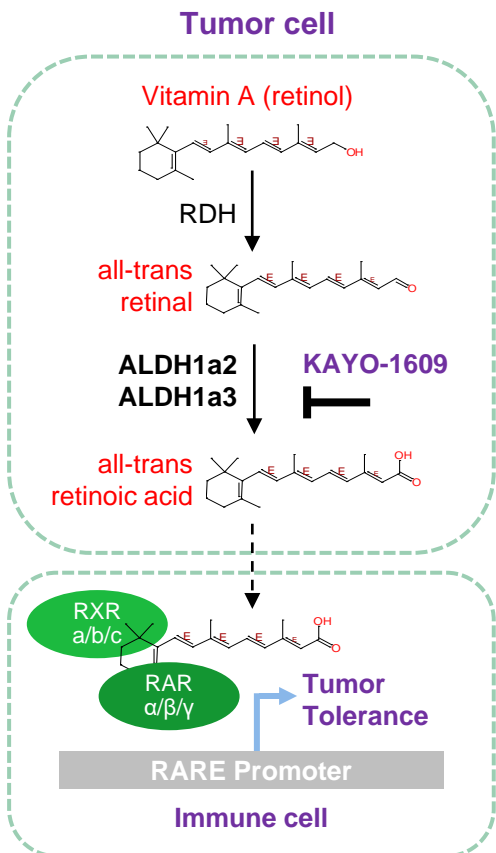
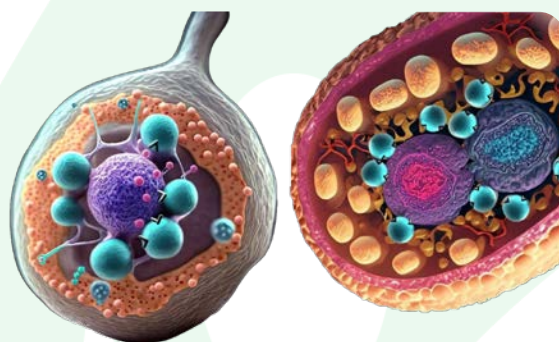


Overview

Kayothera is a preclinical stage biotechnology company developing 1st-in-class antagonists of the retinoid pathway, a central regulatory pathway historically considered undruggable. Kayothera has leveraged unique biological insights to develop a pipeline of selective, oral, small molecule retinoid antagonists for multiple indications, including cancer immunotherapy, cardiometabolic diseases (Type 2 diabetes and obesity) and Type 1 diabetes. Kayothera has secured \$11.2 million in venture capital financing, led by Accelerator Life Science Partners, with participation from other professional biotech investors, and has secured an additional \$2.7 million in government grants.

With the platform potential of multiple distinct system-specific retinoid antagonists, Kayothera has built a network of key partners in each disease area. Kayothera's lead immune oncology therapy, KAYO-1609, has been nominated as a DDC and progressed into IND-enabling studies, while additional programs will nominate a DDC in 2024.



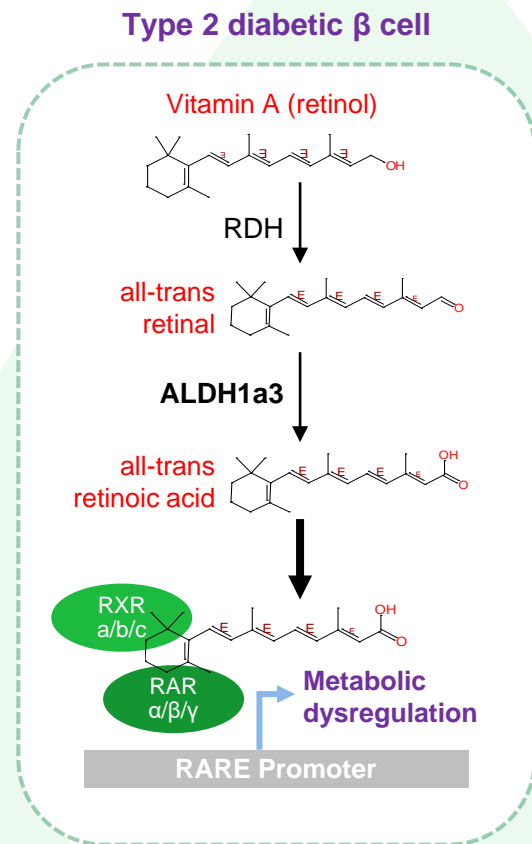
Technology

Our scientific understanding of the retinoid pathway has been built over a century of academic and commercial research, both in the lab and the clinic. Studies in both settings have shown that retinoic acid, the nuclear ligand of the retinoid pathway, is tightly regulated in a tissue-specific manner to activate the promiscuously expressed RAR nuclear receptors. Retinoid activation is responsible for immune regulation in diseases such as cancer and Type 1 diabetes through binding to RAR receptors in T cells, while production of retinoic acid in pancreas, liver or adipose tissue is an autocrine regulator of lipid metabolism that is aberrantly activated in multiple metabolic diseases.

These mechanisms have been clinically validated in randomized clinical trials in >200,000 patients and thus have attracted considerable drug development interest. Prior programs developed by large pharma were focused on drugging the RAR nuclear receptors but failed due to target promiscuity and difficult biology. Kayothera has surmounted the 'undruggability' of the retinoid pathway by identifying unique ALDH1a enzymes that are responsible for retinoic acid synthesis in each disease setting and developing isoform specific inhibitors purpose-built for each indication.

Kayothera has developed a deep pipeline of potent retinoid antagonists. Kayothera's lead oncology program, KAYO-1609, has shown potent disease modification in solid tumors and is being developed for multiple genetically defined cancer populations. KAYO-1609 is a dual ALDH1a2/ALDH1a3 inhibitor that reactivates anti-tumor immunity through CD4 polarization and antigen display in myeloid cells. KAYO-1609 shows no ADME-tox liabilities up to 1000 mg/kg PO in rats or pigs and is undergoing GLP toxicology studies to support Phase 1 trials in patients with ALDH1a2/ALDH1a3-amplified tumors.

Our rapidly maturing KAYO-1610 program has demonstrated single agent disease prevention in Type 1 diabetes and is progressing through toxicology profiling to support pediatric treatment. Additional Kayothera programs in Type 2 diabetes have demonstrated single agent activity in pancreatic regeneration in obesity-driven Type 2 diabetes, a result that was recently published in partnership with Dr. Accili at Columbia University. Kayothera is also developing a fourth program with the goal of direct weight loss through retinoid targets that have been genetically and pharmacologically validated.



Team

Kayothera was founded based on advanced biology and next-generation chemical approaches by Dr. Mark Esposito and Dr. Yibin Kang at the Ludwig Branch in Princeton University. The commercial and technical development is further supported by a team of experts at Accelerator Life Science Partners, including President & CEO Thong Q. Le and Senior Advisor Dr. Ken Mohler. Kayothera has built a deep network of top-tier drug development partners across North America, Europe, and China to advance novel chemistry from hit to IND. As the first and only retinoid antagonist company, Kayothera is leveraged to build transformational medicines for patients.



Thong Q. Le
President & CEO | Director



Mark Esposito, PhD
Founder & VP



Yibin Kang, PhD
Co-Founder



Ken Mohler, PhD
Advisor



Merika Koday, PhD
Director