months

¹ As of Oct 22, 2018 data cutoff. Excludes one subject in DIMENSION at “run-in” dose level in cetuximab arm.

² Best overall response.



Changing the Game in Cell Therapy

Key Features	Cell Therapy 1.0 & 2.0
Cell Source	Patient / Donor Cells
Genetic Engineering	Random, Variable & Repetitive
Product Consistency	Heterogeneous
Characterization	Imprecise
Manufacturing	Personalized
Delivery	Delayed & Uncertain
Dose-per-Patient	Single
Overall Paradigm	Process-centric

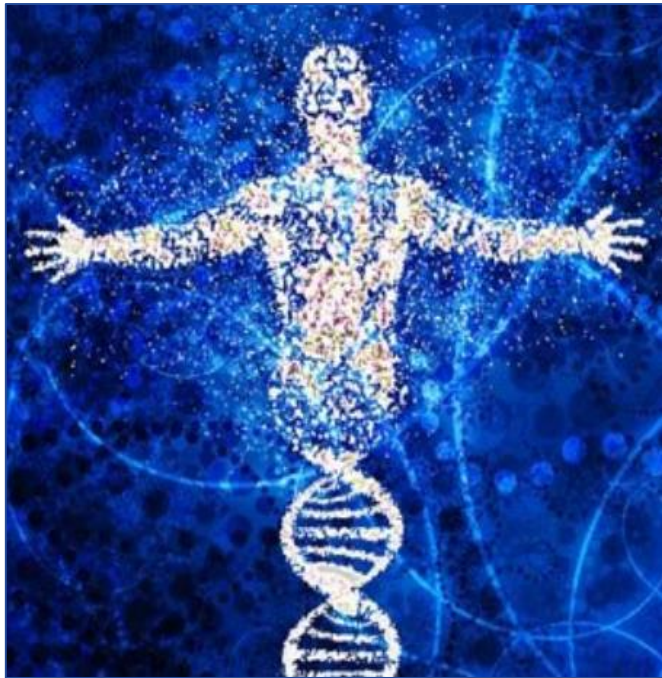
Current Challenges of Cell Engineering

Cellular Chaos



The Potential for Cellular Chaos

A single dose of an engineered cell therapy is typically comprised of >10 million cells



Not All Cells Are Engineered

Gene Edit Technology	CRISPR/Cas9	ZFN	TALEN
Gene Edit Tool Delivery	RNP	mRNA	mRNA
CAR Transduction	AAV6	AAV6	Unknown
TRAC-	97% / ~98%	93%	97%
β2M-	76% / 83%	96%	91%
CAR+ in TRAC	61% / 64%	77%**	69%**
PD1-	97%	---	---
CISH-	---	93%	---
TRAC- / β2M-	74%* / >80%	91%	89%
TRAC- / β2M- / CAR+ in TRAC	47%* / ~50%	70%*	61%*
TRAC- / β2M- / CAR+ in TRAC / PD1-	46% / 48%*	---	---
TRAC- / β2M- / CAR+ in TRAC / CISH-	---	65%*	---
TRAC- / β2M- / CAR+ in TRAC / NKi in β2M	---	---	42%*

Source: Guggenheim Securities

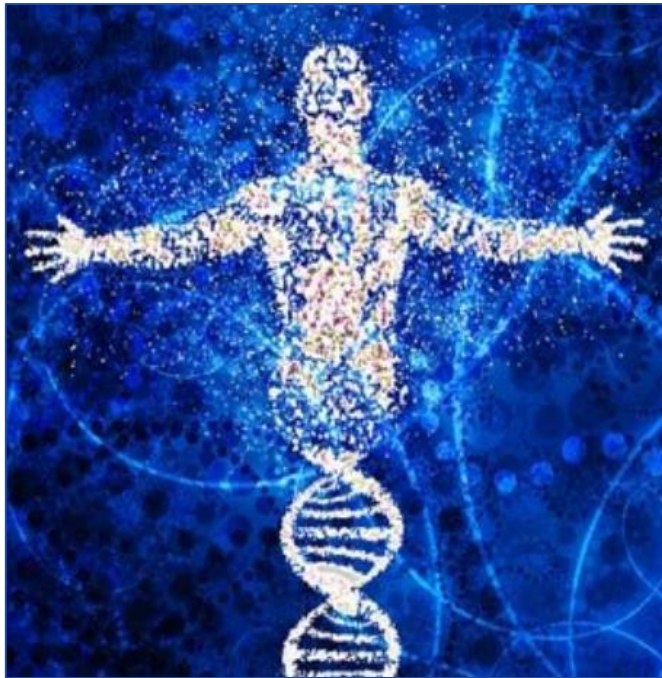
Current Challenges of Cellular Engineering

Molecular Chaos



The Potential for Molecular Chaos

Each cell contains 23 pairs of chromosomes, with an estimated total of 20,000 to 25,000 genes and 6 billion nucleotides



Each Cell Is Not Engineered The Same

- Random integration of transgenes
- Double stranded breaks in DNA
- Genetic translocations
- Off-target editing

Disruption of normal cellular machinery ---> potential for abnormal expression patterns and oncogenesis

Changing the Game in Cell Therapy



Key Features	Cell Therapy 1.0 & 2.0
Cell Source	Patient / Donor Cells
Genetic Engineering	Random, Variable & Repetitive
Product Consistency	Heterogeneous
Characterization	Imprecise
Manufacturing	Personalized
Delivery	Delayed & Uncertain
Dose-per-Patient	Single
Overall Paradigm	Process-centric



Changing the Game in Cell Therapy



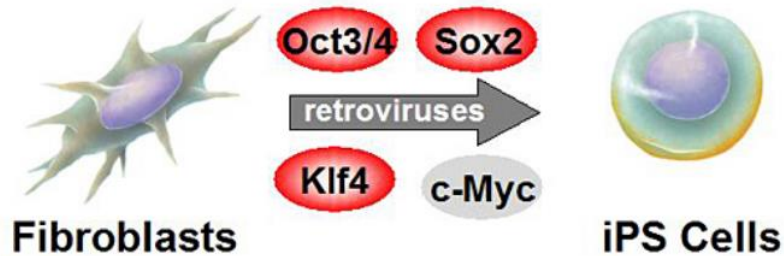
Key Features	Cell Therapy 1.0 & 2.0	Cell Therapy 3.0
Cell Source	Patient / Donor Cells	Master Cell Line
Genetic Engineering	Random, Variable & Repetitive	Specific, Uniform & One-time
Product Consistency	Heterogeneous	Homogeneous
Characterization	Imprecise	Well-defined
Manufacturing	Personalized	Off-the-Shelf
Delivery	Delayed & Uncertain	On Demand
Dose-per-Patient	Single	Multiple
Overall Paradigm	Process-centric	Product-centric

Human Induced Pluripotent Stem Cells

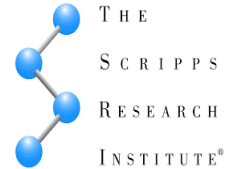
Foundational Inventions of Fate Therapeutics' Scientific Founders



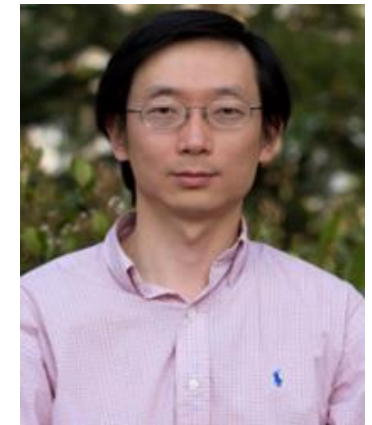
Induced Pluripotent Stem Cells (iPSCs)



Mouse iPS cells reported in 2006
Human iPS cells reported in 2007



Rudolf Jaenisch



Sheng Ding

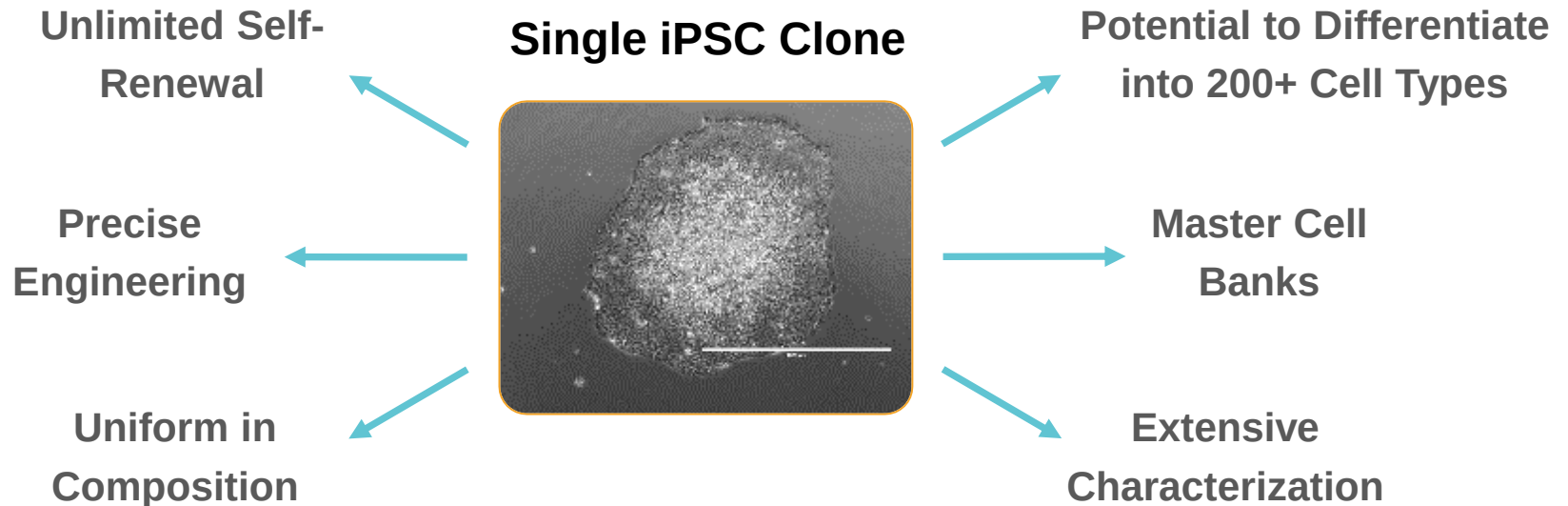
Fate Therapeutics' iPSC product platform is supported by an IP portfolio of 100+ issued patents and 100+ pending patent applications

Clonal Master iPSC Lines

Single-cell Engineering, Selection, Characterization & Banking



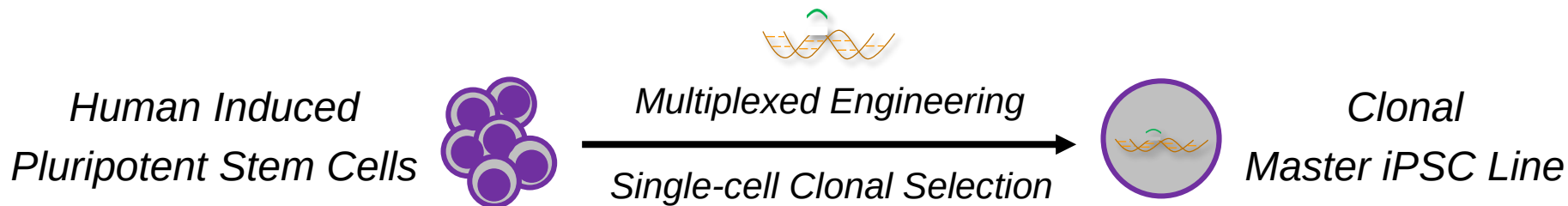
A Single Human Induced Pluripotent Cell



Renewable Clonal Cell Line ---> Homogeneous Cell Products

Clonal Master iPSC Lines

Renewable Source for Manufacturing Off-the Shelf Cell Products



Universal | Off-the-Shelf | Cell Products



Healthy Banked Starting Material | **One-time Uniform** Engineering | **Scalable** Logistics
Multiple Dose Paradigm | **Homogeneous** Drug Product | **Cost-Effective**

Universal Off-the-Shelf Cell Products

Collaborations with Top Investigators and Leading Centers



Engineered NK Cells



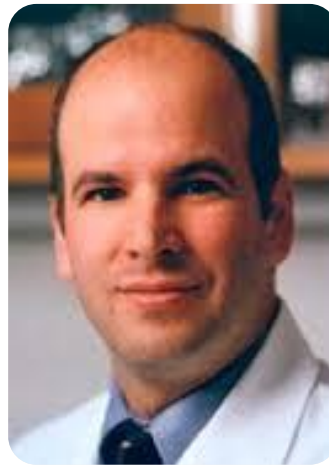
Jeffrey S. Miller, MD



UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

CAR NK Cells



Dan Kaufman, MD PhD



UC San Diego

CAR T Cells



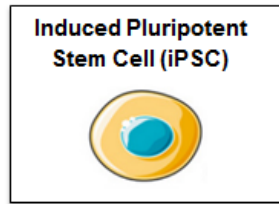
Michel Sadelain, MD, PhD



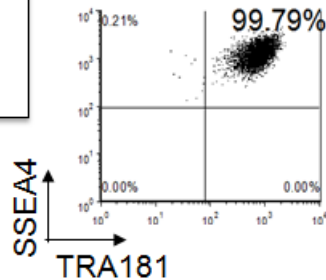
Memorial Sloan Kettering
Cancer CenterTM

Universal Off-the-Shelf NK Cell Products

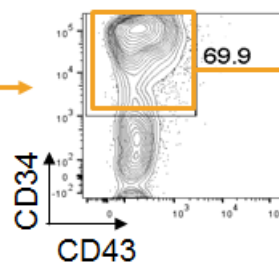
Robust Differentiation Protocol to Create iPSC-derived NK Cells



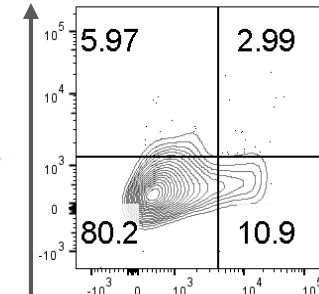
Day 0 - iPSC



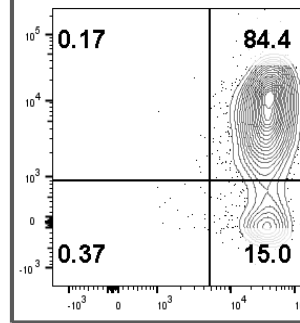
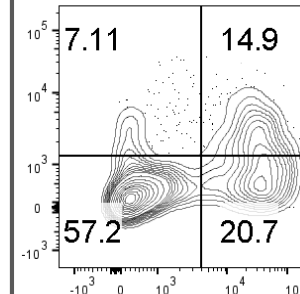
Day 10 - iCD34



Initiation of iNK Differentiation



NKp30



CD56

NK Cell Differentiation & Expansion

Day 44

Renewable Clonal Master iPSC Line

*Hundreds of doses of
homogeneous NK cells per
each manufacturing campaign*



>95% pure for CD56⁺ cells

Cryopreserved in Infusion Media

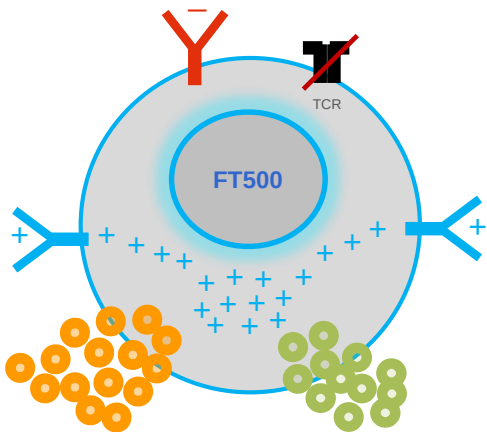
FT500: Universal Off-the-Shelf NK Cell Product

Bridging Innate and Adaptive Immunity



Landmark IND for FT500 Cleared by FDA in December 2018

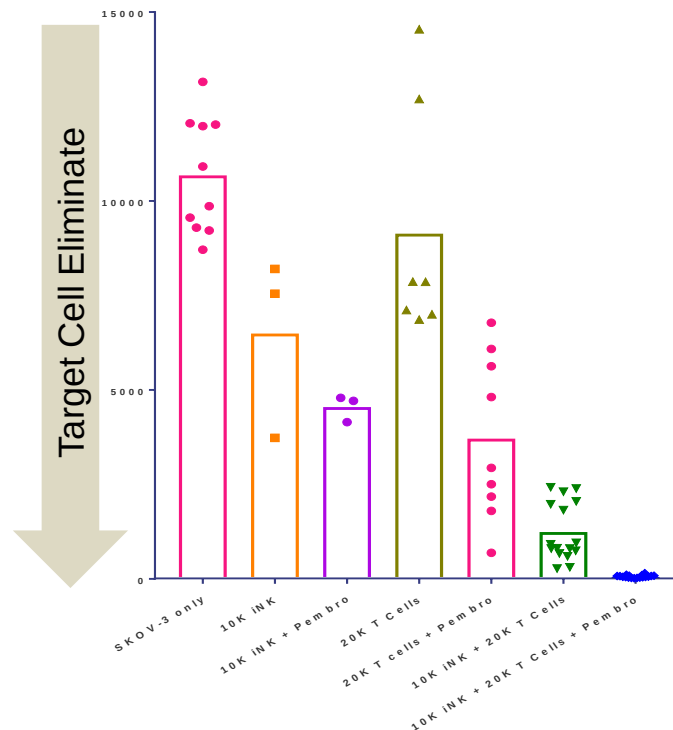
Multi-faceted Functionality to Augment T-cell Activity



- ✓ Enhanced cytokine and chemokine production
- ✓ Activate primary T cells
- ✓ Support primary T cell infiltration and killing of 3-D tumor aggregates
- ✓ Support *in vivo* homing and trafficking of primary T cells

Support synergistic killing of tumor cells
when combined with primary T cells and
checkpoint blockade therapy

3-D Ovarian Cancer Tumor Model



FT500: Combination with Checkpoint Blockade

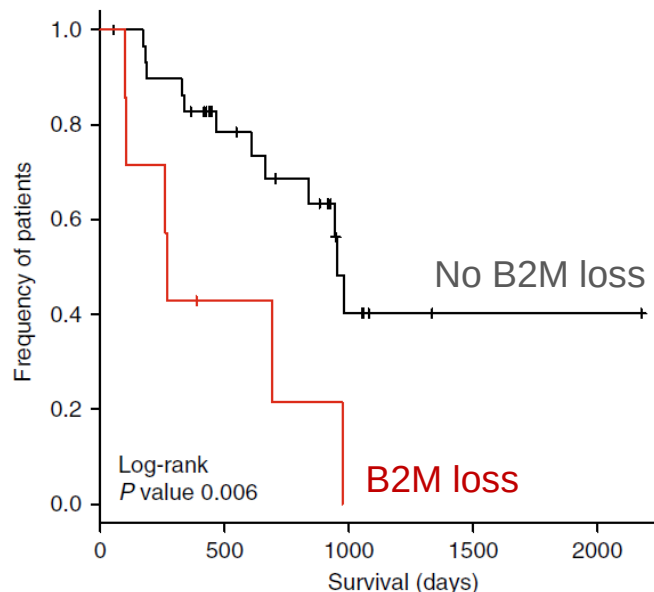
Rescue Therapy in Patients with B2M Mutations



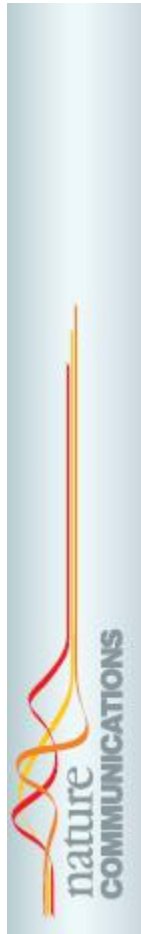
Resistance to checkpoint blockade therapy through inactivation of antigen presentation

Moshe Sade-Feldman^{1,2}, Yunxin J. Jiao^{2,3}, Jonathan H. Chen^{2,4}, Michael S. Rooney², Michal Barzily-Rokni¹, Jean-Pierre Eliane⁴, Stacey L. Bjorgaard^{1,2}, Marc R. Hammond¹, Hans Vitzthum¹, Shauna M. Blackmon¹, Dennie T. Frederick¹, Mehlika Hazar-Rethinam¹, Brandon A. Nadres¹, Emily E. Van Seventer¹, Sachet A. Shukla^{2,5}, Keren Yizhak², John P. Ray², Daniel Rosebrock², Dimitri Livitz², Viktor Adalsteinsson², Gad Getz^{2,4}, Lyn M. Duncan⁴, Bo Li⁶, Ryan B. Corcoran¹, Donald P. Lawrence¹, Anat Stemmer-Rachamimov⁴, Genevieve M. Boland⁷, Dan A. Landau^{2,8,9}, Keith T. Flaherty¹, Ryan J. Sullivan¹ & Nir Hacohen^{1,2}

Survival



- ✓ *B2M* mutations are enriched in patients who are resistant to checkpoint blockade (~30%)
- ✓ Loss of *B2M* associated with poor survival
- ✓ MHC Class 1 null tumor cells are highly susceptible to killing by NK cells



FT500: FIH Study in Advanced Solid Tumors

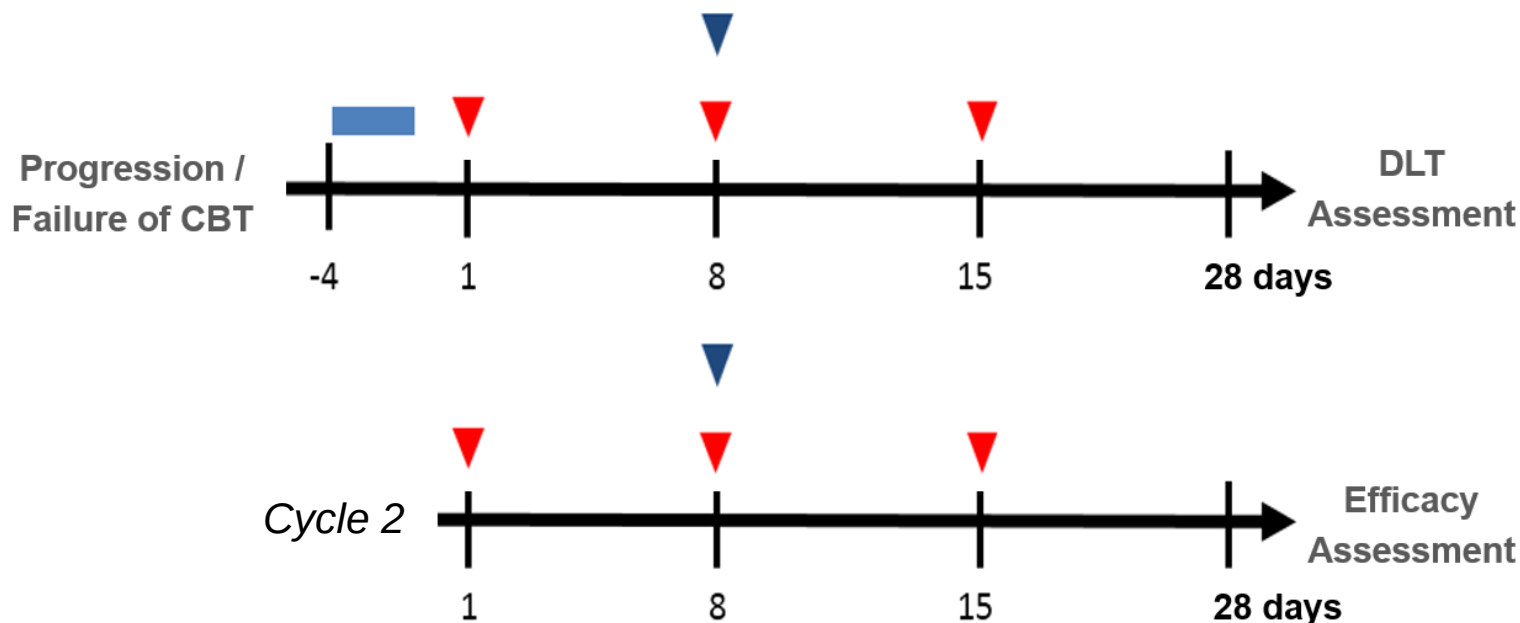
Multi-dose, Multi-cycle Combination with Checkpoint Blockade



OPDIVO
(nivolumab)

KEYTRUDA[®]
(pembrolizumab)

TECENTRIQ[®]
atezolizumab



■ **Outpatient Conditioning** Cy (300 mg/m² IV) x 2 + Flu (25 mg/m² IV) x 2

▼ **FT500** 3 doses at 1 week intervals

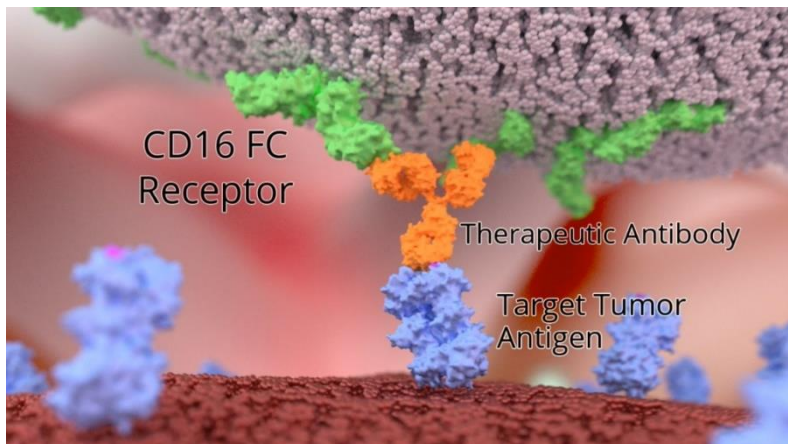
▼ **Checkpoint Inhibitor** Per SOC dose and frequency

NK Cell Expression of Naturally-Occurring CD16

Fc Receptor Mediates Antibody-Dependent Cellular Cytotoxicity (ADCC)

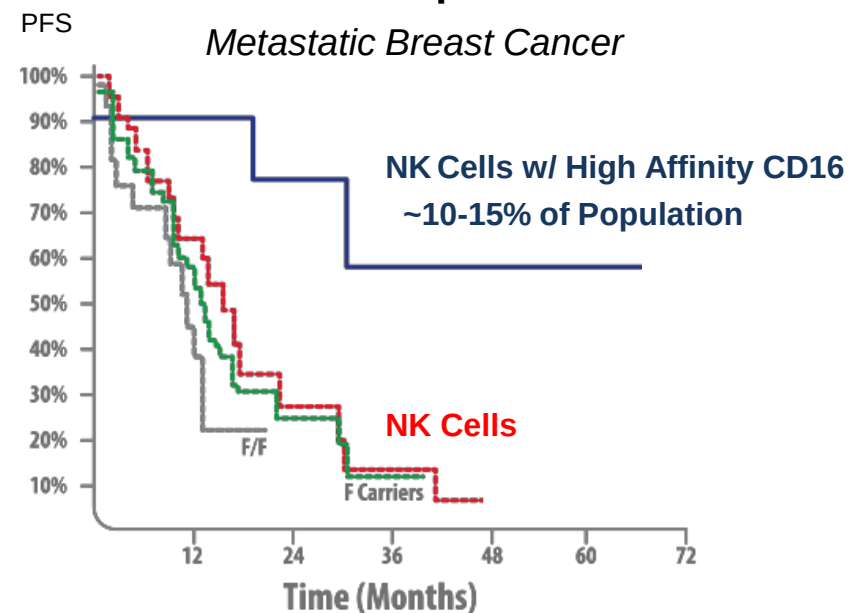
- NK cells bind antibody-coated tumor cells via CD16 Fc receptor, initiating release of perforin and granzyme resulting in tumor cell death
- ADCC contributes to anti-tumor activity of many FDA-approved antibodies, providing expansive opportunity to target a broad spectrum of cancers

Antibody-Dependent Cellular Cytotoxicity



Herceptin

Metastatic Breast Cancer



Musolino et al, J. Clin Oncol, 26, 1789, 2008

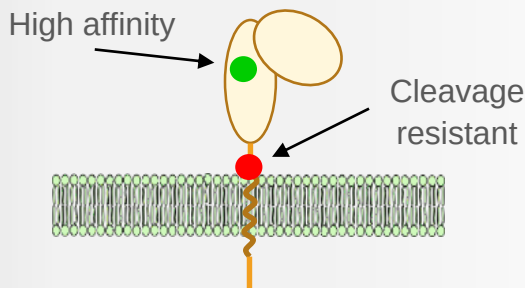
FT516: Off-the-Shelf hnCD16 NK Cell Product

Enhanced ADCC for Combination with Monoclonal Antibody Therapy

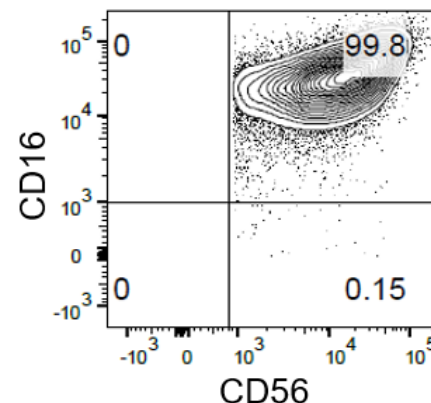
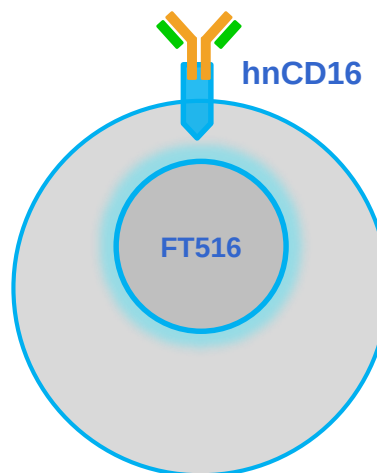


High-Affinity, Non-Cleavable CD16

Modified form of CD16a
IgG antibody-binding receptor
resists shedding upon activation



Engineered High-affinity, Non-cleavable CD16 Fc Receptor



Universal NK Cell Engager of mAb Therapy in Liquid and Solid Tumors

Rituxan
Rituximab

Empliciti
(elotuzumab)

Herceptin
trastuzumab

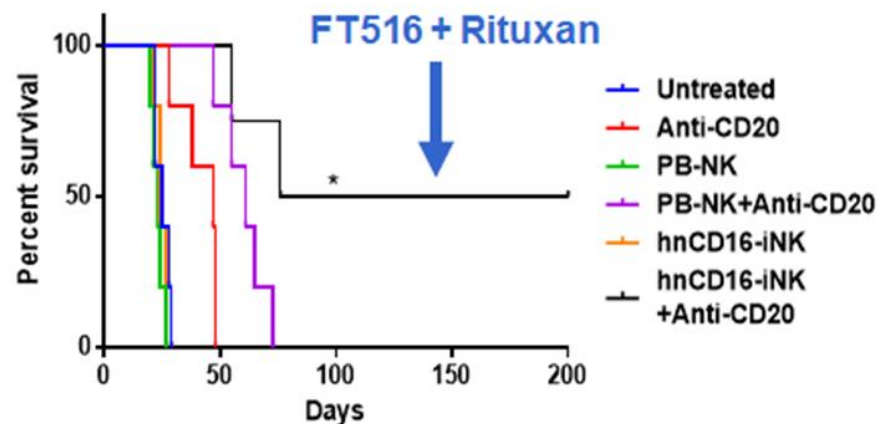
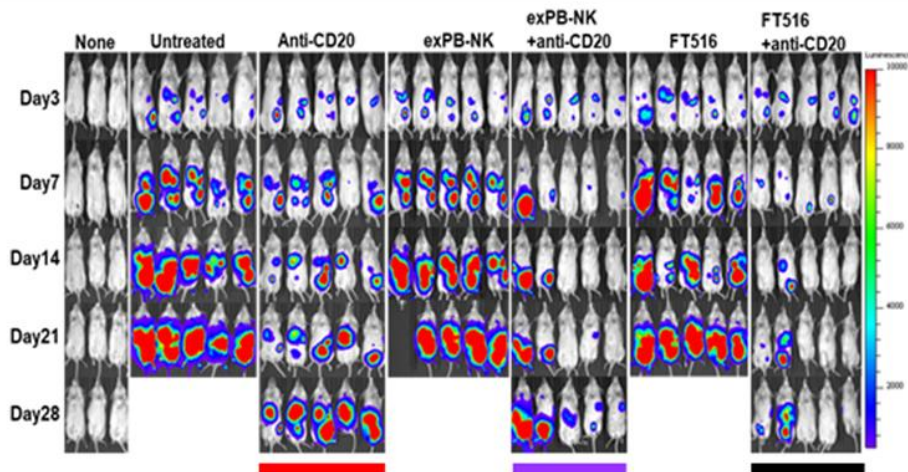
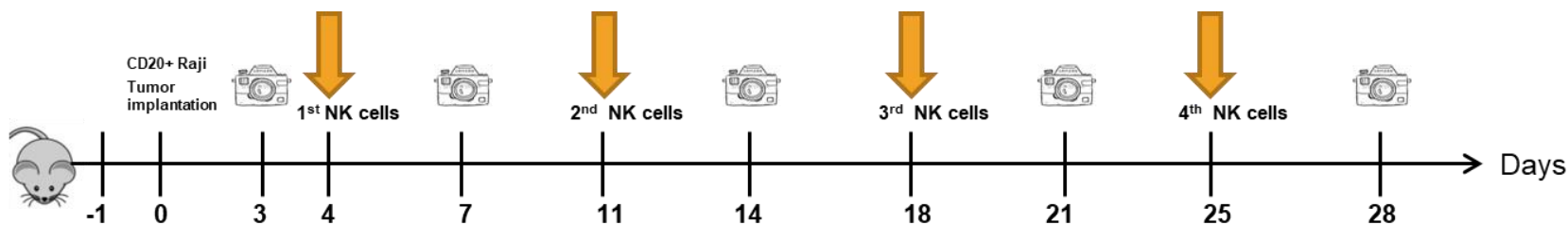
ERBITUX
Cetuximab

FT516: Combination with Rituxan

Enhanced In Vivo Survival



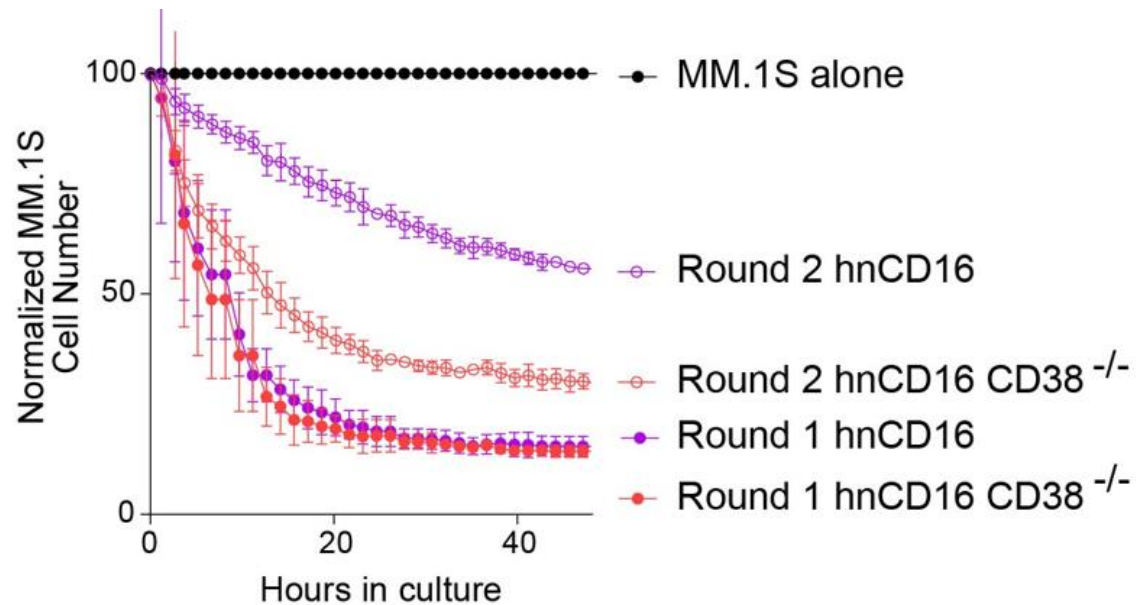
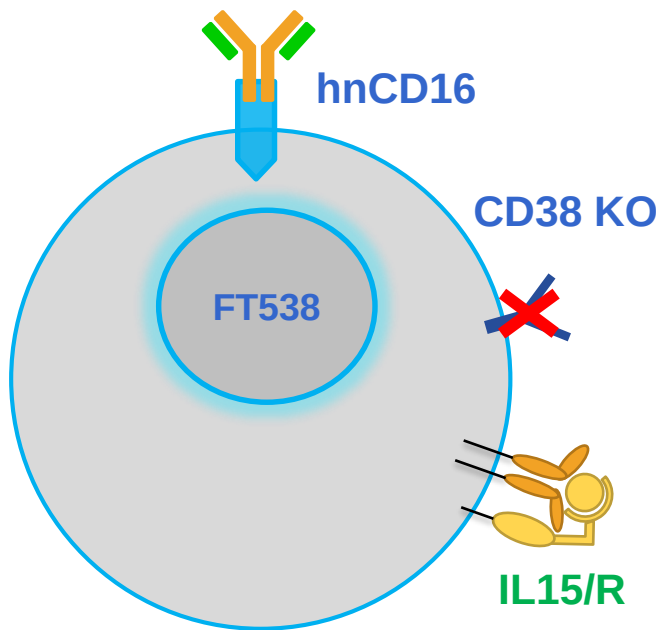
*IND Cleared by FDA in February 2019 for First-ever
Engineered iPSC-derived Cell Therapy*



FT538: Off-the-Shelf hnCD16 / CD38- NK Cell Product

Enhanced ADCC with Elimination of Fratricide for Anti-CD38 mAb Combo

Serial Killing in the Presence of anti-CD38 mAb



Combination with anti-CD38 mAb for Multiple Myeloma



daratumumab



isatuximab

Universal Off-the-Shelf CAR NK Cell Products

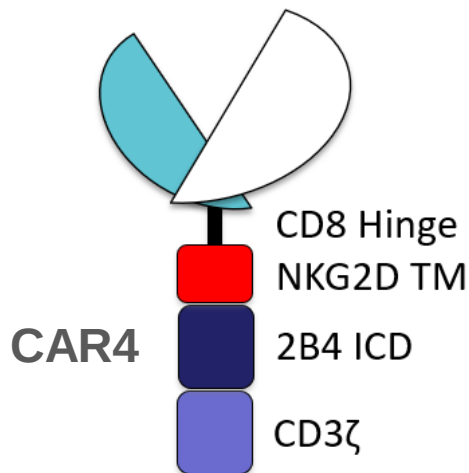
Developed Novel Construct Specifically Optimized for NK Cell Activity



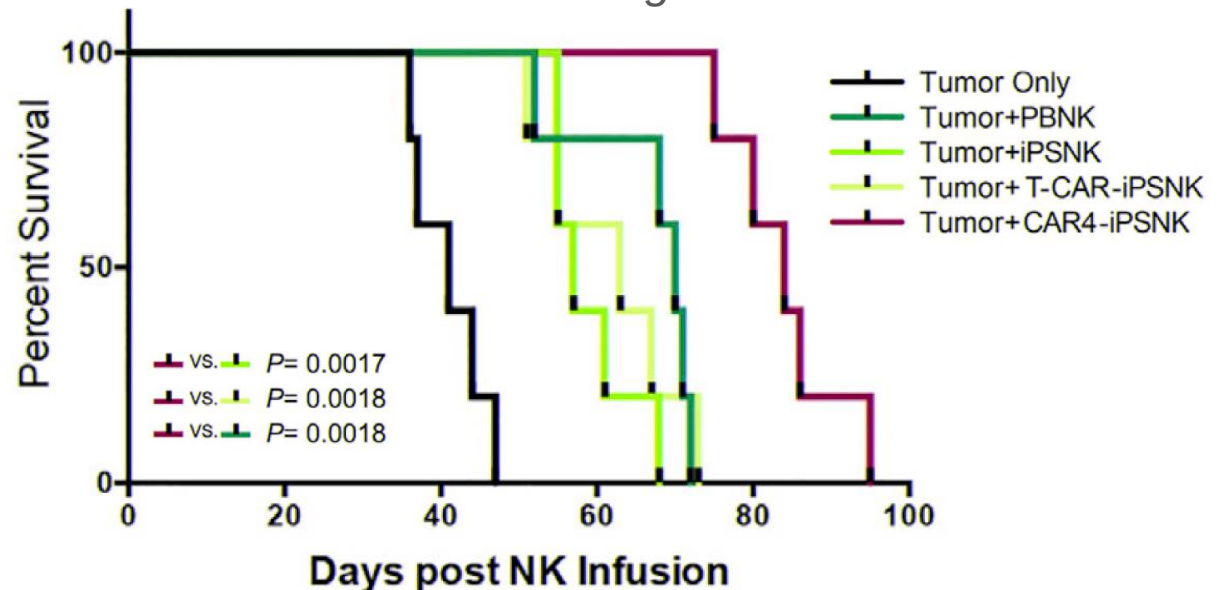
Dan Kaufman, MD PhD



Identified novel NK cell-specific constructs by screening CARs consisting of a transmembrane domain and co-stimulatory domain(s) typically expressed in NK cells



iPSC-derived CAR4 NK Cells in A1847 Ovarian Cancer Cells in Mouse Xenograft Model



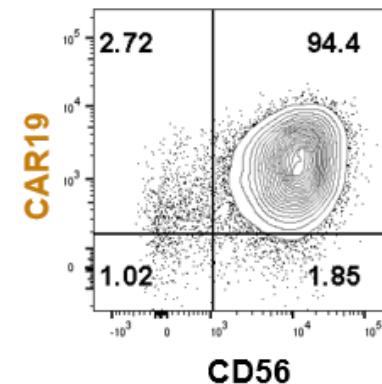
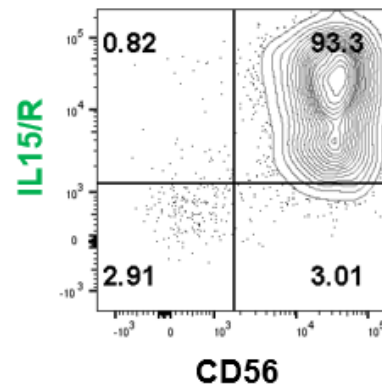
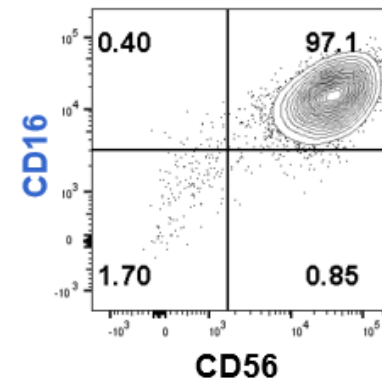
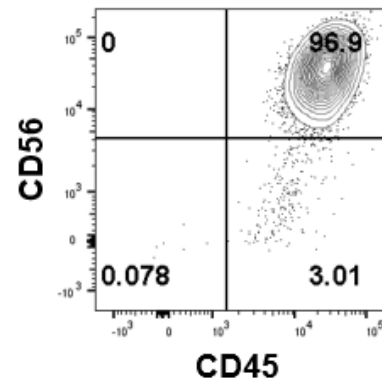
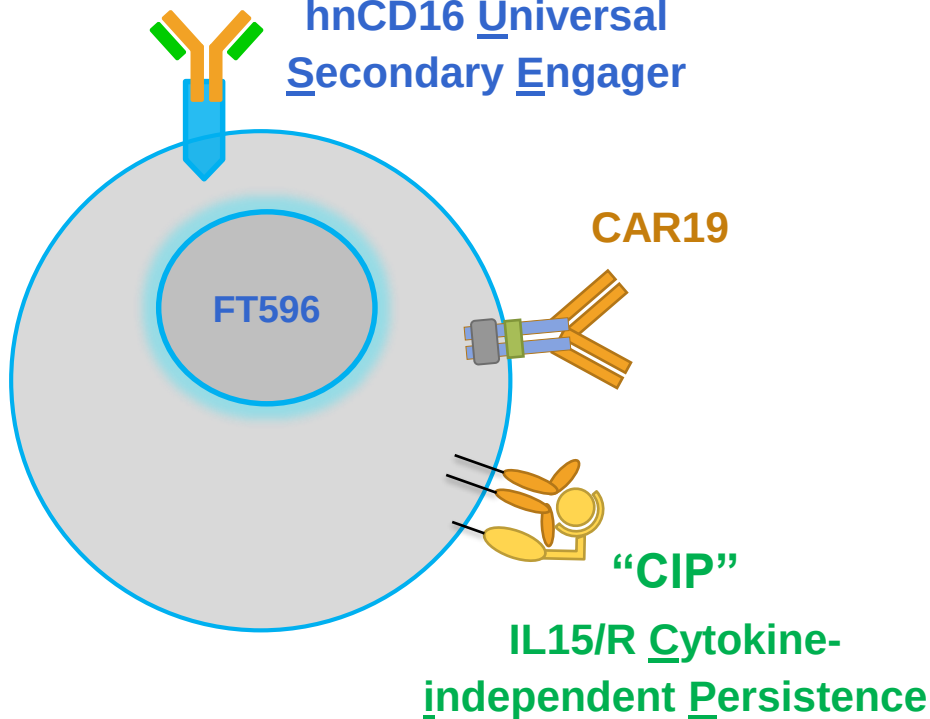
Li et al., 2018, Cell Stem Cell 23, 1-12

FT596: Off-the-Shelf hnCD16 / CAR19 NK Cell Product

Multi-modality Engineered Master iPSC Line Cell – CAR | CIP | USE

“USE”

hnCD16 Universal
Secondary Engager



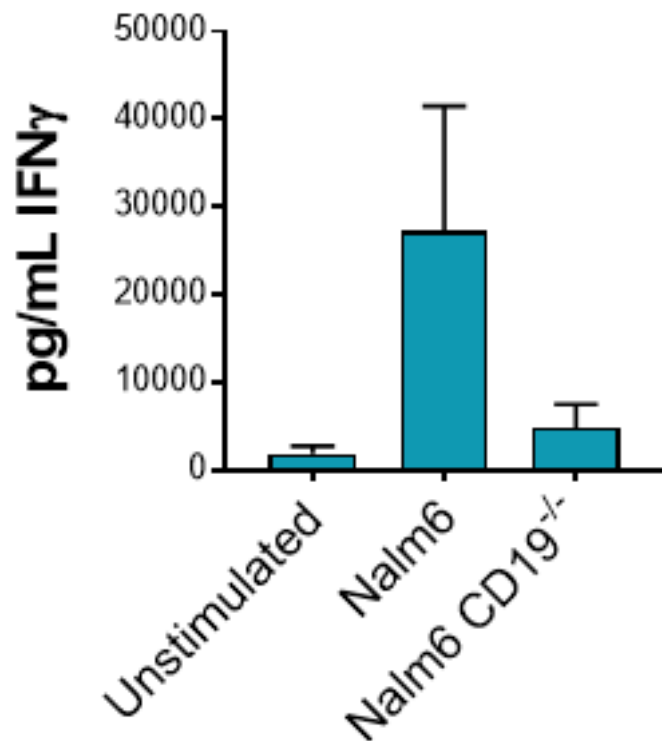
IND to be Submitted in 2019

FT596: Off-the-Shelf hnCD16 / CAR19 NK Cell Product

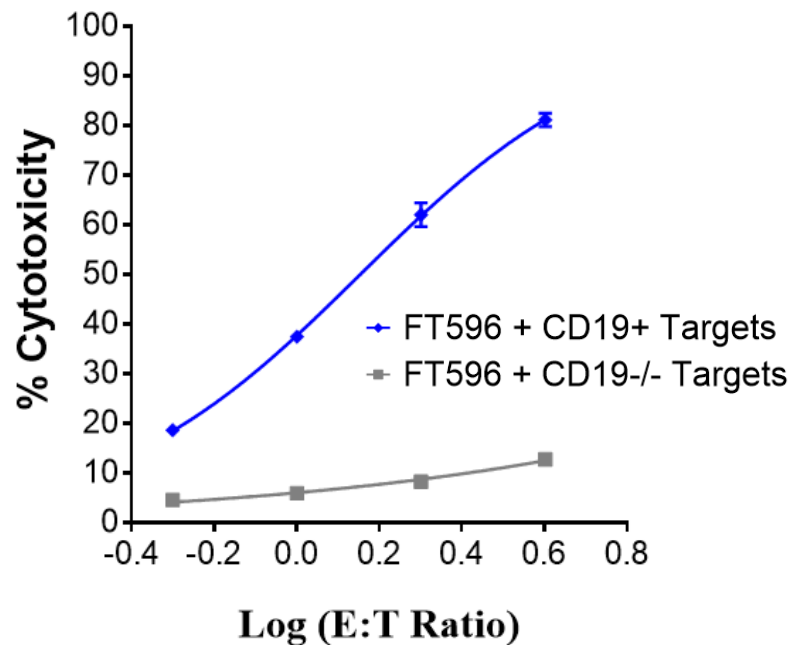
Target-specific Enhanced Potency



Target-specific Cytokine Production



Target-specific Cytotoxicity

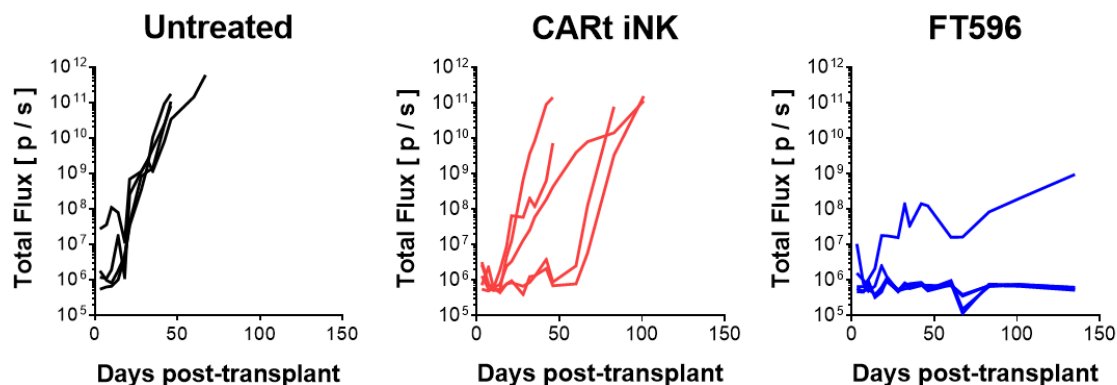


FT596: Off-the-Shelf hnCD16 / CAR19 NK Cell Product

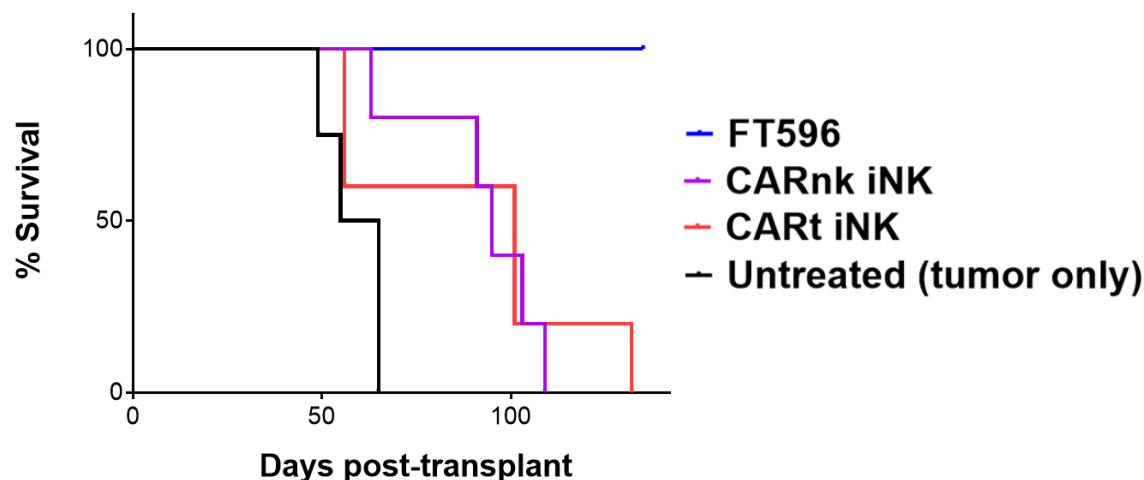
In Vivo Anti-tumor Activity



Control of Tumor Growth



Survival



Universal Off-the-Shelf CAR T-Cell Products

Memorial Sloan Kettering Collaboration



Dr. Michel Sadelain, MD, PhD

Director, Center for Cell Engineering
Memorial Sloan Kettering Cancer Center

LETTERS

Generation of tumor-targeted human T lymphocytes from induced pluripotent stem cells for cancer therapy

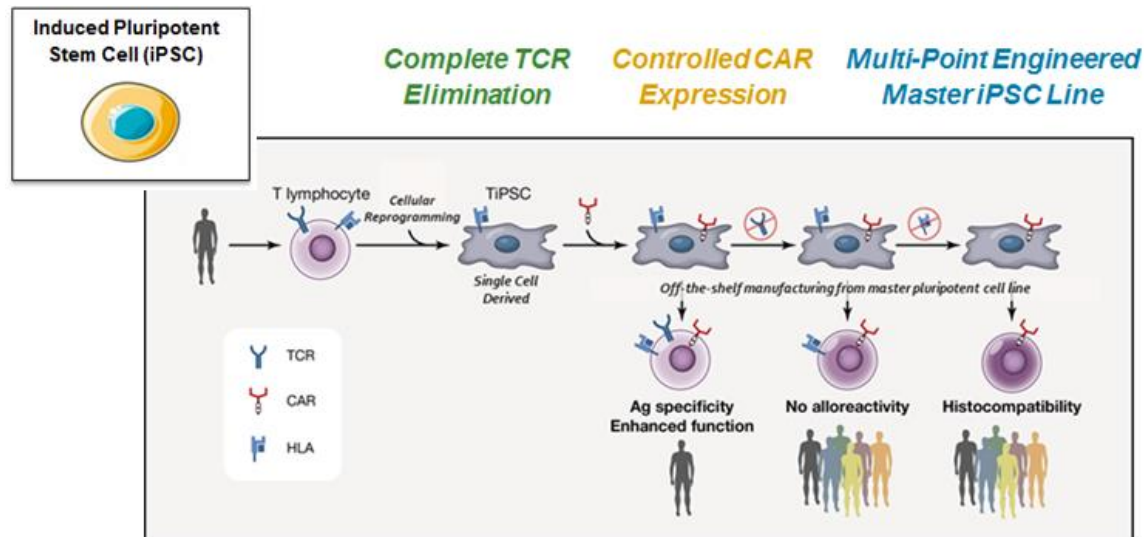
nature
biotechnology

Cell Stem Cell
Perspective

New Cell Sources for T Cell Engineering and Adoptive Immunotherapy



“Engineering therapeutic attributes into pluripotent cell lines is a breakthrough approach to renewably generate potent T-cell immunotherapies. This unique approach offers the prospect for off-the-shelf delivery of T-cell therapies with enhanced safety and therapeutic potential at the scale necessary to serve significant numbers of patients.”



Adapted from: Themeli, Riviere & Sadelain, *Cell Stem Cells*, 2015

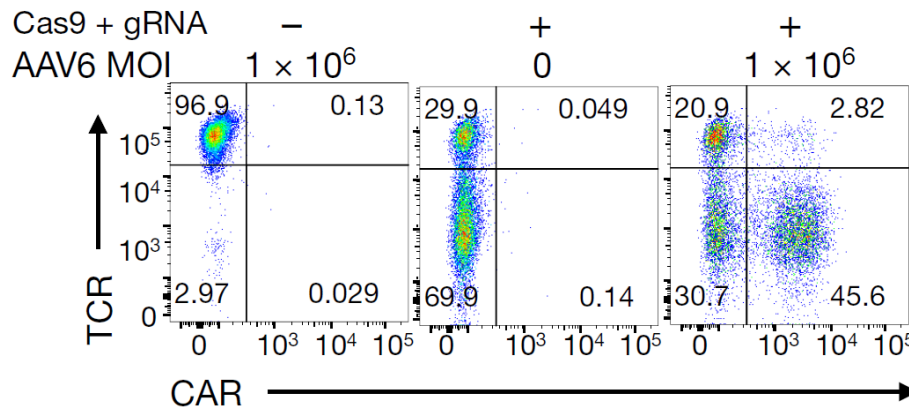
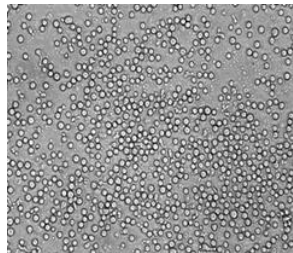


FT819: CAR19 TCR-null T-Cell Product Candidate

TRAC-encoded CAR Expression: Primary T Cells vs. Single iPSC

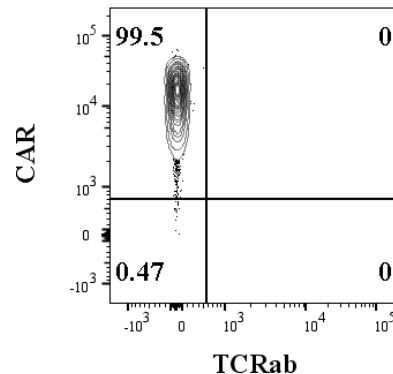
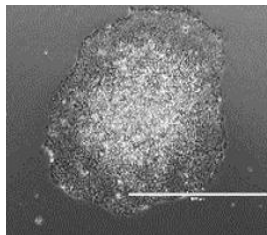
CRISPR Engineering: TCR Disruption + TRAC-encoded CAR Expression

Primary T Cell Batch



- ✓ 20% of T cells express allo-reactive TCR
- ✓ Only 45% of T cells have TCR KO + CAR expression

Single iPSC Clone



- ✓ Complete elimination of TCR expression
- ✓ Uniform and controlled CAR expression through TRAC



FT819: CAR19 TCR-null T-Cell Product Candidate

Novel MSK Construct 'TRAC-1XX' Optimized for T-Cell Activity

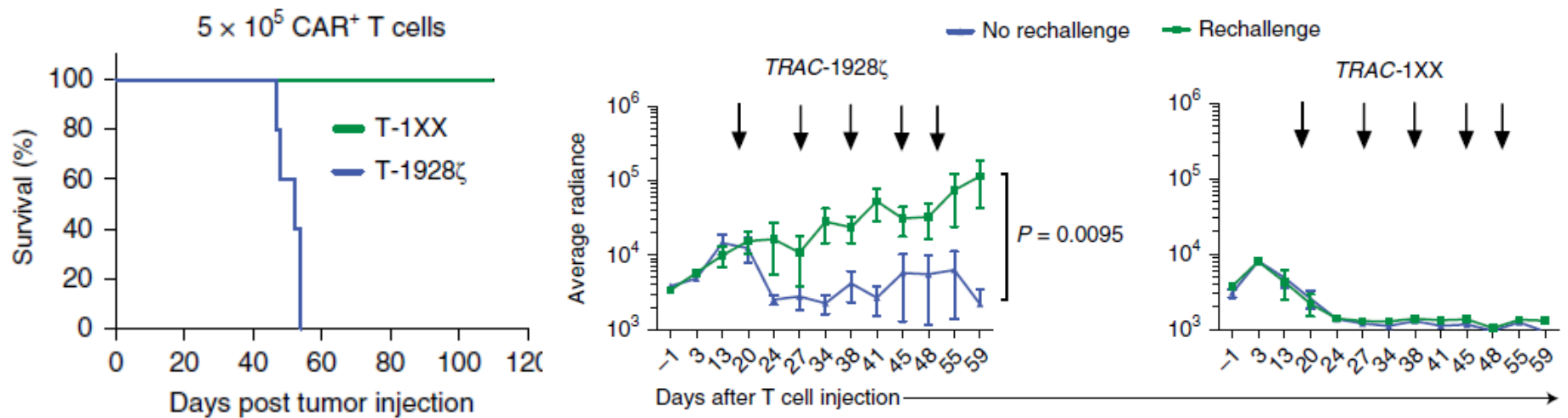
nature
medicine

LETTERS

<https://doi.org/10.1038/s41591-018-0290-5>

Calibration of CAR activation potential directs alternative T cell fates and therapeutic potency

Judith Feucht^{1,4}, Jie Sun^{1,2,4}, Justin Eyquem¹, Yu-Jui Ho³, Zeguo Zhao¹, Josef Leibold³, Anton Dobrin¹, Annalisa Cabriolu¹, Mohamad Hamieh¹ and Michel Sadelain^{1*}

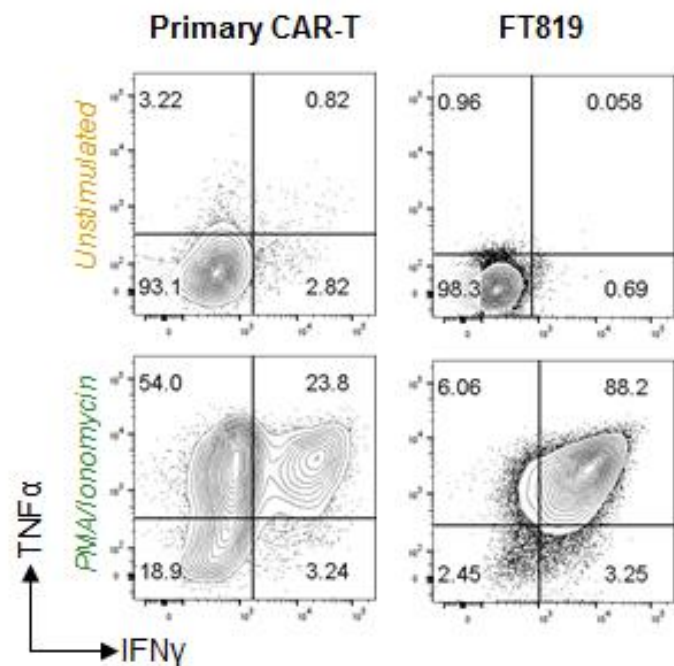


FT819: CAR19 TCR-null T-Cell Product Candidate

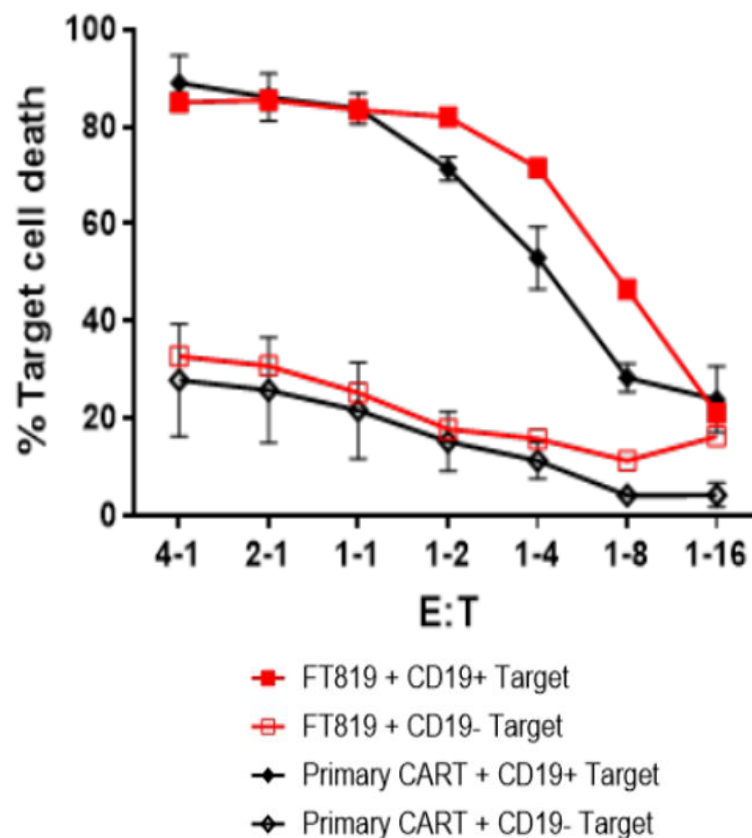
In Vitro Cytokine Production and Specificity vs. Primary CAR T Cells



Cytokine Production

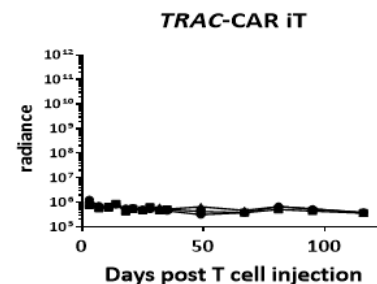
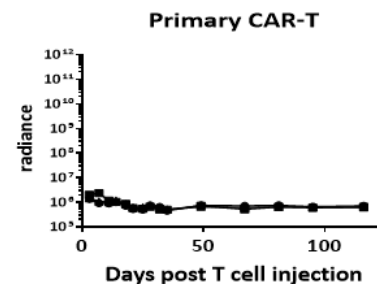
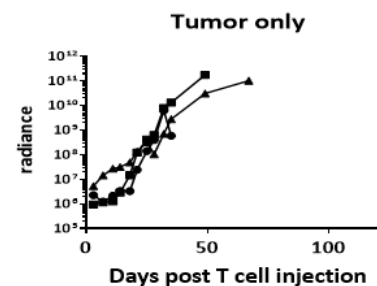
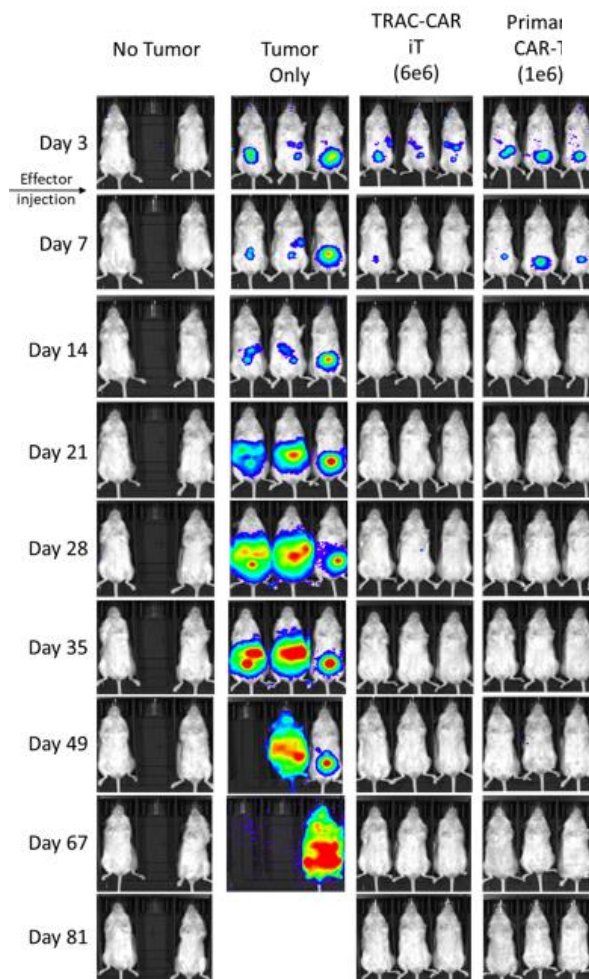


Antigen-specific Cytotoxicity



FT819: CAR19 TCR-null T-Cell Product Candidate

In Vivo Anti-Tumor Activity vs. Primary CAR T Cells



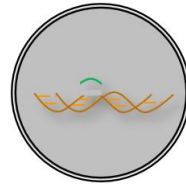
Cryopreserved TRAC-CAR iT cells (6e6) and Primary CAR-T (1e6) were thawed and injected into NOD-SCID IL2Rgc^{null} mice inoculated with CD19⁺ NALM-6 expressing firefly luciferase. TRAC-CAR iT cohort were given 1 additional dose (6e6) at Day 7.

iPSC Product Platform

Clonal Master iPSC Lines for Off-the-Shelf Cell Products



*Single
iPSC Clone*



(Engineered) Single Pluripotent Stem Cell

- *Renewable*
- *Potential to differentiate into 200+ cell types*

Expansion & Banking

*Unlimited Supply of
Clonal Master iPSC
Lines*

**Master Cell
Bank**



Working Cell Banks

Working Cell Banks

Working Cell Banks

Differentiation & Expansion

*Thousands of
Clonally-derived Doses
of Cell Products*



***Off-the-Shelf
Homogeneous | Multi-Dosing
(Engineered) Cell Products***





ONO Pharmaceutical Collaboration

Two Off-the-Shelf CAR T-Cell Product Candidates



- **Partnership combines ONO's immuno-oncology innovation with Fate's industry-leading iPSC product platform**
 - ONO was the originator of PD-1 checkpoint inhibitor Opdivo (nivolumab), licensed by BMS in 2011, and jointly developed by the two firms
- **Enables FATE to smartly extend the reach of its iPSC platform beyond the U.S. and expand its iPSC-derived CAR T-cell product pipeline**
 - FATE and ONO to jointly advance two iPSC-derived CAR T-cell product candidates, with ONO contributing a novel antigen binding domain for solid tumors to the collaboration
 - FATE is to receive up to \$70M during preclinical development, including \$10M upfront plus \$20M in committed research funding and up to an additional \$40M in contingent fees
- **Option-based structure enables ONO to opt into clinical development and commercialization**
 - Collaboration candidate 1 for hematologic malignancies: Territory of Asia only for ONO, with FATE eligible to receive up to \$285M in clinical development, regulatory and sales milestones plus royalties
 - Collaboration candidate 2 for solid tumors: Worldwide for ONO, provided that FATE has a step-in right to develop and commercialize in the U.S. and Europe under a 50-50 profit-sharing arrangement, with FATE eligible to receive up to \$895M in clinical development, regulatory and sales milestones plus royalties

Financial Summary

As of September 30, 2018



Three Months Ended September 30, 2018	
Revenue	\$1.0M
Operating Expense, Adjusted ¹	\$14.2M
Cash & Cash Equivalents	\$211.2M
Employees	92
Total Shares Outstanding ²	78.6M

[1] Excludes one-time expense of \$1.4M associated with the in-license of IP from J. David Gladstone Institutes covering CRISPR-based cellular reprogramming; \$1.6M in stock-based compensation expense; and \$0.5M in funded research expense under Juno Therapeutics collaboration.

[2] Includes 14.1M shares of common stock from conversion of non-voting preferred stock.



Projected 2019 Milestones

- **ProTmune: Next-Generation Allogeneic Cell Graft**
 - Complete enrollment in randomized, blinded, controlled PROTECT Phase 2 study
- **NK100: First-in-class Adaptive Memory NK Cell Cancer Immunotherapy**
 - Additional clinical data in AML and Ovarian as monotherapy
 - Additional clinical data in solid tumors, including in combination with mAb
- **First-of-kind, Universal, Off-the-Shelf NK and CAR NK Cell Candidates**
 - Initial clinical data from landmark FT500 clinical trial in solid tumors +/- checkpoint blockade
 - Initial clinical data from landmark FT516 clinical trial in hematologic malignancies +/- mAb
 - Clear IND application for FT596; initial clinical data in hematologic malignancies
- **First-of-kind, Universal, Off-the-Shelf CAR19 T-Cell Candidate**
 - Conduct pre-IND meeting with FDA
 - Submit IND application for FT819
- **iPSC Product Platform**
 - Launch GMP manufacture at FATE headquarters and complete first in-house clinical run



Better Cells For Better Therapies™