



# Affimed 2018 Research and Development Day

December 7, 2018

### Forward-Looking Statements / Safe Harbor

#### Legal notices



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.

### **Clinician Disclosures**

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- Dr. Stoven Herwitz is a paid consultant of
- Dr. Steven Horwitz is a paid consultant of Affimed.
- Dr. Ahmed Sawas and The University of Texas MD Anderson Cancer Center receive research funding from Affimed.
- The opinions expressed by Dr. Steven Horwitz, Dr. Yago Nieto, and Dr. Ahmed Sawas are their own and do not necessarily reflect the views of Affimed.

### Agenda



#### **AFMD Strategic Overview**

Dr. Adi Hoess, Chief Executive Officer

#### T-cell Lymphoma, Hodgkin Lymphoma Current Treatment Landscape

Dr. Steven M. Horwitz, Associate Attending, Division of Hematologic Oncology, Memorial Sloan-Kettering Cancer Center

#### **AFM13 Overview**

Dr. Leila Alland, Chief Medical Officer

#### AFM13 Combination with Adoptive NK Cell Transfer

Dr. Yago Nieto, Professor of Medicine, Department of Stem Cell Transplantation, The University of Texas MD Anderson Cancer Center

#### AFM13 Monotherapy Phase 1b/2a CD30-Positive Lymphoma Data

Dr. Ahmed Sawas, Assistant Professor of Medicine, Columbia University College of Physicians and Surgeons and the New York-Presbyterian Hospital





#### **AFM13 Clinical Development Plan**

Dr. Leila Alland, Chief Medical Officer

#### **AFM13 Market Opportunity**

Denise Mueller, Head of Commercial Strategy and Business Development

#### **Brief Concluding Remarks**

Dr. Adi Hoess, Chief Executive Officer

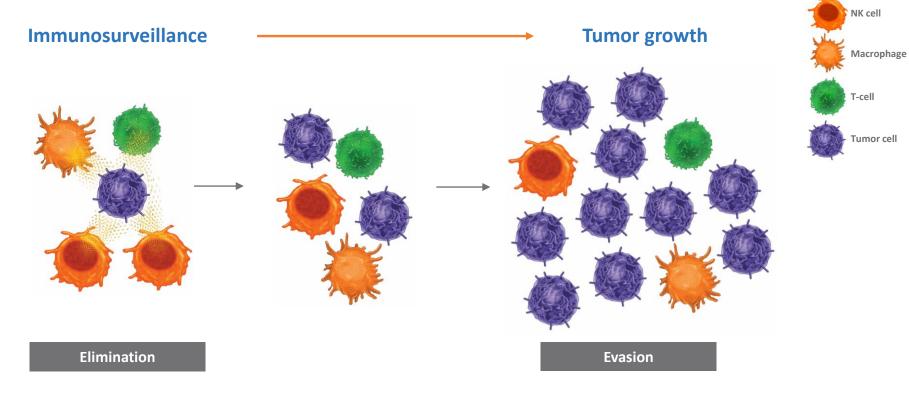




# Actualizing the Untapped Potential of the Innate Immune System

Affimed's Approach to Advancing Immuno-oncology Dr. Adi Hoess, Chief Executive Officer

### **Immunotherapies Need to Overcome Tumor Immune Evasion**



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

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#### **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

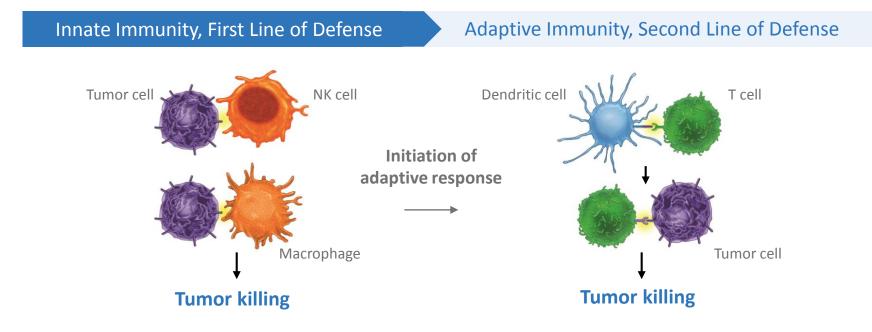
#### Affimed

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



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

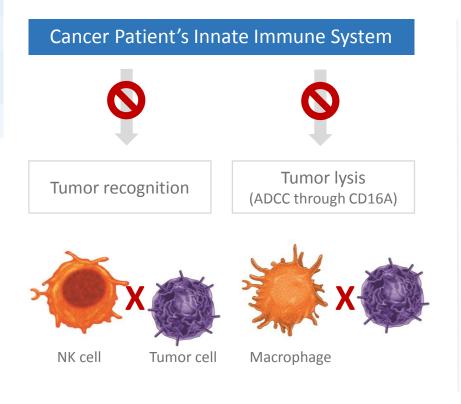




Activation of the innate and adaptive immune system is the optimal integrated I-O approach

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





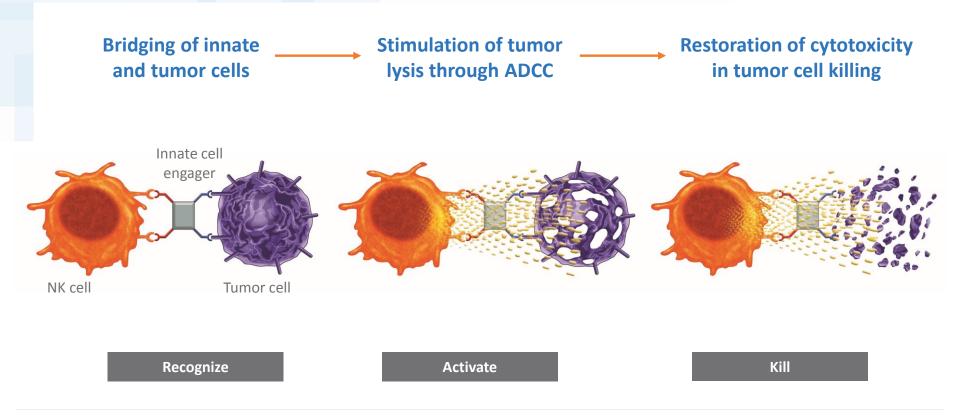
Affimed's unique approach activates innate cells through proprietary CD16A targeting

#### Innate Cell Engagers

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

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





Fit-for-Purpose ROCK<sup>®</sup> Platform Allows Innate Cell Engagers to be Designed for Specific Patient Populations



#### ROCK<sup>®</sup> Platform is Affimed's proprietary technology to generate in-house innate cell engagers

#### **Versatile Platform**

Tailor tetravalent, bispecific innate cell engagers to specific indications

#### **Strong Engineering**

Proven record in building potent and stable molecules in a short time

#### **Proprietary Target**

Specific CD16A-targeting addresses major hurdles required for potent activation

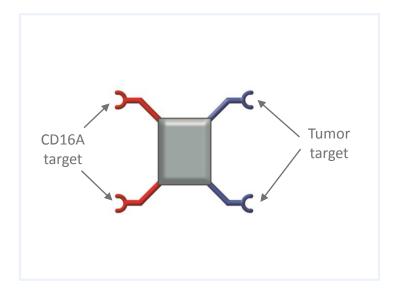
Generate novel IP to broaden leadership in innate immunity Elegant predictability for powerful medicines

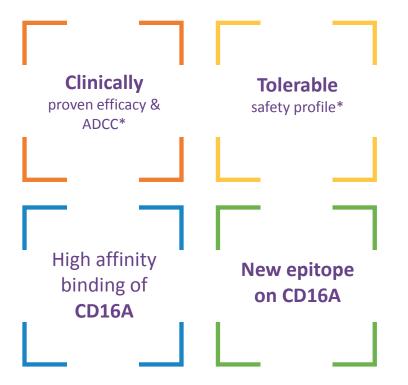
The right approach to unlock innate immunity

### Innate Cell Engagers Are Highly Effective in Activating Innate Cell Cytotoxicity



Innate cell engagers, bispecific antibodies created by the ROCK<sup>®</sup> platform, feature:





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



# Genentech

 $A \ Member \ of \ the \ Roche \ Group$ 



Upfront, near term funding



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



AFM13 Disease Target CD30 Immune Cell Target CD16A Hodgkin lymphoma + PD-1 Phase 1 (Collaboration) Hodgkin lymphoma Phase 2 (IST) NK Cell Engagers Hodgkin lymphoma + adoptive NK cells Pre-IND (Collaboration) CD30-positive lymphoma Phase 2 (IST) AFM24 Disease Target EGFRwt Immune Cell Target CD16A Solid tumors Pre-IND AFM26 Disease Target BCMA Immune Cell Target CD16A Multiple Myeloma Pre-IND AFM11 Disease Target CD19 Immune Cell Target CD3 **Cell Engagers** Non-Hodgkin lymphoma Phase 1 (on hold) Acute lymphocytic leukemia Phase 1 (on hold) Immune Cell Target CD3 AMV564 (Amphivena\*) Disease Target CD33 H Acute myeloid leukemia Phase 1

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<sup>®</sup> innate cell engagers
- Efficacy with monotherapy and combination therapy (TCL, HL)
- Tolerable safety profile



### **Opportunities**

- Registrational path for AFM13 in TCL with potential for delivering this medicine to patients faster (accelerated approval)
- Expanded opportunity with combinations
- Groundwork for further CD16A • engagers (AFM24, AFM26, early pipeline)

### AFM24, a Novel 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**

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

### **Affimed is Actualizing the Next Great Advancement in I-O**

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Giving Patients Back their Innate Ability to Fight Cancer



- Fit-for-Purpose ROCK<sup>®</sup> platform utilizes CD16A
- Effective as monotherapy or combination therapy
- Foundation to offer novel medicines
- AFM13: Lead agent with registrational path in TCL
- AFM24: Potential to disrupt landscape with a novel MOA
- Uncovering novel combination therapies

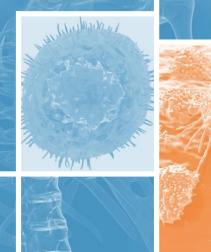
Affimed

**Innate cell engagers** 

**Novel therapeutics** 

- Only 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







# T-cell Lymphoma, Hodgkin Lymphoma Current Treatment Landscape

Dr. Steven M. Horwitz, Associate Attending, Division of Hematologic Oncology, Memorial Sloan-Kettering Cancer Center





# AFM13 Overview and Combination Opportunities

Dr. Leila Alland, Chief Medical Officer

#### **AFM13 Is the Lead Innate Cell Engager**



AFM13 is a first-in-class innate cell engager designed to activate the NK cells and macrophages against CD30-expressing lymphomas

• Generated through Affimed's ROCK<sup>®</sup> platform, AFM13 is a tetravalent bispecific antibody targeting CD16A/CD30

AFM13 represents the first CD16A-targeting innate cell engager with demonstrated efficacy as both monotherapy and combination therapy

#### Mechanism of action for AFM13



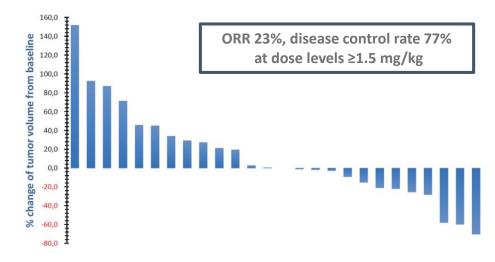
### AFM13 Demonstrated Efficacy and Safety as Monotherapy in Patients With Relapsed/Refractory Hodgkin Lymphoma



#### AFM13 (CD16A/CD30)

AFM13-101: Phase 1, first-in-human study of AFM13 monotherapy in patients with R/R HL

Patients who have failed  $\geq 2$  prior therapies including auto-SCT (79%) and brentuximab vedotin (29%)



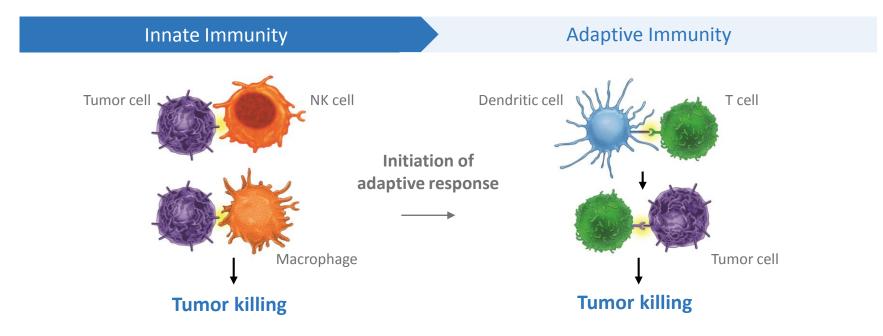
Preferred Term	Safety Population (N, %)	CTCAE Grade 1/2 (N, %)	CTCAE Grade ≥3 (N, %)
Pyrexia	15 (54)	14 (50)	1 (4)
Chills	11 (39)	11 (39)	0 (0)
Headache	8 (29)	8 (29)	0 (0)
Nausea	5 (18)	5 (18)	0 (0)
Nasopharyngitis	5 (18)	5 (18)	0 (0)
Vomiting	4 (14)	4 (14)	0 (0)
Pneumonia	4 (14)	0 (0)	4 (14)
Infusion reaction	4 (14)	4 (14)	0 (0)
Rash	4 (14)	4 (14)	0 (0)

Safety (n=28)

Efficacy (n=26)

### Innate Cell Engagers Can Synergize With Checkpoint Inhibitors

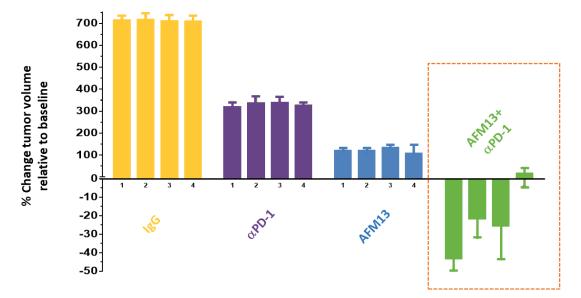




### Preclinical Data Demonstrated Efficacy of AFM13 in Combination With Anti-PD-1



Tumor Regression in a Xenograft Model



- Tumor sections (8X8 mm) from newly diagnosed CD30+ HL were engrafted and grown over 28 days
- Autologous PBMCs infused at 2x106 PBMCs/mouse i.p. at baseline
- CPIs and AFM13 given at 5 mg/kg every week

### AFM13-103: AFM13 + Pembrolizumab in Patients With R/R HL

**Trial Design** 



AFM13 (CD16A/CD30) + Pembrolizumab (PD-1 inhibitor) AFM13-103: Phase 1b, AFM13 + Pembrolizumab for R/R HL (n=30)

CD30-positive cHL, R/R after standard therapy including brentuximab vedotin

Part 1: MTD

Part 2: Safety and preliminary efficacy at the chosen dose

**Dose:** Pembrolizumab 200 mg Q3W + AFM13 dose levels (mg/kg) during dose escalation:

on lle		Weeks 2 & 3	Weeks 4, 5, 6, 7, 8, & 9	Weeks 10, 13, 16, 19, 22, & 25
ose lati edu	Cohort 1	0.1 x 3	0.5	0.5
D( sche	Cohort 2	0.5 x 3	1.5	1.5
	Cohort 3	3.0 x 3	7.0	7.0

### AFM13-103: AFM13 + Pembrolizumab in Patients With R/R HL

#### **Baseline Characteristics**



Characteristic	Total Patient Population (N=30)	
Age, years, median (range)	34 (18 to 73)	
Gender	Female 10 (33%); Male 20 (67%)	
Prior therapies, no.		
3	15 (50%)	
4	6 (20%)	
5	3 (10%)	
6	4 (13%)	
7	2 (7%)	
Prior auto. stem cell transplant	12 (40%)	
Prior brentuximab vedotin (BV)	30 (100%)	
BV as last therapy	13 (43%)	
Refractory vs relapsed	57% vs 43%	

Median prior lines of therapy: 4

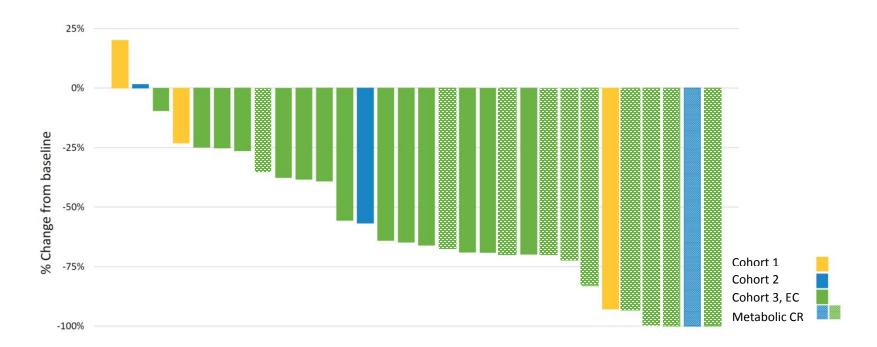
# Addition of Pembrolizumab to AFM13 Results in Doubling of the Complete Response Rate in Patients With R/R HL



	Best Metabolic Response	Complete Metabolic Response, No. (%)	No Metabolic Response, No. (%)	Overall Response Rate, No. (%)
tor ent	Cohort 1 and Cohort 2 (N=6)	1 (17%)	0 (0%)	4 (67%)
Investigator assessment	Cohort 3 + Extension Cohort (EC) (N=24)	10 (42%)	2 (8%)	21 (88%)
lnv ass	<b>ITT</b> (N=30)	11 (37%)	2 (7%)	25 (83%)

lent ent	Cohort 1 and Cohort 2 (N=6)	1 (17%)	2 (33%)	4 (67%)
Independer assessmen	<b>Cohort 3 + EC</b> (N=24)	11 (46%)	1 (4%)	21 (88%)
Ind	<b>ITT</b> (N=30)	12 (40%)	3 (10%)	25 (83%)

### Vast Majority of Patients Treated With AFM13 + Pembrolizumab Demonstrated Tumor Reduction



Change in tumor volume measured by CT-scan, efficacy (ITT) population (N=30)

### **AFM13 + Pembrolizumab Demonstrated a Well-Tolerated Safety Profile**



Safety (n=30)	TRAEs, All Grades, No. (%)
IRR	24 (80%)
Rash	9 (30%)
Nausea	7 (23%)
Pyrexia	7 (23%)
Diarrhea	6 (20%)
Fatigue	5 (17%)
Headache	5 (17%)
Elevated ALT	4 (13%)
Elevated AST	4 (13%)

Safety (n=30)	TRAEs ≥ Grade 3, No. (%)
IRR	4 (13%)
Elevated AST	1 (3%)
Gastritis	1 (3%)
Hypotension	1 (3%)
Nausea	1 (3%)
Neutropenia	1 (3%)
Vomiting	1 (3%)

### AFM13-103 Case Study\*: 20 y.o M with refractory Hodgkin Lymphoma unresponsive to 3 prior regimens



#### Achieved PR with AFM13/pembrolizumab and in complete response post allo-transplant

Presented Dec 2016 with fever, nightsweats, bulky mediastinal mass. Diagnosis Stage II-B nodular sclerosing HL 1L: (Jan-Jun '17): ABVD x 6 $\rightarrow$  progression (re-biopsy  $\rightarrow$  Hodgkin lymphoma) 2L: (Aug-Sep '17): ESHAP x 2  $\rightarrow$  progression 3L: (Oct '17-Jan '18): BV X 4  $\rightarrow$  progression



#### No B-symptoms

Ran a marathon→ no PET scan due to interference from strenuous activity



Haplo-identical Allo transplant ' Sept '18 (mother: donor)

Last f/u visit Nov 29, 2018 No GVHD

Feb '18 pre-study PET scan Week 13 Partial Response (CT) Week 26 Very Good Partial Response

2 months post-transplant Complete Response

#### **Key Takeaways from AFM13 Data**



AFM13 demonstrated clinically meaningful responses both as monotherapy and in combination with pembrolizumab in patients with R/R HL

Efficacy of AFM13 in clinical studies has demonstrated proof of concept that ROCK<sup>®</sup> innate cell engagers can stimulate the innate immune system to overcome tumor immune evasion

• Data indicate that an innate immune system treatment approach may provide further responses in difficult-to-treat patients who have failed current standard-of-care therapies

Further potential for AFM13 in other disease areas and in combination approaches

Clinical Opportunities to Investigate AFM13 as Monotherapy and in Combination With Complementary I-O Agents



#### AFM13 + Anti-PD-1

#### Demonstrated efficacy and tolerable safety with pembrolizumab

#### AFM13 + Adoptive NK Cell Transfer

Combining AFM13 with an allogenic NK cell product (cord blood–derived and activated NK cells) developed at MD Anderson Cancer Center to enhance therapeutic benefit

#### AFM13 as monotherapy in T-Cell Lymphomas

New therapeutic option in a disease area with high unmet need



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Q&A

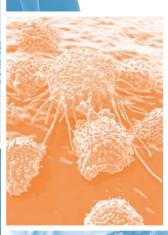




## **5-minute Intermission**



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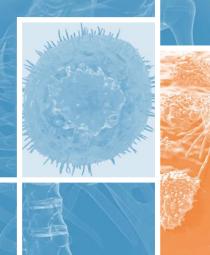


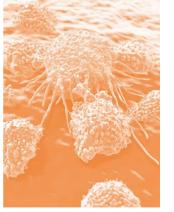


# AFM13 Combination with Adoptive NK Cell Transfer

Dr. Yago Nieto, Professor of Medicine, Department of Stem Cell Transplantation, The University of Texas MD Anderson Cancer Center







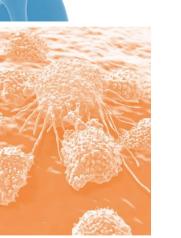


# AFM13 Monotherapy Phase 1b/2a CD30-Positive Lymphoma Data

Dr. Ahmed Sawas, Assistant Professor of Medicine, Columbia University College of Physicians and Surgeons and the New York-Presbyterian Hospital









# AFM13 Clinical Development Plan

Dr. Leila Alland, Chief Medical Officer

## CD30 Lymphoma Landscape

**Clinical Development Areas for AFM13** 



#### CD30 Lymphoma Clinical Unmet Need

#### **Hodgkin Lymphoma**

Need for new treatments in salvage setting as current therapies move to earlier lines

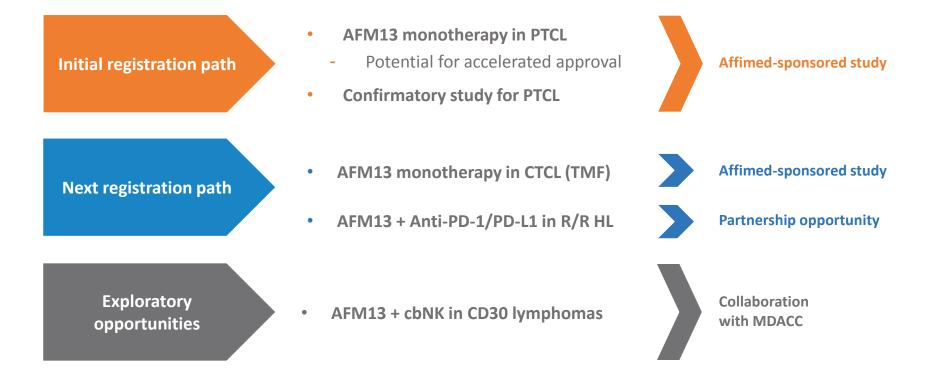
#### Peripheral T-Cell Lymphoma

Current SOC in R/R setting has limited efficacy and high toxicity Cutaneous T-Cell Lymphoma (Transformed Mycosis Fungoides)

Few effective therapeutic options, especially for those with large cell transformation

## **Multiple Clinical Development Opportunities With AFM13**

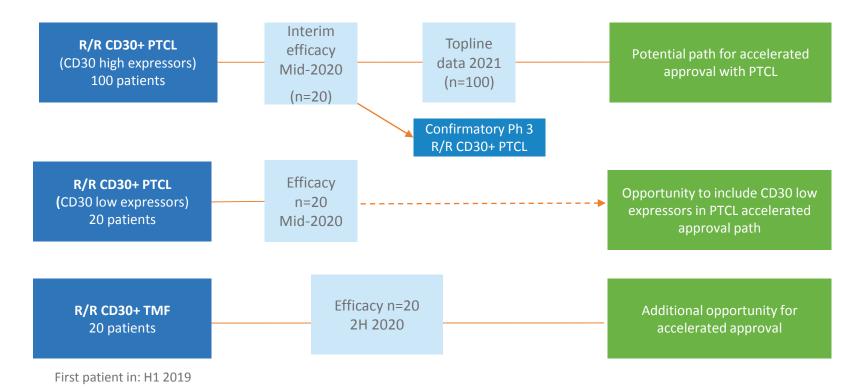




## AFM13 Monotherapy in Patients With R/R CD30+ T-Cell Lymphoma

#### AFM13-202 Development Plan

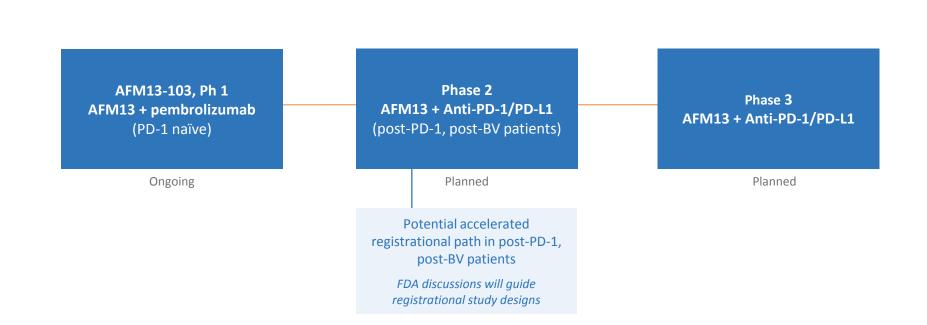




CD30 high expression=≥5% CD30 low expression=1-4%

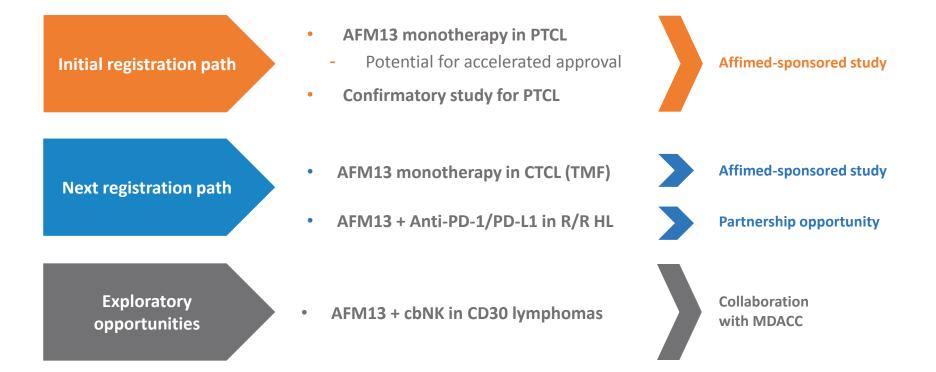
### AFM13 in Combination With Anti-PD-1 in Patients with R/R HL Development Plan





## **Multiple Clinical Development Opportunities With AFM13**







# **AFM13 Market Opportunity**

Denise Mueller, Head of Commercial Strategy & Business Development



Washing and





### **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." 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." 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"

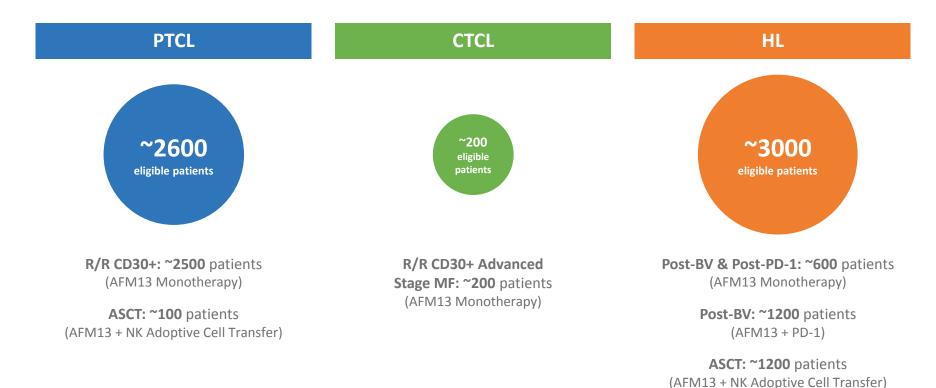
HL KOL

PTCL KOL

CTCL KOL

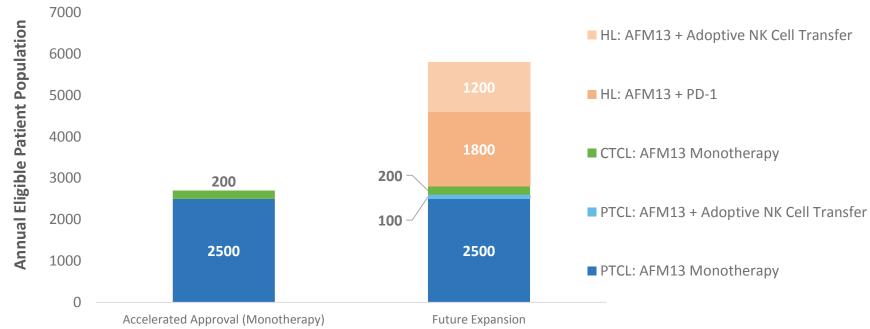
## **AFM13: Commercial Potential To Treat ~6000 Patients**





### **AFM13: Commercial Potential To Treat ~6000 Patients**





#### **AFM13 Eligible Patient Population Per Clinical Trial**

(Mono & Combo Therapies)



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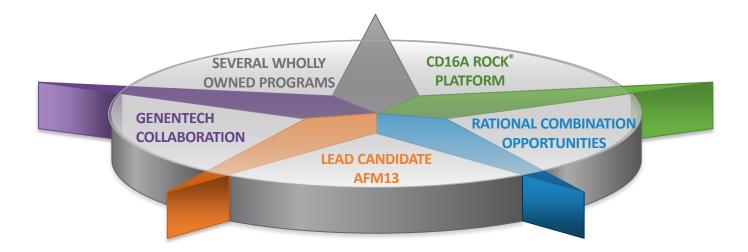
## **Closing Remarks**

Dr. Adi Hoess, Chief Executive Officer



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## **Affimed: Growing Leadership in Innate Immunity**



Pro forma cash, equivalents, financial assets\* of ~\$139M (Sep. '18) and cash runway into 2021

\*"Pro forma" includes upfront and contractually committed received October 31 under Genentech collaboration. "Financial assets" comprises short-term deposits.

### Affimed is Actualizing the Next Great Advancement in I-O

Giving Patients Back their Innate Ability to Fight Cancer

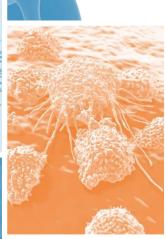




#### **Novel therapeutics**









# Thank you

