

# Preclinical services reading list 2024

We've compiled a selection of recent publications that utilizes Revvity's Preclinical Services to enhance scientific research and progress drug discovery. It covers areas including cell panel screening, cell line engineering services, assay development in immune cells, pooled screening, arrayed screening, CRISPR-based functional genomic screening, and base editing that can be applied to your research.

**1. Porreca I., Blassberg R., Harbottle J. et al.**

[An aptamer-mediated base editing platform for simultaneous knockin and multiple gene knockout for allogeneic CAR-T cells generation.](#) *Mol Ther.* 2024 Jun 26;S1525-0016(24)00423-4

**Application:** CRISPR, base editing.

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**2. Ferretti S., Hamon J., de Kanter R. et al.**

[Discovery of WRN inhibitor HRO761 with synthetic lethality in MSI cancers.](#) *Nature* 2024 629, 443-449.

**Application:** Opera Phenix, cell panel screening

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**3. Tay, T., Bommakanti, G., Jaensch, E. et al.**

[Degradation of IKAROS prevents epigenetic progression of T cell exhaustion in a novel antigen-specific assay.](#) *bioRxiv* 2024.02.22.581548.

**Application:** Arrayed T Cell CRISPRko

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**4. Shen L, Chen Y-L, Huang C-C. et al.**

[CVM-1118 \(foslinanib\), a 2-phenyl-4-quinolone derivative, promotes apoptosis and inhibits vasculogenic mimicry via targeting TRAP1.](#) *Pathol. Oncol. Res.* 2023 29:1611038

**Application:** Drug-gene CRISPR

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**5. Andrews S.L., Ghaderi-Najafabadi M., Gong P. et al.**

[SVEP1 influences monocyte to macrophage differentiation via integrin  \$\alpha4\beta1/\alpha9\beta1\$  and Rho/Rac signalling.](#)

*Biochim Biophys Acta Mol Cell Res.* 2023;1870(6):119479

**Application:** Cell line knockouts

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**6. Kim, D., Herdeis, L., Rudolph, D. et al.**

[Pan-KRAS inhibitor disables oncogenic signalling and tumour growth.](#) *Nature.* 2023 Jul;619(7968):160-166.

**Application:** 2D and 3D cell panel screening

**7. Goodstal, S.M., Lin, J., Crandall, T. et al.**

[Preclinical evidence for the effective use of TL-895, a highly selective and potent second-generation BTK inhibitor, for the treatment of B-cell malignancies.](#) *Sci Rep* 2023. 13, 20412.

**Application:** Cell panel and immune cell screening

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**8. Wischhof L., Lee H-M., Tutas J. et al.**

[BCL7A-containing SWI/SNF/BAF complexes modulate mitochondrial bioenergetics during neural progenitor differentiation.](#) *The EMBO Journal* 2022 41:e110595

**Application:** Cell engineering in iPSC cells

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**9. Snyder L.A., Damle R., Patel S. et al.**

[Niraparib Shows Superior Tissue Distribution and Efficacy in a Prostate Cancer Bone Metastasis Model Compared with Other PARP Inhibitors.](#) *Mol Cancer Ther* 2022 21 (7): 1115-1124.

**Application:** Cell panel screening

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**10. Bellail. A.C, Jin H.R., Lo H.Y., et al.**

[Ubiquitination and degradation of SUMO1 by small-molecule degraders extends survival of mice with patient-derived tumors.](#) *Sci Transl Med.* 2021 Oct 13;13(615):eabh1486.

**Application:** Pooled CRISPRko

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**11. Gozgit J.M., Vasbinder M.M., Abo R.P., et al.**

[PARP7 negatively regulates the type I interferon response in cancer cells and its inhibition triggers antitumor immunity.](#) *Cancer Cell.* 2021 13;39(9):1214-1226.e10.

**Application:** Pooled dual CRISPRi/a screen; cell panel screen; arrayed CRISPR KO screen

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**12. Pappalardi M.B., Keenan K., Cockerill M. et al.**

[Discovery of a first-in-class reversible DNMT1-selective inhibitor with improved tolerability and efficacy in acute myeloid leukemia.](#) *Nat Cancer.* 2021 Oct; 2(10): 1002-1017.

**Application:** Cell panel screening



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