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Platinum-Group Metal

National Cancer Institute

Source

National Cancer Institute. *Platinum-Group Metal*. NCI Thesaurus. Code C113467.

Six transition metals (iridium, osmium, palladium, platinum, rhodium, and ruthenium) clustered in the d-block of the periodic table (groups 8, 9, and 10, periods 5 and 6) with potential antibiotic and chemotherapeutic activities. Administration of agents containing platinum-group metals can produce DNA crosslinks and adducts in rapidly dividing cells, which can lead to bacterial lysis or eukaryotic cell apoptosis. Additionally, these elements are highly resistant to chemical and thermal challenges, which allow these metals to be used in many industrial applications.