

# **Combination of chemo and diabetes drugs shows potential for treating Ewing sarcoma**

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Stephen T. Wong, Ph.D., Associate Director, Cores, Biostatistics and Bioinformatics Houston Methodist Cancer Center. Credit: Houston Methodist

Ewing sarcoma, an aggressive tumor that commonly affects bones in adolescents and young adults, is diagnosed in about 225 American children and teens every year, accounting for about 1 percent of pediatric cancers.

Although Ewing sarcoma has been studied for decades, it has no effective cure and a survival rate of just 20-30% for patients who relapse; furthermore, most treatment require surgical resections or amputation and this impacts quality of life of the patients.

But a research team at Houston Methodist aims to change those odds.

A new possibility for treatment is proposed by Stephen Wong, Ph.D., John S. Dunn Sr. Presidential Distinguished Chair in Biomedical Engineering and professor of computer science and bioengineering in oncology at Houston Methodist.

He is proposing a combination of two well-known drugs as a new treatment option for Ewing sarcoma—the chemo drug imatinib and the diabetes drug metformin.

**More information:** Xiang Nan et al, Imatinib revives the therapeutic potential of metformin on ewing sarcoma by attenuating tumor hypoxic response and inhibiting convergent signaling pathways, *Cancer Letters* (2019). [DOI: 10.1016/j.canlet.2019.10.034](https://doi.org/10.1016/j.canlet.2019.10.034)

Provided by Houston Methodist

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