Unique AD-1/Cpf2/ap092 binding at pteratinib

Authors: Andres Diaz Miss Lisa Stevens Marcia Keller Eric Clarke Dustin Crawford

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California State University-Sacramento

School of Environmental Studies

The big research question in rhabdomyosarcoma is how to inhibit cell growth in a tumor by targeting specificity proteins (Sp) transcription factors. For years these Sp-targeting Sp protein inhibitors have been used to stop proliferation of human adult tissues for various causes. Sp is a known tumor suppressor of growth and also the target of a number of other relevant candidate targeting proteins. For example, in an attempt to control the growth of lung cancer cells in vitro, some investigators have targeted specific SMN-1 Sp transcription factors, known as NM-1 and SMN. In an attempt to target Sp in humans, some patients have been treated with inhibitors that target alpha1-antitrypsin (A1)-tumor growth factor (TCF). The A1-tumor growth inhibitor TCF blocker also binds TGF-beta, also known as fibroblast growth factor (FG-beta). This study looked at FG-beta, which is currently being studied in a number of human clinical trials.

Long suspected, It was only recently that the authors of this research article demonstrated for the first time that FG-beta is uniquely targeted by this specific A1-tumor growth inhibitor, another known drug target, poly methyl lipoprotein ÃŸ 2, or PML. A compound, known as MP-3 that binds to PML and stops it from binding to FG-beta had previously been linked to cancer in animals and potentially human tumors.

This study shows, for the first time, that in vivo mechanisms of binding between FG-beta and cancer cells involved a specific SP-binding protein (Sp) transcription factor, miR-9A-genes, also known as AP092. In addition, this study demonstrates that this double target, FG-beta and AP092, binds to the same cell surface cell surface molecule, pteratinib, to halt expression of this cancer cell regulator. This compound, MP-3 (monazepam), works by binding to the molecular gyrosphere, only when the drug binds to the SP-transcription factors, showing the first specificity-targeting therapeutic outcome.

A Black And White Photo Of A Teddy Bear