

IGI Announces Publication in Nature Cancer on ISB 2001, IGI's Innovative Trispecific Antibody for Relapsed/Refractory Multiple Myeloma

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- Article highlights preclinical findings demonstrating ISB 2001 can potentially overcome myeloma cell escape mechanisms to evade therapeutic anti-tumor activity
- Data show superior killing potency of multiple myeloma tumor cells by ISB 2001 when compared to several approved bispecific therapies and combination of therapies

NEW YORK, Sept. 11, 2024 (GLOBE NEWSWIRE) -- Ichnos Glenmark Innovation (IGI), an alliance between Ichnos Sciences Inc., a global fully-integrated clinical-stage biotech company developing multispecifics™ in oncology, and Glenmark Pharmaceuticals Ltd., announced today that Nature Cancer published a research article describing the preclinical development of ISB 2001, a first-in-class trispecific antibody targeting BCMA and CD38 on myeloma cells and CD3 on T cells. ISB 2001 is currently being investigated in a Phase 1 clinical study in relapsed/refractory multiple myeloma (r/r MM).

"Despite advances with monoclonal antibodies and earlier-generation bispecifics, a high relapse rate and resistance to currently available therapeutics are persistent challenges in treating multiple myeloma," said Cyril Konto, M.D., President, Executive Director and CEO of IGI. "The publication of ISB 2001 preclinical data in Nature Cancer supports the differentiation and mechanism of action of IGI's multispecific antibody. These comprehensive findings underscore the therapeutic potential of ISB 2001, now in Phase 1 clinical testing, and we look forward to sharing our continued progress."

Key findings of the Nature Cancer article, "ISB 2001 trispecific T cell engager shows strong tumor cytotoxicity and overcomes immune escape mechanisms of multiple myeloma cells" include the following:

- The data demonstrate that ISB 2001 can overcome resistance mechanisms by dual tumor targeting via binding and cytotoxicity of tumor cells with low expression of CD38 or BCMA.
- ISB 2001's architecture is optimized to support robust killing of tumor cells while limiting CD38 on-target, off-tumor activity.
- ISB 2001 demonstrated increased killing of tumor cells compared to BCMA-targeted T cell engagers in vitro, in vivo and ex vivo; induced complete tumor regression in humanized mouse models; and demonstrated superior potency compared to standard combination of therapies.

"We leveraged our proprietary BEAT® platform to create a highly specific antibody that increases binding to MM cells while minimizing off-target activity," said Mario Perro, Ph.D., Head of Biologics Research at IGI. "These preclinical data demonstrate the potential of a trispecific approach to augment immune cell activation and achieve more precise tumor targeting and killing."

The paper can be found at <https://www.nature.com/articles/s43018-024-00821-1>.

ISB 2001 – Mechanism of Action

ISB 2001 is the first T cell-engaging antibody that simultaneously targets BCMA and CD38 on MM cells. It is a trispecific antibody based on BEAT® (Bispecific Engagement by Antibodies based on the TCR) technology, a proprietary platform allowing maximal flexibility and manufacturability of full-length multispecific antibodies. ISB 2001 combines three proprietary antigen-binding arms, each targeting a different antigen, with one arm binding to the epsilon chain of CD3 on T cells, and the other two binding BCMA and CD38 on MM cells. Its fragment crystallizable (Fc) domain was fully silenced to suppress Fc effector functions. ISB 2001 redirects CD3+ T lymphocytes to kill tumor cells expressing BCMA and CD38. Targeting of two different tumor-associated antigens instead of one allows for avidity binding to MM cells expressing very low levels of BCMA and CD38.

About Ichnos Glenmark Innovation

Ichnos Glenmark Innovation (IGI) is an alliance between Ichnos Sciences Inc., a global fully-integrated clinical-stage biotech company developing multispecifics™ in oncology, and Glenmark Pharmaceuticals Ltd. (Glenmark), with the aim to accelerate new drug discovery in cancer treatment. IGI combines Ichnos' research and development proficiencies in novel biologics with those of Glenmark's in new small molecules to continue developing cutting-edge therapy solutions that treat hematological malignancies and solid tumors. Harnessing the combined proficiency of over 150 scientists and a robust pipeline of novel molecules, this collaboration will leverage the capabilities of its three global centers of innovation spread across the USA, Switzerland and India to propel Innovation. For more information, visit www.iginnovate.com.

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