

Developmental drug helps protect against radiation damage

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A drug currently under development at the University of Pittsburgh School of Medicine protects cells from the damaging effects of radiation exposure, a new study suggests. Results of the study, Abstract Number 3988, are being presented at the 100th annual meeting of the American Association for Cancer Research (AACR), April 18 to 22 in Denver.

The study, led by Joel Greenberger, M.D., professor and chairman of the Department of [Radiation](#) Oncology at Pitt, is overseen by Pitt's Center for Medical Countermeasures Against Radiation. The center is dedicated to identifying and developing small molecule radiation protectors and mitigators that can be easily accessed and administered in the event of a large-scale radiological or nuclear emergency.

JP4-039 assists the mitochondria, the energy generator of all [cells](#), in combating irradiation-induced cell death. For this study, cells treated immediately after irradiation with JP4-039 demonstrated significant radioprotection, suggesting a potential role for the drug as a mitigator of radiation damage.

"Currently, no drugs on the market counteract the effects of radiation exposure," said Dr. Greenberger. "We know this drug can counteract the damage caused by irradiation, and now we want to develop the ideal dosage, one that is effective for the general population while remaining non-toxic. Our goal is to take this drug through a phase I clinical trial and, once the dosage is established, develop the drug for late-stage clinical trials and market licensing."

Source: University of Pittsburgh Schools of the Health Sciences ([news](#) : [web](#))

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