

Nanodiamonds delivering drugs

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Story Highlights

- Study demonstrates the usefulness of nanodiamonds in biomedicine
- Nanodiamonds used in cancer drugs don't produce the typical negative effects
- They don't induce inflammation in cells once they've done their job

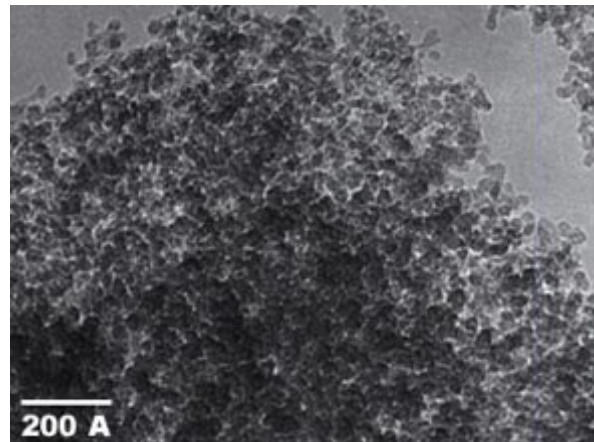
(PopSci.com) -- Granted, they might not be as pretty as their much larger counterparts, but unlike their bold and sparkling brethren, the tiny particles known as nanodiamonds might actually end up doing some good in the world.

Scientists at Northwestern University have demonstrated that these relatively new nanomaterials can shuttle chemotherapy drugs to cells without producing the negative effects of today's delivery agents.

Clusters of the nanodiamonds surrounding the drugs block them off from healthy cells, preventing unnecessary damage, and then release them upon reaching the intended targets.

Just as important, the leftover diamonds, hundreds of thousands of which could cram onto the eye of a needle, don't induce inflammation in cells once they've done their job.

The study, the first to demonstrate the usefulness of the material in biomedicine, is published online in Nano Letters.



Hundreds of thousands of nanodiamonds could fit onto the eye of a needle.