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Patrys cancer drug gives hope to patients

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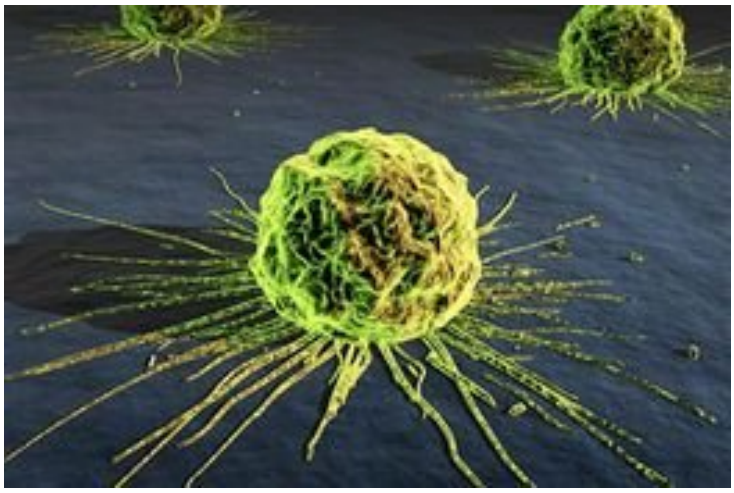

Singapore: Patrys, a clinical stage biopharmaceutical company, has confirmed anti-cancer properties of PAT-SM6 and has demonstrated the mechanism by which it occurs in patients with multiple myeloma. The study was conducted in collaboration with the Institute of Pathology, University of WÃ¼rzburg, Germany.

"This is an important study that not only shows that our lead drug candidate (PAT-SM6) actively targets and kills cancerous multiple myeloma cells, it explains the mechanism behind this," said Dr Marie Roskrow, CEO, Patrys. "We can see how PAT-SM6 binds to the glucose-regulate protein 78 (GRP78) which is abnormally attached to the outside of multiple myeloma cells and not on the inside as occurs in healthy, non-cancer causing cells. This further validates the potential of PAT-SM6 as an anti-cancer therapy for patients with multiple myeloma."

Lead researcher, Dr Stephanie BrÃ¤ndlein, examined whether Patrys' IgM antibody, PAT-SM6, can effectively kill multiple myeloma cells. This study confirmed that PAT-SM6 induces killing of multiple myeloma cells (cytotoxicity). Further, it showed that PAT-SM6 induces cytotoxicity in multiple myeloma cells but not normal cells by interacting with glucose-regulated protein 78 (GRP78).

Laboratory experiments reveal strong binding of PAT-SM6 to the surface of multiple myeloma cell lines and cancer cells isolated from the bone marrow of newly diagnosed as well as relapsed patients. This binding of PAT-SM6 results in killing of the cells through a mechanism called programmed cell death, without releasing any harmful substances. PAT-SM6 shows significant induction of this killing mechanism resulting in high levels of cell death in cells extracted from both newly diagnosed patients and those with refractory and relapsed disease.

PAT-SM6 was also seen to have an additional anti-cancer effect. It was shown to be capable of killing multiple myeloma cells through an additional mechanism called complement dependent cytotoxicity (CDC).