



# FivePrime<sup>®</sup>

## Leerink Immuno-Oncology Roundtable Conference

September 28, 2017

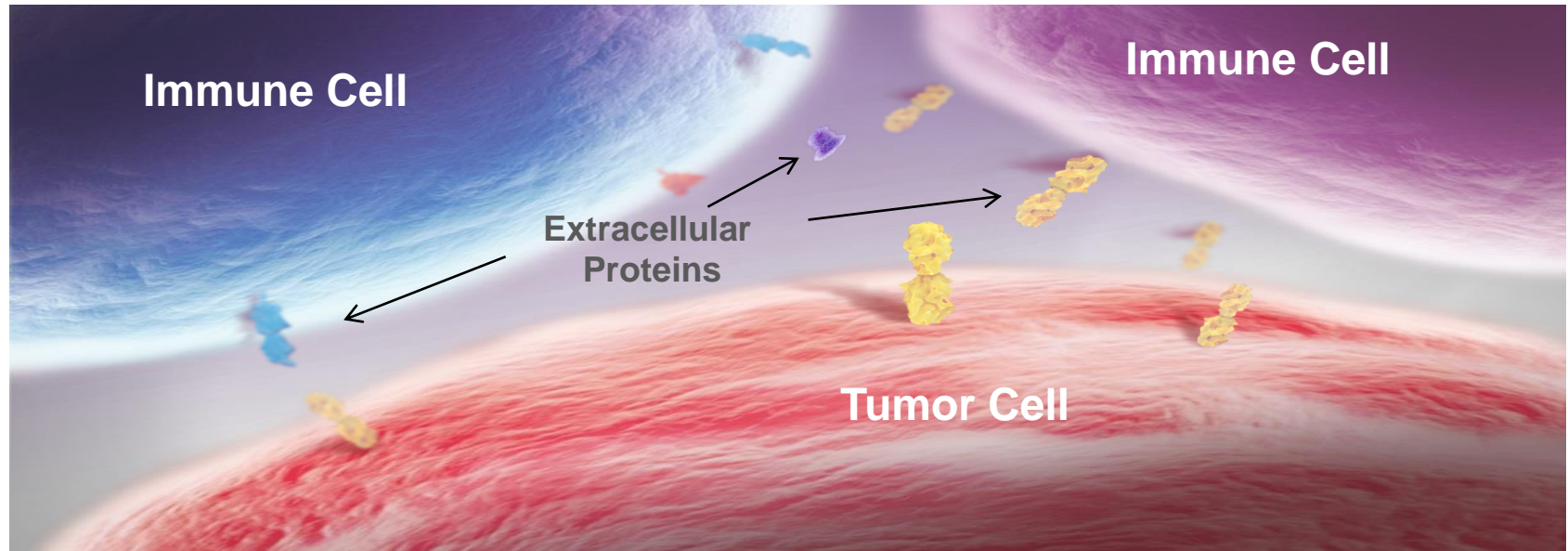
NASDAQ:FPRX

# Forward-Looking Statements Disclaimer

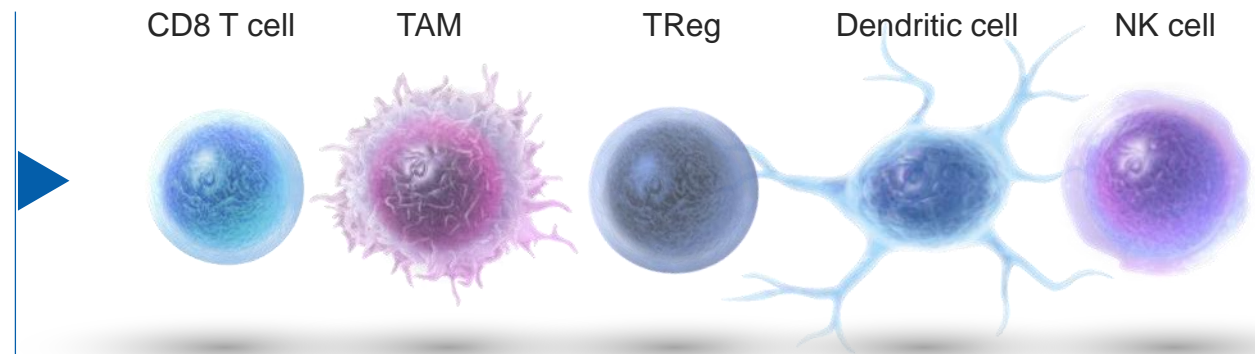
This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate" and similar expressions (as well as other words or expressions referencing future events or circumstances) are intended to identify forward-looking statements. These forward-looking statements reflect FivePrime's current beliefs and expectations. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ from these forward-looking statements. Forward-looking statements contained in this presentation include statements about (i) the timing of initiation, progress and scope of clinical trials for our product candidates; (ii) the potential use of our product candidates to treat patients; (iii) the extent of gene amplification and protein overexpression in and the size of certain patient populations; (iv) the prevalence and incidence of certain diseases; (v) the timing of the filing of INDs; (vi) the timing of data disclosures; and (vii) our estimated 2017 net cash used in operating activities and estimated year-end balance of cash, cash equivalents and marketable securities.

Many factors may cause differences between current expectations and actual results, including unexpected safety or efficacy data observed during preclinical or clinical studies, clinical site activation rates or clinical trial enrollment rates that are lower than expected, changes in expected or existing competition, failure of our collaborators to support or advance collaborations or product candidates and unexpected litigation or other disputes. Other factors that may cause our actual results to differ from current expectations are discussed in FivePrime's filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. Except as required by law, we assume no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.




# Our Unique Platform is Ideal for the Design of New Drugs that Reprogram Immune Cells in the Tumor Microenvironment



- Discovering novel protein drugs
- Targeting key immune cells



# Oncology-Focused Pipeline with Multiple Clinical Candidates

Program	Indications	Lead selection	IND-enabling activities	Phase 1	Phase 1b	Phase 2
<b>Cabiralizumab (FPA008)</b> CSF-1R antibody  Bristol-Myers Squibb	Multiple tumor settings in combination with <i>Opdivo</i> <sup>®</sup> Pigmented Villonodular Synovitis (PVNS)					
<b>FPA144</b> FGFR2b antibody	Gastric and bladder cancers					
<b>FP-1039</b> FGF ligand trap	Mesothelioma					
<b>FPA150</b> B7-H4 antibody	Multiple tumor settings					
<b>FPT155</b> CD80-Fc	Multiple tumor settings					
<b>I-O antibody</b>  Bristol-Myers Squibb	Multiple tumor settings					
<b>I-O antibody</b>  Bristol-Myers Squibb	Multiple tumor settings					

# Cabiralizumab, a Product of the Five Prime Platform Blocks Survival of Macrophages

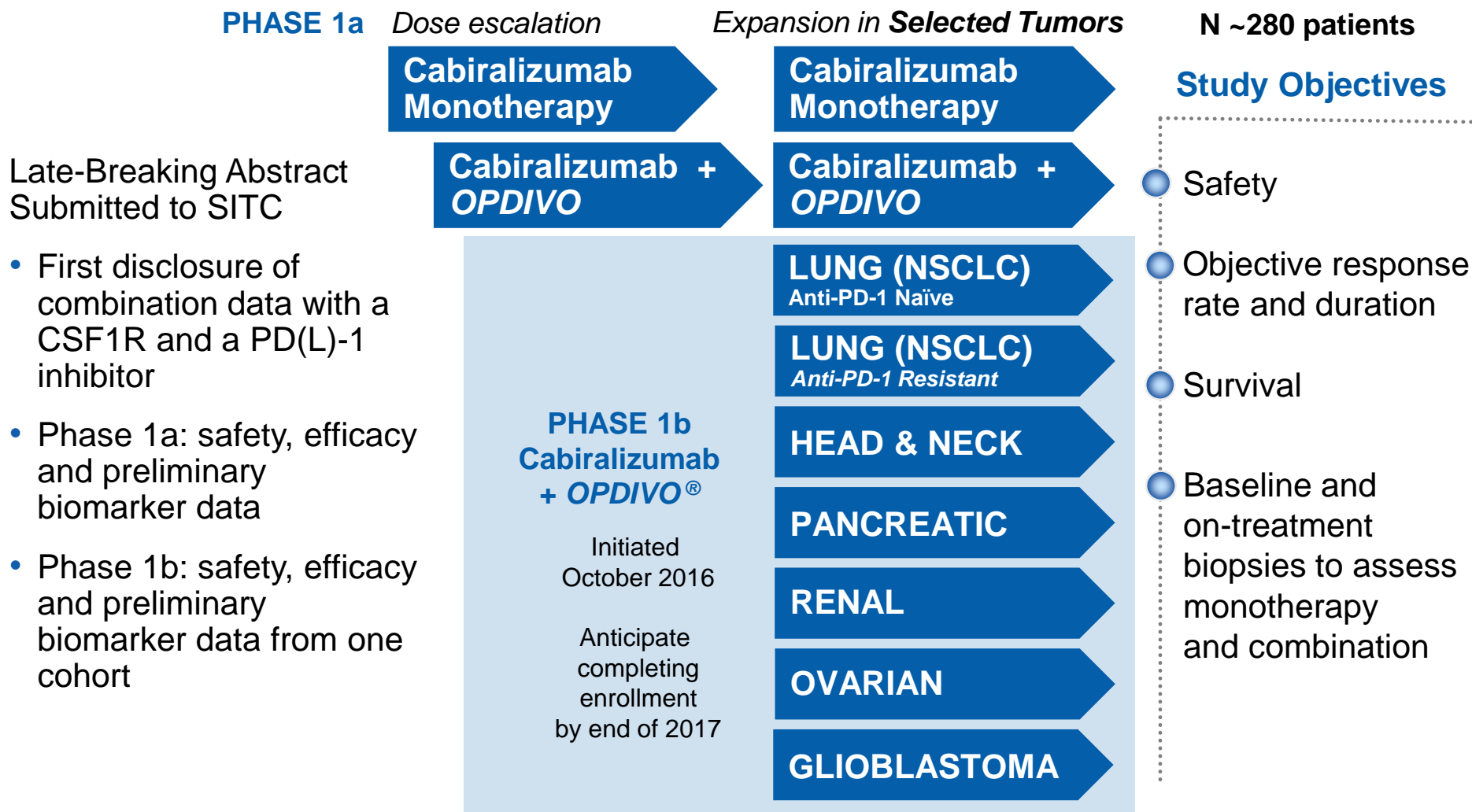
**Cabiralizumab (FPA008)**  
is an antibody to **CSF-1R**

**CSF-1**

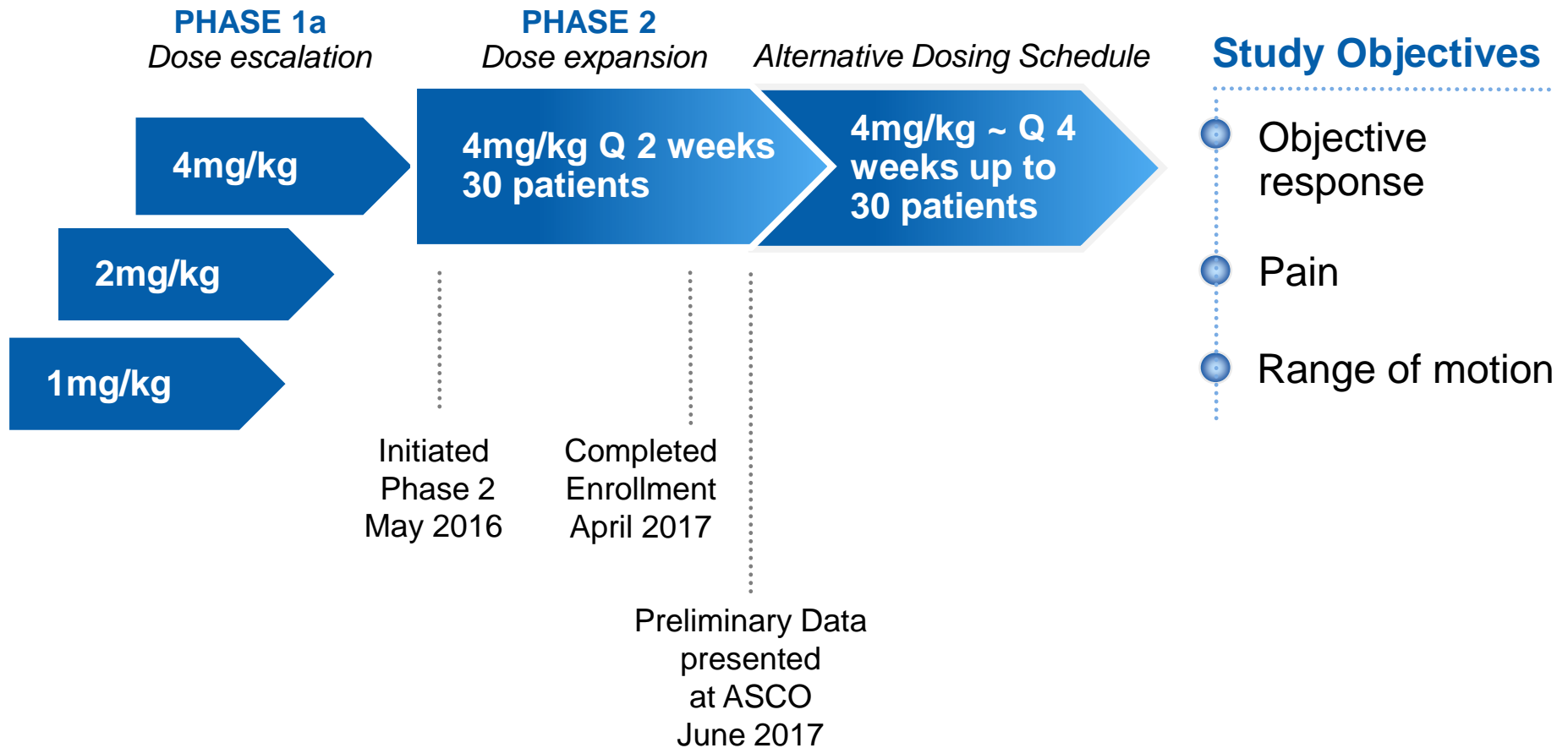
**IL-34**

Five Prime discovered **IL-34**,  
one of the two ligands for CSF-  
1R that **cabiralizumab**  
(**FPA008**) blocks

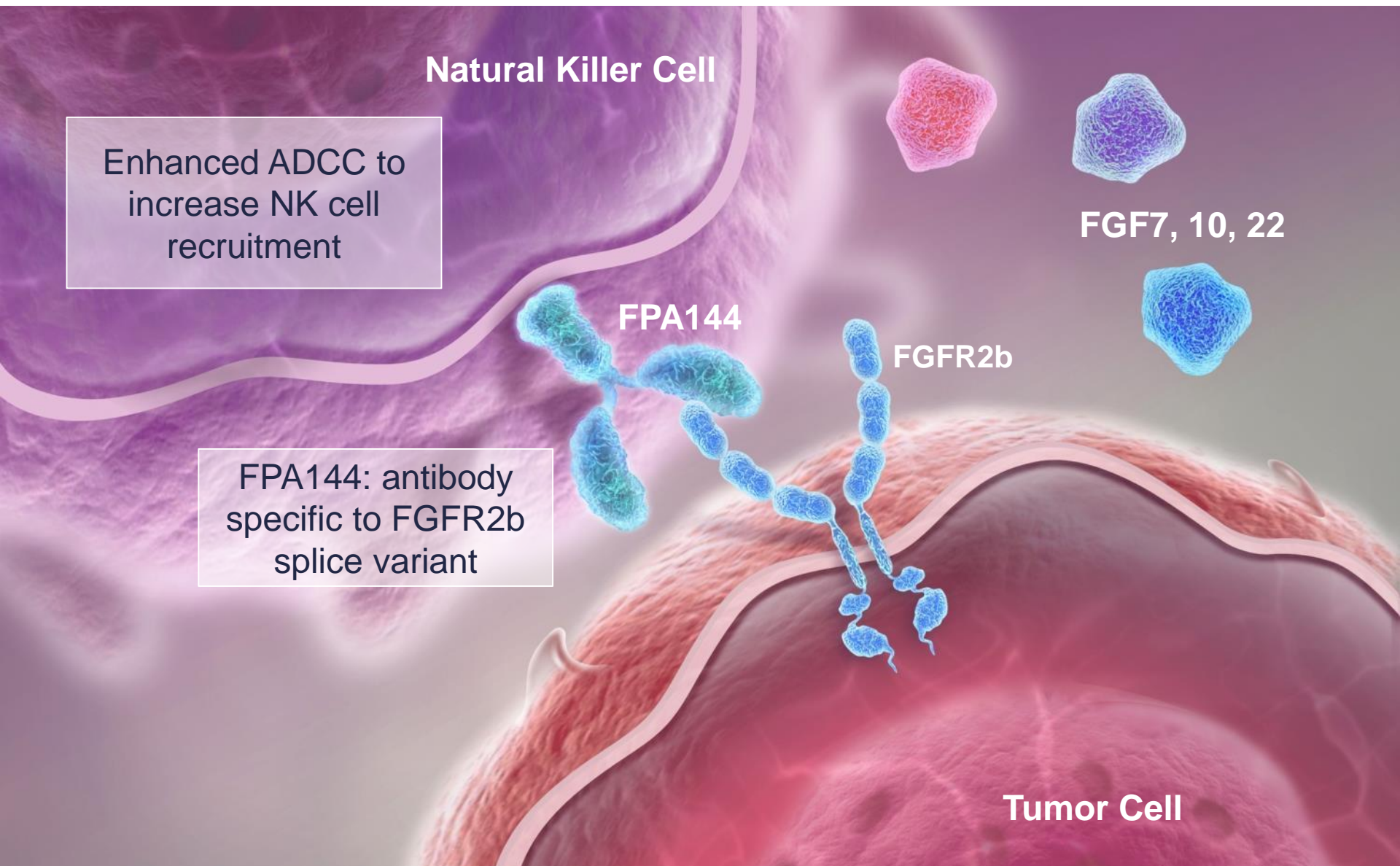
# Cabiralizumab/OPDIVO® Combination Trial in Multiple Tumor Settings: Preliminary Data Planned for Presentation at SITC



# Cabiralizumab: Current Five Prime-Sponsored Phase 2 Trial in PVNS



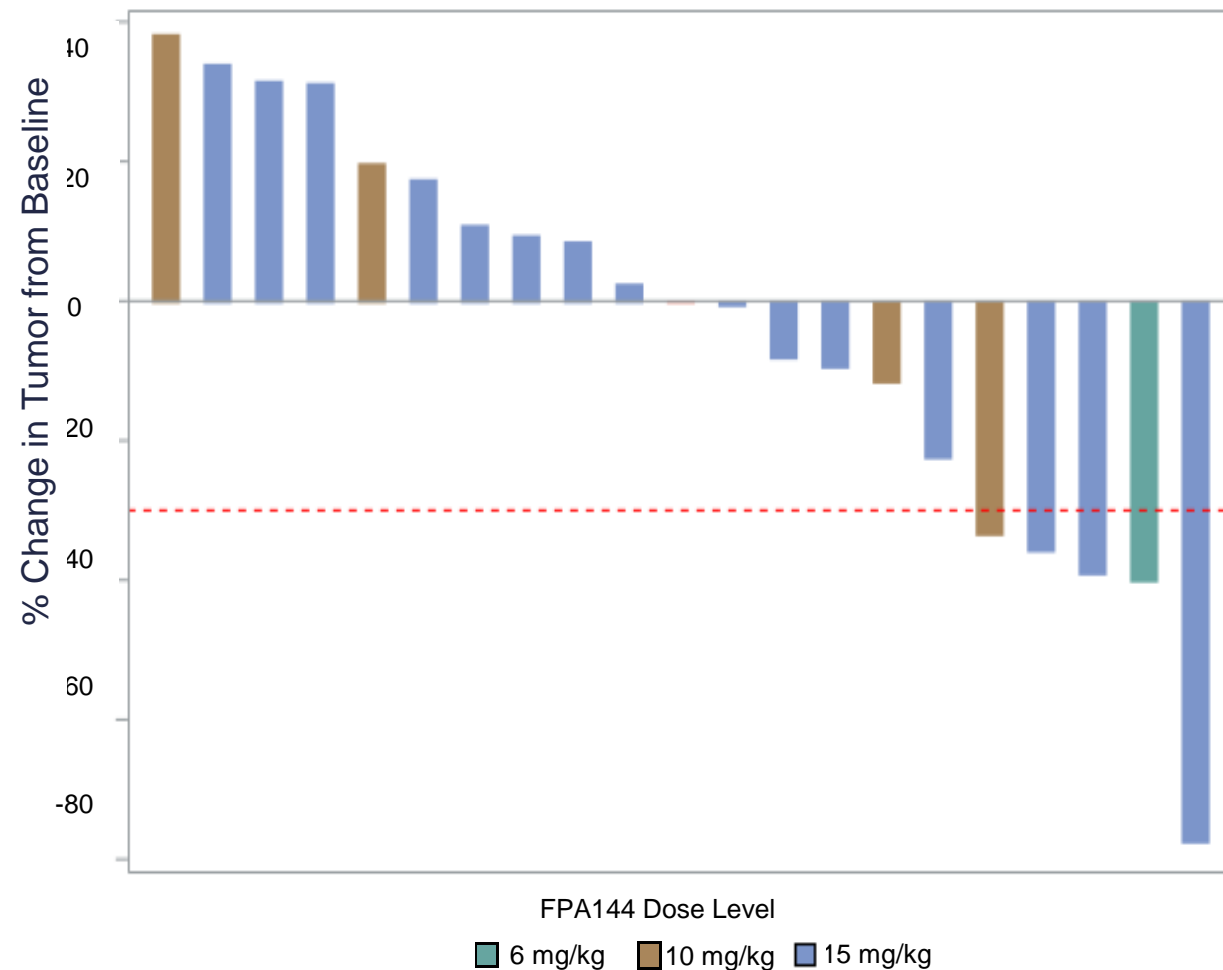
# FPA144 Was Designed to Recruit Tumor-Killing NK Cells into the Tumor Microenvironment





# FPA144 Demonstrated Monotherapy Activity in Heavily Pre-treated Patients with FGFR2b+ Gastric Cancer\*

Best % Change in Sum of Diameters from Baseline FGFR2b+



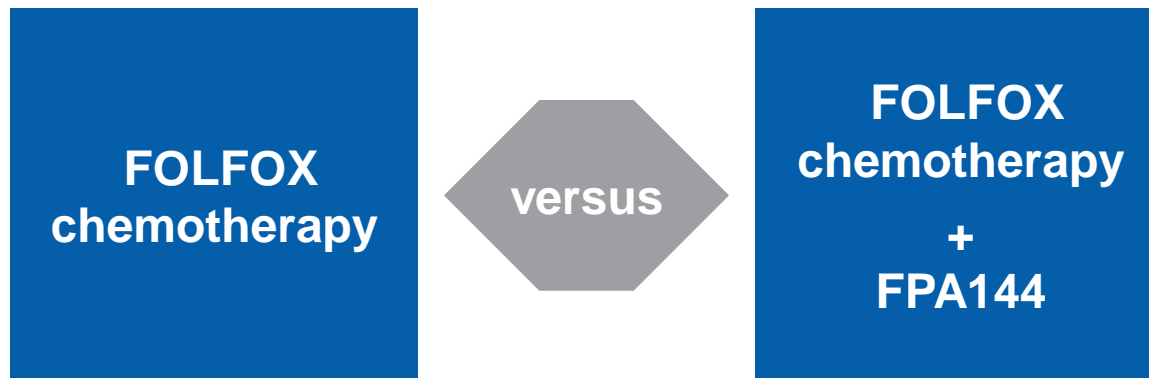
- High number of prior therapies (median = 3)
- Objective Response Rate: 19.0% (n=21)
- Disease Control Rate: 57.1%
- Median Duration of Response = 15.4 weeks

Including patients enrolled into Part 2 (Cohort A), as well as 6 patients in Part 1B

\* ASCO 2017 Catenacci *et al*

# Preparing for Pivotal Trial of FPA144 for Front-Line Treatment of FGFR2b+ Gastric Cancer

- Seeking regulatory guidance on details of registration-enabling pivotal trial plan
  - Global (including China and Japan) randomized, controlled trial
  - Select biomarker-positive patients by ctDNA (blood-based) or IHC (tumor sample) tests; approximately 10% of patients expected to be biomarker-positive
  - Phase 1 safety run-in followed by Phase 3 trial
- Study start-up activities underway

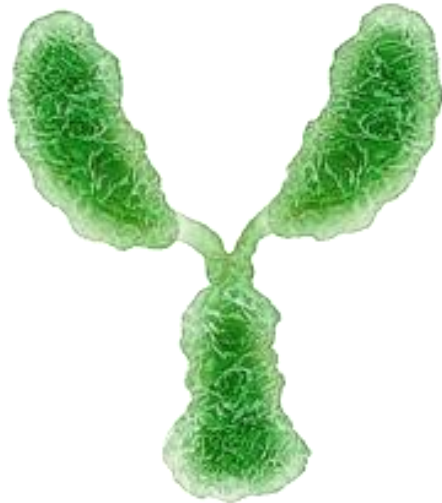


## Study Objectives

- PFS
- OS
- ORR

# FPA150: Novel B7-H4 Antibody is Designed for Two Mechanisms of Action

**FPA150**

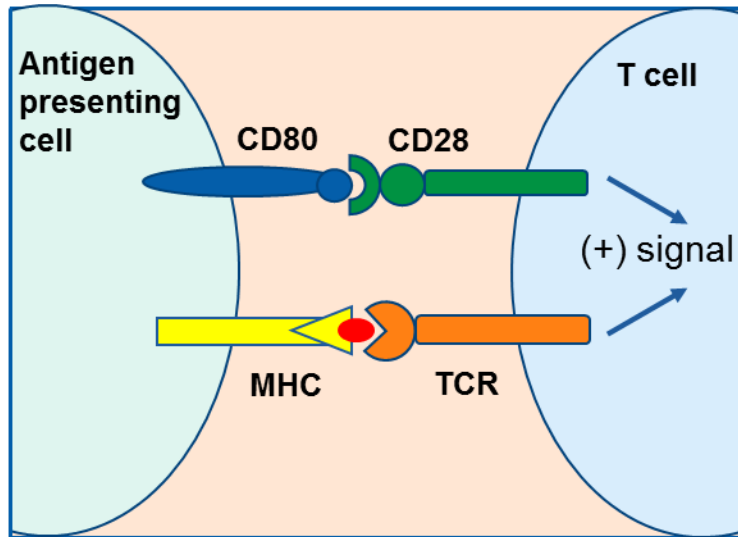


**IND planned 4Q17**

- Blocks a T cell checkpoint pathway expressed on tumor cells
- Engineered to enhance ADCC against B7-H4-expressing tumor cells
- B7-H4 is overexpressed in breast, ovarian and endometrial cancers
- Presented at an oral poster discussion at ESMO

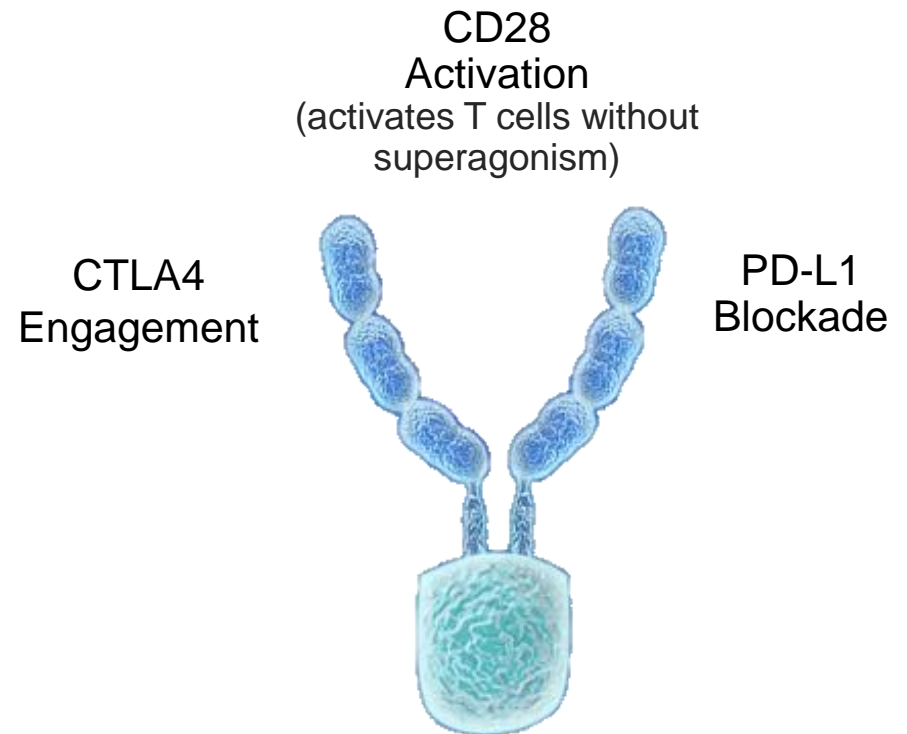
# FPT155 is a CD80-Fc Fusion Protein Engineered to Activate T cells Through Multiple Pathways

## Normal T cell activation via CD80



CD80 is a co-stimulatory molecule expressed on antigen presenting cells

FPT155 uses the binding interactions of Soluble CD80 to modulate 3 pathways



A close-up photograph of a dog's face, likely a Golden Retriever, with a blue color overlay. The dog's eyes are partially visible, and its fur texture is detailed. The text 'FivePrime' is overlaid in white, with a registered trademark symbol (®) to the upper right of the 'e'. A white horizontal line with a semi-circle and a dot in the center is positioned below the text.

# FivePrime®

A vertical grey bar is located on the left side of the slide, partially overlapping the 'Thank You' text.

## Thank You

[www.fiveprime.com](http://www.fiveprime.com)

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