Transforming Immuno-Oncology Using Next-Generation Immune Cell Engagers
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, our ongoing and planned preclinical development and clinical trials, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates AFM13, AFM11 and AFM21, our intellectual property position, 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.
Transforming immuno-oncology
Using next-generation immune cell engagers

- Unencumbered clinical and pre-clinical pipeline based on bi- and trispecific TandAb antibodies
- Direct the immune system to eliminate tumor cells with NK-cells or T-cells
- Partnerships with industry and The Leukemia & Lymphoma Society (LLS)
- Raised ~$119 million gross proceeds since September 2014
- Currently ~40 employees, with HQ in Heidelberg and offices in NYC and Boston
Highlights Q3-15

- Affimed raised $21.8 million (€19.1 million) through the sale of approximately 3.3 million shares to Aeris Capital, a long-term existing shareholder.
- Following acceptance of the Company’s proposed protocol amendment, patient enrollment continued into the Phase 1 study of AFM11 in non-Hodgkin’s lymphoma (NHL) in October. The new protocol allows for investigation of less frequent dosing of AFM11.
- At the annual SITC conference, Affimed presented first data on the Company’s proprietary T-cell (AFM21) and NK-cell (AFM22) TandAbs, generated against the tumor-specific variant III of the Epidermal Growth Factor Receptor (EGFRvIII). AFM21 and AFM22 showed similar cytotoxic and *in vitro* potency. The Company anticipates final candidate selection and initiation of IND-enabling studies in the first half of 2016.
- In November, the Company announced the acceptance of two abstracts as poster presentations on December 6 at the upcoming ASH Meeting.
Affimed: The leader in natural killer cell-based immuno-oncology

• **AFM13 (CD30/CD16A TandAb)**
  - Is the most advanced natural killer (NK-) cell-engaging antibody in clinical development
  - Attaches to both cells and thereby brings immune cell into proximity with tumor cell leading to activation and killing of tumor cell
  - Demonstrated clinical and PD activity in heavily pretreated lymphoma patients
  - Showed very good safety, therefore might be well suited for combination with wide range of other drugs

• **Further NK-cell-engaging TandAb planned to enter IND-enabling studies in 2016**
NK-cells are potent killers of cancer cells and the gatekeeper of adaptive immunity

- NK-cells represent the most prevalent pathway by which tumors evade the immune system
- NK-cells ignite the entire immune cascade, beginning with antigen presentation and leading to T-cell activation
- CD16A is the most potent known “on/off” switch on NK-cells
NK-cell engagement and modulation
Key modulators are identical to known T-cell CPIs

- Lirilumab
  - Innate/BMS
- CD16A (FcγRIIIA)
- KIR2
- NKG2a
- GITR
- CD137 (4-1BB)
- CD319 (CS1)
- PD-1
- MK-4166
  - Merck
- Urelumab
  - PF-05082566
  - BMS, Pfizer
- Elotuzumab
  - BMS/Abbvie
- Nivolumab
  - Pembrolizumab
  - BMS, Merck

**CD16A TandAbs**
**Affimed**

**IgG**

**TandAb**
AFM13: Proof-of-concept for the Natural Killer cell-based approach

- **AFM13**
  - TandAb antibody engages CD16A on NK-cells and CD30 on tumor cells
  - AFM13 redirects NK-cells and becomes activated only upon binding to the tumor
- **Phase 1 data**
  - AFM13 showed a very good safety profile in the Phase 1 trial and is therefore well suited for a combination with a wide range of other drugs
  - Tumor shrinkage in 8/13 (62%) and PRs in 3/13 (23%) patients treated with just 4 weekly doses of 1.5 mg/kg or greater
  - Effective even in patients refractory to Adcetris given as most recent therapy
- **Combination opportunity**
  - Synergistic with check-point inhibitors
  - Increased T-cell infiltration in tumor microenvironment
AFM13: Significant synergy of AFM13 in combination with PD-1 inhibitor

- Tumor sections (8x8 mm) were derived from surgical specimens of a newly diagnosed CD30+ Hodgkin lymphoma patients; Tumor sections (8x8 mm) were xenografted and mice were randomized into 8 groups on day 28.
- Autologous PBMCs were infused on day 28 (2x10^6 PBMCs/mouse) i.p.
- Therapy with AFM13 and CPI began on day 28 and continued weekly for a total of three i.p. injections.
- Tumor size was compared between groups on day 58.
AFM13 and NK-cell TandAb platform
Transforming approach to treat cancer

• The only CD16A-targeting bispecific in clinical development
  • Distinguishes between NK-cells and neutrophils
  • Redirects NK-cells to the tumor
  • Patent protected until 2026

• The only tetravalent bispecific molecule in clinical development
  • Avidity effect with 10-100x stronger binding

• The only NK-cell platform currently for commercially viable bispecifics
  • Single gene construct
  • Homogeneity greater than 97%, critically important for commercial material
  • Half-life enables convenient dosing
**AFM13: Dual opportunity**

**Lymphoma drug / platform validation**

- The only specific NK-cell engager in the clinic increasing tumor penetration
- Potential to restore the entire immune cascade for a more robust and lasting fight against cancer cells
- To date, the NK-cell approach has demonstrated impressive safety (no CRS) with no MTD reached in the AFM13 Phase 1 study
- Opportunity for mono- and combination therapies
- Multiple near-term milestones

![AFM13 Timeline](image)
NK-cell pipeline
Application to solid tumors and multiple myeloma

- Further NK-cell engager in development for lung, GBM, colon, H&N, MM
- AFM22 targets EGFRvIII, which is a highly tumor-specific molecule
  - Expression demonstrated in lung, GBM, H&N
- Currently evaluating both NK-cell and T-cell TandAb constructs
  - AFM21 EGFRvIII / CD3 TandAb has shown efficacy in animal model
  - AFM22 EGFRvIII / CD16A TandAb generation advanced
- Candidate(s) selection by year-end
  - IND-enabling studies expected to start in 2016
Affimed with its TandAbs is a leader in T-cell recruitment

- T-cells are highly potent to eliminate tumor cells
  - Efficacy demonstrated in blood cancers – first T-cell engager approved in the US
  - Further data is highly promising though early stage
  - Safety issues to be carefully managed, bispecific T-cell approach in ALL showed that interruption of dosing was an effective way of resolving critical issues
  - Convenience and COGs remain key issues
- Conventional antibodies cannot overcome the tumor’s escape mechanism via T-cell engagement because T-cells lack Fcγ receptors
- Hence, other options are required
  - Bispecific antibodies
  - Chimeric antigen receptor modified T-cells (CAR-T)
  - Other cell-based platforms
AFM11: Advantages of T-cell TandAbs

- Robust manufacturing with low COGs and filled in a vial ("off-the-shelf" CAR-T)
- Avidity effect (~100-fold higher affinity to CD3 vs Blincyto)
- Cytotoxicity maintained at low effector-to-target ratio
- Prolonged half-life allows regular i.v. infusion

<table>
<thead>
<tr>
<th></th>
<th>Blincyto</th>
<th>AFM11</th>
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<tbody>
<tr>
<td>MW</td>
<td>~55 kDa</td>
<td>~104 kDa</td>
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<tr>
<td>Binding sites</td>
<td>1 for each, CD3 &amp; CD19</td>
<td>2 for each, CD3 &amp; CD19</td>
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<tr>
<td>Affinity to CD3+ cells</td>
<td>100 nM</td>
<td>1 nM</td>
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- Blincyto is first T-cell engager approved by the FDA for treatment of ALL
AFM11: Most advanced T-cell engager in the clinic next to Blincyto with well differentiated TPP

- Phase 1 dose escalation in NHL/ALL patients initiated with intensive dosing regimen
- Phase 1 protocol was amended changing the regimen to a less frequent dosing
- In addition, NHL and ALL indications were split into separate studies
- AFM11 is well differentiated from competition
  - Potency, convenience
- Strong market potential in large indications such as NHL and ALL
Platform-validating partnerships

- Rapid identification of preclinical CD33/CD3 candidate (<18 months) for therapy of AML
- T564 is stable, highly expressed, and displays significant *in vitro* and *in vivo* cytotoxicity
- Corroborative evidence of direct correlation between binding affinity and potency (3 posters presented at ASCO 2015)
- Major financial contribution for NK-cell TandAb AFM13

someday is today
## Current pipeline and programs
Global rights retained with 3 candidates

<table>
<thead>
<tr>
<th>Compound</th>
<th>Disease Target</th>
<th>Immune Cell Target</th>
<th>Indication</th>
<th>Discovery</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<td>CD16A / NK-cell</td>
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<td>CD3/T-cell</td>
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*CPI = Checkpoint inhibitor

- **Worldwide rights with Affimed**
- **Partnered program**
News flow

AFM13
- Ph2a HL monotherapy
- Ph1b Ph1b HL +CPI
- Ph1b/2a CD30+ lymph.
- Preclin. NK-cell collab’s
- Preclin. +IMID

AFM11
- Ph1 NHL (new dose regimen)
- Ph1 ALL (new dose regimen)

AFM21 / AFM22
- Preclinical development

Janssen/Amphivena
- Preclinical development

Discovery/
Preclin. development
- Novel NK-cell engagers
- Trispecific program

2015 2016 2017
Q3/2015 Cash flow statement

- In October 2015 an additional $21.8 million (€19.1 million) were raised in a private placement
- Cash reach is projected into Q1/2018

<table>
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<tr>
<th>in thousands of €</th>
<th>For the nine months ended September 30, 2015</th>
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<td>Cash and Cash equivalents at the beginning of the period</td>
<td>39,725</td>
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<td>FX related changes to Cash and Cash equivalents</td>
<td>1,006</td>
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<td>Net cash used in operating activities</td>
<td>(14,526)</td>
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<td>Cash Flow from investing activities</td>
<td>(214)</td>
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<td>Cash Flow from financing activities</td>
<td>34,434</td>
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<td>Cash and Cash equivalents as of September 30, 2015</td>
<td>60,425</td>
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Our strategy is to maximize value from pipeline and technologies

- Leverage first product AFM13 to establish a market in key indication
  - Salvage settings enable fast development path and cost-efficient M&S structure
  - Investigate AFM13 both as monotherapy and in combination with PD-1 reduces development risk and guides the application of NK-cell platform to solid tumors
  - Our pre-clinical and clinical strategy is designed to broaden the scientific leadership of NK-cell platform
- Use pipeline and technologies to create value through both next-generation products and deal opportunities
  - Develop AFM11 through Phase 2 POC studies
  - Advance EGFRvIII TandAb (AFM21 or AFM22) and further CD16A/NK-cell TandAb in solid tumors such as GBM, lung, head and neck, colon
  - Develop TandAb and Trispecific Ab in multiple myeloma
  - Add high-value technology platform partnership