

# Predicting nasopharyngeal carcinoma patient response to radiation therapy

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Nasopharyngeal carcinoma (NPC) affects cells lining the nasopharynx. The majority of NPC cases can be cured by radiation therapy, however ~20% are resistant to radiation treatment.

In this issue of the *Journal of Clinical Investigation*, Yu-Sun Chang and colleagues at Chang Gung University sought to find a way to predict which individual cases of NPC would be sensitive to radiation therapy. The authors compared the levels of various serum factors between NPC patients that responded to radiation therapy and patients that were resistant to therapy. Patients that did not respond to radiation therapy had higher serum levels of the IL-6 family cytokine leukemia inhibitory factor (LIF), and that LIF levels were predictive of NPC patient response to radiation therapy. The researchers further demonstrated that LIF itself promotes NPC.

In the companion commentary, Micah Luftig from the Duke University School of Medicine discusses the implications of LIF as a predictor of NPC resistance to [radiation therapy](#).

**More information:** Leukemia inhibitory factor promotes nasopharyngeal carcinoma progression and radioresistance, *J Clin Invest*. DOI: [10.1172/JCI63428](https://doi.org/10.1172/JCI63428)

Heavy LIFting: tumor promotion and radioresistance in NPC, *J Clin Invest*. 2013;123(12):4999–5001. DOI: [10.1172/JCI73416](https://doi.org/10.1172/JCI73416)

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