

AAS @ Roche

Overview

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2026

Our purpose



Doing now what patients need next

Roche at a glance

Who we are and what we do



129 years

founded in Basel in 1896



**A leader in
healthcare R&D**

with CHF 12 billion invested in
2025



**3 Nobel Prizes and
44 Prix Galien**

since 1974



CHF 61.5 billion*

in Roche Group sales in 2025



**46 Roche medicines
& 103 diagnostics****

on the WHO List of
Essential Medicines & Tests



>100,000

dedicated employees
worldwide



~39 million people

treated with our medicines
in 2025



~31 billion tests

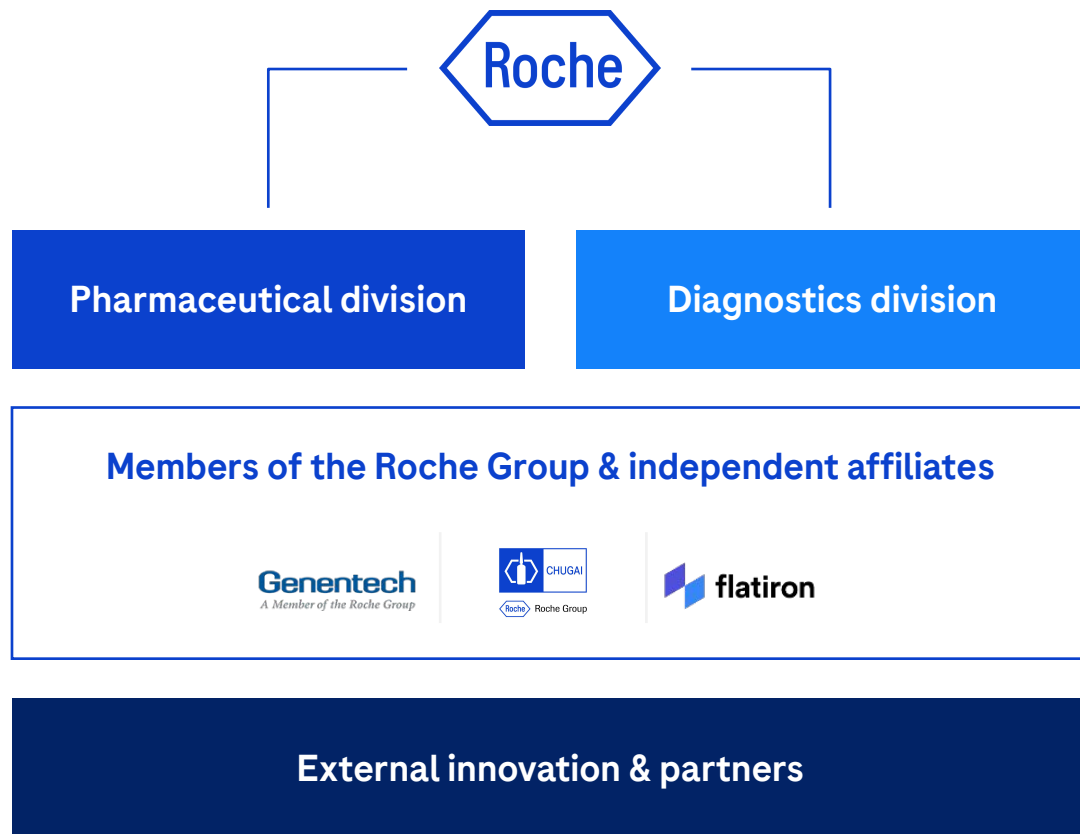
conducted with our
Diagnostics products in 2025

*Unless otherwise stated, all figures are at constant exchange rates (CER; average rates 2025)

** Medicines and tests that have either been developed or acquired by Roche

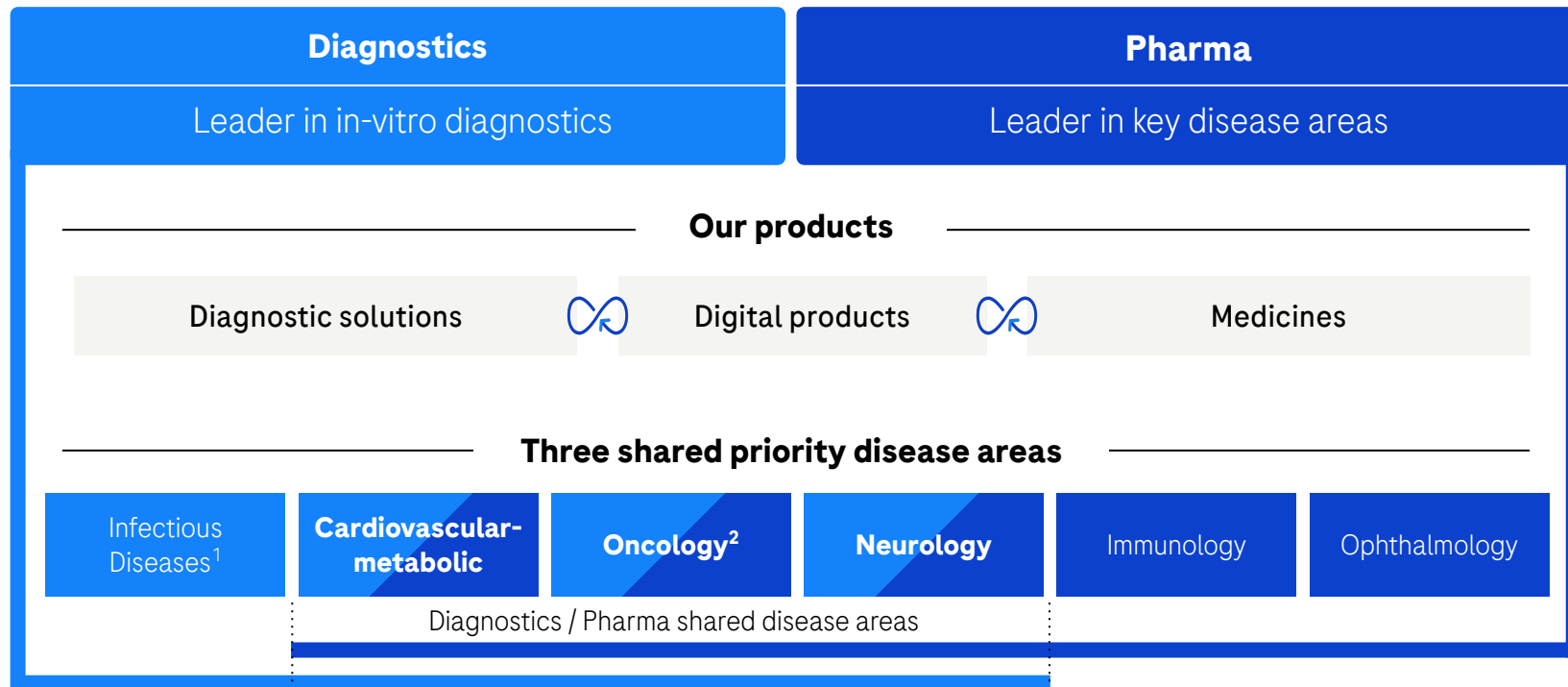
Our structure and setup

Providing scientific freedom to work, think and address problems in different ways



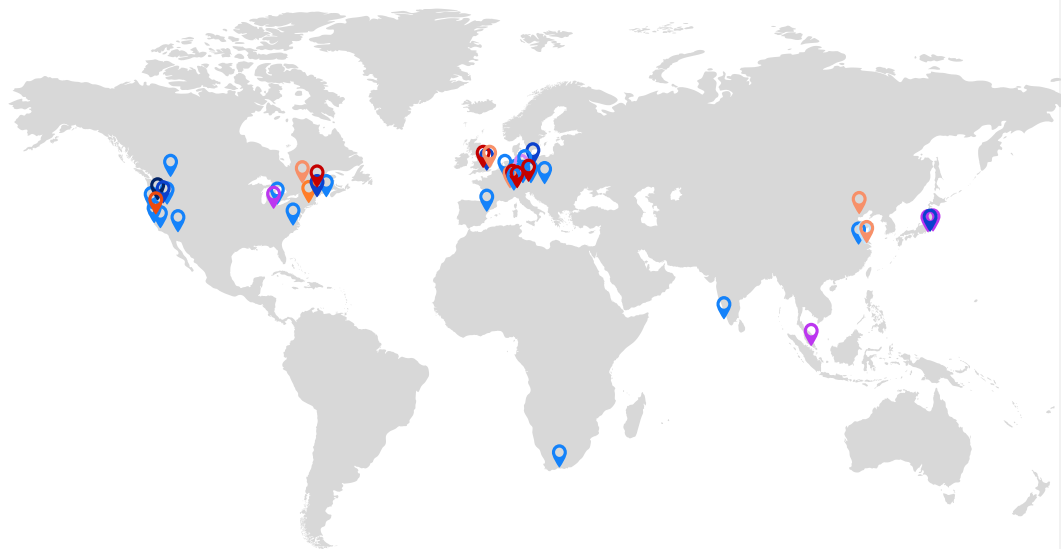
Two divisions working together to address healthcare needs

Three shared priority disease areas between Diagnostics and Pharma



¹ Also relevant for Antimicrobial Resistance in Pharma; ² Includes Hematology in Pharma

Roche R&D locations



Roche Diagnostics R&D

- | | | |
|---------------------------------|-----------------------------|-----------------------------------|
| ▪ Basel , Switzerland | ▪ Vienna , Austria | ▪ Tucson , USA |
| ▪ Rotkreuz , Switzerland | ▪ Sant Cugat , Spain | ▪ San Diego , USA |
| ▪ Berlin , Germany | ▪ Cambridge , USA | ▪ Seattle , USA |
| ▪ Mannheim , Germany | ▪ Indianapolis , USA | ▪ Carlsbad , USA |
| ▪ Penzberg , Germany | ▪ Morrisville , USA | ▪ Pune , India |
| ▪ Ludwigsburg , Germany | ▪ Santa Clara , USA | ▪ Suzhou , China |
| ▪ Penzberg , Germany | ▪ Pleasanton , USA | ▪ Cape Town , South Africa |

Genentech R&D (gRED)

- **South San Francisco**, USA

Flatiron Health

- **San Francisco**, USA
- **New York City**, USA
- **London**, UK
- **Berlin**, Germany
- **Tokyo**, Japan

Roche Pharma Product Development

- **Mississauga**, Canada
- **Beijing**, China
- **Shanghai**, China
- **Basel**, Switzerland
- **South San Francisco**, USA
- **Welwyn**, UK

Roche R&D (pRED)

- **Basel**, Switzerland
- **Greater Munich (Penzberg)**, Germany
- **New York**, USA
- **Philadelphia**, USA
- **Welwyn**, UK
- **Zurich**, Switzerland

Chugai R&D

- **Yokohama**, Japan
- **Ukima**, Japan
- **Singapore**, Singapore

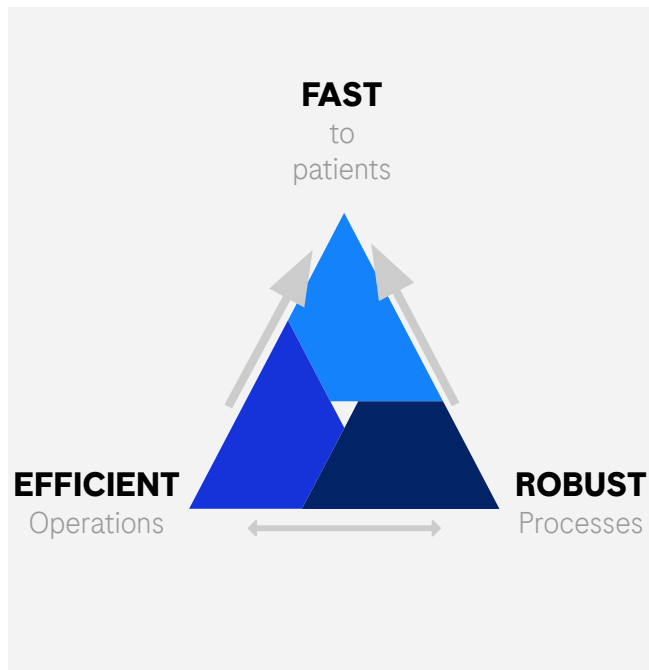
China Innovation Center of Roche (CiCoR)

- **Shanghai**, China

We leverage Data & AI to manage our growing complexity

One of the industry's biggest & most complex drug pipeline, posing a positive challenge to our operations

Our Performance Promises



Addressing our changing reality



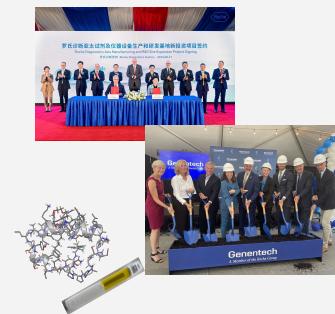
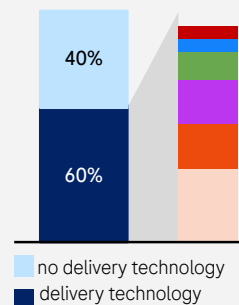
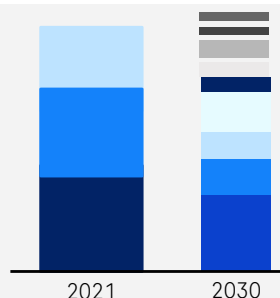
Higher product mix

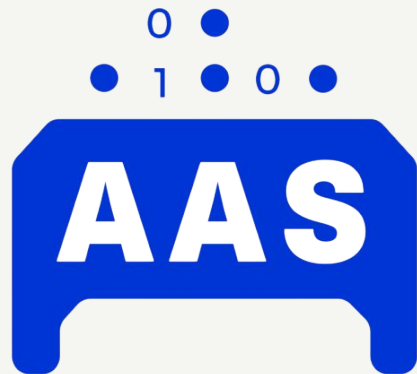


60% with devices



New Sites in the pipeline & **PT Incretin (CT-388)**





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The Age of Industrial AI & the Human Augmentation - Common pitfalls

🔥 70% of Digital Transformations Fail

🪄 AI ≠ Magic Stick
You can't "AI" your way out of a broken process. Automating chaos = faster chaos

💾 Data Drama
Garbage in, garbage out!

👤 The Human Element is Always the Hardest

🧸 The "Shiny Toy" Syndrome

**To be successful we need to
focus on business,
technology, AND people**



Why is this necessary?

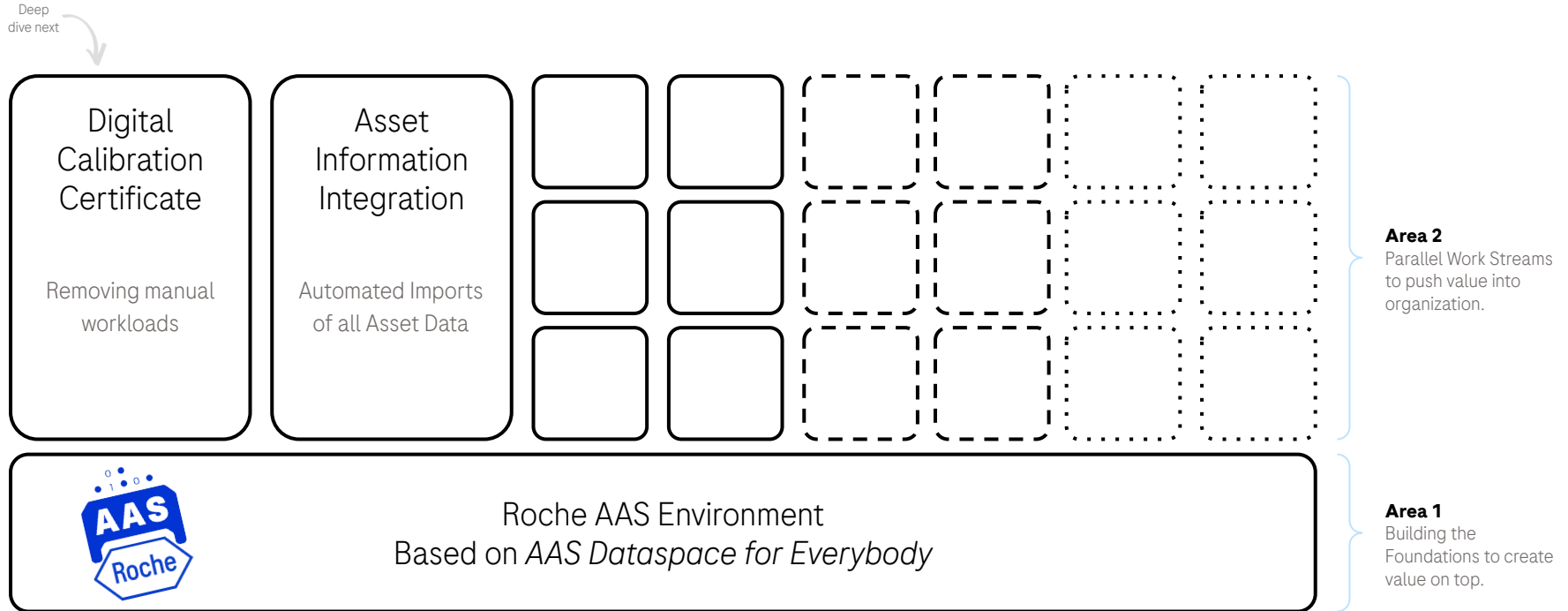
Automated Manufacturing



Manual Data Verification



What is Roche doing?



= currently in development



= currently in planning



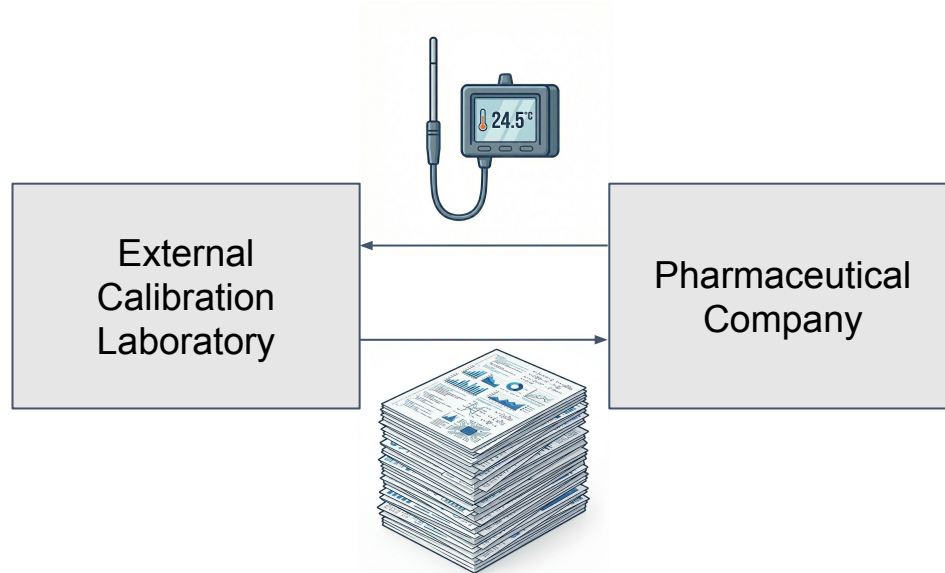
= future roadmap

Focus: Digital Calibration Certificate

Ten-thousands of external calibrations in fragmented, paper/pdf-based silos that hinder global scalability.

High manual work and labor-intensive data entry, driving up operational costs while increasing the **risk of human error**.

Missing data for analytics leads to **avoidable issues** in process transparency.

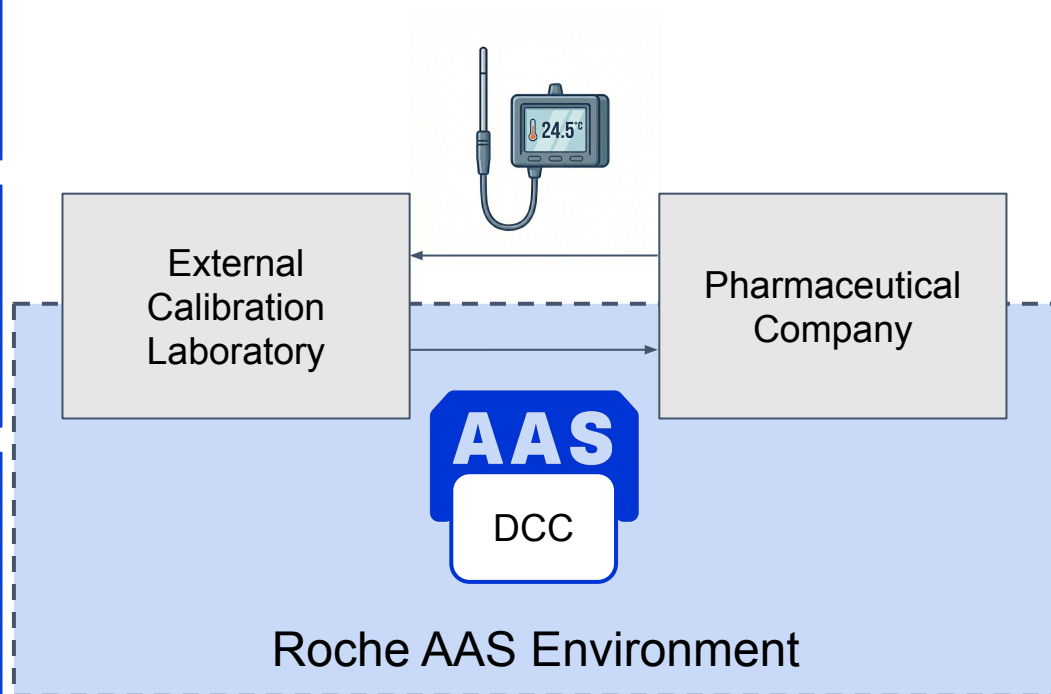


Focus: Digital Calibration Certificate

Beyond PDFs: Replaces static documents with **standardized, machine-readable digital twins** for instant interoperability.

End-to-End Automation: Enables seamless data ingestion into management systems, **eliminating manual entry and errors.**

Analytical Foundation: Provides structured, granular data submodels to power **predictive maintenance** and **trend monitoring.**



From AAS Environment to Pharma Open Data Space

ISPE and its members are developing the roadmap to introduce Industry 4.0, also referred to as the Smart Factory, to the pharmaceutical industry as Pharma 4.0™.



2025 **ISPE PHARMA 4.0™** CONFERENCE



Pharma Open DataSpace (PODS)

An open, collaborative initiative to develop and pilot open data spaces for the pharmaceutical industry – built on open source principles and federation.

Now or Never

Doing now what patients need next