Seeking for new therapeutic approaches against ovarian cancer: exploring a new inhibitor of homologous DNA repair

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Advanced ovarian cancer is known for its poor prognosis and low survival rates (Lheureux et al., Lancet. 2019 doi: 10.1016/S0140-6736(18)32552-2). With this project, we aim to search for more effective therapeutic options against this type of cancer. In particular, a new inhibitor of homologous DNA repair with effective *in vitro* an *in vivo* antitumor activity, particularly against ovarian cancer, was recently identified by us (Raimundo et al. Br J Pharmacol 2021, https://doi.org/10.1111/bph.15506). Pre-clinical data strongly support its advantages compared to other homologous DNA repair inhibitors, namely the PARP inhibitors, demonstrating its great potential as anticancer agent, either alone or in combination therapy. The benefits that this compound may bring to the precision therapy of ovarian cancer makes it worthy of further studies envisioning its potential clinical translation.