

## Cyclacel Publication List Website Version

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**Do KT**, Frej KBH, Quinn N, Bhushan K, Pruitt-Thompson S, Zheleva D, Blake D, Chiao J, Shapiro GI. 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 32<sup>nd</sup> EORTC/AACR/NCI Virtual Symposium 24-25 October 2020.**

**Decker JT**, Kandagatla P, Wan L, Bernstein R, Ma JA, Shea LD, and Jeruss JS. 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**, Liang T, Jamin Y, Walz S, Kwok C, Hakkert A, Barker K, Urban Z, Thway K, Zeid R, Hallsworth A, Box G, Ebus ME, Licciardello MP, Sbirkov Y, Lazaro G, Calton E, Costa BM, Valenti M, Brandon ADH, Webber H, Tardif N, Almeida GS, Christova R, Boysen G, Richards MW, Barone G, Ford A, Bayliss R, Clarke PA, Bono JD, Gray NS, Blagg J, Robinson SP, Eccles SA, Zheleva D, Bradner JE, Molenaar J, Vivanco I, Eilers M, Workman P, Lin CY, and Chesler L. 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**, Saladino C, MacKay C, Atrash B, Sheldrake P, McDonald E, Clarke PA, Workman P, Blake D, Zheleva D. 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](https://doi.org/10.1371/journal.pone.0234103).

**Siebert S**, Pratt AG, Stocken DD, Morton M, Cranston A, Cole M, Frame S, Buckley CD, Ng W-F, Filer A, McInnes IB, Isaacs JD. Targeting the rheumatoid arthritis synovial fibroblast via cyclin dependent kinase inhibition: An early phase trial. **Medicine 2020, 99:26.**

**Keenan T**, Liu D, Elmarakeby H, Stover D, Kochupurakkal B, Tracy A, Danielczyk E, Anderson L, Andrews C, Reardon B, Overmoyer B, Winer EP, Zheleva D, Blake D, Chiao J, Allen EV, Shapiro GI, Tolaney SM. Expansion of phase 1 study of oral sapacitabine and oral seliciclib in patients with metastatic breast cancer and *BRCAl/2* mutations. **Proc. Ann. Meeting AACR, 2019, Mar 29 – Apr 3; Atlanta, GA, Abstract CT050.**

**Wierda WG**, Lee S, Chen R, Zheleva D, Blake D, Chiao J, Plunkett W. A Phase I Study Combining CDK2/9 Inhibitor CYC065 with Venetoclax, a BCL2 Inhibitor, to Treat Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL). **ASH Ann. Meeting and Exposition; 2019, Dec 7 – 10; Orlando, FL, Abstract 1761.**

**Borthakur G**, Kadia TM, Azzawi HI, Zheleva D, Blake D, Chiao J. Combining CDK2/9 Inhibitor CYC065 with Venetoclax, a BCL2 Inhibitor, to Treat Patients with Relapsed or Refractory AML or MDS. **ASH Ann. Meeting and Exposition; 2019, Dec 7 – 10; Orlando, FL, Abstract 1379.**

**[Kadia TM](#), Borthakur G, Jabbour E, Konopleva M, Ravandi F, DiNardo C, Zheleva D, Blake D, Chiao J.** An Oral Combination Study of Novel Nucleoside Analogue Sapacitabine and BCL2 Inhibitor Venetoclax to Treat Patients with Relapsed or Refractory AML or MDS. **ASH Ann. Meeting and Exposition; 2019, Dec 7 – 10; Orlando, FL, Abstract 3926.**

**[Chantkran W](#), Zheleva D, Frame S, Hsieh Y-C, Wheadon H and Copland M.** Combination of CYC065, a second generation CDK2/9 inhibitor, with venetoclax or standard chemotherapy – a novel therapeutic approach for acute myeloid leukemia (AML). **ASH Ann. Meeting and Exposition; 2019, Dec 7 – 10; Orlando, FL, Abstract 3938.**

**[Kawakami M](#), Mustachio LM, Chen Y, Chen Z, Roszik J, Liu X, Dmitrovsky E.** Next Generation CDK2/9 Inhibitor CYC065 Triggers Anaphase Catastrophe in Diverse Aneuploid Cancers and Markedly Inhibits Growth and Metastasis. **Proc. Ann. Meeting AACR, 2019, Mar 29 – Apr 3; Atlanta, GA, Abstract 4407.**

**[Do KT](#), Chau N, Wolanski A, Beardslee B, Hassinger F, Bhushan K, Pruitt-Thompson S, Scotton A, Frame S, Zheleva DI, Blake D, Chiao J, Shapiro GI.** 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](#), Chen Y, Frame S, Blake D, Wierda WG, Zheleva D, Plunkett W.** 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](#), Begna K, Altman J, Goldberg S, Sekeres M.A., Strickland S, Rubenstein E, Arellano M, Claxton D, Baer M.R., Gautier M, Berman E, Seiter K, Solomon S.R., Schiller G, Luger S, Butrym A, Gaidano G, Thomas X, Montesinos P, Rizzieri D, Quick D, Agura E, Venugopal P, Subramanian J, Maness L, Robert D-E, Hicheri Y, Kadia T, Ravandi F, Buyse M, Chiao J. H.** 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: abst 891**

**[Rao SS](#), Stoehr J, Dokic D, Wan L, Decker JT, Konopka K, Thomas AL, Wu J, Kaklamani VG, Shea LD, Jeruss JS.** Synergistic effect of eribulin and CDK inhibition for the treatment of triple negative breast cancer. **Oncotarget 2017, 8(48):83925-83939**

**[Whittaker SR](#), Barlow C, Martin MP2, Mancusi C, Wagner S1, Self A, Barrie E, Te Poele R, Sharp S, Brown N, Wilson S, Jackson W, Fischer PM, Clarke PA, Walton MI, McDonald E, Blagg J, Noble M, Garrett MD, Workman P.** Molecular profiling and combinatorial activity of CCT068127: A potent CDK2 and CDK9 inhibitor. **Mol Oncol. 2017 Oct 24. doi: 10.1002/1878-0261.12148.**

**[Kawakami M](#), Roszik J, Zheng L, Kurie J, Mustachio LM, Liu X, Dmitrovsky E.** The next generation CDK2/9 inhibitor CYC065 elicits marked antineoplastic effects in lung cancer by engaging anti-metastatic pathways. **Proc. Ann. Meeting AACR, 2017, Apr 1 - 5; Washington, D.C., Abstract 128.**

**Moureau S, MacKay C, Saladino C, Pohler E, Kroboth K, Hollick J, Zheleva D, Frame S, Blake D.** 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, Lisa, Mustachio M, Rodriguez-Canales J, Mino B, Roszik J, Tong P, Wang J, J. Lee J, Myung JH, Heymach JV, Johnson FM, Hong S, Zheng L, Hu S, Villalobos PA, Behrens C, Wistuba I, Freemantle S, Liu X, Dmitrovsky E.** Next-Generation CDK2/9 Inhibitors and Anaphase Catastrophe in Lung Cancer. **J Natl Cancer Inst. 2017. 109(6): djw297**

**S. Moureau, E. Pohler, K. Kroboth, C. Saladino, C. MacKay, J. Hollick, D. Zheleva, S. Frame, D. Blake.** 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, Jamin Y, Walz S, Hakkert S, Kwok C, Hallsworth A, Thway K, Barker K, Sbirkov Y, Pickard L, Urban Z, Tardif N, Webber H, Box G, Valenti M, De Haven Brandon A, Petrie K, Ebus M, Molenaar J, Eccles S, Robinson SP, Zheleva D, Eilers M, Workman P, Chesler L.** The small molecule CDK2 and CDK9 inhibitors CYC065 and CCT68127 are potent inhibitors of MYCN via transcriptional repression. **Childhood Cancer Meeting 2016, September 5 – 7th, London, UK, Abs. 1-19**

**Cocco E, Lopez S, Black J, Bellone S, Bonazzoli E, Predolini F, Ferrari F, Schwab CL, Menderes G, Zammataro L, Buza N, Hui P, Wong S, Zhao S, Bai Y, Rimm DL, Ratner E, Litkouhi B, Silasi DA, Azodi M, Schwartz PE, Santin AD.** Dual CCNE1/PIK3CA targeting is synergistic in CCNE1-amplified/PIK3CA-mutated uterine serous carcinomas in vitro and in vivo. **Br J Cancer. 2016. 115(3):303-11**

**Sara M. Tolaney, John Frederick Hilton, James M. Cleary, Leena Gandhi, Eunice Lee Kwak, Jeffrey W. Clark, Andrew Wolanski, Tracy Demeo Bell, Scott J. Rodig, Judy H. Chiao, David Blake, Geoffrey Shapiro.** Phase I study of sapacitabine and seliciclib in patients with advanced solid tumors. **J Clin Oncol 34, 2016 (suppl; abstr 2503).**

**Kawakami M, Liu X, Mustachio LM, Sekula DJ, Hu S, Zheng L, Rodriguez-Canales J, Mino B, Villalobos PA, Behrens C, Wistuba I, Freemantle SJ, Dmitrovsky E.** Antineoplastic activity of the novel CDK2/9 inhibitor CCT68127 occurs via induced anaphase catastrophe and inhibition of PEA15 phosphorylation in lung cancer. **Proc. 107th Ann. Meeting AACR, 2016, Apr 16-20; New Orleans, LA, Abstract 2982.**

**Frame S, Pohler E, MacKay C, Zheleva D, Blake D.** 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, MacKay C, Frame S, Zheleva D.** CYC065, a novel CDK2/9 inhibitor: Molecular basis for clinical development in basal-like triple-negative breast cancer. [abstract]. **In: Proceedings of the Thirty-Eighth 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 nr P5-03-10.**

**Hu S, Lu Y, Orr B, Godek K, Mustachio LM, Kawakami M, Sekula D, Compton DA, Freemantle S, Dmitrovsky E.** Specific CP110 Phosphorylation Sites Mediate Anaphase Catastrophe after CDK2 Inhibition: Evidence for Cooperation with USP33 Knockdown. **Mol. Cancer Ther.** 2015. 14(11):2576-85

**Aspinall C, Zheleva D, Tighe A, Taylor S.** Mitotic entry: Non-genetic heterogeneity exposes the requirement for Plk1. **Oncotarget**, 2015, 6 (34): 36472.

**Craig MacKay, Sheelagh Frame, Chiara Saladino, Elizabeth Pohler, Daniella Zheleva, David G. Blake.** Molecular basis for clinical development of the novel CDK2/9 inhibitor CYC065 in oncology. [abstract]. In: **Proceedings of the AACR-NCI-EORTC International Conference: Molecular Targets and Cancer Therapeutics; 2015 Nov 5-9; Boston, MA. Philadelphia (PA): AACR; Mol Cancer Ther 2015;14(12 Suppl 2):Abstract nr B182.**

**Poon E, Jamin Y, Hakkert A, Hallsworth A, Thway K, Barker K, Sbirkov Y, Pickard L, Urban Z, Almeida G, Tardif N, Webber H, Box G, Valenti M, De Haven Brandon A, Poudel P, Sadanandam A, Eccles S, Robinson SP, Zheleva D, Petrie K, Chesler L.** Orally available small molecule CDK inhibitors CYC065 and CCT68127 prolong survival in MYCN-addicted neuroblastoma models. **4th Neuroblastoma Society Symposium 2015, 26 – 27 November, Newcastle, UK.**

**Zheleva D, Frame S, Saladino C, MacKay C & Blake D.** Molecular rationale for clinical development of CYC065 in hematology. In: **Proceedings of the Annual Meeting of the Society of Hematologic Oncology (SOHO), 2015, Houston, Texas (TX), September 16-19; SOHO, 2015, Abstract 213.**

**Kawakami M, Mustachio LM, Liu X, Hu S, Lu Y, Sekula D, Freemantle S, Dmitrovsky E.** CCT68127 is a next generation CDK2/9 inhibitor with potent antineoplastic activity against lung cancer cells. **16th World Conference on Lung Cancer, 6 – 9 September 2015, Denver, Colorado. Abstract 554**

**Hu S, Danilov A. V, Godek K, Orr B, Tafe L. J, Rodriguez-Canales J, Behrens C, Mino B, Moran C. A, Memoli V. A, Mustachio L. M, Galimberti F, Ravi S, DeCastro A, Lu Y, Sekula D, Andrew A. S, Wistuba I. I, Freemantle S, Compton D. A, Dmitrovsky E.** CDK2 Inhibition Causes Anaphase Catastrophe in Lung Cancer through the Centrosomal Protein CP110. **Cancer Research 2015, 75:2029**

**Saladino C, Frame S, Davis S, Blake D, Zheleva D.** CYC065, a novel CDK2/5/9 inhibitor: detailed mechanistic studies, determinants of sensitivity and synergistic combinations. **Proc. 106th Ann. Meeting AACR, 2015, Apr 18-22; Philadelphia, PA, Abstract 1650.**

**Cocco E, Bellone S, Lopez S, Bonazzoli E, Predolini F, Black JD, Santin AD.** Cyclin E amplification predicts sensitivity of primary Uterine Serous Carcinoma (USC) cell lines to the cdk2 inhibitor CYC065. **Proc. 106th Ann. Meeting AACR, 2015, Apr 18-22; Philadelphia, PA, Abstract 3103.**

**Kawakami M, Mustachio LM, Liu X, Hu S, Lu Y, Sekula D, Freemantle S, Dmitrovsky E.** Novel CDK2/9 inhibitor has antineoplastic activity in lung cancer by inducing anaphase catastrophe. **Proc. 106th Ann. Meeting AACR, 2015, Apr 18-22; Philadelphia, PA, Abstract 942.**

**Burnett AK**, Russell N, Hills RK, Panoskaltsis N, Khwaja A, Hemmaway C, Cahalin P, Clark RE and Milligan D. A randomised comparison of the novel nucleoside analogue sapacitabine with low-dose cytarabine in older patients with acute myeloid leukaemia. **Leukemia (2015) 29, 1312–1319.**

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**Hrabakova R**, Kollareddy M, Tyleckova J, Halada P, Hajduch M, Gadher S-J, Kovarova H. Cancer cell resistance to aurora kinase inhibitors: identification of novel targets for cancer therapy. **J Proteome Res. 2013; 12:455.**

**Guillermo Garcia-Manero**, Selina M Luger, Stuart Goldberg, Jessica K Altman, Martha Arellano, Meir Wetzler, Karen Seiter, Judy Chiao, and Hagop M Kantarjian. A Randomized Phase II Study Of Sapacitabine In MDS Refractory To Hypomethylating Agents. **Blood 2013 122:2752**

**Giordano SB**, Jeruss JS, Bethke KP, Hansen NM, Khan S, Von Roenn J, Rosen S, Gradishar WL, Siziopikou KP, Meservey C, and Kaklamani V. Neoadjuvant phase II trial with carboplatin and eribulin in triple negative breast cancer patients. CTRC-AACR San Antonio Breast Cancer Symposium, 2013 Dec 10-14; San Antonio, TX. **Abstract P3-14-14.**

**Geoffrey I. Shapiro**, John Hilton, James M. Cleary, Sara M. Tolaney, Leena Ghandi, Eunice L. Kwak, Jeffrey W. Clark, Andrew Wolanski, Tracy Bell, John Schulz, Sheelagh Frame, Chiara Saladino, Morag Hogben, Scott J. Rodig, Judy H. Chiao, David Blake. Responses to sequential sapacitabine and seliciclib in patients with BRCA-deficient solid tumors. In: **Proceedings of the 104th Annual Meeting of the American Association for Cancer Research; 2013 Apr 6-10; Washington, DC. Philadelphia (PA): AACR; 2013. Abstract nr LB-202.**

**Farhad Ravandi**, Tapan M. Kadia, Gautam Borthakur, William G. Wierda, Stuart L. Goldberg, Meir Wetzler, Parameswaran Venugopal, Karen Seiter, Judy Chiao, MD and Hagop M. Kantarjian. Pooled Analysis of Elderly Patients with Newly Diagnosed AML Treated with Sapacitabine and Decitabine Administered in Alternating Cycles. **Blood (ASH Annual Meeting Abstracts) 2012 120: Abstract 2630.**

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[Geoffrey Shapiro](#), Eunice Lee Kwak, James M. Cleary, Sara Tolaney, Leena Gandhi, Jeffrey W. Clark, Andrew Wolanski, Sheelagh Frame, Scott J. Rodig, Judy H. Chiao. Phase I study of sequential sapacitabine and seliciclib in patients with advanced solid tumors. *J Clin Oncol* 30, 2012 (suppl; abstr 3053).

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