Fusion & AstraZeneca Strategic Collaboration

To Develop and Commercialize Next-Generation Targeted Alpha Therapy Radiopharmaceuticals and Combination Therapies

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John Valliant, PhD

Chief Executive Officer

Collaboration Overview and Rationale

Our Targeted Alpha Therapies Platform + AZ's Antibody & DDRi Portfolio

Creating Novel and Potent Targeted Cancer Therapies and New Treatment Paradigms

Collaboration Overview

Fusion Pharmaceuticals Inc. + AstraZeneca

1) Novel Targeted Alpha Therapies

- Jointly select up to three new TATs
- Co-fund
- Co-develop
- Option to co-commercialize in U.S.

2) Combination Therapies with TATs

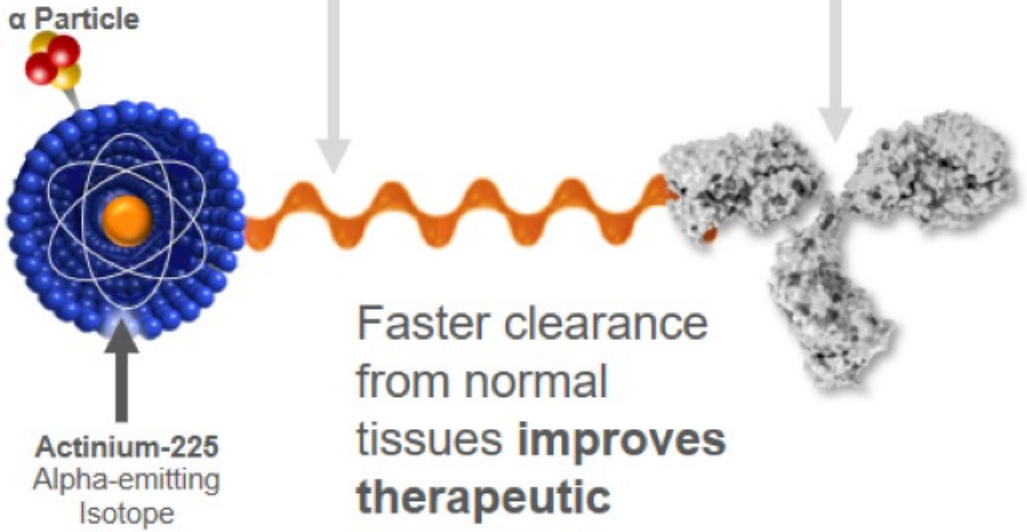
- DNA Damage Response Inhibitors (DDRis)
- Immuno-Oncology Agents
- AZ solely funds unless Fusion opts-in

Leveraging the strengths of the partners

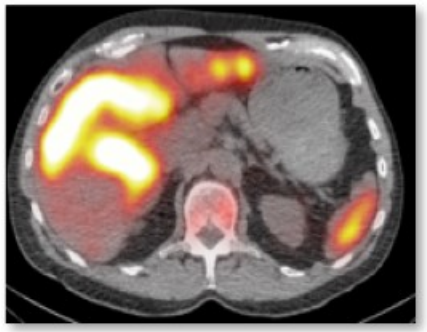
Our Targeted Alpha Therapies Platform

FUSION'S TAT PLATFORM

Proprietary *Fast-Clear*™ Linker + **Antibodies** + **Precision Medicine Imaging of TATs** + **Radio Pharma R&D and Manufacturing**



Faster clearance from normal tissues **improves therapeutic window**



In-111 Imaging Isotope

Combining Fusion's Platform with AZ's Antibody & DDRi Portfolio

Strategic Rationale: Multiple Avenues

Fusion Pharmaceuticals Inc. + AstraZeneca

- Delivers access to breadth of AstraZeneca's world-class oncology pipeline & products, resources and expertise
- Avoids early-stage development risk
- Provides optionality around later-stage risk and expense
- Preserves significant back-end economics
- Maintains all rights to existing Fusion pipeline

Marc Schwabish, PhD

Senior Vice President,
Business Development and
US Operations

Details of the Agreement

Details of the Global Partnership Agreement

Therapeutic Expansion

- Maximize utilization of our TAT platform
- Maximize potential applications of Targeted Alpha radiation Therapies
- Expand Fusion's pipeline via co-development and co-commercialization

Business Model

- Global partnership
- Long-term agreement
- Fully-retain rights to our existing products
- Retain co-commercialization rights on new TATs
- Upfront payment
- Future development milestones
- Financial flexibility minimizes near-term risk

1) Overview of the Terms to Develop Novel Targeted Alpha Therapies

Up to three new TATs will be jointly selected and then…

- Co-developed with a 50/50 R&D cost split

Each partner can opt-out at defined breakpoints in exchange for milestone payments to the other party and a low to high single-digit royalty on future sales

  - 1st → following pre-clinical activities
  - 2nd → following completion of Phase 1 study

- AstraZeneca and Fusion to co-commercialize
  - Fusion has option to co-promote in the U.S.
  - AstraZeneca to commercialize in ROW
  - 50/50 profit and loss share

2) Agreement to Develop Novel Clinical Combination Therapies

AstraZeneca

- Nominate for preclinical evaluation up to five targets
- Fully fund all R&D (unless Fusion opts-in to co-fund clin dev)
- AZ responsible for clinical trial operations and related financial obligations

Fusion

- Responsible for TAT drug supply
- Can opt-in to co-fund post-P1 development (50/50)
- If Fusion does not opt in:
  - Fusion obligated to pay back share of R&D expense plus risk premium

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- Both companies retain full rights to their respective compounds
- Equal representation on Joint Steering and other committees

Eric Burak, PhD

Chief Scientific Officer

Scientific Rationale

1) Using Antibodies in AstraZeneca's Leading Oncology Portfolio To Discover, Develop and Commercialize Up to Three Novel TATs

FUSION'S TAT PLATFORM

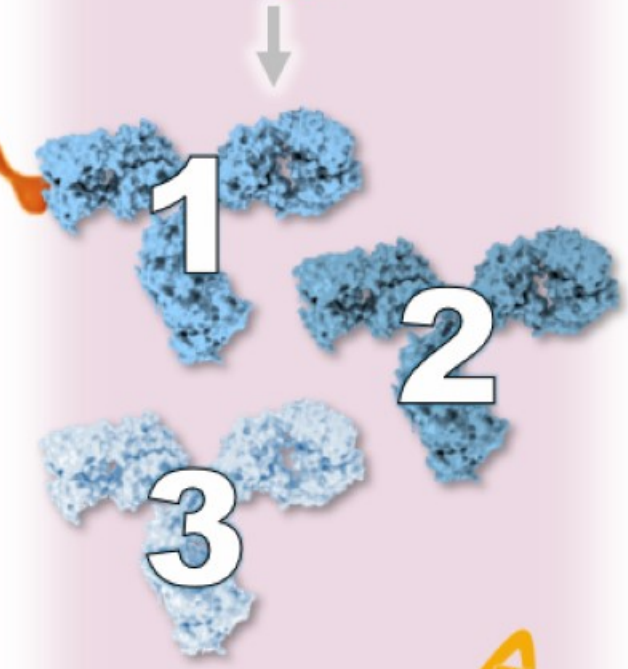
Proprietary *Fast-Clear*™ Linker +

α Particle

Actinium-225
Alpha-emitting Isotope

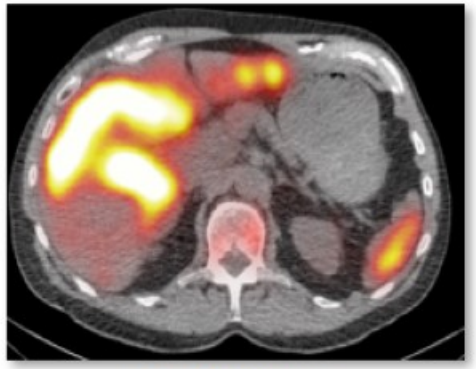
✓ Faster clearance from normal tissues **improves therapeutic window**

Antibodies from AZ's Leading Oncology Portfolio +



AstraZeneca

Precision Medicine Imaging of TATs +



In-111 Imaging Isotope

Radio Pharma R&D and Manufacturing

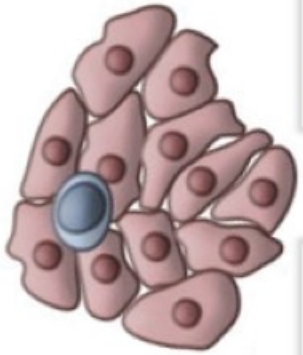
2) Evaluate Up to Five Combination Therapy Programs Using TATs with AZ's Portfolio of Immuno-oncology Agents & DDRis

Immuno-Oncology Combo Therapy

Turning I/O "resistant" tumors into I/O "sensitive"

BEFORE:
"Cold Tumor"

Immune Desert



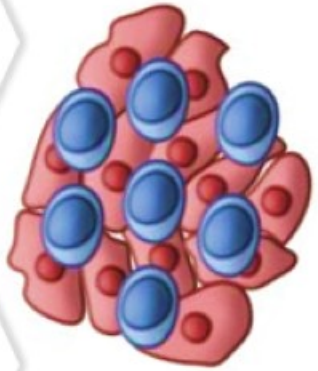
AstraZeneca
Immuno-Oncology Agents

+

Fusion
Targeted Alpha Therapy

AFTER:
"Hot Tumor"

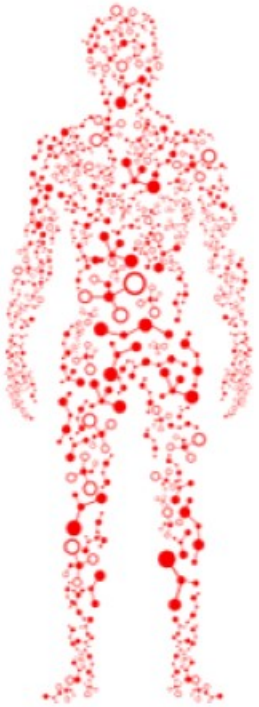
Immune Responsive



Enhancing antigen presentation and stimulating T-cell recruitment

DNA Damage Response Inhibitors

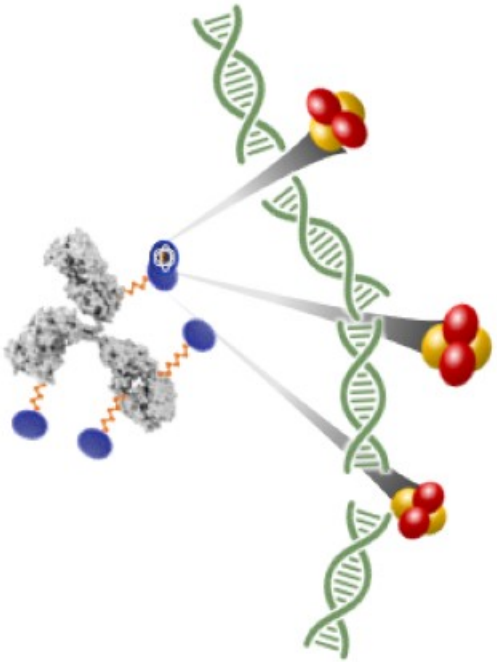
TAT = DNA Damage : DDRi's Prevent DNA Damage Repair



AstraZeneca
DDRis

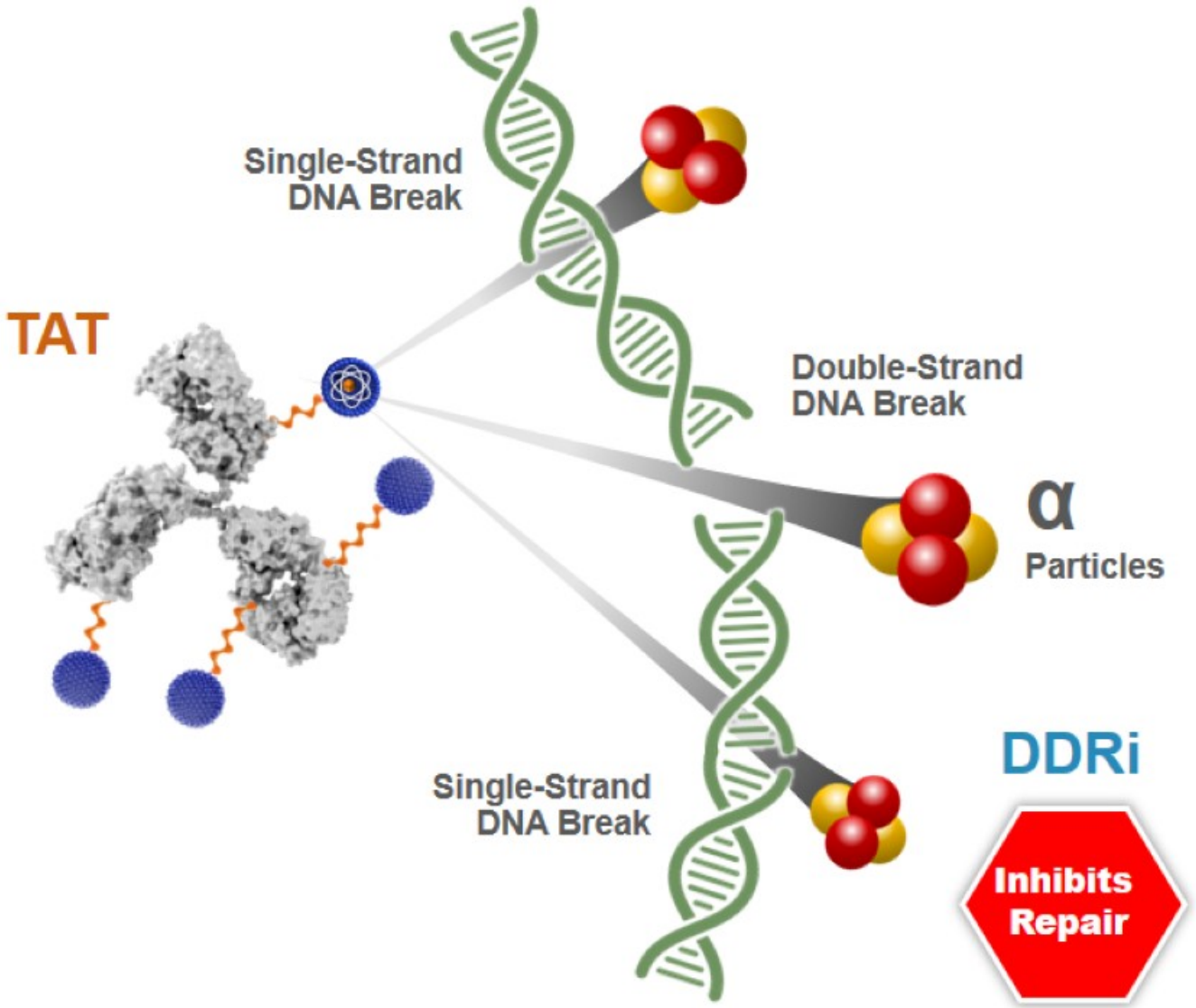
+

Fusion
Targeted Alpha Therapy



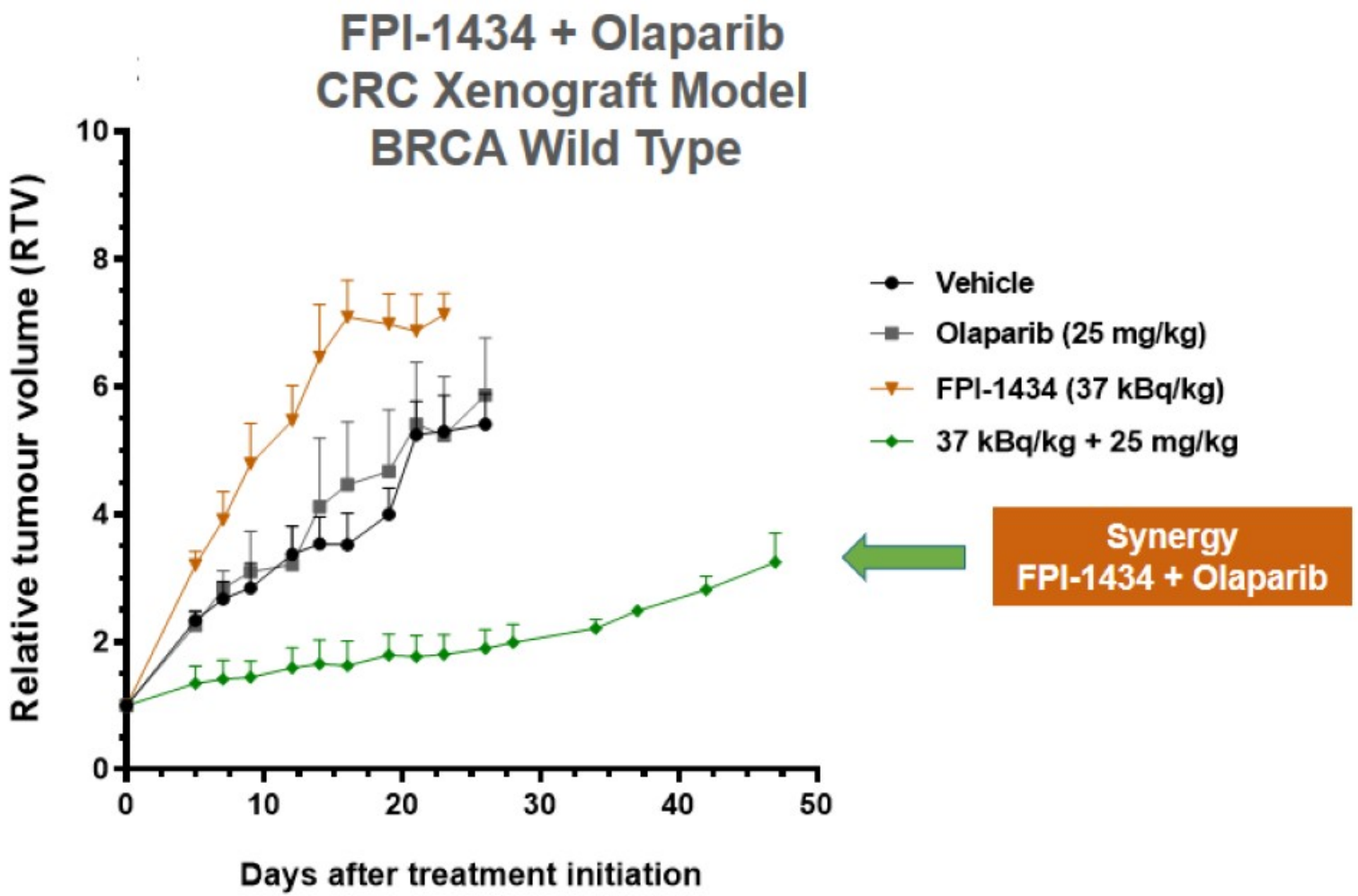
Potential Future Market Expansion, and Earlier Stage Treatment with Lower Required Doses

TATs Are Synergistic with DNA Damage Response Inhibitors (DDRi)



- TATs + DDR inhibitors are a logical combination:
  - TAT creates tumor DNA damage
  - DDRi prevents DNA repair
- Potential for increases in response rates and broader therapeutic utility

Scientific Rationale: Combination of Sub-Therapeutic Single Agent Doses Resulted in Enhanced Anti-Tumor Activity



FPI-1434 + Olaparib Combination

- Shows synergistic effects when compared to low-dose single agents alone

Synergistic Efficacy

- Has been observed in multiple tumor xenograft models

Scientific Rationale: [^{225}Ac] TAT + Checkpoint Inhibitors Demonstrate Enhanced Efficacy in a Mouse Syngeneic Tumor Model

Immune Competent Mouse
(mulGF-1R^{++}, CTLA^{++}, PD-1^{+} Tumor)

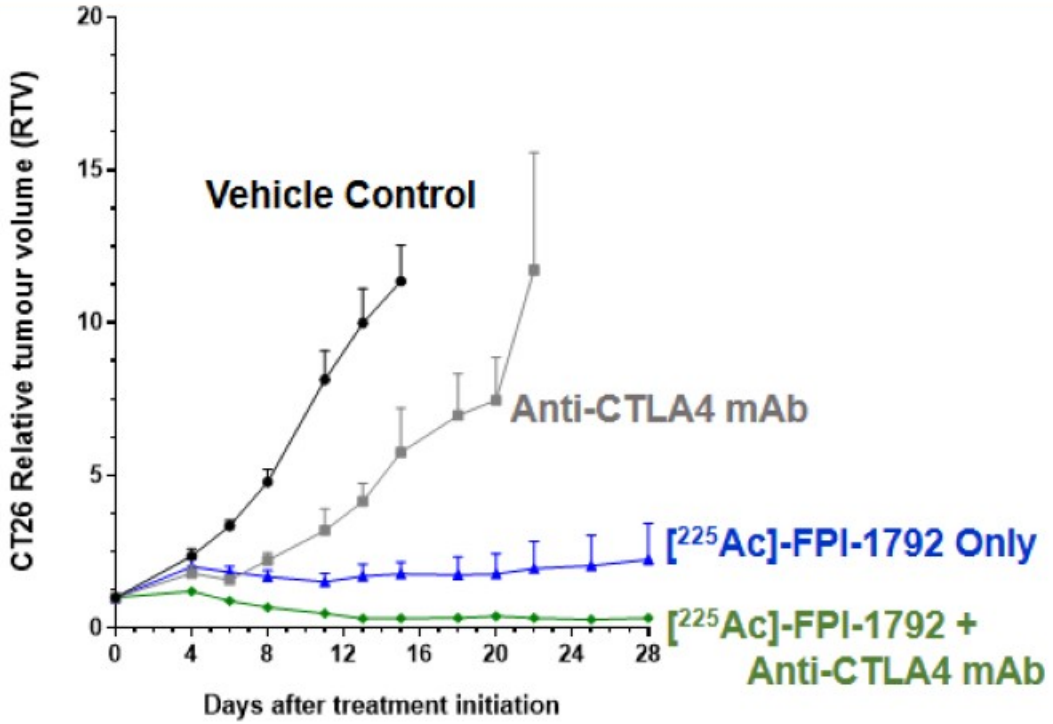
Implant CT-26
Colorectal Tumor

~7 days
~175 mm^3

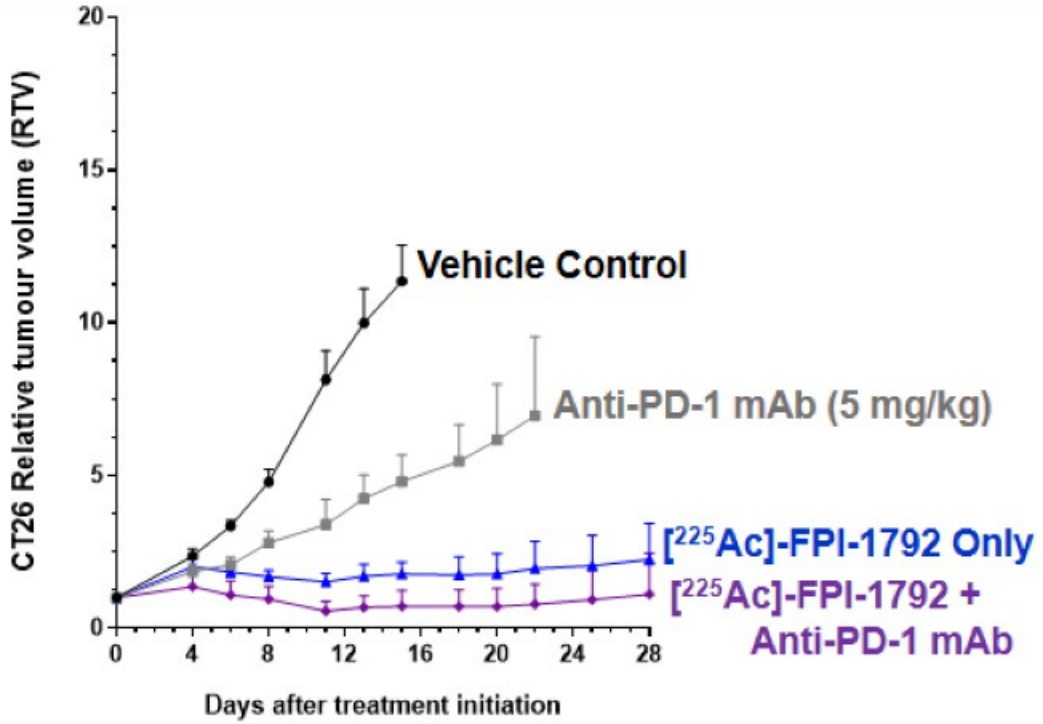
Treat
Single Dose

Monitor Tumor Volume

FPI-1792* with anti-CTLA-4



FPI-1792* with anti-PD-1



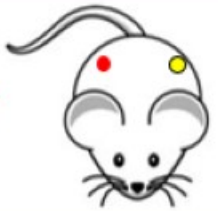
*Murine version of the IGF-1R antibody connected to ^{225}Ac through Fusion's Fast-Clear linker

Reduced Tumor Growth Observed in All Dose Groups Following Re-Challenge in Contralateral Flank

Immune Competent Mouse
CT-26 Colorectal Tumor
(mulGF-1R^{++}, CTLA^{++}, PD-1^{+} Tumor)

Treat
(per previous slide)

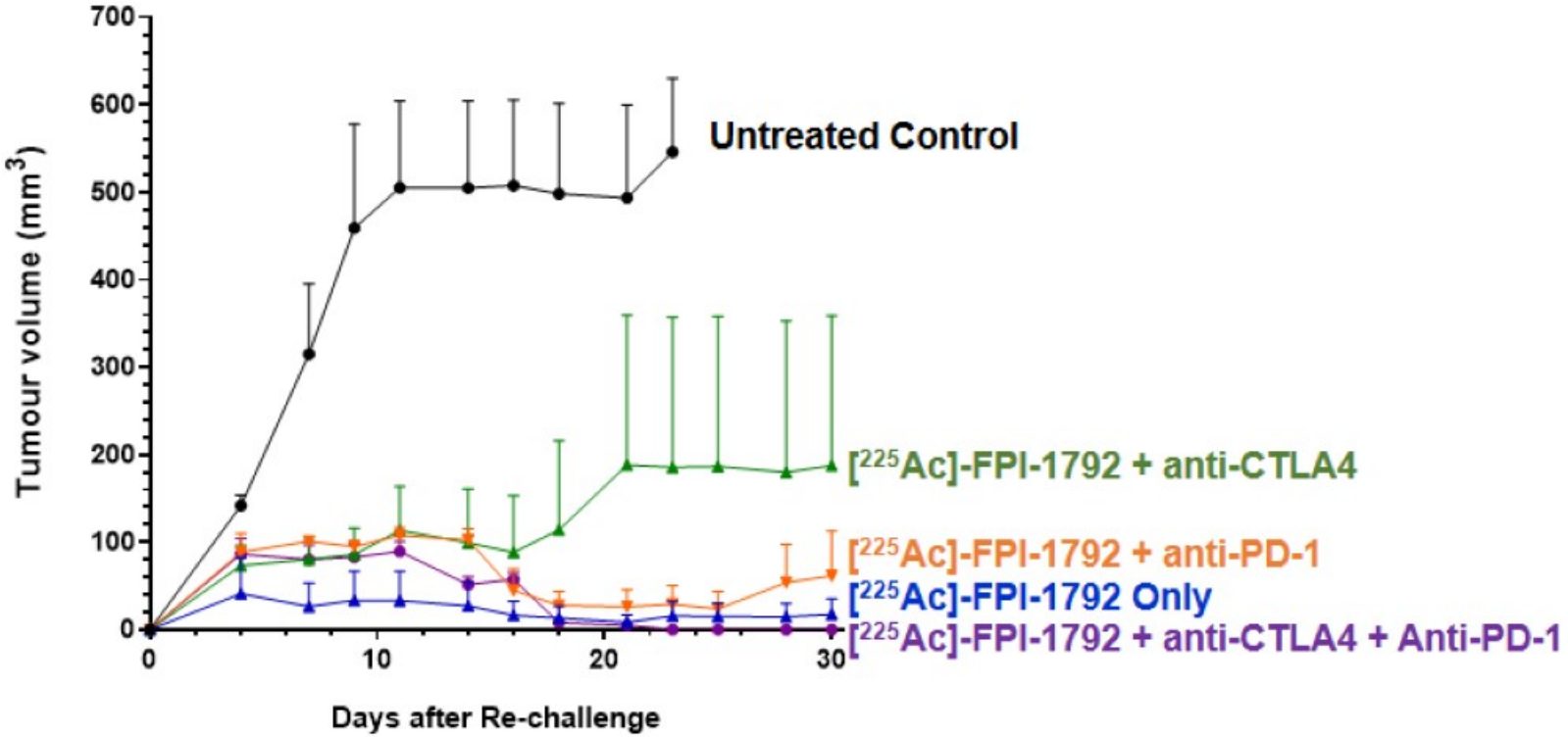
Re-Challenge
CT-26



No Treatment

Monitor Tumor Volume

Vaccine Study: 13 of 15 Animals Showed No Growth of a Secondary Tumor

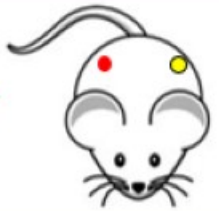


Infiltration of Antigen-Specific CD8+ T Cells Is Responsible for "Vaccine Effect"

Immune Competent Mouse
CT-26 Colorectal Tumor
(mulGF-1R^{++}, CTLA^{++}, PD-1^{+} Tumor)

Treat
(per previous slide)

Re-Challenge
CT-26

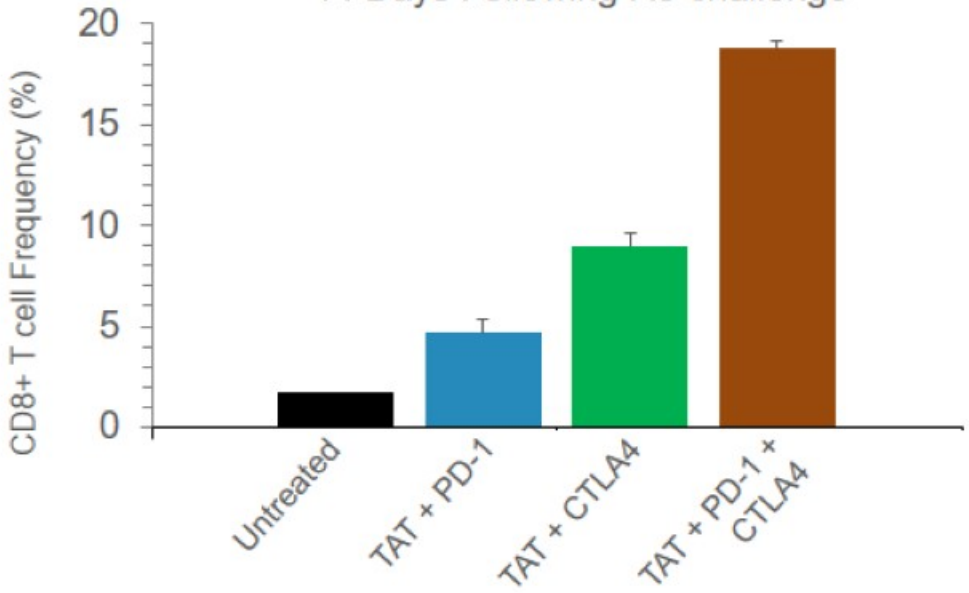


No Treatment

Tumor/ Spleen Assessment

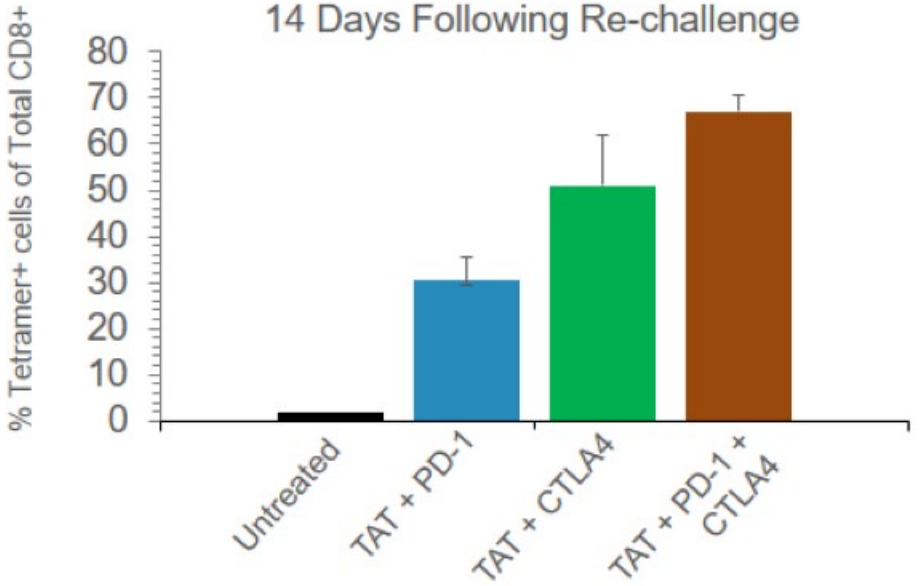
Tumor CD8+ T cell Recruitment

14 Days Following Re-challenge



Detection of Antigen-specific AH1 CD8+ T cells

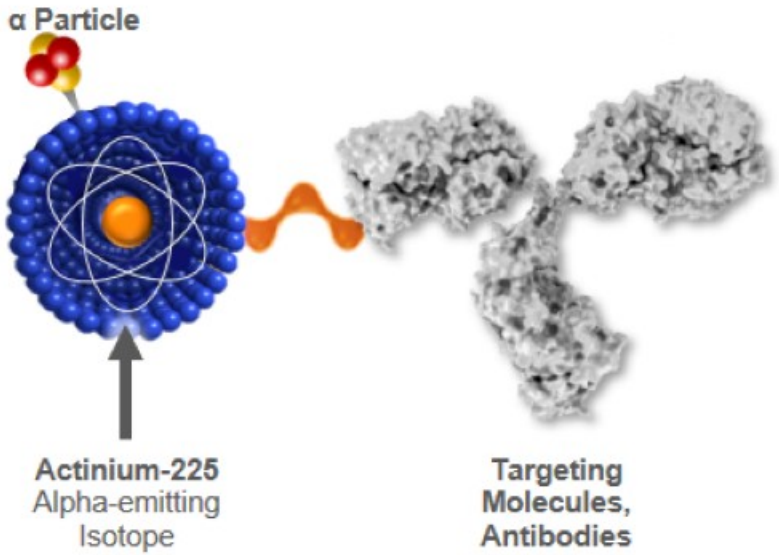
14 Days Following Re-challenge



Obtained Biochemical Evidence of T cell Memory

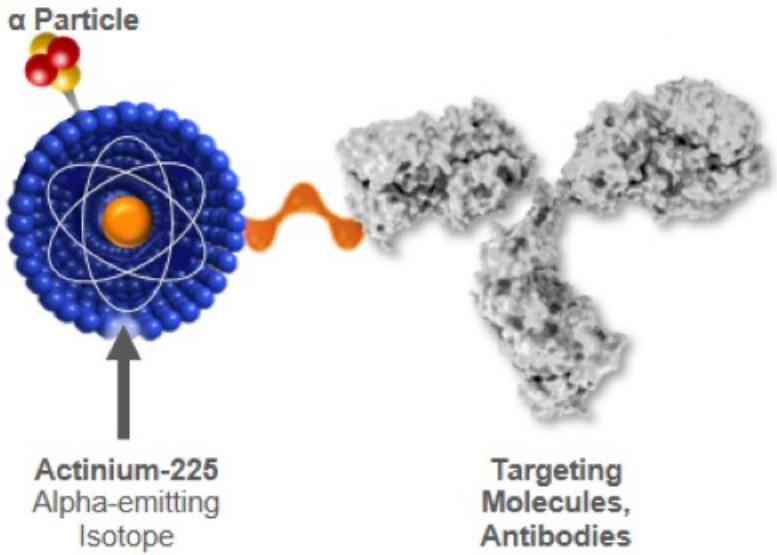
Two Pillars of the Collaboration

1) Novel Targeted Alpha Therapies



New precision medicines

2) Combination Therapies with TATs



- **Immuno-Oncology Agents**

…or…

- **DNA Damage Response Inhibitors (DDRis)**

Broader utility for DDRis and TATs, reduced doses of TATs

John Crowley

Chief Financial Officer

Financials

Agreement Drives Long-Term Value Creation

Fusion Pharmaceuticals Inc.

+

AstraZeneca

	Combinations (up to 5)	Novel TATs (up to 3)	Opt Out for Each Novel TAT
Milestones ($5M upfront)	Up to $40M to Fusion	-	Up to $145M in milestones from developer
Development Expense	100% AZ (unless Fusion opts-in)	50/50	-
Profit Share	Profit from Respective Compounds (minus payback and risk premium if not opted-in)	50/50	Low-to-high single-digit royalty to non-developer

*as of 6/30/20

$319M* for Operations into 2024 **Capacity to Support Multiple Programs** **Scalable Platform**

Strategic Rationale: Multiple Avenues

Fusion Pharmaceuticals Inc. + AstraZeneca

- Delivers access to breadth of AstraZeneca's world-class oncology pipeline & products, resources and expertise
- Avoids early-stage development risk
- Provides optionality around later-stage risk and expense
- Preserves significant back-end economics
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Q&A

Fusion
Pharmaceuticals Inc.

Thank You

Fusion and AstraZeneca to Develop and Commercialize Next-Generation Targeted Alpha Therapy Radiopharmaceuticals and Combination Therapies