

Nanomedicines promise fewer side effects in treating cancer

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A new generation of cancer treatments based on nanotechnology is making its way out of the laboratory and into the clinic with the promise of targeting cancer cells while steering clear of healthy tissue, according to the current edition of *Chemical & Engineering News* (C&EN). C&EN is the weekly newsmagazine of the American Chemical Society (ACS).

In the cover story, C&EN Senior Editor Bethany Halford explains that today's anti-cancer medications impact healthy tissue in the process of killing [cancer cells](#). Patients thus may experience side effects, such as nausea and vomiting, that in some instances can be so severe that patients decline further treatment. New nanomedicine cancer treatments promise to focus on diseased tissue while leaving healthy parts of the body unscathed, reducing the severity of side effects.

The article explains how a new generation of nanoparticle-based medications bring anti-cancer drugs directly to the tumor. Because of their ultra-small size, particles of these drugs can slip through tiny passages in the blood vessels that nourish tumors, get inside tumors and even individual cancer cells, and do their work with precision. The article describes nanomedicines that already are in clinical trials with cancer patients and others that are moving in that direction.

More information: Tiny Tech To Treat Cancer:
[cen.acs.org/articles/90/i23/T ... ch-Treat-Cancer.html](http://cen.acs.org/articles/90/i23/T...ch-Treat-Cancer.html)

Provided by American Chemical Society

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