

# Bacterial cells can help tumors

## REPORT

## Potential role of intratumor bacteria in mediating tumor resistance to the chemotherapeutic drug gemcitabine

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“Certain bacteria express enzymes capable of metabolizing the cancer chemotherapeutic drug *gemcitabine* into an inactive form...an effect that was reversed by antibiotic treatment in mice. A high percentage of human pancreatic ductal adenocarcinomas contain the culprit bacteria (gammaproteobacteria). ...Efficacy of an existing therapy for this lethal cancer might be improved by co-treatment with antibiotics.”



**24% of the drugs** with human targets, including members of all therapeutic classes, inhibited the growth of at least one strain *in vitro*

# Extensive impact of non-antibiotic drugs on human gut bacteria

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