Select Cyclacel Publications

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Kantarjian HM et al., Results of a Randomized Phase 3 Study of Oral Sapacitabine in Elderly Patients with Newly Diagnosed Acute Myeloid Leukemia (SEAMLESS). Cancer 2021; doi: 10.1002/cncr.33828.

Kawakami M et al., A Novel CDK2/9 Inhibitor CYC065 Causes Anaphase Catastrophe and Represses Proliferation, Tumorigenesis, and Metastasis in Aneuploid Cancers. Mol Cancer Ther. 2021, 20:477-489.

Do KT et al., Phase 1 safety, pharmacokinetic and pharmacodynamic study of fadraciclib (CYC065), a cyclin-dependent kinase inhibitor, in patients with advanced cancers (NCT02552953). An oral presentation delivered at the 32nd EORTC/AACR/NCI Virtual Symposium 24-25 Oct 2020.

Decker JT et al., Cyclin E overexpression confers resistance to trastuzumab through noncanonical phosphorylation of SMAD3 in $HER2^+$ breast cancer. Cancer Biol & Therapy 2020; https://doi.org/10.1080/15384047.2020.1818518.

Poon E et al., Orally bioavailable CDK9/2 inhibitor shows mechanism-based therapeutic potential in MYCN-driven neuroblastoma. J Clin Invest 2020; https://doi.org/10.1172/JCI134132.

Frame S et al., Fadraciclib (CYC065), a novel CDK inhibitor, targets key pro-survival and oncogenic pathways in cancer. PLOS One, July 9, 2020; doi.org/10.1371/journal.pone.0234103.

Siebert S et al., Targeting the rheumatoid arthritis synovial fibroblast via cyclin dependent kinase inhibition: An early phase trial. Medicine 2020, 99:26.

Keenan T et al., Expansion of phase 1 study of oral sapacitabine and oral seliciclib in patients with metastatic breast cancer and *BRCA1/2* mutations. Proc. Ann. Meeting AACR, 2019, Mar 29–Apr 3; Atlanta, GA, Abstract CT050.

Do KT et al., Phase I safety, pharmacokinetic and pharmacodynamic study of CYC065, a cyclin-dependent kinase inhibitor, in patients with advanced cancers (NCT02552953). Proc. Ann. Meeting AACR, 2018, Apr 14-18; Chicago, IL, Abstract CT037.

Chen R et al., Strategic combination of the cyclin-dependent kinase inhibitor CYC065 with venetoclax to target anti-apoptotic proteins in chronic lymphocytic leukemia. Proc. Ann. Meeting AACR, 2018, Apr 14-18; Chicago, IL, Abstract 3905.

Kantarjian H et al., Results of a Phase 3 Study of Elderly Patients with Newly Diagnosed AML Treated with Sapacitabine and Decitabine Administered in Alternating Cycles. Blood 2017, 130: Abstract 891.

Whittaker SR et al., Molecular profiling and combinatorial activity of CCT068127: A potent CDK2 and CDK9 inhibitor. Mol Oncol. 2017 Oct 24; doi: 10.1002/1878-0261.12148.

Moureau S et al., Identification of pharmacodynamic markers, sensitive target indications and potential combinations. Proc. Ann. Meeting AACR, 2017, Apr 1-5; Washington, D.C., Abstract 4178.

Kawakami M et al., Next-Generation CDK2/9 Inhibitors and Anaphase Catastrophe in Lung Cancer. J Natl Cancer Inst. 2017, 109(6): djw297.

Moureau S et al., Therapeutic potential of novel PLK1 inhibitor CYC140 in esophageal cancer and acute leukemia. 28th EORTC-NCI-AACR Molecular Targets and Cancer Therapeutics; 2016 Nov 29–Dec 2; Munich, Germany. Abstract 355.

Poon E et al., The small molecule CDK2 and CDK9 inhibitors CYC065 and CCT68127 are potent inhibitors of MYCN via transcriptional repression. Childhood Cancer Meeting 2016, Sept 5–7, London, UK, Abstract 1-19.

Cocco E et al., Dual CCNE1/PIK3CA targeting is synergistic in CCNE1-amplified/PIK3CA-mutated uterine serous carcinomas in vitro and in vivo. Br J Cancer 2016. 115:303-11.

Tolaney, SM et al., Phase I study of sapacitabine and seliciclib in patients with advanced solid tumors. J Clin Oncol 34, 2016 (suppl; Abstract 2503).

Frame S et al., CYC065, a novel CDK2/9 inhibitor, is an effective inducer of cell death and synergizes with BCL2 and BET inhibitors in B-cell lymphoma, including double-hit lymphomas. Proc. 107th Ann. Meeting AACR, 2016, Apr 16-20; New Orleans, LA, Abstract 1309.

Blake DG et al., Molecular basis for clinical development in basal-like triple-negative breast cancer. Proceedings of the 38th Annual CTRC-AACR San Antonio Breast Cancer Symposium: 2015 Dec 8-12; San Antonio, TX. Philadelphia, PA: AACR; Cancer Res 2016;76 (4 Suppl): Abstract P5-03-10.

Cocco E et al., Cyclin E amplification predicts sensitivity of primary Uterine Serous Carcinoma (USC) cell lines to the cdk2 inhibitor CYC065. Proc. 106th Annual Meeting AACR, 2015, Apr 18-22; Philadelphia, PA, Abstract 3103.

Frame S et al., CYC065, potential therapeutic agent for AML and MLL leukaemia. Proceedings of the Annual Meeting of the Society of Hematologic Oncology (SOHO), 2014, Huston, Texas (TX), Sept 17-20, Abstract 209.

Shapiro GI et al., Responses to sequential sapacitabine and seliciclib in patients with BRCA-deficient solid tumors. Proceedings of the 104th Annual Meeting AACR; 2013, Apr 6-10; Washington, DC. Philadelphia, PA: AACR; 2013. Abstract LB-202.

Zheleva D et al., Parameters improving the therapeutic window of Compound 4, a potent and selective Polo-like kinase 1 inhibitor: in vitro studies. National Cancer Research Institute (NCRI) Cancer Conference 2012, Nov 4-7; Liverpool, UK. NCRI; Nov 2012. Abstract B15.

Kantarjian H et al., Oral sapacitabine for the treatment of acute myeloid leukaemia in elderly patients: a randomised phase 2 study. Lancet Oncol. 2012, 13:1096-1104.

Frame S et al., Potent and selective small molecule inhibitors of Polo-like kinase 1: Biological characterization. Proceedings of the 103rd Annual Meeting AACR; 2012, Mar 31-Apr 4; Chicago, Illinois. Philadelphia, PA: AACR; 2012. Abstract 2814.

Scaltriti M et al., Cyclin E amplification/overexpression is a mechanism of trastuzumab resistance in HER2+ breast cancer patients. Proc Natl Acad Sci USA. 2011, 108:3761-3766.

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Hollick JJ et al., Discovery, biological characterization and oral antitumor activity of polo-like kinase 1 (Plk1) selective small molecule inhibitors. Proceedings of the 101st Annual Meeting AACR; 2010, Apr 17-21; Washington, DC, Abstract 4435.

Galimberti F et al., Targeting the cyclin E-Cdk-2 complex represses lung cancer growth by triggering anaphase catastrophe. Clin. Cancer Res. 2010, 16:109-20.

Kantarjian H et al., Phase I clinical and pharmacokinetic study of oral sapacitabine in patients with acute leukemia and myelodysplastic syndrome. J Clin Oncol. 2010, 28:285-291.

Select External Publications

Lai LP et al., Sensitivity of oncogenic KRAS-expressing cells to CDK9 inhibition. SLAS Discovery. April 24, 2021; doi.org/10.1177/24725552211008853.

Somarelli JA et al., A precision medicine drug discovery pipeline identifies combined CDK2 and 9 inhibition as a novel therapeutic strategy in colorectal cancer. Mol Cancer Ther. 2020, 19: 2516-2527.

Blake DR et al., Application of a MYC degradation screen identifies sensitivity to CDK9 inhibitors in KRAS-mutant pancreatic cancer. Science Signal. Jul 16, 2019, 12(590):eaav7259. doi: 10.1126/scisignal.aav7259.

Luo J et al., A genome-wide RNAi screen identifies multiple synthetic lethal interactions with the Ras oncogene. Cell 2009, 137:835–848.