

# How RCH Solutions Helped Takeda Break Through IT Barriers to Scientific Discovery

## Challenge

### Unlocking the Full Potential of the Public Cloud for Advanced Scientific Computing at Scale

Takeda is a global, research and development-driven company facing many of the same challenges sweeping through the industry—how to best leverage emerging and established technologies to accelerate scientific discovery.

While the company had already embraced the idea of a public Cloud as a strategic platform within its numerous R&D businesses, evolving its legacy infrastructure, operations, and workflows to maximize the benefits of such an open platform while maintaining compliance with departmental and organizational standards, has required significant effort. In addition, the growing need to scale appropriately to support complex experiments— and pivot quickly based on the viability and value of a continued investment—was driving Takeda’s goal of a more flexible and highfunctioning Cloud environment.

In order to realize their goal, executives at Takeda knew they needed a strategic plan—and a supportive partner—to unlock the true potential of Cloud adoption: Swift and seamless collaboration between internal and external partners; better operational efficiency; reduced costs; and scientific computing at scale.

However, the need to supplement internal IT talent with an outsourced provider can be challenging, particularly for R&D-related needs. Hiring a third-party generalist to tackle specialized scientific computing initiatives exposes a critical area of the business to increased risk due to operational challenges (like knowledge transfer, ramp-up time, and project ownership), and in most cases fails to provide the continuity and accountability projects of that scope require for success.

For Takeda to overcome that challenge, they would need to source an experienced IT partner with a specific background in scientific computing focused in the Life Sciences.

## Solution

### An Experienced Scientific Computing Partner with a Strategic Cloud Roadmap

With their challenges clearly defined, Takeda selected RCH Solutions as their partner in this critical effort. As a proven provider of effective crossfunctional IT support for previous Takeda initiatives, RCH had established itself as a nimble and flexible partner with the scientific computing experience required to step-in, scale-up and solve the issues unique to a research-IT environment.



### About Takeda:

Takeda is a patient-focused, innovation-driven global pharmaceutical company that builds on a distinguished 235-year history, aspiring to bring better health and a brighter future for people worldwide.

This case study outlines how RCH Solutions helped Takeda manage a lapse in outsourced services without disruption or risk.

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In addition, with a limited scope and under an accelerated timeline, RCH's ability to provide whole stack support—from platforms to workflow—while leveraging the latest public Cloud technologies for novel approaches to research, would provide Takeda with the comprehensive yet specialized support it required.

Under its Managed Services model for strategy and support, the RCH team was able to help Takeda unify its Ops and DevOps objectives by executing RCH-proven best practices for an R&D public Cloud platform, including prioritizing Infrastructure as Code (IaC) for rapid solution deployments, and creating traceable, repeatable, and scalable platforms for innovation.

In addition, the team provided critical security support, helping Takeda score well through audit and establish remediation plans for rapid and repeatable action when necessary. Most importantly, the guidance and solutions the team offered enabled Takeda further develop an elastic HPC environment, with a breadth of computing resources (CPUs, GPUs, high I/O, etc.), in support of its Cloud adoption and evolution goals.

For Takeda, [results] included a significant reduction in public Cloud costs and an accelerated cycle between concept and Research work-flows.



## Results

### Accelerated Scientific Discovery for Less Cost

Through its engagement with RCH Solutions, Takeda's research community realized improved collaboration and more seamless access to critical scientific computing tools, including Analytics, Artificial Intelligence (AI) and Cloud capabilities, resulting in greater operational efficiency between IT and the Businesses.

"Implementing our Managed Services model within Takeda enabled RCH to quickly pick-up responsibilities when our customer faced new hurdles," said Phil Eschallier Chief Technology Officer. "In essence, the model allows us to become a 'solutions collaborator', which typically yields the best results for customers who may be experiencing challenges on multiple fronts."

For Takeda, that included a significant reduction in public Cloud costs and an accelerated cycle between concept and Research work-flows.

"When researchers have the confidence that their IT or Bio-IT partner is equipped to understand their unique needs and challenges, they can return their focus to science," Eschallier continued. "And with a roadmap for research computing now defined to leverage the Cloud to its fullest potential, and with RCH as the enabler, the R&D teams at Takeda can do just that."

### About RCH Solutions

RCH Solutions (RCH) is a global provider of computational science expertise, helping Life Sciences and Healthcare companies of all sizes clear the path to discovery for more than 27 years. Learn more at [www.rchsolutions.com](http://www.rchsolutions.com).

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