



Takeda Pharmaceutical Company saved over \$60M+

Takeda achieved a 50X ROI with ParkourSC by dramatically reducing waste and spoilage of their plasma products

100% track and trace of their plasma materials

Patients with a variety of rare, life-threatening, chronic, and genetic diseases depend on the availability of high-quality drug therapies. To meet the growing demand for life-saving plasma-based drug therapies, Takeda collects and transports over 8 million liters of blood plasma from 82 donor centers to its five plasma facilities worldwide.

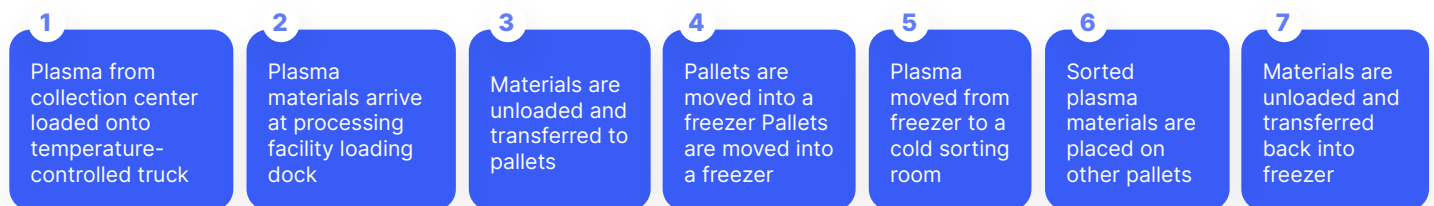
The company was losing tens of millions of dollars every year due to plasma spoilage, missing plasma pallets, re-testing labor costs, and compliance fines. The company turned to ParkourSC to provide a complete system that provides real-time, accurate monitoring of the location, dwell times, condition, and movement history of the blood plasma.

In their North American plasma facility, Takeda produces Albumin, which is used to treat rare, life-threatening, chronic, and genetic diseases. To produce Albumin, they collect and transport pallets of blood plasma from the 82 plasma services centers to the North American facility every year. The journey begins at the donor centers, where a plasma donation is put into a test tube material bottle and a small freezer.

Plasma arrives at the facility and is unloaded and transferred to pallets, which must be immediately moved to the freezer to avoid spoilage. If the batch of materials is exposed to more than 60 minutes of ambient temperature, those materials are quarantined and must be re-tested for viability, which results in extra labor costs.

When the plasma is needed for Albumin production, the pallets are moved to a cold sorting room (+5 degrees C) for sorting by origin and profile. The sorted materials are then placed on other pallets and moved back into the freezer. Dwell time is the threshold for how long the materials can be out of the freezer. If the materials exceed that time, they are discarded.

The illustration below depicts the journey of a blood plasma material, starting from the donor center to the plasma processing facility.



Before implementing ParkourSC's digital supply chain operation platform, this global pharmaceutical company relied on older, manual tracking methods which involved the use of hand-held RFID bar code scanners. RFID technology did not provide them with the timely, accurate data they needed. As a result, many plasma materials spoiled due to temperature excursions — when plasma materials are exposed to temperatures outside the recommended storage conditions. They estimated their supply chain visibility was 20% until they implemented ParkourSC.

With ParkourSC they can track all their materials in real-time anywhere around their facility. No plasma materials or pallets were misplaced, left on a dock, or left outside of the freezer to spoil. This track and traceability saved them millions in reduced waste and more product.

Reducing waste and spoilage

ParkourSC provided Takeda with the ability to capture real-time product flow data within their plasma facility. The ParkourSC platform was paired with 5,000 sensors and 60 gateways, which enabled them to monitor the plasma materials' location accurately, dwell times, condition, and movement history, from the point when a truck pulled up to the receiving dock door to the endpoint when the final product is created.

They are now able to track over 25,000+ pallets' movements to reduce spoilage due to temperature excursions, eliminate searching for missing pallets, and reduce the amount of quarantine plasma, thereby saving them labor and materials costs and providing them more plasma for Albumin production.

50X

ROI from
ParkourSC

\$60M

saved in waste,
spoilage, and fines

100%

visibility of blood plasma
location and quality

“ ParkourSC enables us to do the art of the possible. We are looking to expand into the front end and back end of our processes, giving us complete visibility into our supply chain.”

Ben Davis, Director of Supply,
Takeda Pharmaceuticals

Meeting FDA compliance

To ensure the safety and efficacy of the blood plasma, companies must comply with strict FDA regulations regarding the transportation of the materials. Because manual tracking did not capture the complete movement history of the materials, the company was not in 100% compliance with FDA regulations. With fines and costs for each excursion topping \$5M each, this was an opportunity for Takeda to improve their quality assurance process and stringently meet the FDA regulations.

Using ParkourSC dashboards, Takeda can provide the FDA with a complete record of plasma movement history immediately, instead of looking through manual logs during an audit or request from the FDA.

Their ability to track and trace all their plasma materials in real-time and assure that the plasma was viable throughout their process has saved them over \$60M and achieved an ROI of 50X with ParkourSC.



Takeda Pharmaceutical Company
(formerly Shire)

INDUSTRY

Pharmaceuticals

Takeda is the biggest pharmaceutical company in Asia and one of the top 20 largest pharmaceutical companies in the world by revenue with research and development sites in Asia, North America, and Europe. The company is focused on oncology, rare diseases, neuroscience, gastroenterology, plasma-derived therapies, and vaccines.

**Contact Us to talk
to a digital supply chain
expert today.**

ParkourSC.com

