



**FOR IMMEDIATE RELEASE**

**Affimed ASCO Data for the CD33/CD3-TandAb Program  
Demonstrate that CD33 and CD3 binding affinities correlate  
with potent T-cell activation and cytotoxicity**

-- TandAb platform enables reliable and rapid candidate selection --

Heidelberg, Germany, May 29, 2015 - Affimed N.V. (Nasdaq: AFMD), a clinical stage biopharmaceutical company focused on discovering and developing highly targeted cancer immunotherapies based on its proprietary TandAb platform, today announced that first data on AMV-564 (formerly T564), the product candidate currently in IND-enabling studies, from the Company's Amphivena/Janssen collaboration will be presented on Saturday, May 30, and Sunday, May 31 at the American Society of Clinical Oncology (ASCO) 2015 Annual Meeting being held May 29 – June 2, 2015 in Chicago, IL.

Data from three posters by Affimed and its partners Amphivena and Janssen on its collaborative CD33/CD3 program for the treatment of acute myeloid leukemia (AML) validates the robustness of Affimed's proprietary TandAb technology platform. Overall, using various combinations of 10 human anti-CD33 variable domains, 4 human anti-CD3 variable domains and different middle linkers, the platform has enabled generating more than 150 unique CD33/CD3 TandAbs for further evaluation.

- In Abstract #7071, titled "*Development of a bispecific tetravalent CD33/CD3 TandAb for the treatment of AML*" (by Amphivena and Affimed, on Sunday, May 31), 22 lead TandAbs were selected based on expression titers, homodimer content, melting temperature, thermal stability, and high-affinity CD33 binding or to preserve diversity of CD33 domain or linker, and subsequently were produced and purified to >90% purity. Notably, bivalent high affinity binding did not elicit significant cytokine release in the absence of CD33+ cells.
- Abstract #7067, titled "*Construction characterization of novel CD33/CD3 tandem diabodies (TandAbs) for the treatment of acute myeloid leukemia (AML)*" (by Dr. Roland Walter of the Fred Hutchinson Cancer Research Center, on Sunday, May 31), demonstrated that CD33/CD3-targeted TandAbs exerted potent and specific cytotoxicity in CD33+ leukemia cells that is independent of disease stage and cytogenetic risk. Moreover, CD33 and CD3 binding affinities correlated with T-cell

activation and cytotoxicity, but no correlation between TandAb-induced specific cytotoxicity and CD33 expression level was observed.

- Abstract #3057, titled “*In vitro and in vivo killing of AML using tetravalent bispecific CD33/CD3 TandAbs*” (by Dr. John DiPersio of Washington University in St. Louis, on Saturday, May 30), showed that TandAbs specifically lysed human CD33+ target cell lines, but not human cells lacking the antigen, at concentrations as low as 0.001 and 1pM. Also, preclinical mouse data revealed that even though very few patient T cells (2%-4%) may be present, TandAbs could still clear all AML blasts.

“The power of Affimed’s TandAb technology is evident in its ability to deliver a candidate rapidly – with the TandAb technology platform, it is possible to file an IND within 3 years,” said Martin Treder, CSO of Affimed. “Immune cell engagers redirecting NK- or T-cells possess significant promise in eliminating tumor cells. Importantly, to maximize response rates, it is critical that even those tumor cells with very low target expression can be efficiently eliminated. These posters show that affinity to T-cells is highly relevant in the destruction of primary cancer cells derived from AML patients and that TandAbs with high affinity to T-cells demonstrate superior *in vitro* cytotoxicity as compared to those with lower affinity to T-cells.”

TandAbs are currently the only 4-domain bispecific immune cells engagers worldwide that are in clinical investigations. This four domain (tetravalent) antibody structure is the underlying scaffold that enables generation of molecules with a binding affinity that can exploit the so-called avidity effect, a principle that relies on dual binding to cell surface antigens, to more effectively destroy tumor cells.

### **About NK-Cell TandAbs, T-Cell TandAbs and Trispecific Abs**

Affimed develops TandAbs and Trispecific Abs to substantially increase the efficacy, specificity and/or extend the therapeutic window of current therapeutics. TandAbs and Trispecific Abs are a new generation of proprietary, tumor-cell engaging antibodies with a tetravalent architecture characterized by four binding domains. These tetravalent molecules bind to tumor and immune cells with high affinity. Although generation of such complex antibodies is very challenging, Affimed has succeeded in producing them economically and at high quality.

Leveraging this expertise, Affimed has implemented three platform technologies:

- Bispecific TandAbs engaging NK-cells (via CD16A)
- Bispecific TandAbs engaging T-cells (via CD3)
- Trispecific Abs engaging either NK- or T- cells

**About Affimed N.V.**

Affimed (Nasdaq: AFMD) is a clinical-stage biopharmaceutical company focused on discovering and developing highly targeted cancer immunotherapies. Affimed's product candidates are being developed in the field of immuno-oncology, which represents an innovative approach to cancer treatment that seeks to harness the body's own immune defenses to fight tumor cells. The most potent cells of the human defense arsenal are types of white blood cells called natural killer cells, or NK-cells, and T-cells. Affimed's proprietary, next-generation bispecific antibodies, called TandAbs for their tandem antibody structure, are designed to direct and establish a bridge between either NK-cells or T-cells and cancer cells, triggering a signal cascade that leads to the destruction of cancer cells. Affimed has focused its research and development efforts on three proprietary TandAb programs for which it retains global commercial rights. For more information, please visit [www.affimed.com](http://www.affimed.com).

**FORWARD-LOOKING STATEMENTS**

This press release contains forward-looking statements. All statements other than statements of historical fact are forward-looking statements, which are often indicated by terms such as "anticipate," "believe," "could," "estimate," "expect," "goal," "intend," "look forward to", "may," "plan," "potential," "predict," "project," "should," "will," "would" and similar expressions. Forward-looking statements are based on management's beliefs and assumptions and on information available to management only as of the date of this press release. These forward-looking statements include, but are not limited to, statements regarding the risk of cessation or delay of any of the ongoing or planned clinical studies and/or development of our product candidates. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including, without limitation, risks associated with our clinical development activities, regulatory oversight, product commercialization, intellectual property claims, and the risks, uncertainties and other factors described under the heading "Risk Factors" in Affimed's filings with the Securities and Exchange Commission. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements, and we assume no obligation to update these forward-looking statements, even if new information becomes available in the future.

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