

Treatment with Alk5 inhibitor improves tumor uptake of imaging agents

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Imaging probes that specifically target tumors can provide more sensitive and relevant information about the tumor compared to conventional, non-specific probes. Additionally, targeted probes can improve tumor detection, characterization, therapy stratification, and enhance selective delivery of anti-cancer drugs.

A major limitation to the clinical use of such agents is their large size, which restricts their delivery to the tumor. Further, many tumors are characterized by altered permeability of tumor-associated blood vessels and increased fluid pressure within the tumors themselves, both of which prevent uptake of imaging agents.

In this issue of *JCI Insight*, Heike Daldrup-Link of Stanford University and colleagues demonstrate that pre-treatment with an activin-like kinase 5 (Alk5) inhibitor enhances tumor-specific delivery of the contrast agent ferumoxytol.

Their findings indicate that Alk5 inhibitors could be used to improve tumor imaging to facilitate diagnosis and treatment of [solid tumors](#).

More information: Heike E. Daldrup-Link et al, Alk5 inhibition increases delivery of macromolecular and protein-bound contrast agents to tumors, *JCI Insight* (2016). [DOI: 10.1172/jci.insight.85608](https://doi.org/10.1172/jci.insight.85608)

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