



Service offering  
**Gateway to Asia**

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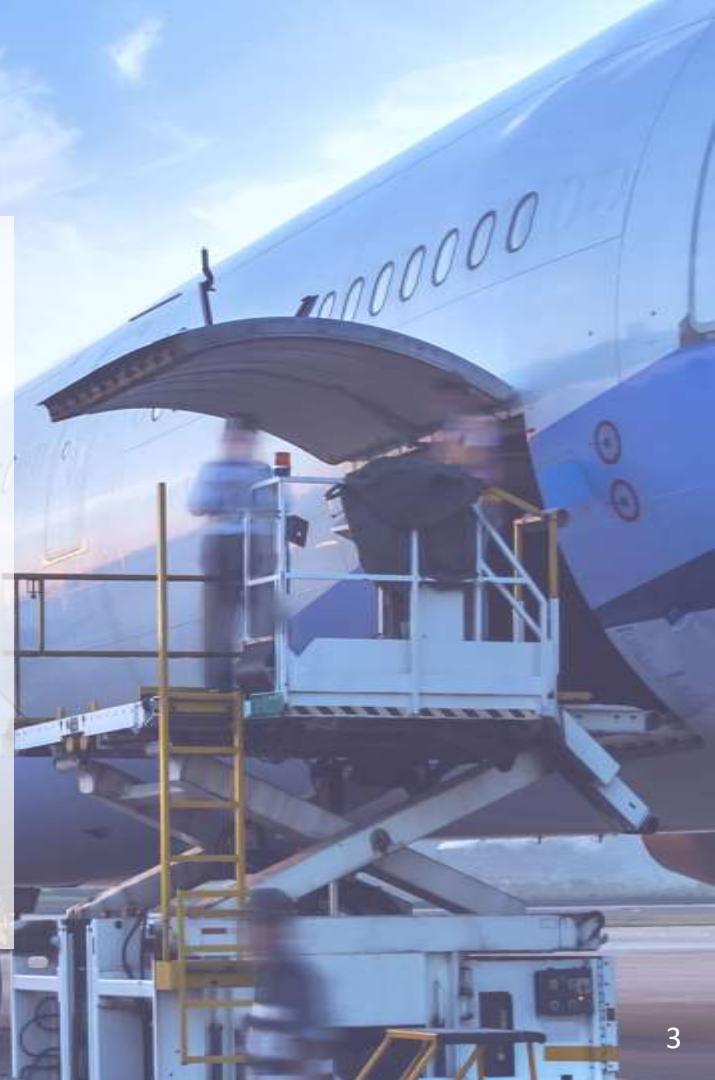


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## Bushu Pharma's Gateway to Asia Offering

Key advantages to making us your Asia Hub:

- Shortened lead time from Purchase Order (PO) to delivery to Asia markets
- Flexible delivery for urgent order
- Lean inventory of bulk and final products
- Cost reduction of logistic fees from US/EU to Asia
- Shortened lead time of artwork changes



# The Standard Solution from Competitors

## Competitors:

The lead time from Purchase Order (P.O) to Delivery to the local market is quite long.  
General inventory and logistics are not optimized.

From EU/US	More than 90 Days
to Asia	

Inventory at EU/US global package site – more than 3 months

Inventory at each local warehouse in Asia – more than 3 months



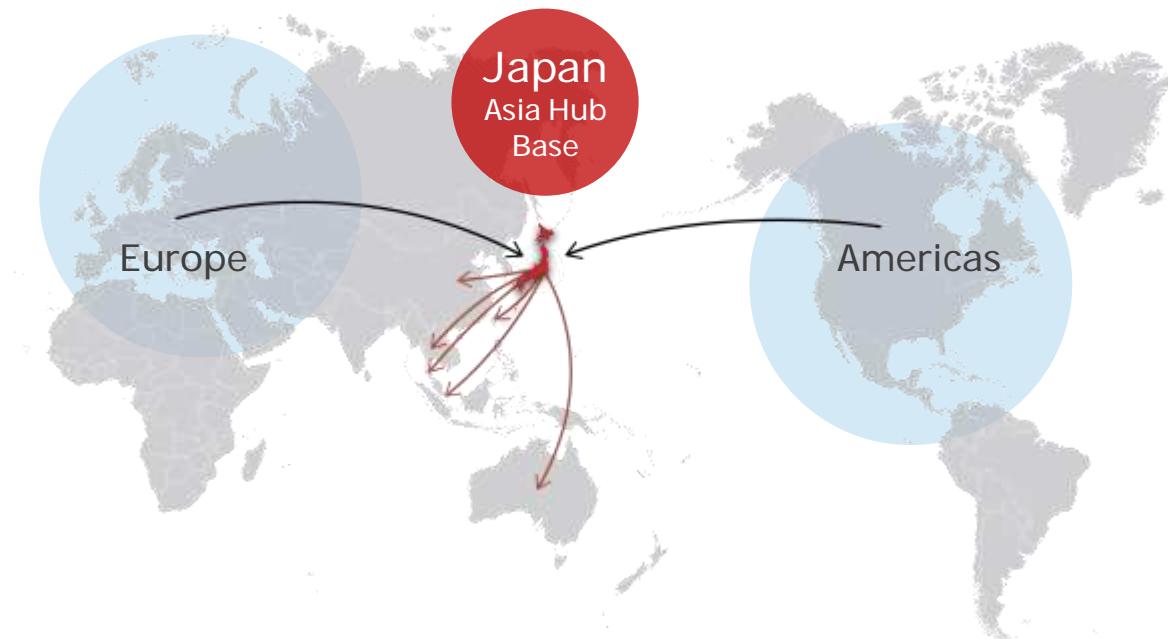
## Bushu Solution: Asia Hub facilitates rapid distribution

### The Bushu Pharma Advantage:

Lead time from Purchase Order (P.O) to Delivery to local markets can be shortened

Routine Order	Only 60 Days
Urgent Order	Only 30 Days

Since the lead time can be shortened, inventory at each local warehouse in Asia can also be reduced



## Forecast Review, Planning and Operations

Bushu Pharma arranges materials and production plans to achieve the lead-time KPI.

We suggest establishing a 36-months forecast, from which the full supply process can be managed, such that the required warehouse space can be reduced due to shortened lead-times from PO to delivery.

Timing	Step	Planning and operations
2 months prior to shipping	Receive products in bulk	Operate packaging
3 months prior to shipping	Receive the Purchase Order	Order the packaging material Fix the packaging slot
Annual	Review ~36 months forecast	Review process and determine warehouse space requirements

# Asia Model: Temperature + Security Management

Bushu Pharma Support from importation, local transportation to export to Asia, providing the services related to temperature-controlled transportation chain and GDP (Good Distribution Practices) requirements.



1.

Export from  
US/EU



2.

Import + Local  
transportation in  
Japan



3.

Secondary  
Packaging at  
Bushu



4.

Export to Asia  
Pacific



5.

Local  
Transportation  
in Asia Pacific



6.

Distribution Center

## Temperature management

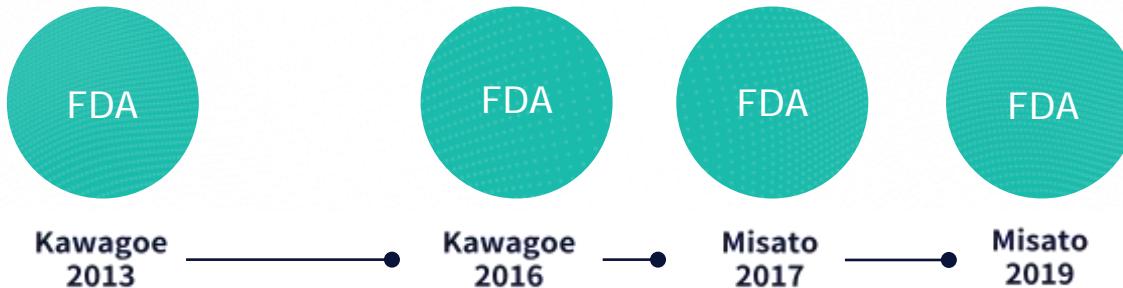
Keeping the product  
temperature constant by using  
passive shipper during air freight  
and monitoring it by data logger

## Security management

Contract with transporter for  
security such as locking the  
local transportation trucks  
and other vehicles

## Globally Qualified

Inspection History by Foreign Authorities: Bushu Pharma has a high-quality management system and provides performance track-record as Asia Hub.



### Key Features of our QMS

- GMP certification from 43 countries
- Established comprehensive quality assurance system employed to maintain high quality and reliability levels
- Ability to accurately grasp our customers' needs through close communication provided in English or Japanese
- Continuous acquisition of new technology in order to further increase production quality levels
- Established procedures for quality system management that meet international standards
- Voluntary data management system (LIMS)
- Responsive actions ensuring data integrity
- Continuous quality education and training

## Performance and Strength

Supporting the global healthcare industry to create a healthier tomorrow.

Bushu Pharma is committed to producing and delivering quality healthcare products, including pharmaceuticals and medical devices, to patients around the world through its role as a healthcare Contract Development and Manufacturing Organization (CDMO).

By ensuring optimized QCD (Quality, Cost, Delivery) through our advanced technology and production capacity, we create strong partnerships with pharmaceutical manufacturers and other customers – making it possible to grow the global healthcare industry and in effect, to make better health a reality around the world.

Our success is focused on our customers – we strive to help them achieve their business goals and build lasting relationships through which we support the construction of global supply chains.

22

Years of CMO  
Business Experience

69

Accumulated number of  
Commercial Customers

43

Number of GMP  
Certifications

47

Percentage of sales  
generated from  
international customers

# Production Features



## Solid Form

### Drug products

- Granules
- Tablets
- Capsules
- Dry Syrup

### Primary + Secondary

#### Packaging

- Blister
- Strip package
- Stick package
- Bottle

6.8 bil/year

Possible for high activity



## Injectable Form

### Drug products

- Liquid
- Lyophilization

### Inspection Assembling

- Pre-filled Syringe

### Secondary packaging

- Vial
- Ampoule
- Pre-filled Syringe
- Auto Injector

6 mil/ year

Possible for refrigerated items



## Medical Devices

### Assembling Inspection + Secondary packaging

- Drug & Device/Machine (ex. IVD machine)
- Device only (ex. catheter) possible

## Production Features



### Visual Inspection

- Skill qualification system for all Visual Inspector staff
- Over 50 Visual Inspectors
- Expand the line-up



### Cold Chain Warehouse

- More than 800 pallet capacity in the Cold storage at 2-8°C
- Backup electrical power source
- Planning to expand facility for increased capacity



### Packaging Line

- Automatic line: 660,000 packs/annually
- Process for cold chain product
- In line visual inspection cameras
- Stable production available by adequate production technology

# New Refrigerated Warehouse and Packaging Building



Launched September 2020

## Floor Area

1st floor	1554 sqm
2nd floor	1274 sqm
3rd floor	1274 sqm (TBD)

## Work Areas

Refrigerated packaging  
General secondary packaging  
Investigational product packaging

## Storage Capacity (All areas: 2°C to 8°C)

1st phase	300 pallets
2nd phase	300 pallets to be added (TBD)
3rd phase	300 pallets to be added (TBD)

## Earthquake Countermeasures

Suitable vibration reduction equipment can reduce shaking motion by up to 50%

## BCP

Continuous operation for one week with in-house generator and heavy oil storage

## Others

Achieving appropriate temperature control from receipt to delivery (Handling area: 2°C to 8°C)  
Lower temperature (-20°C to -80°C) management is planned in the next phase of Kawagoe service offering

**Bushu Pharma as a CMO, has a social and patient responsibility to ensure the smooth, continuous production of pharmaceuticals - even in the face of a national disaster.**

Having developed the Bushu BCP Plan in 2019 through consultation with one of the highest regarded consulting firms in Japan, Bushu Pharma offers a very strong BCP system for its customers – allowing bulk and final product inventory to be reduced.

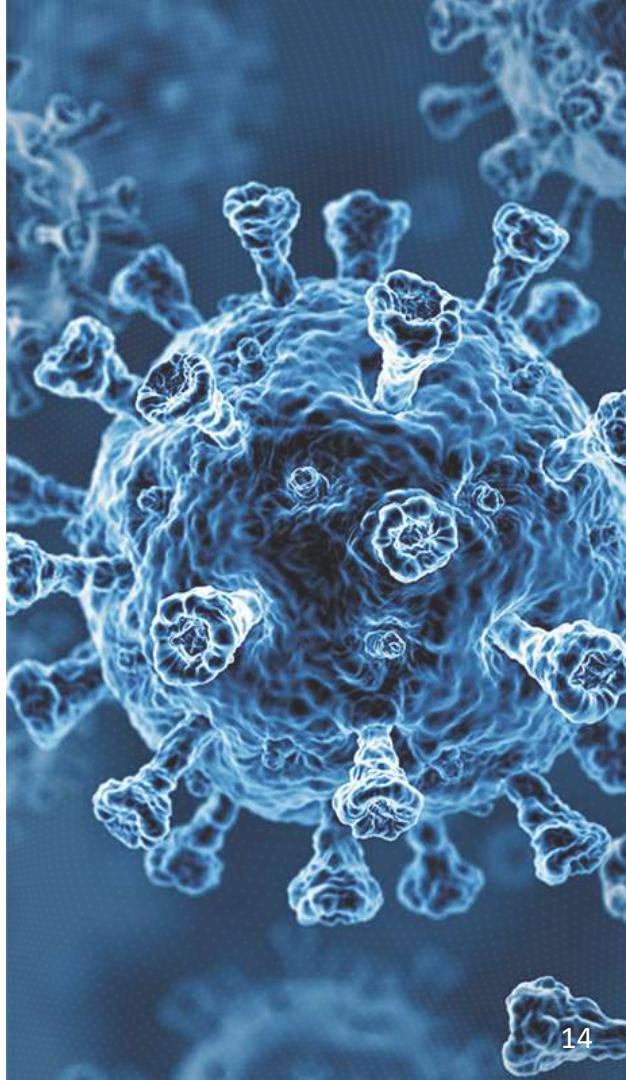
**Further BCP strengths include:**

- Our plants avoid potential damage by Tsunami as we are located 63.5km inland
- Our plants are located on hard strata, Kanto loam layer
- Our plants fulfill the earthquake resistance standards
- Power Generation System / Heavy oil supply / Industrial water (Self-Supply for 14 days)
- Recovery policy: We can recover 70% of manufacturing capacity within 15 days, and 100% of manufacturing capacity within 45 days.

# BCP - Disaster Recovery Plan - Pandemic

## Pandemic Case (COVID-19)

1. Disseminate the “Plant Entrance guideline” to employees
2. Prohibit entrance and exit to the Plant to the public except for employees
3. Prohibit business trips and promote web-meetings and remote work
4. Decrease on-site internal meetings
5. Supply masks to employees
6. Promote remote-working system for indirect employees
7. Increase ventilation capacity of plant
8. Tracking infected patients and perform contact tracing daily
9. Financial preparations and a system of compensation for those who are absent from work
10. Build the recovery plan process flow (disinfect / collaboration with public health centers)





# Thank You

[www.bushu-pharma.com/en](http://www.bushu-pharma.com/en)

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