Actualizing the Untapped Potential of the Innate Immune System

Affimed’s Approach to Advancing Immuno-oncology
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.
Recent Developments

2 Abstracts to be presented at AACR June 22\textsuperscript{nd}, 2020

- Title: AFM24, a bispecific EGFR/CD16A Innate Cell Engager with the potential to overcome resistance to current targeted treatments for EGFR-positive malignancies
  - Abstract: 5659
- Title: Preclinical pharmacology and safety of RO7297089, a novel anti-BCMA/CD16A bispecific antibody for the treatment of multiple myeloma (co-authored with Genentech)
  - Abstract: 4566

AFM24 study update

- 2\textsuperscript{nd} patient dosed in PH 1 dose escalation study
- 2 of 4 sites open, a 3\textsuperscript{rd} expected in June

Management update

- Arndt Schottelius joined Affimed as CSO in April 2020
Innate immune cell activation represents a compelling opportunity in oncology

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

Late-stage company

First patient dosed in AFM13 registration directed study

Proof-of-concept data in TCL, HL

Broad pipeline comprising fully owned and partnered programs

AFM24: clinical-stage; broad solid tumor opportunity

RO7297089: partnered; poised to enter clinic

AFM28 and AFM32 programs have initiated

Initiated multiple programs with Genentech
Our Pipeline: Versatile Innate Cell Engagers (ICEs) Targeting Hematologic and Solid Tumors

<table>
<thead>
<tr>
<th>Program</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
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<tbody>
<tr>
<td><strong>AFM13</strong> (Tumor Target CD30)</td>
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<tr>
<td>Peripheral T-cell lymphoma (AFM13-202)</td>
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<td>Registration Directed, Enrolling</td>
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<td>Transformed mycosis fungoides (AFM13-202)</td>
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<td>POC, Enrolling</td>
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<tr>
<td>CD30-positive T-cell lymphoma (AFM13-102)</td>
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<td>POC, Enrollment Completed</td>
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<tr>
<td>HL (post BV, post anti-PD-1) (AFM13-201)</td>
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<td>POC, Enrollment Completed</td>
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<tr>
<td><strong>AFM13 + adoptive NK cells</strong></td>
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<tr>
<td>CD30-positive lymphoma (AFM13-104)</td>
<td></td>
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<td>Safety &amp; POC, IND Approved</td>
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<tr>
<td><strong>AFM13 + anti-PD-1</strong></td>
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<tr>
<td>Hodgkin lymphoma (post BV) (AFM13-103)</td>
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<td>POC, Study Completed</td>
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<tr>
<td><strong>AFM24</strong> (Tumor Target EGFR)</td>
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<td>Safety &amp; POC, Enrolling</td>
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<td>Solid tumors (AFM24-101)</td>
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<tr>
<td><strong>RO7297089</strong> (Tumor Target BCMA)</td>
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<tr>
<td>Multiple Myeloma</td>
<td>Pre-IND</td>
<td></td>
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<tr>
<td><strong>AFM28 and AFM32</strong> (Tumor Targets Undisclosed)</td>
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<tr>
<td>Multiple indications</td>
<td>Pre-IND</td>
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**Affimed Programs**

**Partnered Programs**

**Genentech**

*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 ICEs Activate the Innate Immune System and Trigger a Concerted Anti-Tumoral Immune Response

**Multiple Therapeutic Approaches**

- **ICEs**
- **Monotherapy**
- **Adaptive NK & CAR-NK Cell Combinations**
- **Combinations w/ Established Tumor-specific Therapeutics**
- **Combinations w/ Other I-O Agents (CPI, IL-15, etc.)**

**Innate Immunity**
- First Line of Defense

**Adaptive Immunity**
- Second Line of Defense

**Cells and ICEs**
- Tumor cell
- Dendritic cell
- Macrophage
- NK cell
- T-cell
ICEs from the ROCK® Platform are Optimized for Anti-Cancer Activity

ROCK® platform builds therapeutics customized to tumor targets

**ROCK® Platform**

**Toolbox**
- Scaffolds
- Linkers & Domains

**Engineering**

**Screening**
- Assays
- TPP

**Multivalent antibodies with modular architecture**
- Tunable affinities and avidities
- Multiple-specific targeting
- Variable PK profiles

**Innate Cell Engagers (ICEs)**

Affimed’s ICEs engage CD16A-positive cells (NK cells and macrophages) with a differentiated epitope
- Tetravalent, bispecific antibodies with high-affinity binding to CD16A
- No interference between IgG and ICE binding to CD16A
- Equally effective across all allelic variants (e.g. V/F polymorphism)
Innate Cell Engager for CD30+ Lymphomas

Treatment with AFM13
## Patients with CD30+ Lymphomas Need More Treatment Options

### Market Potential (US, Annual)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Eligible Patients</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peripheral T-cell Lymphoma</strong></td>
<td>PTCL</td>
<td>~2,700 eligible patients</td>
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<tr>
<td></td>
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<td>Lack of standard of care in R/R – high unmet need – accelerated approval path given lack of options for patients</td>
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<tr>
<td><strong>Cutaneous T-cell Lymphoma</strong></td>
<td>TMF</td>
<td>~200 eligible patients</td>
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<tr>
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<td>FDA acknowledged high unmet need in TMF; potential for small trial and accelerated timelines</td>
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<tr>
<td><strong>Hodgkin Lymphoma</strong></td>
<td>HL</td>
<td>~3,000 eligible patients</td>
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<td>Emerging vacuum of effective options in R/R as current therapies (e.g. anti-PD1 and BV) move to earlier lines of treatment</td>
</tr>
<tr>
<td><strong>Diffuse Large B-cell Lymphoma</strong></td>
<td>DLBCL</td>
<td>~1,300 eligible patients</td>
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<td>Precision medicine opportunity in CD30-positive subset currently not targeted</td>
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</table>

### Adcetris WW annual revenue projected to exceed $1B in 2019 despite limitations

- Approved in sALCL and other CD30-expressing PTCL
- Recently approved for front-line HL
- Unfavorable toxicity profile and limits long term use

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**Sources:**
- sALCL, systemic anaplastic large cell lymphoma
- TMF, transformed mycosis fungoides
- BV, brentuximab vedotin
AFM13: Holds Promise as Monotherapy and in Combination with allo-NK Cells or Anti-PD-1 Antibodies

- **AFM13** to address clinical unmet needs in CD30+ lymphomas
- Unmet need in CD30+ lymphomas represents >$1B market potential

**T-cell Lymphoma**
- R/R PTCL and CTCL
- R/R PTCL and TMF
- 1L PTCL

**CD30+ Lymphoma**
- R/R CD30+ lymphoma

**Hodgkin Lymphoma**
- R/R Post-BV/PD1-naïve

**Fast to Market**

**Expand**

**Today**

**AFM13-102**: monotherapy

**AFM13-202 (REDIRECT)**: monotherapy

**AFM13-104**: AFM13 + cbNK cells (MDACC)

**AFM13-103**: AFM13+Pembro

**Ph 2/3**: AFM13+aNK

**Ph 3**: AFM13+anti-PD-1

**POC Study**

**Registrational Study**

**TMF**, transformed mycosis fungoides

**R/R**, relapsed/refractory

**PTCL**, peripheral T-cell lymphoma
# AFM13: Delivering Meaningful Benefit to Patients with CD30+ Lymphomas

**Monotherapy**

**AFM13:** First-in-class innate cell engager targeting patients with CD30+ lymphomas
- Showed 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.
Innate Cell Engagers in Solid Tumors

Treatment with AFM24
AFM24 (EGFR/CD16A): Potential to Disrupt the Treatment Paradigm for Patients with EGFR-Expressing Tumors

<table>
<thead>
<tr>
<th>AFM24 holds the promise of:</th>
<th>Based on preclinical data:</th>
</tr>
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<tbody>
<tr>
<td>✓ Opportunity for improved outcomes</td>
<td>✓ Differentiated antibody profile</td>
</tr>
<tr>
<td>• Efficacy of current therapies rely on mAb inhibition of EGFR signaling, which can be associated with side effects</td>
<td>• New MOA with preclinical data showing increased activation of ADCC and ADCP</td>
</tr>
<tr>
<td></td>
<td>• Little IgG competition</td>
</tr>
<tr>
<td>✓ Opportunity for more tolerable side effect profile</td>
<td>✓ Positive toxicity profile</td>
</tr>
<tr>
<td>• Side effects of current EGFR-targeting mAbs can lead to dose interruptions and discontinuations, resulting in potential lowered therapeutic efficacy</td>
<td>• No toxicities observed in 2 independent cynomolgus toxicity studies <em>(Potentially due to a much lower inhibition of signaling)</em></td>
</tr>
<tr>
<td>✓ An effective therapy against EGFR-resistant tumors</td>
<td>✓ Cytotoxicity regardless of mutation</td>
</tr>
<tr>
<td>• Mutations in the EGFR pathway limit use and effectiveness of EGFR mAbs</td>
<td>• Strong cytotoxic activity against EGFR-expressing tumor cell lines, including wild type, KRAS or BRAF mutated</td>
</tr>
</tbody>
</table>

Kluge et al. AACR 2019, Abstract 559.
AFM24 (EGFR/CD16A) Has Broad Applicability and Combination Potential

**AFM24**
EGFR / CD16A

Novel MOA

**Broad Development Opportunities**

- **IO and Cell Therapy Combinations**
  Checkpoint inhibitors, activators of innate immunity, adoptive cell therapy, etc.

- **Mutation-agnostic**

- **Earlier Lines of Therapy**
  Through combinations and monotherapy depending on tumor setting
A Multipronged Clinical Development Strategy Designed to Deliver AFM24 to Those Patients with Few Options

Initiated Opportunities

- **Colorectal Cancer**
  - 3L All-comers

- **Non-small Cell Lung Cancer**
  - 3L All-comers

- **Priority Indication 3**
  - 3L All-comers

- **Priority Indication 4**
  - 2L Mutation Agnostic

Future Potential

- **Expansion cohorts**
  - 2L All-comers, Wild Type and Mutated
  - 2L Post-anti-PD-1 or 2L Post-TKI
  - 2L Regardless of PD-1 Eligibility
  - 1L Mutation Agnostic Opportunities

Initiated in 1Q20

Source: Physician Interviews; ClearView Analysis.
Innate Cell Engagers in Myeloma

Treatment with RO7297089 (formerly AFM26)
Preclinical Pharmacology and Safety of RO7297089, a Novel Anti-BCMA/CD16A Bispecific Antibody for the Treatment of Multiple Myeloma

The ROCK platform continues to demonstrate the ability to induce efficacious target cell lysis also in the presence of low expression of the tumor antigen.

High affinity bivalent engagement of CD16A positive innate immune cells is a promising approach to target BCMA positive tumor cells in MM.

- **Potent killing of BCMA positive tumor cells and low risk of cytokine release syndrome**
  - R07297089 shows potent cell killing of BCMA pos tumor cell lines employing NK cells and macrophages as effector cells; minimal increases in cytokines.

- **Favorable safety profile in 4-week cyno safety study**
  - A 4-week safety study in cynomolgus monkeys showed a favourable safety profile with no cytokine release or adverse findings observed in both dose levels (15 and 50 mg/kg).

- **Selective killing of BCMA pos cells**
  - Time- and dose-dependent reductions in serum IgM levels and plasma cell markers (BCMA and J-chain mRNA) were observed suggesting selective killing of BCMA positive cells by engaging CD16a positive immune cells.

Kakiuchi-Kiyota et al. AACR 2020, Abstract 4566.

MM, Multiple Myeloma
Pipeline Expansion
AFM28, AFM32 and partnered programs
Vast Pipeline Opportunities for ROCK® Platform

Partnering New ICEs

CD16A  Tumor Targets

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

Rational Combinations

- Adoptive NK cells
- Checkpoint inhibitors (anti-PD-1 and beyond)
- Targeted cytokines
- Other innate and adaptive MOAs synergistic to innate cell engagement

Preclinical ICEs are advancing to address various solid and hematological malignancies
Leading Innate Immunity Activation to Treating Cancer Patients

Innate immune cell activation represents a compelling opportunity in oncology

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

Late-stage company

✓ First patient dosed in AFM13 registration directed study
✓ Proof-of-concept data in TCL, HL

Broad pipeline comprising fully owned and partnered programs

✓ AFM24: clinical-stage; broad solid tumor opportunity
✓ RO7297089: partnered; poised to enter clinic
✓ AFM28 and AFM32 programs have initiated
✓ Initiated multiple programs with Genentech
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

Denise Mueller
Chief Business Officer (CBO)
Strong background in commercialization and global marketing including launch of new products

Dr. Arndt Schottelius
Chief Scientific Officer (CSO)
Broad experience in biotherapeutics R&D and I/O & immunology research and early development

Dr. Andreas Harstrick
Chief Medical Officer (CMO)
Seasoned oncology expert with broad experience and proven track record to bring innovative therapies to the market

Harry Welten
CFO (consulting ad interim)
Strong financial background, lead advisor in a variety of transactions & financings life sciences/healthcare
Thank you