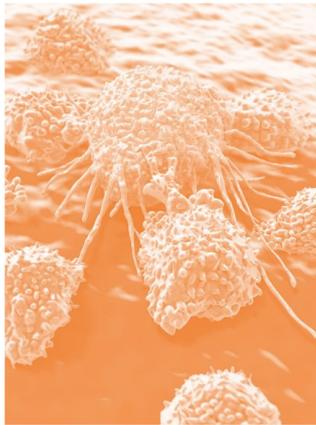
A blue-tinted silhouette of a human figure, showing the head, neck, and torso, positioned on the left side of the slide.

# Actualizing the Untapped Potential of the Innate Immune System

Affimed's Approach to Advancing Immuno-Oncology

July 2020



# Forward-Looking Statements / Cautionary Note



This presentation and the accompanying oral commentary contain “forward-looking” statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this presentation and the accompanying oral commentary, including statements regarding our future financial condition, business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “believe,” “will,” “may,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “plan,” “might,” “approximately,” “expect,” “predict,” “could,” “potentially” or the negative of these terms or other similar expressions.

Forward-looking statements appear in a number of places throughout this presentation and the accompanying oral commentary and include statements regarding our intentions, beliefs, projections, outlook, analyses and current expectations concerning, among other things, the value of our ROCK® platform, the safety and efficacy of our product candidates, our ongoing and planned preclinical development and clinical trials, our collaborations and development of our products in combination with other therapies, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates, our intellectual property position, our collaboration activities, our ability to develop commercial functions, clinical trial data, our results of operations, cash needs, financial condition, liquidity, prospects, future transactions, growth and strategies, the industry in which we operate, the trends that may affect the industry or us, impacts of the COVID-19 pandemic and the risks, uncertainties and other factors described under the heading “Risk Factors” in Affimed’s filings with the Securities and Exchange Commission.

Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements represent our management’s beliefs and assumptions only as of the date of this presentation. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

# Every Patient Deserves More Options. Every Patient Deserves Another Chance.



*The first patient to receive AFM13 to treat CD30+ lymphoma with cutaneous presentation*

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# Leading Innate Immunity Activation to Treating Cancer Patients

Innate Cell Engagers (ICE®) have promising potential to revolutionize patient treatment in hematologic and solid tumors



## Strong Leadership and Cash Position

- ✓ Recent CFO, CSO and CMO appointments strengthen depth and breadth of industry experience
- ✓ Multiple value inflection points in 2020 and 2021

## Innate immune cell activation represents a compelling opportunity in oncology

- ✓ Industry-leading, ROCK® antibody engineering platform, honed for clinical benefit



## Late-stage company

- ✓ AFM13: novel approach for CD30+ lymphoma and proof-of-concept data in TCL and HL
- ✓ AFM13-202: registration-directed study in 46 clinical sites in 9 countries
- ✓ AFM13-104: innovative – preloaded NK cells for CD30+ lymphoma pts

## Broad pipeline comprising fully owned and partnered programs

- ✓ AFM24: first ICE® for solid tumor in clinical-stage; broad opportunity
- ✓ AFM28 & AFM32: programs initiated
- ✓ RO7297089 (BCMA): partnered with Genentech; poised to enter clinic
- ✓ Genentech: Initiated multiple programs

# Experienced Management Team

Proven track record in biotech, pharma, product development, and finance



**Dr. Adi Hoess**  
Chief Executive Officer (CEO)

Extensive background in general management, product commercialization, fundraising and M&A



**Dr. Arndt Schottelius**  
Chief Scientific Officer (CSO)

Broad experience in biotherapeutics R&D and I/O & immunology research and development, proven track record building biologics portfolios



**Dr. Wolfgang Fischer**  
Chief Operating Officer (COO)

In-depth expertise in R&D with a focus on oncology and immunology, proven track record of bringing drugs to market



**Dr. Andreas Harstrick**  
Chief Medical Officer (CMO)

Seasoned oncology expert with broad experience and proven track record of bringing innovative therapies to market



**Denise Mueller**  
Chief Business Officer (CBO)

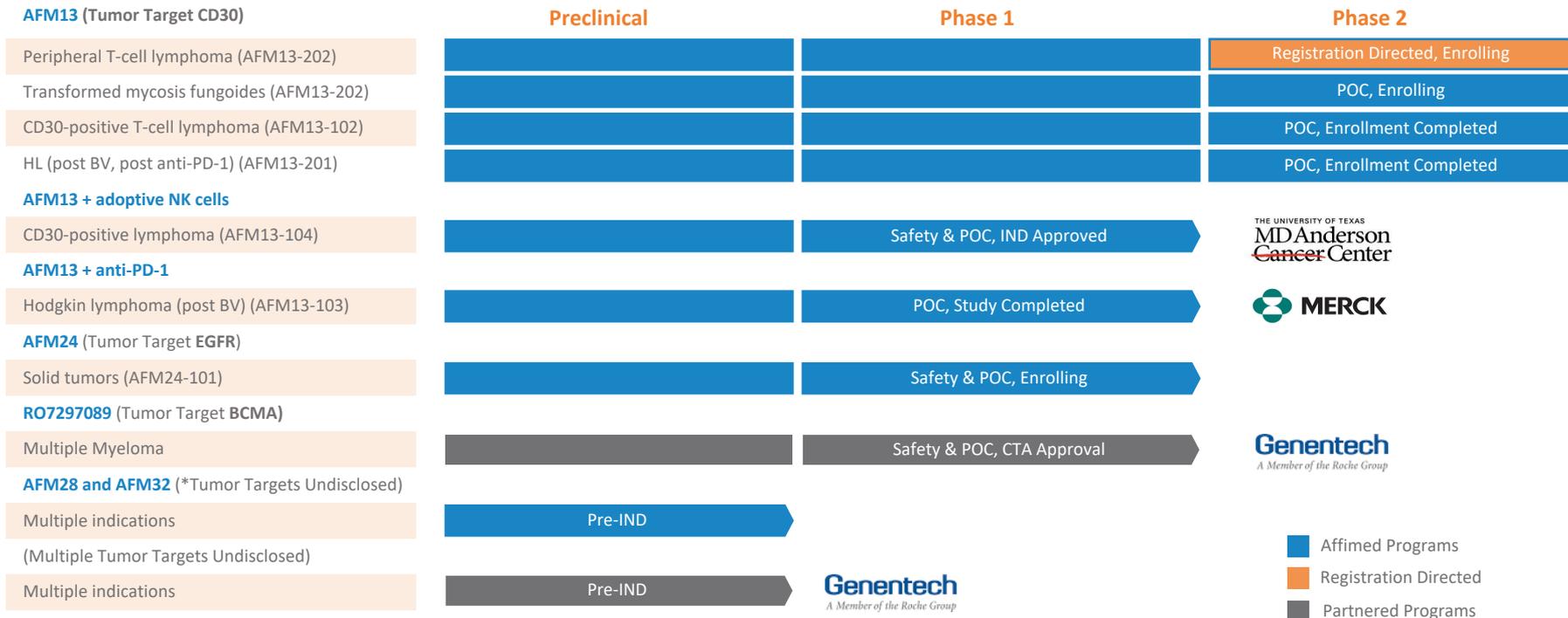
Strong background in commercialization and global marketing, including launch of new products



**Angus Smith**  
Chief Financial Officer (CFO)

Broad biopharmaceutical industry experience including financial strategy, capital markets, business development and operations

# Pipeline: Versatile Innate Cell Engagers Targeting Hematologic and Solid Tumors

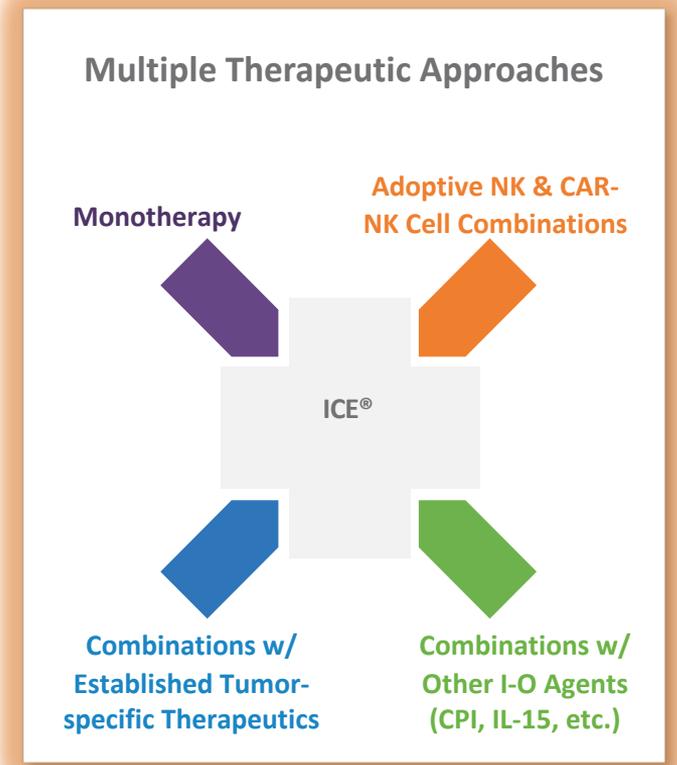
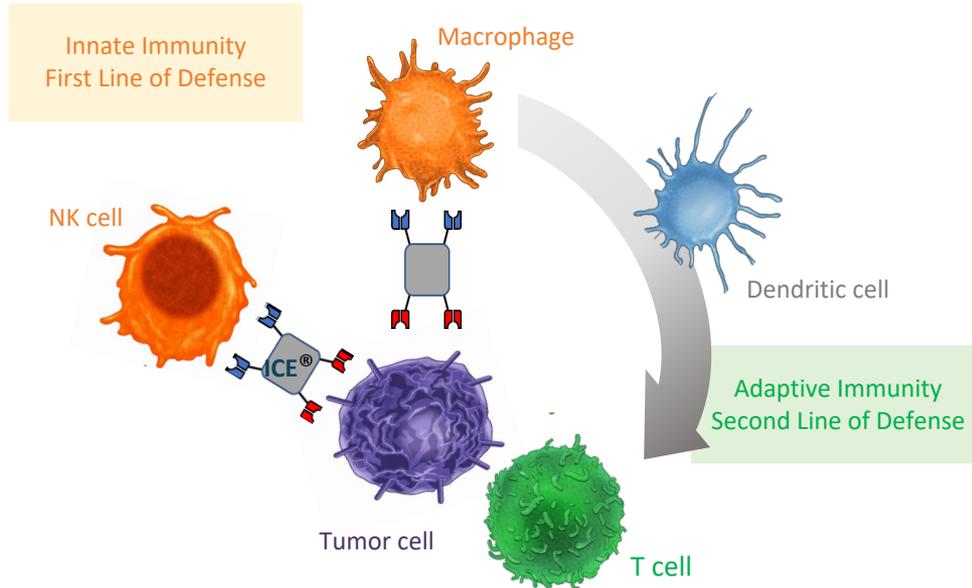


\* Hematologic and solid tumor targets

BV, brentuximab vedotin; PD-1, programmed cell death protein 1; NK, natural killer

EGFR, epidermal growth factor receptor; BCMA, B-cell maturation antigen; IND, investigational new drug application

# Affimed's ICE<sup>®</sup> Molecules Activate the Innate Immune System and Trigger a Concerted Anti-Tumoral Immune Response



# Fit-for-Purpose ROCK<sup>®</sup> Platform Allows ICE<sup>®</sup> Molecules to be Designed for Specific Indications



ROCK<sup>®</sup> Platform is Affimed's proprietary technology generating innate cell engagers

## Versatile Platform

Tailored tetravalent, bispecific innate cell engagers with high avidity and affinity, and variable PK profiles

*Generate novel IP to broaden leadership in innate immunity*

## Strong Engineering

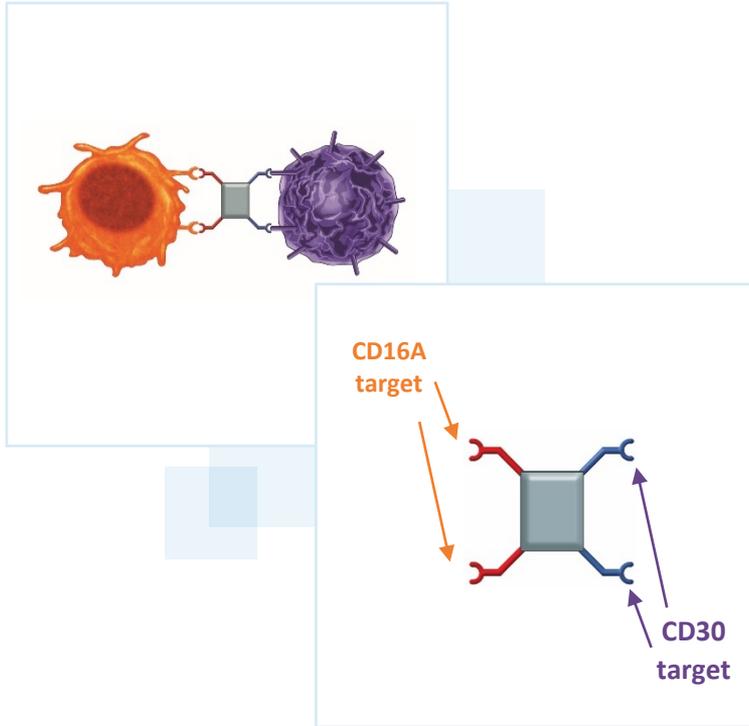
Proven record in quickly building potent and stable molecules

*A proven record of rapidly & predictably building potent, stable innate cell engagers tailored to specific diseases*

## Proprietary Target

Specific CD16A-targeting addresses major hurdles required for potent activation

*Advantageous approach to unlock innate immunity*



# Innate Cell Engager for CD30+ Lymphomas

Treatment with AFM13

# CD30-positive Lymphoma Patients Need More Treatment Options



## AFM13 is the only immunotherapy in development for CD30+ lymphoma patients

- Current treatment options are largely chemo-based with limitations on DoR and high toxicity
- Despite limitations, there is a significant market opportunity: B.V. annual revenue >\$1B in 2019 and growing
- AFM13 showed anti-tumor responses as single agent, including in patients that are r/r to B.V.
- pTCL provides option for accelerated approval
- Expansion opportunity in different lymphoma subgroups in combination, in particular with NK cells and/or anti-PD-1/PDL-1

Peripheral T-cell Lymphoma	Lack of standard of care in R/R – accelerated approval path
Cutaneous T-cell Lymphoma	Potential for <b>small trial</b> and <b>accelerated</b> timelines
Hodgkin Lymphoma	Emerging vacuum of effective options in R/R as current therapies (e.g. anti-PD1 and BV) move to earlier lines of treatment
Diffuse Large B-cell Lymphoma	Precision medicine opportunity in CD30+ subset currently not targeted

## Monotherapy

AFM13: First-in-class innate cell engager targeting patients with CD30+ lymphomas

Shown single agent anti-tumor responses in TCL (ORR=50%) and HL

## Combinations w/other I-O Agents

Shows promising signs of broad clinical development potential in augmenting other I-O therapies, such as PD-1 inhibitors\*

P1b data: 88% ORR, 42%/46% CR rate (local/central read); N=24

## Adoptive NK & CAR-NK Cell Combinations

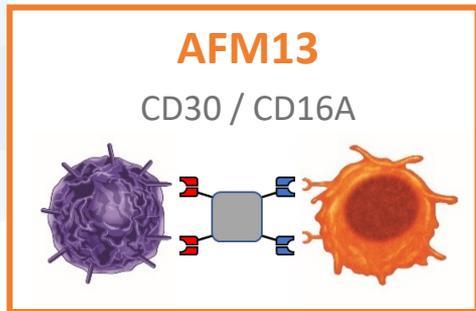
Combination with adoptive transfer of innate immune cells could enhance immune response\*

Preclinical data show promising signs of potential efficacy

IND cleared for Ph 1 NK cell therapy combo

\*Based on AFM13 preclinical and clinical studies.

# AFM13: Holds Promise as Monotherapy and in Combinations



**Value inflection points in 2020 and 2021**

- Interim data in PTCL as mono
- Initiation of combination study with NK cell product at MDACC and progression updates

Fast to Market

Expand

## T-cell Lymphoma

R/R PTCL and CTCL

R/R PTCL and TMF

1L PTCL



AFM13-102: monotherapy

AFM13-202 (REDIRECT): monotherapy

Ph 3:  
Confirmatory study

## CD30+ Lymphoma

POC of AFM13 + NK cells

R/R CD30+ lymphoma



AFM13-104: AFM13 + cbNK cells (MDACC)



## Hodgkin Lymphoma

R/R Post-BV/PD1-naïve

AFM13-103: AFM13+Pembro

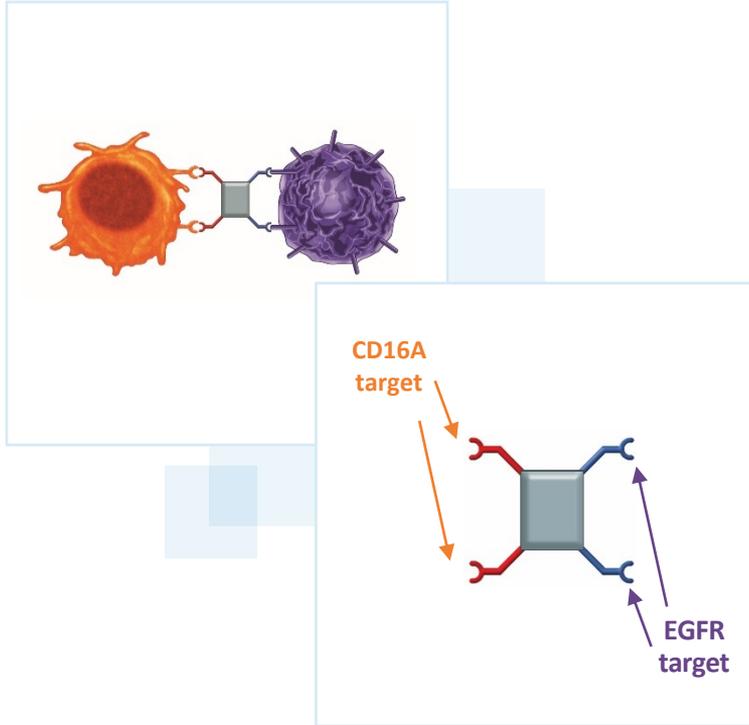


Ph 3: AFM13+anti-PD-1

TMF, transformed mycosis fungoides  
R/R, relapsed/refractory  
PTCL, peripheral T-cell lymphoma

Blue bar: POC Study  
Orange bar: Registrational Study

Yellow bar: Preclinical Study



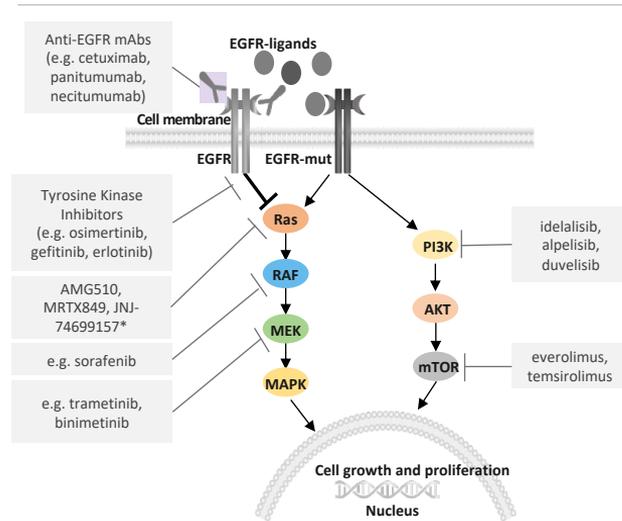
# Innate Cell Engagers in Solid Tumors

Treatment with AFM24

# AFM24 is Addressing Large Solid Tumor Indications - Many with Poor Prognosis

EGFR is widely expressed in solid tumors: Colorectal, lung, ovarian, gastric, breast, pancreas, etc.  
Incidence of >1,000,000 patients in EU and US with CRC, lung and gastric cancers\*

## Current therapies rely on disruption of the EGFR signaling cascade



## Limitations of current EGFR targeting therapies

- Standard therapies (TKIs or mAbs) cannot address broad patient populations due to primary mechanism - signal inhibition
- Patient subgroups with specific mutations (KRAS, BRAF) have very limited/no treatment options
- Resistance in the EGFR signaling cascade by activation of alternate pathways or downstream mutations limit use
- Dose limiting side effects lead to treatment discontinuation or non-optimal dosing
- Many indications with poor prognosis e.g. mCRC: 14% 5-year survival rate

\*<https://seer.cancer.gov/statfacts/more.html>

\*<https://www.lungcancereurope.eu/wp-content/uploads/2017/10/LuCE-Report-final.pdf>

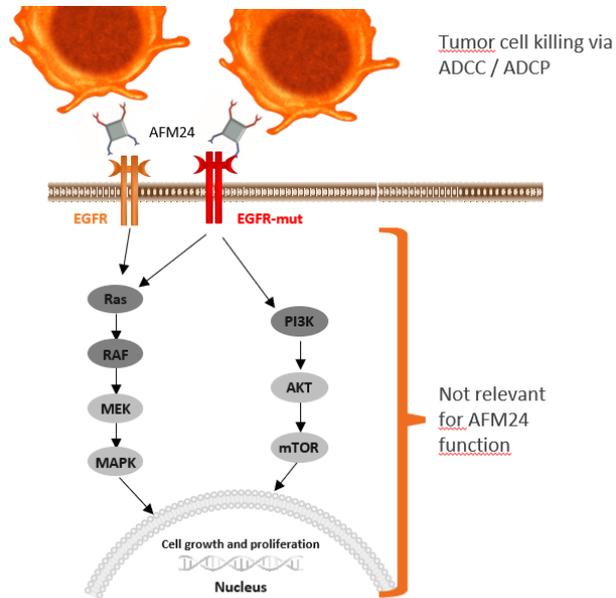
\*<https://gco.iarc.fr/today/data/factsheets/populations/908-europe-fact-sheets.pdf>

\*<https://ecis.jrc.ec.europa.eu/explorer.php?S0-0S1-AllS2-AllS4-1,2S3-0S6-0,8S5S-2008S7-7SCEstByCountrySX0-8-3SX0-19-AE28ESX0-20-NoSCEstRelativeSX1-8-3SX1-9-AE28SX1-19-AE28ESCEstByCountryTableSX2-19-AE28E>

# AFM24 (EGFR/CD16A): Potential to Disrupt Treatment Paradigm

By activation of innate immunity and overcoming resistance to current targeted treatments for EGFR-positive malignancies

AFM24 activates NK cells and macrophages independent of EGFR signaling and mutational status



Preclinical data presented at AACR 2020<sup>1</sup> demonstrating key features of AFM24

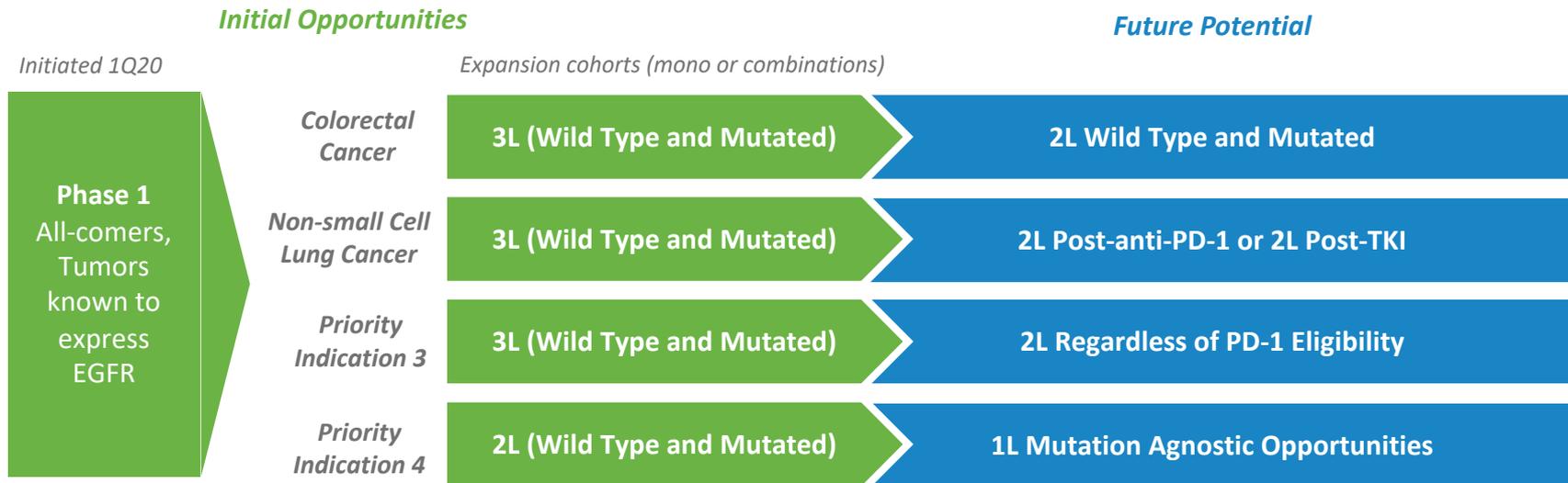
- ✓ MOA distinctive from all current EGFR-targeting therapies with promise to bring benefit to a broad set of patients
- ✓ MOA leverages the power of the innate immune system via NK cell-mediated ADCC and macrophage-mediated ADCP
- ✓ Option to patients currently not eligible for approved treatments due to resistance based on mutations in EGFR pathway
- ✓ ADCC and ADCP even at low EGFR density; induction of strong ADCC-mediated cell killing even at low E:T ratios
- ✓ Preclinical toxicology study demonstrates good safety profile

1) [https://www.affimed.com/wp-content/uploads/AACR2020\\_AFM24.pdf](https://www.affimed.com/wp-content/uploads/AACR2020_AFM24.pdf)

# A Multipronged Clinical Development Strategy Designed to Rapidly Deliver AFM24 to Patients with Few Options

## AFM24-101 – a dose escalation and expansion study

- All 4 sites activated (USC Los Angeles, DFCI Boston, VHIO Barcelona, Royal Marsden ICR London)
- 1<sup>st</sup> dose cohort completed, 2<sup>nd</sup> dose cohort enrolling



# AFM24 (EGFR/CD16A): A Distinctive Mechanism Physicians View as a Potential to Improve the Standard of Care



*"If I were to see that this agent added activity to a chemotherapy backbone, I would use this in all eligible patients."*

*"Leveraging NK cells in CRC has been a holy grail for a novel therapy."*

*"I would absolutely enroll my patients in a clinical trial for this agent."*

## Value inflection points in 2020 and 2021

- Dose escalation safety and activity data
- Initiation of dose cohort expansion as mono and in combinations

Source: Physician Interviews; ClearView Analysis.

## Key Differentiating Features

**CD16A ROCK® ICE® with potent ADCC & ADCP**

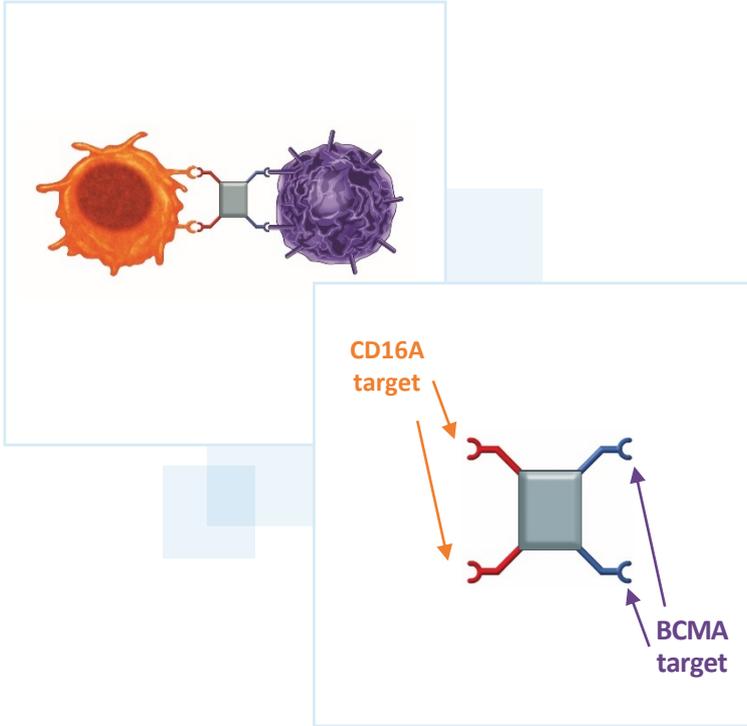
Could address tumors with any EGFR expression levels and overcome limitations of mAbs (V/F polymorphism)

**Substantial Market Opportunity**

Activity against EGFR-expressing tumor cell lines regardless of mutation

**Strong pre-clinical safety profile**

No dosing limitations expected and broad set of option for combinations



# Genentech Partnership

RO7297089 (formerly AFM26) in Myeloma

# Genentech Partnership: BCMA/CD16A Bispecific Antibody for the Treatment of Multiple Myeloma and Multiple Other Programs



## 1<sup>st</sup> publication at AACR featuring partnership with joint authorship on R07297089 (formerly called AFM26)

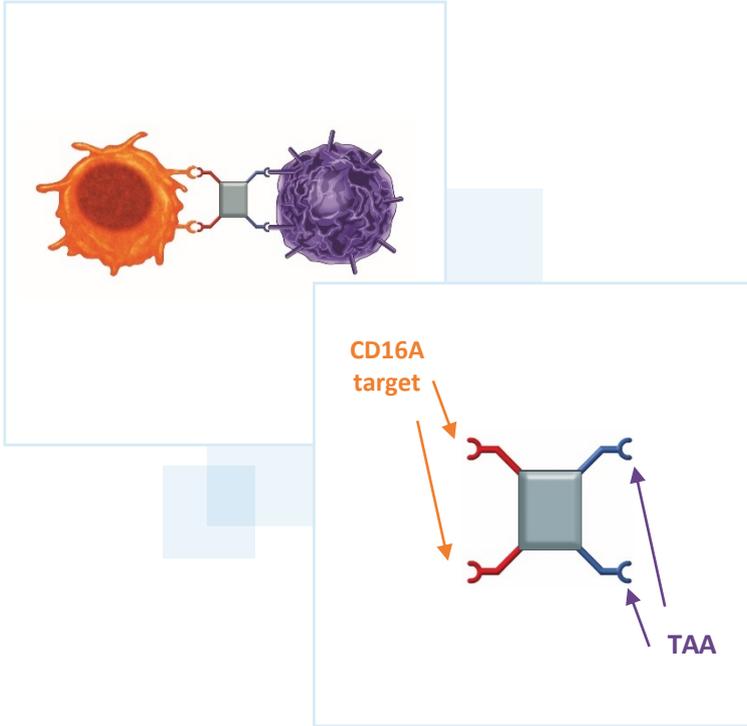
- ✓ The ROCK<sup>®</sup> platform continues to demonstrate the ability to induce efficacious target cell lysis also in the presence of low expression of the tumor antigen
- ✓ Favorable safety profile in 4-week cyno safety study
- ✓ Selective killing of BCMA-positive cells *in vitro* and *in vivo* (cyno) with low risk of cytokine release syndrome
- ✓ Filing of CTAs in Denmark, Norway and Australia by Genentech

## Additional Programs

- 2018 deal triggered \$96 M upfront payment to AFMD and has potential for over \$5 Bn in milestones
- Genentech selected final target option in Dec. 2019 - triggered milestone payment to AFMD

## Value inflection points in 2020 and 2021

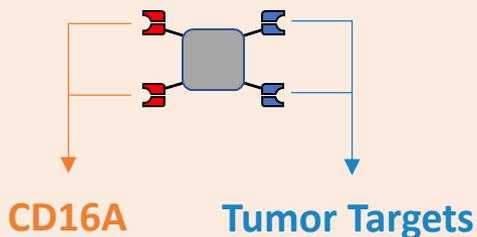
- Update on R07297089 progression and on additional programs
- Pending program progression will trigger milestone payments



# AFM28 and AFM32

Novel product candidates

## Partnering New ICE<sup>®</sup> Innovations



- **AFM28** and **AFM32** – wholly owned by Affimed
- **New ICE<sup>®</sup> molecules**
  - Can target a **broad range of TAAs** generated internally or sourced from partners
  - Antibody formats can be customized based on the **modular ROCK<sup>®</sup> platform**

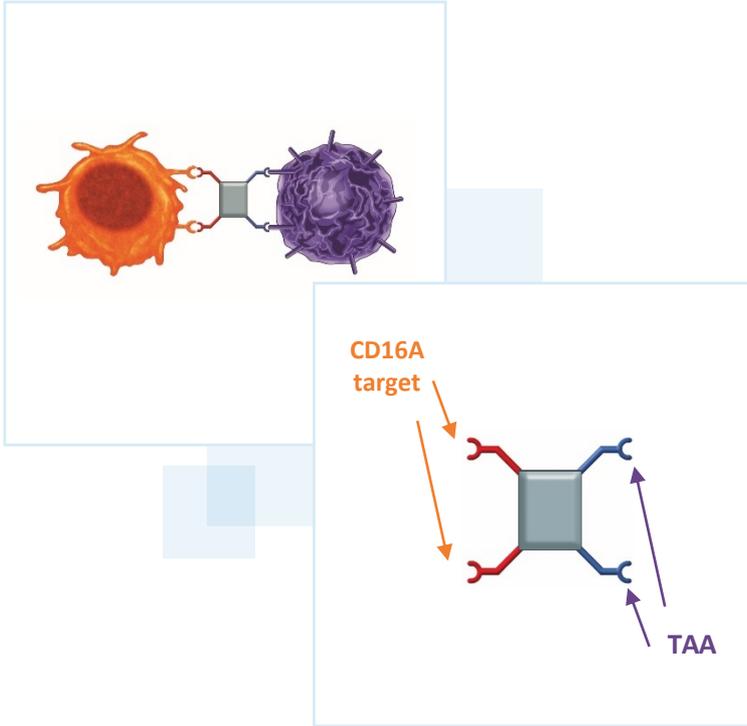


## Rational Combinations

- Adoptive NK cells
- Checkpoint inhibitors
- Targeted cytokines
- Other innate and adaptive MOAs synergistic to innate cell engagement

## Value inflection points in 2021

- **AFM28** and **AFM32** data releases
- **Initiation of IND-enabling studies**
- **IND-filing of AFM28**



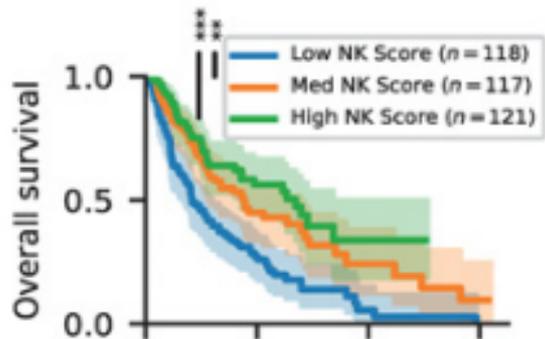
# Future Opportunities

ICE® Combination with NK Cellular Therapies

## High NK cell numbers are associated with better outcomes

Patients with higher NK cell count have:

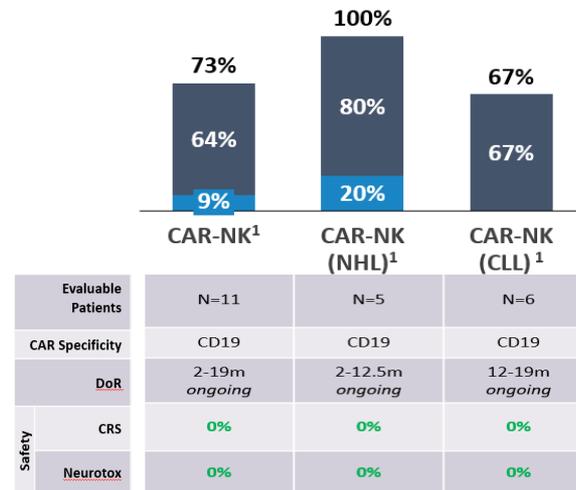
- ✓ Superior clinical outcomes in general<sup>1</sup>
- ✓ Superior clinical benefit from (chemo)-immunotherapy<sup>2</sup>



Providing larger numbers of NK cells to patients cannot address this opportunity, as:

- Lack of tumor recognition limits efficacy
- Specifically activated NK cells are required

## CAR-NK with promising early efficacy and initial safety data



Generation of CAR-NK cells has limitations:

- Resistance of NK cells to genetic engineering
- Limited proliferative potential and persistence
- No macrophage activation

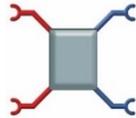
1) Cursons, J. et al. *Cancer Immunol. Res.* (2019)  
 2) Klanova, M. et al. *Clin. Cancer Res.* (2019);

# ICE<sup>®</sup> Can be Used to Generate an *in-situ* CAR-NK Like Therapies without Engineering and Could Address the Need for Larger NK Cell Numbers

Prevalence of NK cells is associated with beneficial outcomes

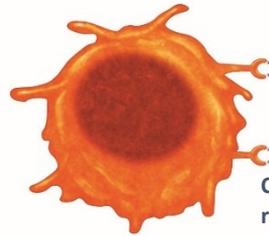
Tumor targeting of NK cells can improve responses

ICE<sup>®</sup>  
e.g. AFM13, AFM24, ...



+

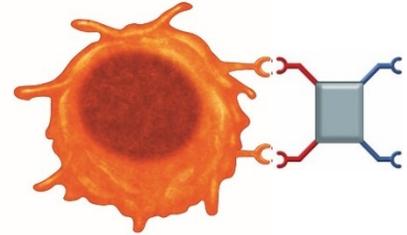
cb-NK cells



CD16A  
receptor

=

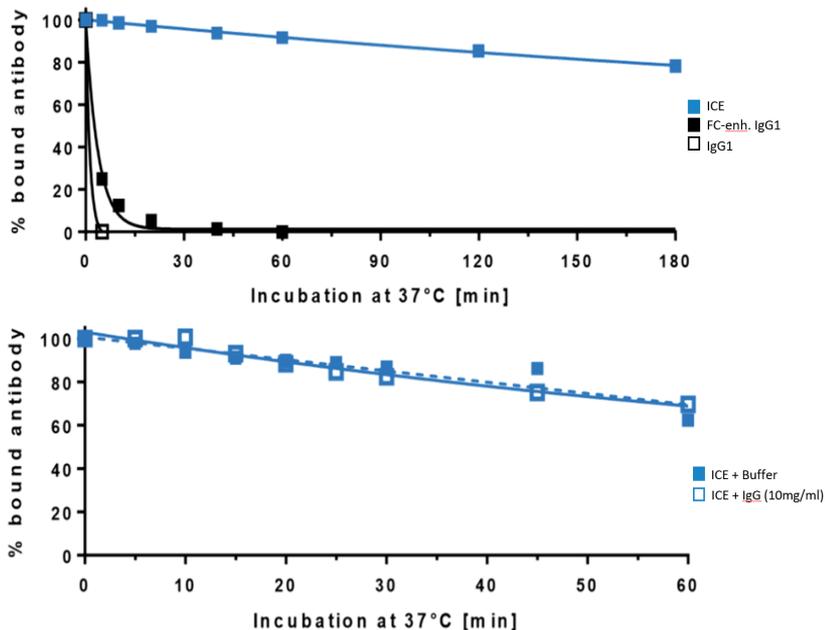
ICE<sup>®</sup> pre-loaded  
cb-NK cells



Features			
	<ul style="list-style-type: none"><li>• High affinity</li><li>• High potency</li><li>• CD16A-specific</li></ul>		<ul style="list-style-type: none"><li>• High functionality</li><li>• Allogeneic</li><li>• Off-the-shelf</li></ul>
			<ul style="list-style-type: none"><li>• ICE<sup>®</sup> retention on NK cells</li><li>• Tumor cell recognition</li><li>• High efficacy</li></ul>

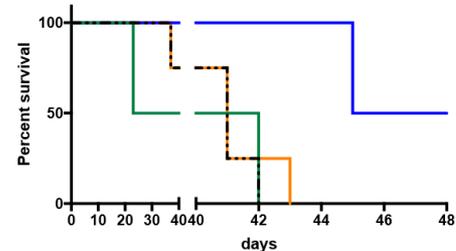
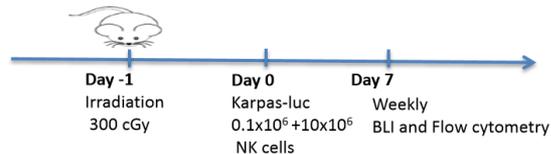
# ICE<sup>®</sup> Show Strong Binding to cb-NK Cells Providing Improved Survival in vivo

ICE<sup>®</sup> possess strong cell retention binding on NK cells vs. mAbs or in presence of IgG



ICE<sup>®</sup> loaded cb-NK cells improve survival of mice (ASH 2018, Oral Presentation)

NSG Null mice, female, 12-week-old



- ◆ Karpas 299-ffluc
- ◆ Karpas 299-ffluc + unloaded NK cells
- ◆ Karpas 299-ffluc + AFM13 loaded NK cells
- ◆ Karpas 299-ffluc + AFM13 (no NK cells)

# Pre-clinical Data Supports Clinical Investigation of AFM13 in Combination with cbNK-cells



Confirmed concept of AFM13 preloaded cb-NK cells

Completed CMC validation runs of pre-loaded cb-NK cells with AFM13

IST Study protocol finalized

- **Title:** Bispecific antibody AFM13 combined with NK cells for patients with recurrent or refractory CD30 positive Hodgkin or Non-Hodgkin lymphomas
- **Type of study and site:** IST at MD Anderson Cancer Center (MDACC)
- **Outline:** Dose-escalation study of cb-NK cells combined with AFM13
- **Dosing:** Infusion of AFM13 pre-loaded NK cells, followed by AFM13 monotherapy
- **Objectives:** *Safety, Recommended Phase II dose, Response rates (ORR, CR, PR), Duration of response, Event-free survival, Overall survival*
- **ClinicalTrials.gov Identifier:** NCT04074746



ASH 2018, Oral Presentation

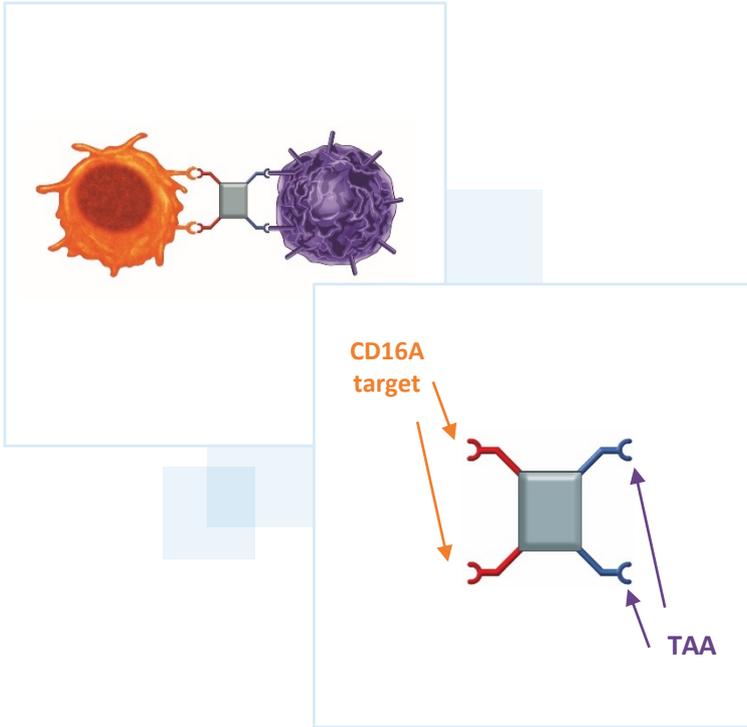
**Cord blood derived natural killer cells loaded with a tetravalent bispecific antibody construct (AFM13) as off-the-shelf cell therapy for CD30+ malignancies**

Lucila Nassif Kerbauy<sup>1</sup>; Mecit Kaplan<sup>1</sup>; Pinaki P Banerjee<sup>1</sup>; Francesca Wei Inng Lim<sup>1</sup>; Ana Karen N Cortes<sup>1</sup>; May Daher<sup>1</sup>; Mayela Carolina Mendt<sup>1</sup>; Rafet Basar<sup>1</sup>; Li Li<sup>1</sup>; Muharrem Muftuoglu<sup>1</sup>; Hila Shaim<sup>1</sup>; Mayra Shanley<sup>1</sup>; Enli Liu<sup>1</sup>; Sonny O. Ang<sup>1</sup>; Rong Cai<sup>1</sup>; Vandana Nandivada<sup>1</sup>; Richard Champlin<sup>1</sup>; Joachim Koch<sup>1</sup>; Martin Treder<sup>2</sup>; Yago Nieto<sup>1</sup>; Elizabeth J Shpall<sup>1</sup>; Katy Rezvani<sup>1</sup>

1- Department of Stem Cell Transplantation of MD Anderson Cancer Center  
2- Employee of Affimed

## Value inflection points in 2020 and 2021

- Initiation of combination study of AFM13 with cb-NK cells at MDACC and progression updates



# Inflection Points

# Leading Innate Immune Cell Activation to Treat Cancer Patients

Multiple Potential Inflection Points in 2020 and 2021



## Strong Leadership and Cash Position

- ✓ Recent CFO, CSO and CMO appointments strengthen depth and breadth of industry experience
- ✓ Funded at least into the First Half of 2022

### AFM13

- Interim data in PTCL as mono
- Initiation of combination study with NK cell product at MDACC and progression updates

### AFM24

- Dose escalation safety and activity data
- Initiation of dose cohort expansion as mono and in combinations

### AFM28 & AFM32

- Initiation of IND-enabling studies of AFM28 and AFM32
- IND-filing of AFM28

### Genentech

- Update on RO7297089 progression and on additional programs
- Pending program progression, potential milestone payment

Thank you

