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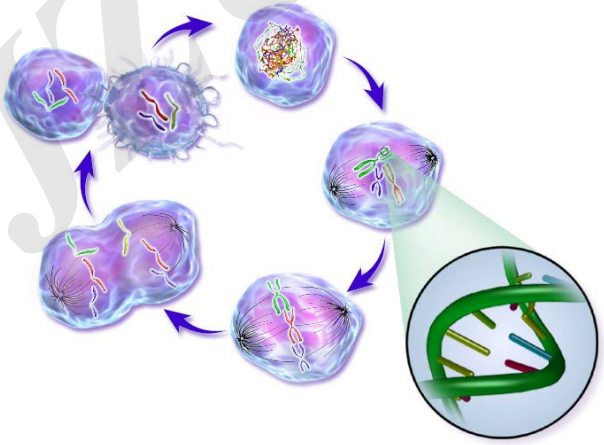
Future of PARP inhibitors in cancer treatment: overcoming resistance and enhancing efficacy with combination therapies

Key words: Poly(ADP-ribose) polymerase (PARP); PARP inhibitors (PARPi); Cancer; PARPi resistance; PARPi modulation; Cancer alternative therapy

Research Summary

This article offers an exhaustive analysis of the underlying mechanisms associated with

- **PARP inhibitor resistance**
- **potential strategies to surmount resistance**
- **evaluates the therapeutic promise of synergizing PARP inhibitors with alternative treatments.**



Life of a Cancer Cell

Source: WikiMedia

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Innovation points



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Innovation points

A series of comprehensive supplementary tables were generated to summarize the latest knowledge about PARP inhibitors alone and in combination with other therapies against various types of cancers.

Table S1 | Therapeutic role of PARPi alone and in combination against various types of ovarian cancer.

Table S2 | Therapeutic role of PARPi alone and in combination against various types of breast cancer.

Table S3 | Therapeutic role of PARPi alone and in combination against various types of prostate cancer.

Table S4 | Therapeutic role of PARPi alone and in combination against various types of pancreatic cancer.

Table S5 | Therapeutic role of PARPi alone and in combination against various types of lung cancer.

Table S6 | Therapeutic role of PARPi alone and in combination against various types of acute myeloid leukemia.

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