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Nota di contenuto Evolution of the development of PARP inhibitors -- Exploiting cancer

synthetic lethality in cancer – Lessons learnt from PARP inhibitors -Mechanisms of PARP inhibitor resistance -- Development of
homologous recombination functional assays for targeting the DDR -Clinical application of Poly(ADP Ribose) Polymerase (PARP) inhibitors in
ovarian cancer -- Clinical use of PARP inhibitors in BRCA mutant and
non-BRCA mutant breast cancer -- Development of PARP inhibitors in
targeting castration-resistant prostate cancer -- Strategies for the
management of patients with pancreatic cancer with PARP inhibitors -Combining poly (ADP-ribose) polymerase (PARP) inhibitors with
chemotherapeutic agents: Promise and challenges -- Rational
combinations of PARP inhibitors with HRD-inducing molecularly
targeted agents -- Combining PARP inhibition and immunotherapy in
BRCA-associated cancers -- Mitotic MTH1 inhibitors in treatment of

cancer -- Targeting ATR in cancer medicine -- Targeting polymerase

## Sommario/riassunto

Theta (POLq) for cancer therapy -- Targeting DNA-PK -- WRN is a promising synthetic lethal target for cancers with microsatellite instability (MSI).

This book discusses the latest developments in Poly (ADP-ribose) polymerase (PARP) inhibitor drug development. It focuses on the translational and clinical development of the latest drugs, as well as the evidence for regulatory approval of PARP inhibitors in multiple different molecular subtypes and tumor indications. The most-up-to-date information on basic scientific research on DNA repair pathways and the DNA Damage Response (DDR) is also covered. Every chapter contains insight into the preclinical, translational along with clinical aspects of a specific DDR inhibitor with key and expert opinion points reinforcing the most important concepts detailed to enable the reader to develop a deep understanding of the topic. Targeting the DNA Damage Response for Cancer Therapy comprehensively reviews the application of PARP and other DDR inhibitors across oncology disciplines. Therefore, it is a valuable resource for all medical professionals and researchers who use or who are researching the use of these inhibitors on a day-to-day basis.