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Syngene brings out novel approach to treat acute myeloid leukaemia

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The article details important findings and solutions that were brought forth by the scientists in the novel approach for the treatment of Acute Myeloid Leukaemia (AML)

Two Syngene scientists, Vijaykumar Chennupati and Balaji Ramachandran, co-authored an article titled ‘Selective recruitment of ?? T cells by a bispecific antibody for the treatment of acute myeloid leukaemia’ that got published in Leukemia, a prestigious international journal from the Nature Publishing Group. The scientists designed and conducted the experiments and performed the data analysis and helped with interpretation.

The article details important findings and solutions that were brought forth by the scientists in the novel approach for the treatment of Acute Myeloid Leukaemia (AML). Despite significant progress over the last few decades in the treatment of AML, there still remains a major unmet medical need for this disease. The treatment approaches under immunotherapy include, monoclonal antibody (mAb) therapy, anti-CD33 antibodies, anti-CD123 antibodies, adoptive T cell therapy, among others. However, each has their own challenges that brings about the need to develop better, safer and accurate treatment solutions to treat AML.

The authors designed a bispecific antibody that can simultaneously bind to immune cells and AML cancer cells, thereby bringing the two cell types in close proximity to destroy AML blast cells in the body. Further investigations and research on anti-TRGV9/anti-CD123 have shown promising results that can change the way immunotherapy-based treatment for AML can be carried out.