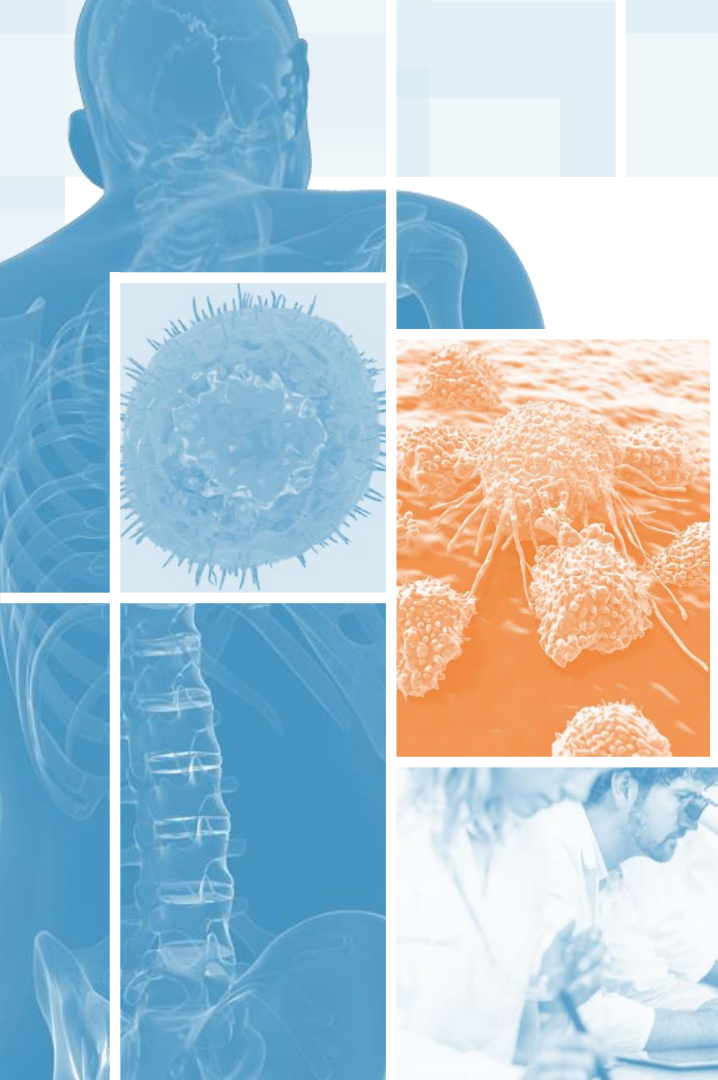


Actualizing the Untapped Potential of the Innate Immune System

Affimed's Approach to Advancing Immuno-oncology

January 2019

Forward-Looking Statements / Safe Harbor

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, expectations regarding 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 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.

Affimed Overview

PRODUCTS

- Versatile innate cell engagers targeting hematologic and solid tumors
- Only company with clinically validated innate cell engagers

PLATFORM

- Fit-for-Purpose ROCK® platform generates customizable innate cell engagers with proprietary CD16A target

Giving patients back their innate ability to fight cancer

PARTNERSHIPS

- Collaborations based on proprietary CD16A engager capabilities and innate immunity expertise
- Genentech, Merck (MSD), Nektar Therapeutics, MD Anderson Cancer Center, Columbia University, Leukemia & Lymphoma Society

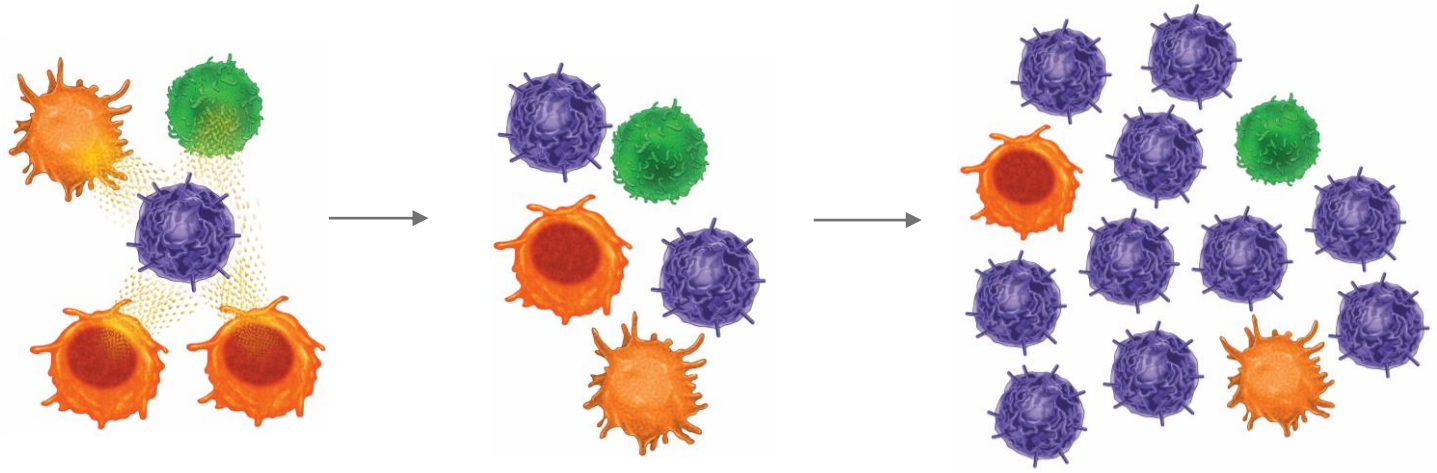
CORPORATE FACTS

- Nasdaq listed since 2014 (NASDAQ: AFMD)
- 76 employees (62 FTEs) in Heidelberg (HQ), Munich, New York
- *Pro forma* cash, equivalents, financial assets* of ~$139M (September 2018); cash runway into 2021

FTE, full-time employees; **HQ**, headquarters; **IP**, intellectual property

*"Pro forma" includes upfront and contractually committed payments received in October 2018 under Genentech collaboration. "Financial assets" comprises short-term deposits.

Immunotherapies Need to Overcome Tumor Immune Evasion



Adapted from Dunn et al. Nat. Immunol. 2002.

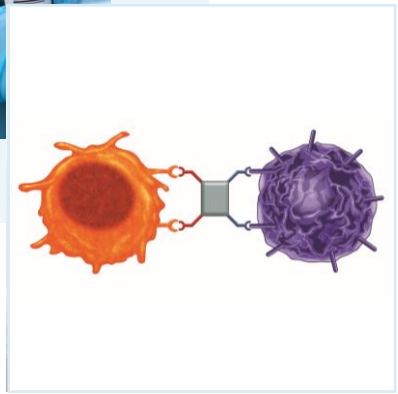
Affimed Brings a New Approach to Counter Tumor Immune Evasion Through the Innate Immune System

Current Treatments

- Advanced I-O agents demonstrate it is possible to activate the immune system to trigger tumor killing
- Despite these advances, a cure remains elusive and more options are needed to truly help patients

Affimed

- Affimed is committed to improving patient outcomes through the power of the **innate immune system**
- **Affimed's ROCK®** platform creates medicines that enable the body's immune cells to recognize and kill tumor cells

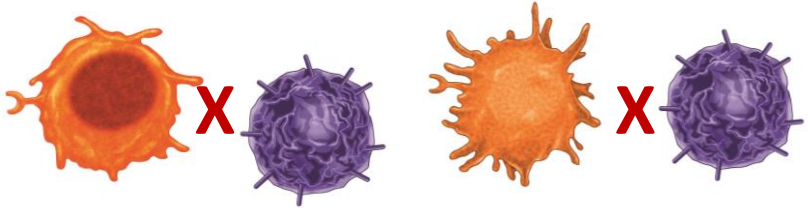


Affimed's Innate Cell Engagers Can Give Patients Back their Innate Ability to Fight Cancer

Cancer Patient's Innate Immune System

Tumor recognition

Tumor lysis
(ADCC through CD16A)



NK cell Tumor cell Macrophage

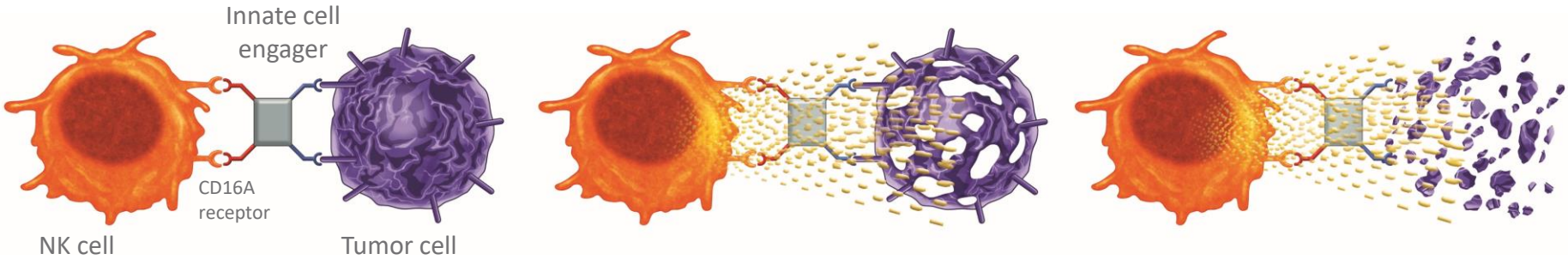
Affimed's unique approach activates innate cells through proprietary CD16A targeting

Innate Cell Engagers

- Increase binding of CD16A
- Increase NK cell activation
- Increase cytotoxicity (ADCC)

CD16A Engagers Bridge Together Innate Immune and Tumor Cells Through Proprietary ROCK®-based Antibodies

Bridging of innate and tumor cells → **Stimulation of tumor lysis through ADCC** → **Restoration of cytotoxicity in tumor cell killing**

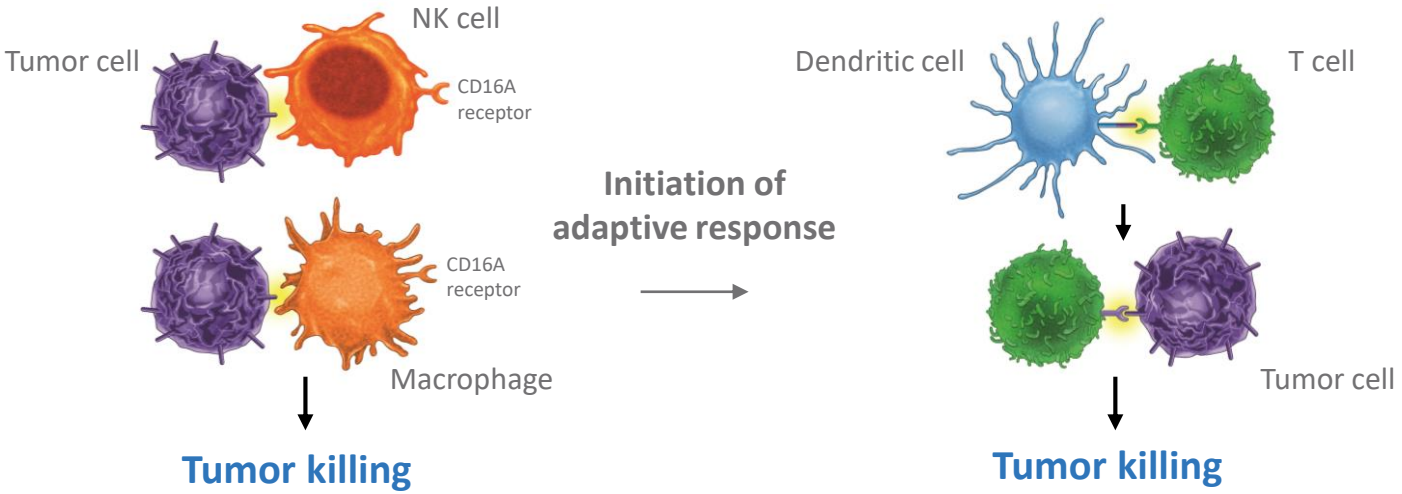


Recognize | **Activate** | **Kill**

Innate Immunity Plays an Important Role in Tumor Recognition and Killing, as well as Initiating an Adaptive Response

Innate Immunity, First Line of Defense

Adaptive Immunity, Second Line of Defense



Activation of the innate and adaptive immune system is the optimal integrated I-O approach

Fit-for-Purpose ROCK® Platform Allows Innate Cell Engagers to be Designed for Specific Indications

ROCK® Platform is Affimed's proprietary technology to generate in-house innate cell engagers

Versatile Platform

Tailor 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 building potent and stable molecules in a short time

Elegant predictability for powerful medicines

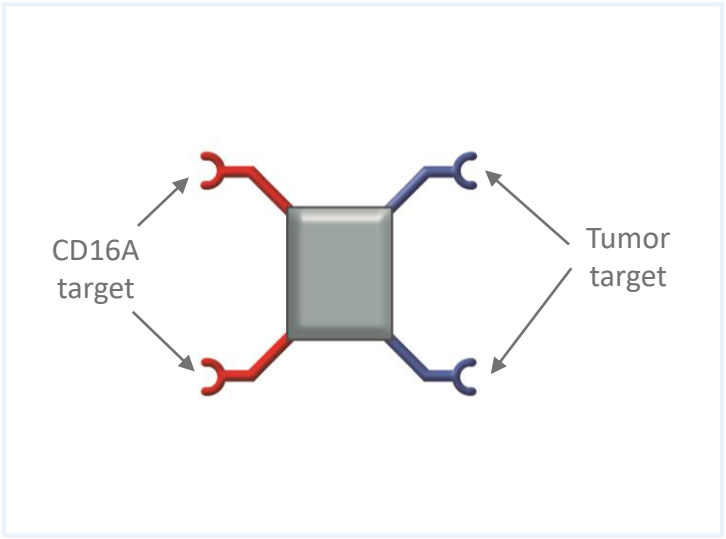
Proprietary Target

Specific CD16A-targeting addresses major hurdles required for potent activation

The right approach to unlock innate immunity

CD16A-Targeted Cell Engagers Are Highly Effective in Activating Innate Cell Cytotoxicity

Innate cell engagers, bispecific antibodies created by the ROCK® platform, feature:



Clinical signs
of efficacy &
ADCC*

Evidence of
Tolerable
safety profile*

High affinity
binding of
CD16A

New epitope
on CD16A

*Based on AFM13 clinical studies.

Genentech Invested in Affimed's CD16A Engager Capabilities and Expertise in Innate Immunity

Genentech
A Member of the Roche Group

$96M Upfront, near term funding

$5B Potential milestones, royalties

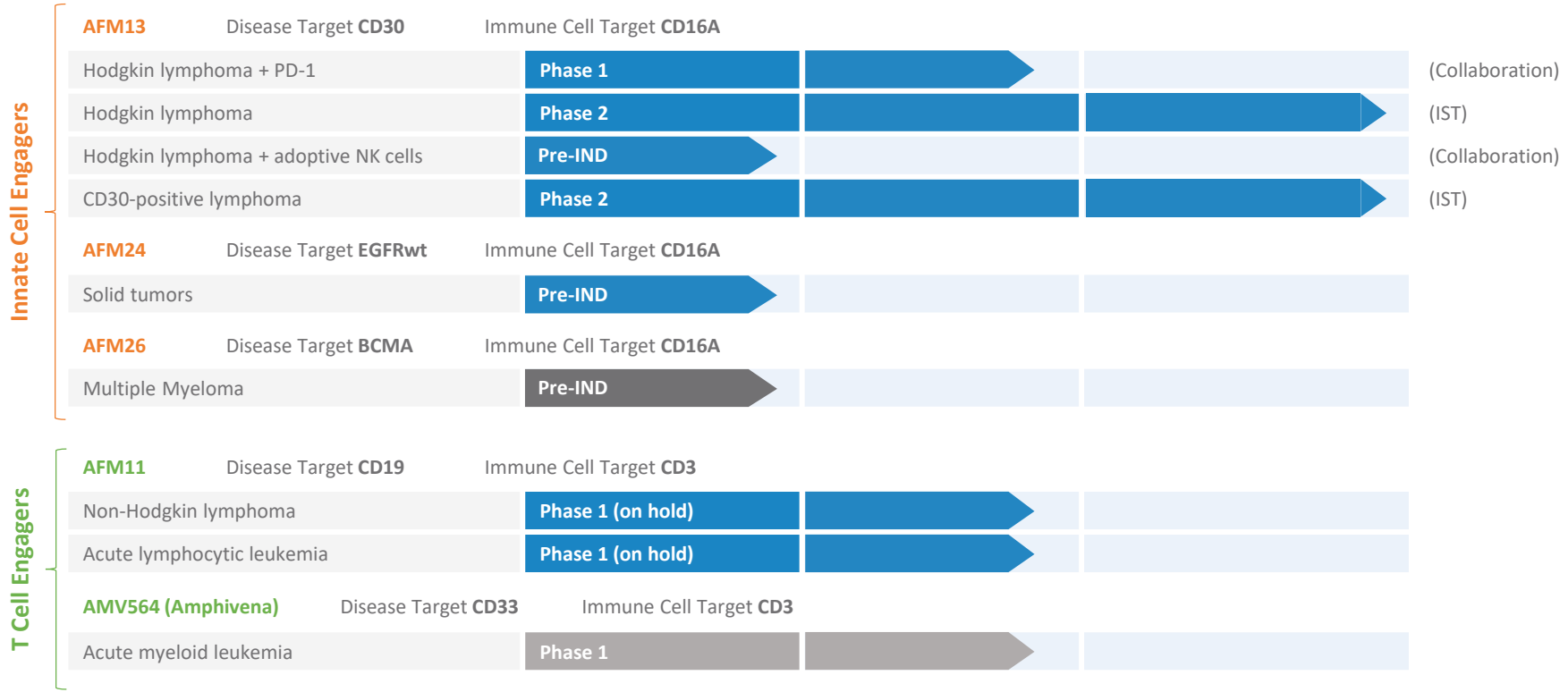
Strategic partnership driven by our **clinical stage CD16A-targeted** innate cell engagers

- Clinical efficacy
- Tolerable safety profile
- Synergy with other I-O agents

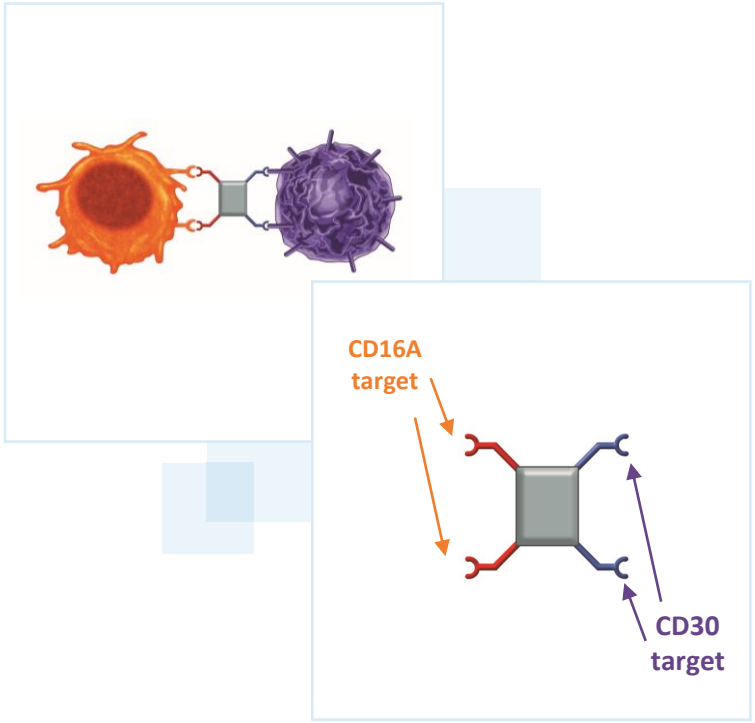
"This collaboration is based on Affimed's innate immune cell drug discovery and development expertise and our team's deep understanding of cancer immunology"

James Sabry, M.D., Ph.D.,
Global Head of Partnering, Roche

Differentiated and Versatile Innate Cell Engagers to Target Hematological and Solid Tumors



Affimed Programs Partnered Programs Licensed Programs



Innate Cell Engagers in Hematologic Tumors

Treatment with AFM13

In Clinical Studies, AFM13 Has Shown Promising Efficacy in Patients With CD30 Positive Lymphoma

CD30-Positive Lymphoma (PTCL, CTCL)

Treatment:
- AFM13 monotherapy

Total of 9 patients treated to date:
- Investigator-sponsored*, translational study to evaluate immunological effects and preliminary efficacy of AFM13 in R/R CD30+ lymphoma with cutaneous presentation

Preliminary efficacy data:**
- 9 patients treated in 3 dose cohorts
- 44% ORR including 1 CR and 3 PRs
- Biomarker data: possible correlation between response and tumor NK cell infiltration pre-therapy

R/R Hodgkin Lymphoma

Treatment:
- AFM13 in combination with Merck's Keytruda® (pembrolizumab)

Total of 30 patients treated to date:
- MTD not reached in Part 1; highest dose employed in Part 2/Extension

Efficacy data#:
- 24 patients evaluable in highest dose cohort
- 88% ORR, 42%/46% CR rate (local/central read)
- Durable responses: 77% estimated 6-month PFS rate
- Deepening of responses over time in multiple patients
- Patients previously transplant ineligible transitioned to transplant after achieving an objective response

*Principal Investigator: Ahmed Sawas, MD, Columbia University Medical Center, New York, NY.
**A Sawas et al., ASH 2018 Abstract 2908.
#NL Bartlett et al., ASH 2018 Abstract 1620.

CR, complete response; MTD, maximum-tolerated dose;
ORR, objective response rate;
PR, partial response; R/R, relapsed/refractory.

AFM13: Broad Clinical Development Potential

PTCL

- **Lack of standard of care** in R/R – very high unmet need
- Establish new standard of care treating the **vast majority** of R/R patients

*"It's a group of patients where **there is no standard [of care]**…the majority of patients recur after chemo and even after transplant."*

PTCL KOL

CTCL

- Potential for **small trial** and **accelerated** timelines for Mycosis Fungoides
- Position as the **preferred therapy** for R/R for CD30+ patients

"Patients will progress through brentuximab vedotin - they are still CD30 positive…And we do not have many other things to offer them."

CTCL KOL

HL

- **Emerging vacuum** of effective options in R/R as current therapies move to earlier lines
- Expand into **multiple settings** with **mono and combo** approaches

"As brentuximab vedotin and the PD-1's move up, there are vacuums that have been created that we need novel therapies to fill."

HL KOL

Source: Affimed market research

AFM13 US Opportunity:
Commercial Potential to Treat ~6000 Patients

PTCL

R/R CD30+: ~2500 patients
(AFM13 Monotherapy)

ASCT: ~100 patients
(AFM13 + NK Adoptive Cell Transfer)

CTCL

R/R CD30+ Advanced Stage MF: ~200 patients
(AFM13 Monotherapy)

HL

Post-BV & Post-PD-1: ~600 patients
(AFM13 Monotherapy)

Post-BV: ~1200 patients
(AFM13 + PD-1)

ASCT: ~1200 patients
(AFM13 + NK Adoptive Cell Transfer)

Source: Affimed market research.

Multiple Clinical Development Opportunities With AFM13

Initial registration path

- **AFM13 monotherapy in PTCL**
  - Potential for accelerated approval
- **Confirmatory study for PTCL**

→ Affimed-sponsored study

Next registration path

- **AFM13 monotherapy in CTCL (TMF)** → Affimed-sponsored study
- **AFM13 + Anti-PD-1/PD-L1 in R/R HL** → Partnership opportunity

Exploratory opportunities

- **AFM13 + cbNK in CD30 lymphomas** → Collaboration with MDACC

AFM13, a First-in-Class Innate Cell Engager, Delivers Clinically Meaningful Efficacy as Monotherapy or Combination Therapy in CD30+ Tumors

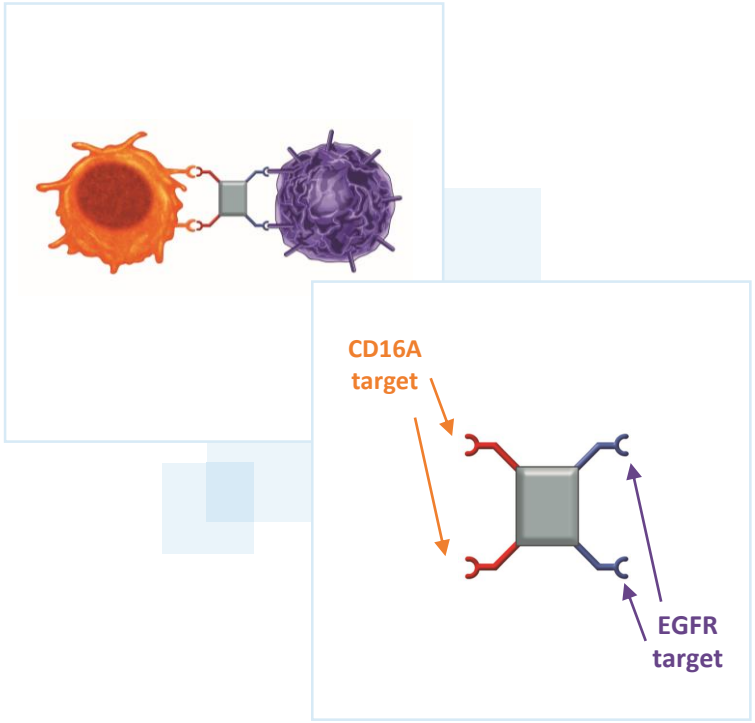
Achievements

- Lead agent demonstrated clinical proof of concept for ROCK® innate cell engagers
- Efficacy with monotherapy and combination therapy (TCL, HL)
- Tolerable safety profile

Opportunities and Next Steps

- Initiating pivotal clinical trial as monotherapy in TCL (potential for accelerated approval), H1 2019
- Initiation of IST with MDACC for AFM13 + adoptive NK cells in CD30+ lymphomas, H1 2019
- Groundwork for further CD16A engagers (AFM24, AFM26*, early pipeline)

*Partnered program.



Innate Cell Engagers in Solid Tumors

Treatment with AFM24

AFM24 is a Novel Approach to Treat Many Types of Solid Tumors that Overexpress EGFR

EGFR Expressing Tumors & Current EGFR Targeting Therapies

- EGFR is overexpressed in several tumors (CRC, NSCLC, HNSCC, GBM, TNBC)
  - EGFR-mediated signaling is frequently affected by mutations in various tumors leading to increased tumor growth
- Current therapies rely on EGFR signal inhibition and may be limited by:
  - Associated toxicities
  - Acquired resistance
  - Limited antitumor immune response

Affimed's Solution to EGFR Tumors is AFM24 (CD16A/EGFR)

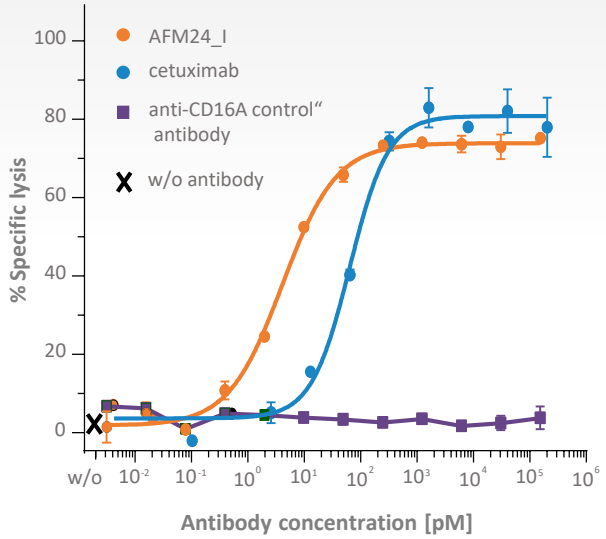
- Innate cell engager bridging NK cells and macrophages to EGFR expressing tumors
  - An influx of TILs and NK cells is associated with a beneficial prognosis in EGFR tumors
- New mode of action addressing safety of SOC and resistant patient population
- IND filing planned by mid-2019

AFM24's Innate Mechanism Demonstrated Potent Tumor Cell Killing through Activation of NK cells and Macrophages

AFM24 demonstrated potent killing of target cells through NK cells as effector cells (ADCC)

Cytotoxicity assay with A-431 targets and NK cells as effector cells

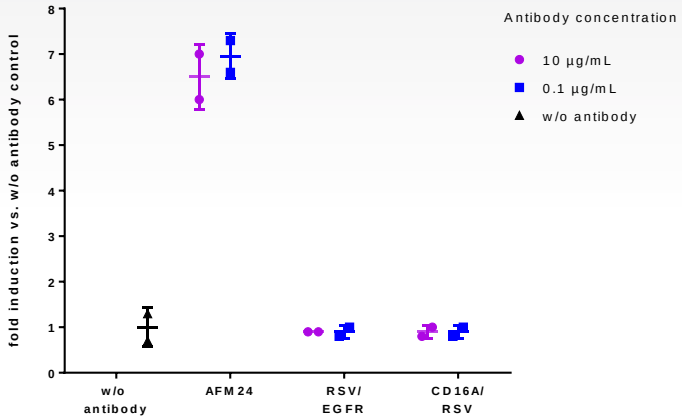
In vitro



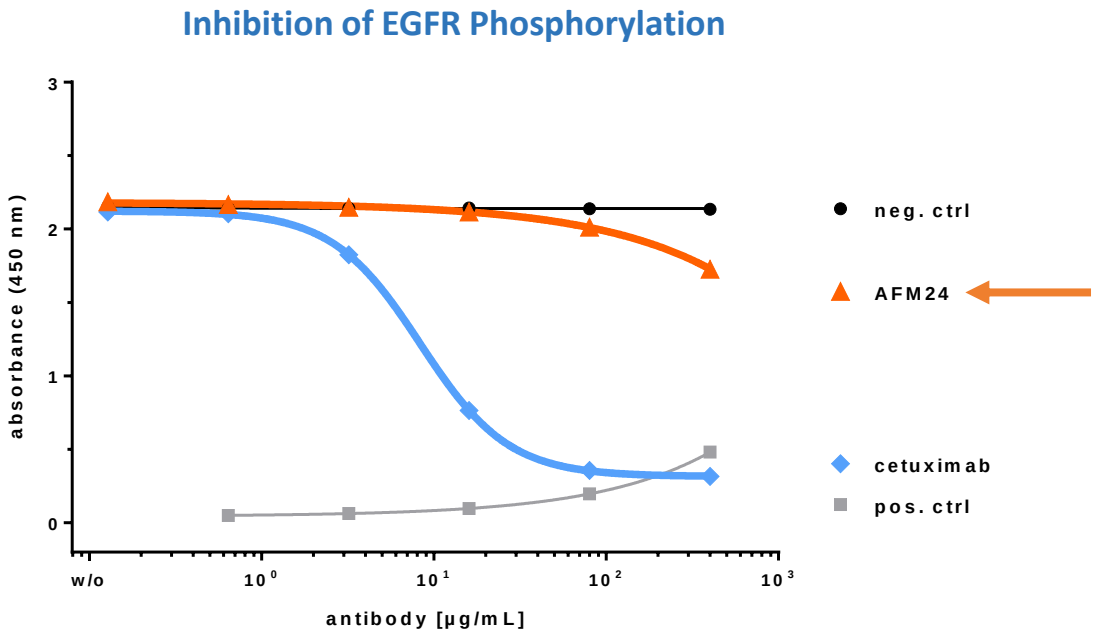
AFM24 elicited macrophage induced killing of EGFR+ target cells (ADCP)

Phagocytosis assay with DK-MG targets and macrophages as effector cells

In vitro



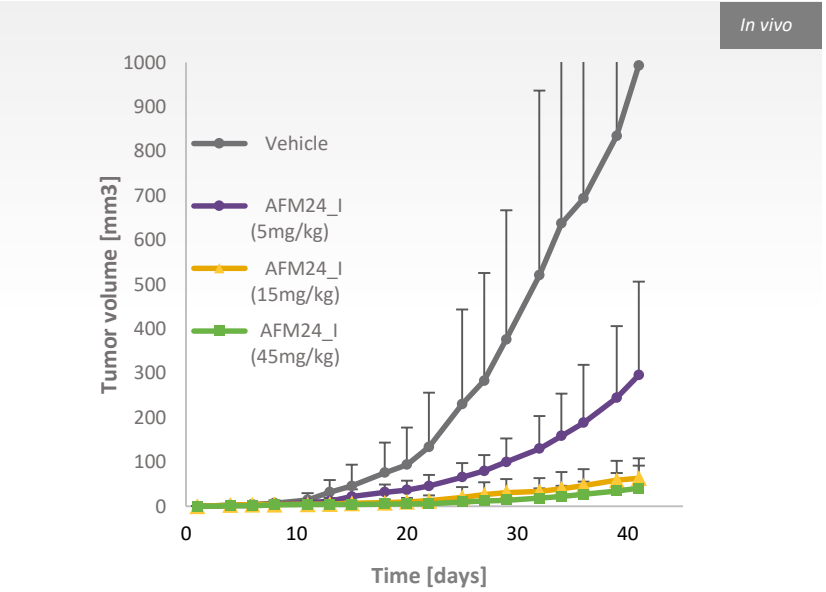
AFM24 Reduced Inhibition of EGFR Phosphorylation May Indicate an Improved Safety Profile With Less Skin Toxicity



AFM24 demonstrated *reduced* inhibition of EGFR phosphorylation relative to cetuximab

AFM24 Demonstrated Potent *in vivo* Tumor Cell Killing and Improved Safety

AFM24 demonstrated dose-dependent **tumor growth inhibition** in an *in vivo* mouse model

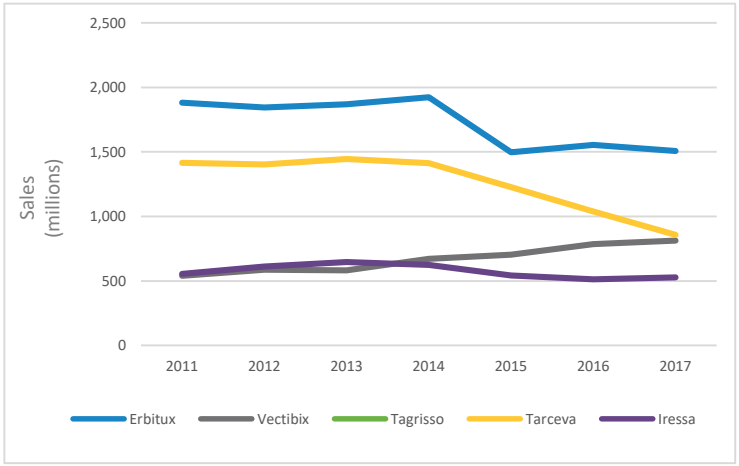


AFM24 showed **favorable safety profile** in a dose range finding toxicity study in cynomolgus monkeys

- All animals were clinically well throughout the study without notable changes in body temperature, clinical hematology, or clinical chemistries
- Macroscopic and microscopic assessment of tissues showed no findings of toxicities (e.g., skin toxicity)
- AFM24 was markedly more tolerable vs. published results for cetuximab in cynomolgus monkeys
- Furthermore, the half-life of AFM24 was comparable to the half-lives of cetuximab and panitumumab in cynomolgus monkeys

AFM24 Could Address Clinical Unmet Need Among EGFR-Targeted Therapies

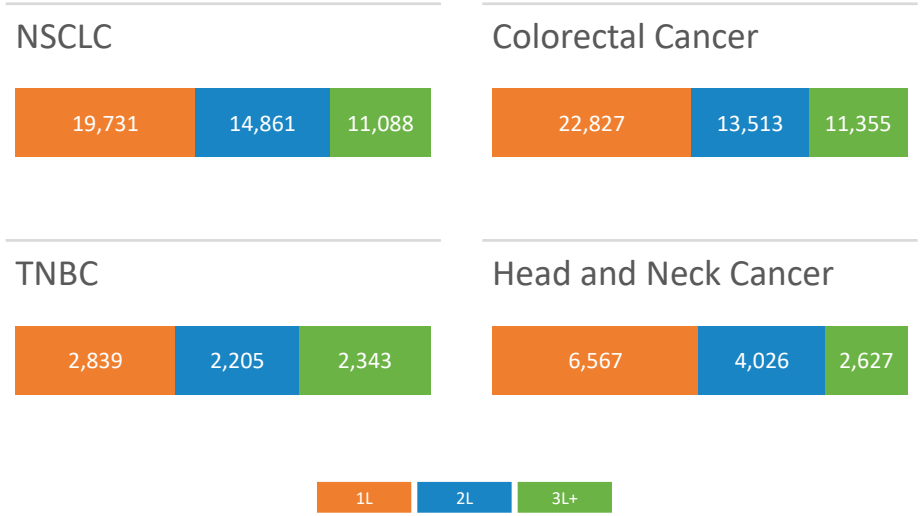
Current Therapies



In 2017, sales of EGFR-targeted therapies totaled $4.7B globally[1]

AFM24 US Market Opportunity

Actively Treated Stage IV Patients in 2016, US[2]



1. Source: Company reports
2. Source: Datamonitor Healthcare survey, 2016

1L, first line; **2L,** second line; **3L,** third line; **CPI,** checkpoint inhibitor; **EGFR,** epidermal growth factor receptor; **IL,** interleukin; **mAbs,** monoclonal antibodies; **NSCLC,** non-small cell lung cancer; **SOC,** standard of care; **TNBC,** triple-negative breast cancer; **US,** United States

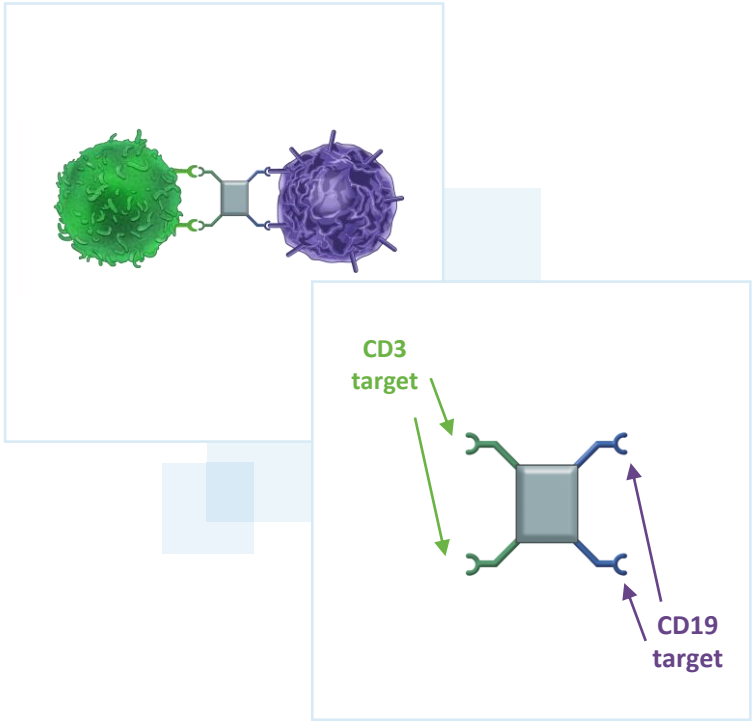
AFM24, a New Mode of Action to Initiate Innate Immunity in EGFR+ Solid Tumors, such as CRC, NSCLC, and Others

Achievements

- Demonstrated potent cell killing capabilities in pre-clinical studies
  - Indicates potent efficacy
  - Potential for greater efficacy in tumor types with EGFR mutations/resistance
- Differentiating safety profile in pilot toxicity study

Opportunities and Next Steps

- New MOA to address patients currently not responding
- Potential for innate/adaptive combinations enhancing efficacy in major solid tumor types
- Planned IND filing by mid-2019, clinical data possible in 2020



Adaptive Cell Engagers

Treatment with AFM11

Affimed's T-Cell-targeting Platform Is a Differentiated Approach to Optimize T Cell Engagement

T Cell Platform

- No non-specific activation of T cells in absence of target cells
- Able to target and lyse tumor cells with low target expression
- Improved PK vs Bi-specific T cell engagers (BiTEs)

Potential to overcome challenges of other current therapies

AFM11 (CD3/CD19)

- Phase 1 dose-escalation trials in R/R ALL and NHL on HOLD after occurrence of SAEs in three patients
- Affimed is assessing all AFM11 data and working with global health authorities to determine next steps

Unique medicine designed to address limitations of BiTEs and benefit/risk profile of CAR-T

Study Update*

- Phase 1 study of 17 patients with R/R ALL treated with AFM11 in 6 dose cohorts
- Preliminary efficacy data included 3 CRs (2 CRs, 1 CRi), with one patient achieving MRD negativity

AFM11 efficacy data was recently reported at ASH 2018

*G Salogub et al., ASH 2018 Abstract 3969

ALL, Acute lymphoblastic leukemia; **CR,** complete response; **MRD,** minimal residual disease
NHL, Non-Hodgkin lymphoma; **PK,** pharmacokinetics; **BiTE,** bispecific T cell engager

Recent Highlights and Upcoming Milestones

Highlights

ASH2018

- Update on AFM13 Phase 1b combination study with Keytruda® (pembrolizumab) in HL
- Data from AFM13 monotherapy Phase 1b/2a study in R/R CD30-positive lymphoma with cutaneous presentation (CUMC)
- Preclinical data on combination with adoptive NK cells (MDACC), ROCK® engager-based activation of macrophages, and AFM26 (partnered)
- Data from AFM11 Phase 1 dose escalation study in ALL

CD16A ENGAGER COLLABORATIONS

- New collaborations with Genentech and Nektar

Upcoming Anticipated Milestones

AFM13

- H1 2019: 12-month data for AFM13 + Keytruda® (pembrolizumab)
- H1 2019: Initiate registration study (monotherapy in TCL)
- H1 2019: Initiate combination study with cbNK cells in CD30+ lymphomas (IST)
- H1 2020: Interim data for monotherapy in TCL

AFM24

- Mid-2019: IND filing
- H2 2019: Initiate first-in-human study
- 2020: Clinical data

Affimed is Actualizing the Next Great Advancement in I-O

Giving patients back their innate ability to fight cancer

Innate cell engagers

- Fit-for-Purpose ROCK® platform utilizes CD16A
- Effective as monotherapy or combination therapy
- Foundation to offer novel medicines

Novel therapeutics

- AFM13: Lead agent with registrational path in TCL
- AFM24: Potential to disrupt landscape with a novel MOA
- Uncovering novel combination therapies

Affimed

- *Only* known company to validate innate cell engagers in the clinic
- Recognized as a leader in innate immunity through Genentech partnership
- Committed to deliver medicines to patients in need

TCL=T cell lymphoma

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. Wolfgang Fischer
Chief Operating Officer (COO)

In-depth expertise in R&D with a focus on oncology, immunology and pharmacology

Dr. Martin Treder
Chief Scientific Officer (CSO)

Broad experience in the field of biotherapeutics R&D in I/O discovery and preclinical development

Dr. Florian Fischer
Chief Financial Officer (CFO)

Strong financial background, lead advisor in a variety of transactions & financings life sciences/healthcare

Dr. Leila Alland
Chief Medical Officer (CMO)

Seasoned immuno-oncology expert with broad experience developing oncology products

Denise Mueller
Head Comm Strat/BD

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


affi
med