

[Open Peer Review on Qeios](#)

Oxaliplatin

National Cancer Institute

Source

National Cancer Institute. *Oxaliplatin*. NCI Thesaurus. Code C1181.

An organoplatinum complex in which the platinum atom is complexed with 1,2-diaminocyclohexane (DACH) and with an oxalate ligand as a 'leaving group.' A 'leaving group' is an atom or a group of atoms that is displaced as a stable species taking with it the bonding electrons. After displacement of the labile oxalate ligand leaving group, active oxaliplatin derivatives, such as monoaquo and diaquo DACH platinum, alkylate macromolecules, forming both inter- and intra-strand platinum-DNA crosslinks, which result in inhibition of DNA replication and transcription and cell-cycle nonspecific cytotoxicity. The DACH side chain appears to inhibit alkylating-agent resistance. (NCI04)