PLATINUM DRUGS FOR CANCER

The year 2018 marks 40 years since the U.S. FDA approved the first platinum-based cancer drug, cisplatin. Here, we look at how these drugs work and versions across the globe.

**KEY PLATINUM CANCER DRUGS**

Doctors administer platinum-based drugs in combination with other drugs to treat several types of cancer.

**HOW PLATINUM CANCER DRUGS WORK**

DNA CROSS-LINKS

INTERSTRAND 1% of cross-links

INTRASTRAND 96% of cross-links

Platinum-based drugs bind primarily to guanine bases in DNA strands, forming a platinum bridge. This stops the DNA strand from unzipping and replicating, stopping cancer growth and causing cell death.

**PLATINUM DRUGS APPROVED OUTSIDE THE U.S.**

Cancer cells become resistant to treatment with platinum-based drugs, limiting the drugs’ effectiveness. Scientists have developed versions to improve potency, lower side effects, or act on new cancer types.

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