Therapeutic Inhibitors of lGF2BP1 RNA Binding

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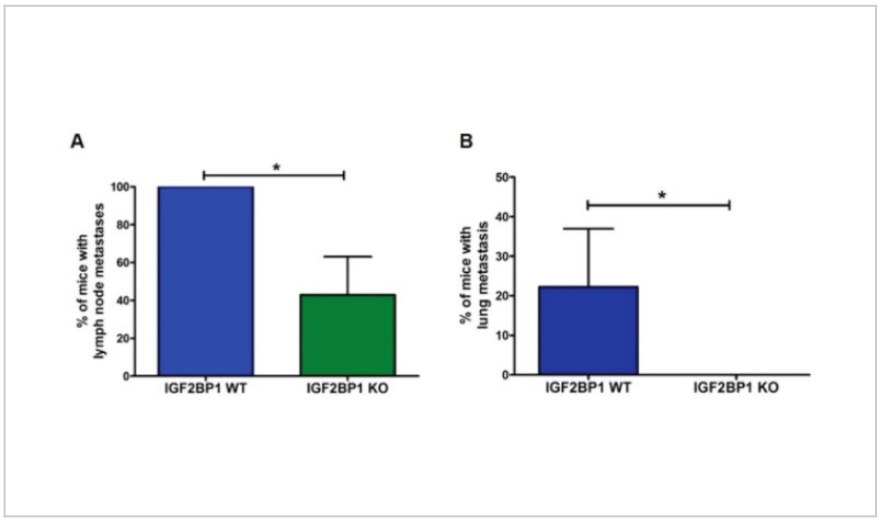

IGF2BP1 Knockout Inhibits Metastasis

Technology Summary

Insulin-like growth factor 2 mRNA-binding protein 1 (IGF2BP1) is a multifunctional RNA-binding protein with an oncofetal pattern of expression that regulates stability, localization, and translation of its mRNA targets. IGF2BP1 is overexpressed in many cancers including melanoma, and its high expression was shown to be associated with poor clinical outcomes. The researchers have shown that IGF2BP1 affects melanoma metastasis, and inhibition of IGF2BP1 is effective in impeding the metastatic process. As such, IGF2BP1 represents an attractive and novel therapeutic target for melanoma and other malignancies with high IGF2BP1 expression. The researchers are actively developing small-molecule compounds that inhibit IGF2BP1 binding to RNA as novel cancer therapeutics.

Application & Market Utility

Melanoma is one of the most lethal forms of cancer, with 4-8% of patients diagnosed with unresectable stage III or stage IV metastatic melanoma, and nearly half of those with unresectable stage III disease ultimately progressing to metastatic melanoma. Effective prevention of metastatic disease is an unmet need that can be addressed by novel IGF2BP1 inhibitors.

Next Steps

Patent pending. Seeking investment and licensing partners.

TECHNOLOGY READINESS LEVEL 1-3

Seeking

Investment | Licensing | Research

Keywords

- Melanoma
- Cancer
- Metastasis
- Small Molecule
- Therapeutic

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