In healthy cells, DNA damage occurs and is repaired by proteins, such as poly ADP-ribose polymerase (PARP), so the cell can continue to function. This damage can be spontaneous or the result of environmental factors like radiation or some chemicals.

Cancer cells also experience damage to their DNA, just like healthy cells, and use proteins such as PARP to repair the damaged DNA.

**Mechanism of Action**

**Single Strand Break (SSB)**

- PARP recruited; PARylation initiation
- Ribosylation
- PARP1
- PARP inhibition
- Accumulation of DNA damage

**SSB converts to Double Strand Break (DSB)**

- Replication fork collapses
- PARP1
- PARP1
- Accumulation of DNA damage
- Cell Death

**Platinum causes DSB**

- Replication forks collapse at additional sites of damage
- PARP1
- PARP1
- PARP inhibition causes more DSBs

**Cell Death**

**References**


*As understood through pre-clinical evidence. Intended for US media audiences only.*