



MEMORANDUM

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**Lilly and Repertoire Immune Medicines announce partnership to develop therapies for autoimmune diseases – January 29, 2026**

*Partnership aims to restore natural immune tolerance to avoid the use of immunosuppressive therapies*

Cambridge, Massachusetts-based [Repertoire Immune Medicines](#) announced a new partnership with Lilly today to develop tolerizing therapies for multiple autoimmune diseases. In patients with autoimmune disease, the body loses its natural tolerance to self-antigens or innocuous antigens. This often results in the need for immunosuppressive therapy, which can have side effects and risks. [Tolerance therapies](#), such as those under investigation by Lilly and Repertoire, aim to restore the body's natural tolerance to antigens without the need for generalized immunosuppression.

**Table of Contents**

1. [Repertoire to receive up to \\$2.69 billion with additional tiered royalties](#)
2. [Repertoire's DECODE platform is experimental and computational, aiming to program immune responses to disease](#)
3. [Partnership continues to expand the breadth of Lilly's recent collaborations spanning muscle maintenance, AI, and more](#)
4. [Close Concerns' Questions](#)

**Repertoire to receive up to \$2.69 billion with additional tiered royalties**

Under the agreement, Repertoire will receive an impressive upfront payment of \$85 million and up to an additional \$1.84 billion for achieving development and commercial milestones. Repertoire will also receive tiered royalties on net sales. Repertoire will lead the development process until candidate nomination using its DECODE discovery platform. Lilly will then lead clinical development, manufacturing, regulatory affairs, and commercialization. Repertoire has previously announced partnerships with Bristol Myers Squibb (BMS), Genentech, and Pfizer. While specific autoimmune diseases were not mentioned in today's release, we imagine that tolerizing therapies may provide promise for T1D.

**Repertoire's DECODE platform is experimental and computational, aiming to program immune responses to disease**

The [DECODE](#) platform is a T cell receptor (TCR)-epitope discovery platform. It focuses on the immune synapse, which is the complex interface between T cells, part of the adaptive immune system, and a cell that presents an intracellular antigen on its surface for immune sensing. Identifying the intricate components of the immune synapse will allow the development of medicines for various autoimmune diseases. The platform includes:

- MEDi to assess the presentation of disease-associated antigens;
- Repertoire's Multimer technology to measure T cell specificity and phenotype;
- MCR, to determine the specificity of T cell receptors; and
- NEPTUNE, a machine learning platform that integrates and augments the massive amounts of immune code data.

## Partnership continues to expand the breadth of Lilly’s recent collaborations spanning muscle maintenance, AI, and more

In the past six months alone, Lilly has announced five partnerships spanning a range of therapeutic areas. This emphasizes the company’s investment in innovation and signals its financial ability to invest in experimental research. See the table below for further detail.

Company and Date	Details	Financials
<a href="#">Chai Discovery</a> , January 9, 2026	The companies plan to accelerate biologics discovery using AI. Chai will build an AI model exclusively for Lilly’s use by training on the company’s proprietary discovery data and customized to its workflows.	Not disclosed.
<a href="#">MEDI&amp;GENE</a> , December 17, 2025	The partnership aims to advance a next-generation therapeutic for obesity. It will encompass strategic capital, laboratory space, and technology to enhance research and development capabilities.	Not disclosed.
<a href="#">Insilico</a> , November 10, 2025	The goal is to discover and advance innovative therapies. The partnership builds on a prior software licensing agreement from 2023 to expand the scope of Lilly’s use of Insilico’s generative AI capabilities to include full-scale drug development.	Insilico is eligible to receive over \$100 million in upfront payments, milestones, and tiered royalties tied to the commercialization of any resulting therapies.
<a href="#">NVIDIA</a> , October 28, 2025	Lilly and NVIDIA plan to build a supercomputer that would power its “AI factory,” a computing infrastructure that manages data processing, storing, and training.	Not disclosed.
<a href="#">Gate Bioscience</a> , July 25, 2025	The companies plan to develop “molecular gate” drugs that eliminate harmful extracellular proteins. The collaboration will leverage Gate Bioscience’s proprietary <a href="#">Molecular Gate Discovery Platform</a> to develop medicine targeting any secreted protein of interest, as well as Lilly’s expertise in small molecule therapies.	Gate Bioscience will receive up to \$856 million in upfront payment, equity investment, and potential milestone payments, as well as tiered royalties on global sales. Gate Bioscience will also receive support from <a href="#">Lilly ExploR&amp;D</a> , an internal development program under <a href="#">Lilly Catalyze360</a> .

### Close Concerns’ Questions

1. How will Repertoire’s partnership with Lilly align with its previous work with BMS, Genentech, and Pfizer? Do these collaborations focus on different research areas?
2. How might tolerizing therapies, if applied to T1D, compare to Sanofi’s Tzield, a monoclonal antibody that can delay the development of T1D?
3. Do tolerizing therapies help improve therapeutic tolerance, allowing patients to take additional medications?

-- by *Nour Khachemoune, Monica Oxenreiter, and Kelly Close*