



<u>CASE STUDY 1: Targeted Drug Repurposing through Domain-Specific Screening</u></u>

- Context: Enhance chemotherapy and radiotherapy in TNBC Breast cancer patients by adjuvant therapy with repurposed drugs by selective inhibition of targets involved in DNA repair pathways for accelerated cancer cell death
- Objective: To repurpose clinically approved compounds for a protein domain implicated in cellular repair mechanisms using computational screening and domain-specific analysis

Method

Flow

binding sites crucial for protein functionality

for high-throughput compound screening

Optimizations



- The compounds demonstrated enhanced interaction profiles, with several surpassing benchmark metrics
- Selected compounds showed compatibility with desirable **ADMET** properties, predicting a favourable in vivo response

