

Index Methodology Guide for the Factset Japan Bio & Med Technologies Index™

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Table of Contents

Index Methodology Guide for the Factset Japan Bio & Med Technologies Index Index™	1
Table of Contents	2
Index Introduction and Objective	3
Index Construction	4
Index Maintenance	5
Index Calculation and Data Correction	6
Additional Information.....	7

Index Introduction and Objective

1.1 Index Overview

The Factset Japan Bio & Med Technologies Index is an equity benchmark designed to track the performance of Japanese companies developing therapeutics, devices, software, services and technologies to treat and promote health. These companies span a wide range of Biomedical related industries covering biopharmaceuticals, medical equipment, research and outsourced services, and software and electronic platforms.

The Factset Japan Bio & Med Technologies Index is a float-adjusted, modified market capitalization weighted index reconstituted and rebalanced semi-annually.

The Factset Japan Bio & Med Technologies Index is calculated and maintained by Solactive AG based on a methodology developed by FactSet. It is calculated on a price, total and net total return basis in Japanese Yen (JPY). The index is calculated continuously, and on an end-of-day basis, from Monday to Friday from 1:00 a.m. to 10:50 p.m. CET (Central European Time). Index values are distributed via various data channels and market data vendors, including the price marketing services of Boerse Stuttgart AG. End-of-day price and total return values of the index may also be obtained from FactSet upon request.

Whenever possible, constituent changes to the index are announced five business days before becoming effective.

1.2 Inception Date and Base Value

The Index Inception Date was January 31st, 2017 with a base value of 1000.00. The inception date refers to when the first back-tested index value was calculated. The back test is based on a similar methodology used to calculate the index when it was officially launched on May 7, 2021.

1.3 Index Valuation Days

Index Valuation Days are business days, Monday to Friday where the Tokyo Stock Exchange is opened for trading.

1.4 Commencement Date

The index commencement date was May 7, 2021. Commencement date refers to when the index was officially launched with continuous and end-of-day calculations.

1.5 Reconstitution and Rebalance Schedule

The index is reconstituted and rebalanced semi-annually after the close of the last Japan business day of January and July (“Reconstitution Day” and “Rebalance Day”).

If any of the existing or new index components is not trading on Reconstitution Day/Rebalance Day due to an exchange holiday, the reconstitution/rebalance is moved to the next Japan business day.

The data used to reconstitute and rebalance the index is as of the close of 2nd Friday of January and July (“Selection Day”). Subsequent adjustment to the index composition may be made to account for corporate actions that occur between the Selection Day and the Reconstitution Day or Rebalance Day.

Index Construction

2.1 Constituent Selection and Weighting Schema

1. The securities are primarily listed on the Tokyo Stock Exchange (including Prime, Standard, Growth segments).
2. The securities have a minimum total market capitalization of \$50 Billion JPY and a minimum three-month ADTV (Average Daily Trading Value) of \$100 Million JPY.
3. Select companies that derived at least 50% or more of their revenues from the following eighty (80) Biomedical related industries as defined by the FactSet RBICS* Level 6 industries, where each Level 6 industry is assigned to a Biomedical Category as follows:

L6 Name	Biomedical Category
Active and Intermediate Chemicals OEMs	BioMed Services & Software
Analytical and Bioanalytical Services	BioMed Services & Software
Biological Specimen Storage	BioMed Services & Software
Biologics OEMs	BioMed Services & Software
Clinical and Preclinical Limited Service CROs	BioMed Services & Software
Clinical Limited Service CROs	BioMed Services & Software
Diversified Contract Manufacturing Organizations	BioMed Services & Software
Diversified Contract Research Organizations	BioMed Services & Software
Diversified Development and Manufacturing Services	BioMed Services & Software
Diversified Healthcare Business Management	BioMed Services & Software
Diversified Healthcare Distributors	BioMed Services & Software
Diversified Healthcare Services	BioMed Services & Software
Drug Development Software	BioMed Services & Software
Drug Lead Discovery, Validation and Optimization	BioMed Services & Software
Drug Target Discovery and Validation	BioMed Services & Software
Final Dosage Forms OEMs	BioMed Services & Software
Full Service CROs	BioMed Services & Software
General Clinical Laboratories	BioMed Services & Software
General Professional Content Providers and Sites**	BioMed Services & Software
Healthcare Consulting	BioMed Services & Software
Healthcare Management Software	BioMed Services & Software
Multi-Type Diagnostic Patient Care	BioMed Services & Software
Multi-Type Drug Discovery Services	BioMed Services & Software
Other Biopharmaceutical OEMs	BioMed Services & Software
Other Healthcare and Pharma Industry Software	BioMed Services & Software
Other Pharmaceuticals Distributors	BioMed Services & Software
Patient Data Management Software	BioMed Services & Software

Preclinical Limited Service CROs	BioMed Services & Software
Specialized Clinical Laboratories	BioMed Services & Software
Antibiotics	Biopharmaceuticals
Autoimmune Disorders Biopharmaceuticals	Biopharmaceuticals
Bacterial Vaccines	Biopharmaceuticals
Breast Cancer Biopharmaceuticals	Biopharmaceuticals
Cardiovascular System Biopharmaceuticals	Biopharmaceuticals
Dietary and Naturopathic Supplements	Biopharmaceuticals
General Infectious Diseases Biopharmaceuticals	Biopharmaceuticals
Heart Disorders Biopharmaceuticals	Biopharmaceuticals
Hematological Oncology Biopharmaceuticals	Biopharmaceuticals
Hematology Biopharmaceuticals	Biopharmaceuticals
Immune Deficiency Disorders Biopharmaceuticals	Biopharmaceuticals
Intermediary Metabolism Biopharmaceuticals	Biopharmaceuticals
Liver Disorders Biopharmaceuticals	Biopharmaceuticals
Lower Respiratory Biopharmaceuticals	Biopharmaceuticals
Musculoskeletal System Biopharmaceuticals	Biopharmaceuticals
Neurology Biopharmaceuticals	Biopharmaceuticals
Other Endocrinology/Metabolism Biopharmaceuticals	Biopharmaceuticals
Other Immunology Biopharmaceuticals	Biopharmaceuticals
Other Oncology Biopharmaceuticals	Biopharmaceuticals
Other Respiratory System Biopharmaceuticals	Biopharmaceuticals
Pituitary Gland Disorders Biopharmaceuticals	Biopharmaceuticals
Transplantation Biopharmaceuticals	Biopharmaceuticals
Type 1 Diabetes Biopharmaceuticals	Biopharmaceuticals
Type 2 Diabetes Biopharmaceuticals	Biopharmaceuticals
Urology Biopharmaceuticals	Biopharmaceuticals
Vascular Disorders Biopharmaceuticals	Biopharmaceuticals
Veterinary Pharmaceuticals	Biopharmaceuticals
Viral Biopharmaceuticals	Biopharmaceuticals
Weight Management Biopharmaceuticals	Biopharmaceuticals
Diversified Biopharmaceuticals	Conglomerate Biopharmaceuticals
Bioanalytical Consumables	MedTech Equipment
Cardiology Medical Devices	MedTech Equipment
Cardiology Surgical Devices	MedTech Equipment
Diversified Bioanalytical Instruments	MedTech Equipment
Diversified Medical Devices and Instruments	MedTech Equipment
Drug Delivery Technology Development	MedTech Equipment
Gastroenterology Devices	MedTech Equipment
General Clinical Diagnostics Devices	MedTech Equipment
General Surgical Devices	MedTech Equipment
Genetic Molecular Diagnostic Test Kits	MedTech Equipment
Home Testing Clinical Diagnostics Devices	MedTech Equipment
Immunoassays Clinical Diagnostics Devices	MedTech Equipment
Neurology Devices	MedTech Equipment
Oncology Devices	MedTech Equipment
Other Chemistry Clinical Diagnostics Devices	MedTech Equipment
Other Surgical Devices	MedTech Equipment

Point of Care Testing Kits	MedTech Equipment
Scientific Analytical Instruments	MedTech Equipment
Surgical Robotic Systems	MedTech Equipment
Vascular Devices	MedTech Equipment
Veterinary Diagnostics	MedTech Equipment

*Revere Business Industry Classification System

**Must also be classified to the Revere Hierarchy focused path "Consumer > Media > Electronic Media > Professional Content > Healthcare"

- Securities that remain after Step 1 to 3 are ranked by their total market capitalization with each Biomedical Category from highest to lowest. Select up to the top 10 ranked securities in the MedTech Equipment, BioMed Services & Software and Biopharmaceuticals categories; select up to the top 5 ranked securities in the Conglomerate Biopharmaceuticals category. If the aforementioned selection criteria result in less than 20 constituents, then the next largest total market capitalization security from any of the four Biomedical Categories may be added to the index until a minimum of 20 constituents is reached. The index shall have a minimum of 20 constituents and a maximum of 35 constituents.
- Apply the float-adjusted modified market capitalization weighting methodology to securities that remain by dividing their individual float-adjusted market capitalization to the sum total market capitalization of all securities.

Individual security weights are capped at 8% and the cumulative weight of all securities from the Conglomerate Biopharmaceuticals Category is capped at 20%.

In addition to the above selection schema, FactSet may at its discretion and in consultation with index licensee, modify one or more selection criterion to ensure relevant and timely capture of the theme. Whenever possible, any modifications shall be announced 60 days prior to annual Reconstitution Day.

2.2 Index Return Formulas

The price, total and net total returns levels of the index are calculated using the following formulas.

$$I_{(t)} = \frac{\sum_{i=1}^n S_{i(t)} \times P_{i(t)}}{D_{(t)}}$$

where:

$I_{(t)}$ = Index value on Index Valuation Day (t)

$D_{(t)}$ = Divisor on Index Valuation Day (t)

n = Number of stocks in the index

$P_{i(t)}$ = Closing price of stock (i) on Index Valuation Day (t)

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation Day (t)

and on Inception Date, where (t) = 0, the initial divisor is calculated as follows:

$$D_{(0)} = \frac{\sum_{i=1}^n S_{i(0)} \times P_{i(0)}}{I_{(0)}}$$

where:

- $I_{(0)}$ = Price Returns Index value on Index Inception Date
- $D_{(0)}$ = Divisor on Index Inception Date
- n = Number of stocks in the index on Index Inception Date
- $P_{i(0)}$ = Price of stock (i) on Index Inception Date
- $S_{i(0)}$ = Number of allocated shares of stock (i) on Index Inception Date

Allocated shares (“S”) are the number of shares required for each constituent such that all constituents are float-adjusted modified market capitalization weighted. Allocated shares (“S”) would be adjusted accordingly to account for Corporate Actions.

Net total return is calculated to account for the effect of tax withholding on dividends by adjusting dividend taken out due to tax payment.

2.3 Index Divisor Adjustments

From time to time, the index divisor is adjusted to account for corporate actions that could distort index value and continuity using the following formula:

$$D_{(t+1)} = D_{(t)} \times \frac{\sum_{i=1}^n AS_{i(t+1)} \times AP_{i(t+1)}}{\sum_{i=1}^n S_{i(t)} \times P_{i(t)}}$$

where:

- $D_{(t+1)}$ = Divisor for Index Valuation Day (t+1) after CA and rebal adjustment
- $D_{(t)}$ = Divisor for Index Valuation Day (t)
- $AP_{i(t+1)}$ = Adjusted price of stock (i) calculated for open on Index Valuation Day (t+1) after CA adjustment
- $P_{i(t)}$ = Closing price of stock (i) on Index Valuation Day (t)
- $S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation Day (t)
- $AS_{i(t+1)}$ = Adjusted number of allocated shares of stock (i) for open on Index Valuation Day (t+1) after CA adjustment.

Divisor adjustments are generally implemented on the date the corporate action becomes effective, such that for example, the ex-dividend date rather than the payment date is used to time the divisor adjustment.

Find below a detailed calculation for AP, AS, and S in case of corporate actions and rebalancing.

- $AP_{i(t)}$ = Adjusted price of stock (i) is determined for the open on Index Valuation Day (t) shall mean:

- If index constituent opens ex-date in respect of the corporate action, then $AP_{i(t)}$ is determined as per Corporate Action Adjustment Section.
- Otherwise

$$AP_{i(t)} = P_{i(t-1)}$$

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation date (t) is determined as

$$S_{i(t)} = AS_{i(t)}$$

$AS_{i(t)}$ = Adjusted number of allocated shares of stock (i) for open on Index Valuation Day (t) after CA adjustment is determined as:

- If such day opens immediately following the Rebalancing Day (t-1) and if:
 - index constituent opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as per Corporate Action Adjustment Section with $S_{i(t-1)}$ replace with:

$$S_{i(t-1)} = \frac{I_{(t-1)} \times Weight_{i(t-1)}}{P_{i(t-1)}}$$

- index constituent does not opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as:

$$AS_{i(t)} = \frac{I_{(t-1)} \times Weight_{i(t-1)}}{P_{i(t-1)}}$$

- On any other day:
 - index constituent opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as per Corporate Action Adjustment Section
 - Otherwise:

$$AS_{i(t)} = S_{i(t-1)}$$

where $Weight_{i(t-1)}$ is determined as per Section 2.1.

2.4 Corporate Action Adjustments

Special Cash Dividend:

$$AP_{i,t} = P_{i,t-1} - D_{i,t}$$

Where

t = Index Valuation Date (t) is ex-date for corporate action.

D_{i,t} = Dividend amount corresponding to stock (i) with ex-date (t).

Spin-off Adjustment

If an index constituent (i.e. the parent company) distributes part of its business into a spun-off company, the spun-off company will be added to the Index according to the transaction terms on the ex-date.

The parent company will remain in the Index with unchanged calculation parameters. The spun-off company will remain in the Index until the next ordinary rebalancing.

The spun-off company will be added to the Index with an open price of zero on ex-date.

If the spun-off company does not start to trade on the effective date (i.e. ex-date), a theoretical price for the spun-off company will be implemented (**see the equation below**) as a fixed price until it commences trading, from which time official prices will be used.

$$P_{f(t)} = [P_{i(t-1)} - AP_{i(t)}] \times \text{Share Ratio}_{i(t)}$$

Where

$P_{i(t-1)}$ = Closing price of Parent Company on Index Valuation Date (t-1).

$AP_{i(t)}$ = Open price of Parent Company on Index Valuation Date (t).

$P_{f(t)}$ = Price of Spun-off Company on Index Valuation Date (t).

Rights Issue Adjustment

$$AP_{j,t} = \frac{P_{j,t-1} + C_{j,t} \times \text{Share Ratio}_{j,t}}{1 + \text{Share Ratio}_{j,t}}$$
$$AS_{j,t} = S_{j,t-1} \times (1 + \text{Share Ratio}_{j,t})$$

Where

$C_{j,t}$ = Official tender price.

Stock Splits Adjustment

$$AP_{j,t} = \frac{P_{j,t-1}}{\text{Share Ratio}_{j,t}}$$
$$AS_{j,t} = S_{j,t-1} \times \text{Share Ratio}_{j,t}$$

Stock distribution

$$AP_{j,t} = P_{j,t-1} \times \frac{1}{1 + \text{Share Ratio}_{j,t}}$$

$$AS_{j,t} = S_{j,t-1} \times (1 + \text{Share Ratio}_{j,t})$$

Index Maintenance

Constituent changes may occur between review periods due to corporate events that disqualify their eligibility for index inclusion. Adjustments to corporate events are described below:

3.1 Corporate Actions – Delisting

A constituent is removed immediately after being delisted from its primary markets.

3.2 Corporate Actions – Merger or Acquisition

If a merger or acquisition results in one constituent acquiring another, the acquiring company remains a constituent, and the acquired company is removed. If a non-constituent acquires a constituent, the acquired constituent is removed. If a constituent acquires a non-constituent, the acquiring constituent remains a constituent.

3.3 Corporate Actions – Spin-off

If a constituent spins or splits off a portion of its business, both the spun-off company and the parent company (the entity representing the existing constituent) will be kept in the index, and be considered for removal from the index at the next Reconstitution or Rebalance Day should they fail to meet the eligibility criteria in Section 2.1.

3.4 Corporate Actions – Bankruptcy

If a constituent is delisted after bankruptcy, it will be removed immediately with a price of 0 from the index.

Index Calculation and Data Correction

4.1 Index Calculation

Price, Total Return, and Net Total Return values for the Factset Japan Bio & Med Technologies Index are calculated by Solactive AG. The price, total and net total return values are calculated on a continuous and end-of-day basis by using the trading price for each component in the index from relevant exchanges and markets. Index values are rounded to 2 decimal places and divisors are rounded to 6 decimal places.

If trading in a stock is suspended prior to the market opening, the stock's adjusted closing price from the previous day will be used in the index calculation until trading commences. If trading in a stock is suspended while the relevant market is open, the official closing price published by relevant exchange for that stock will be used for all subsequent index calculations until trading resumes.

In case of exceptional market conditions disrupting normal closing auction, or causing official closing prices not being available, Solactive and FactSet reserve the right to utilize other prices in the calculation of the official closing level.

4.2 Data Correction

Incorrect index constituent data, corporate action data, or index divisors will be corrected upon detection. If such errors are discovered within five days of occurrence, they will be corrected retroactively on the day of discovery. If discovered after five days, corrective actions will be decided based on the errors' significance and feasibility of a correction.

4.3 Decision Making in Undocumented Events

A FactSet Index Committee consisting of select employees of FactSet Research Systems Inc. is responsible for amending rules as documented in the Index Methodology Guide due to undocumented or extraordinary events.

Additional Information

5.1 Contact Information

FactSet Research Systems Inc.
One Sansome St. Floor 19
San Francisco, CA 94104
Tel.: 1.415.645.0967 Fax: 1.415.645.0901
Contact: GoIndexing@factset.com

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