

# MSCI ACWI IMI Virology index

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November 2024

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## 1 Introduction

The MSCI ACWI IMI Virology Index (the 'Index')<sup>1</sup> aims to represent the performance of a set of companies that are associated with research and development as well as the commercialization of anti-viral and vaccine products, which are used to treat and prevent a range of viral infections.

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<sup>1</sup> The Index is governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. Please refer to Appendix III for more details.

## 2 Constructing the Index

The Index is constructed by selecting securities from the MSCI ACWI Investable Market Index (IMI) (the 'Parent Index'<sup>2</sup>) based on the rules outlined below.

The Index selects companies which are assessed to have strong association with products from following two Therapy Sub-categories<sup>3</sup>. Such products are currently used to treat or are, based on consensus forecasts, expected to treat infectious diseases by means of anti-infectives<sup>4</sup>:

- Anti-Virals
- Vaccines

MSCI may seek input from outside market experts on the ongoing evolution of the themes underlying the Index. However, such input is advisory only in nature. MSCI alone decides whether to use such input at all or to what extent. Receipt of such input, like any other feedback on MSCI indexes, may or may not lead to a change to the index or index methodology.

### 2.1 Company Level Data

The Index uses the following company level data to determine the scores that are subsequently used in the index construction.

- Clinical Trials Information<sup>5</sup> – Clinical Trials where a company is either a lead sponsor, or alternatively, a collaborator with another commercial entity.
- Product Revenue Information<sup>6</sup>
  - Actual Product-level Revenue from company financial filings.
  - Forecast Product Revenue both from currently marketed products as well as from products which are still under development.
- Mappings of Product to Therapy Category and/or to Indication levels<sup>4</sup>
- Mappings of Clinical Trials to Products.<sup>4</sup>

<sup>2</sup> Use of some indexes as Parent Indexes may result in a low number of constituents, which may affect replicability or investability.

<sup>3</sup> See Appendix 1 for definitions and more detail about Therapy Category

<sup>4</sup> See Appendix 1 for more detail on the use of Evaluate Pharma data and product classification.

<sup>5</sup> Clinical trials listed on following global registries are in scope : <https://clinicaltrials.gov/>, EUDRA - <https://www.clinicaltrialsregister.eu/ctr-search/search> and JAPIC - <https://www.clinicaltrials.jp/cti-user/common/Top.jsp>.

<sup>6</sup> See Appendix 1 for more detail.

## 2.2 Eligible Universe

All securities from the Parent Index which belong to GICS® Sector<sup>7</sup> 'Health Care' are selected for the Eligible Universe.

## 2.3 Construction of the Anti-Viral Universe

### 2.3.1 Calculation of Security-level Scores

For the purpose of calculating security level scores, the *Category* is defined as all products and trials mapped to the Anti-Viral Therapy Sub-Category<sup>8</sup>.

Security-level scores are calculated for each security in the Eligible Universe as per the procedure described in Appendix II.

### 2.3.2 Anti-Viral Universe

Securities from Eligible Universe which meet following conditions are then included in the Anti-Viral Universe.

- Category Score<sup>9</sup>  $\geq$  25% or  
Max (Category Share of Revenue, Category Share of Enrollments)<sup>10</sup>  $\geq$  1%.

### 2.3.3 Weighting of securities in Anti-Viral Universe

Securities in the Anti-Viral Universe are weighted by the product of their 'Category Score' and their float-adjusted market capitalization. The weights are then normalized to 100%.

## 2.4 Construction of Vaccine Universe

### 2.3.4 Calculation of Security-level Scores

For the calculation of Vaccine Universe, the *Category* is defined as all trials and products mapped to the Vaccine Therapy Sub-Category.

Security level scores are calculated for each security in the Eligible Universe as per the rules described in Appendix II.

### 2.3.5 Vaccine Universe

Securities from Eligible Universe which meet following conditions are then included in the Vaccine Universe.

<sup>7</sup> For further information regarding GICS®, please refer to <https://www.msci.com/gics>

<sup>8</sup> See Appendix 1 for more details

<sup>9</sup> See Appendix 2 for more details

<sup>10</sup> See Appendix 2 for detailed definition of the scores

- Category Score<sup>11</sup>  $\geq 25\%$  or  
Max (Category Share of Revenue, Category Share of Enrollments)<sup>12</sup>  $\geq 1\%$ .

### 2.3.6 Weighting of securities in Vaccine Universe

Securities in the Vaccines Universe are weighted by the product of their 'Category Score' and their float-adjusted market capitalization. The weights are then normalized to 100%.

## 2.5 Constructing the Index

### 2.3.7 Selected Universe

The Selected Universe is constructed by combining securities from 'Anti-viral' and 'Vaccine' Universes.

### 2.3.8 Determining the weights of the constituents of the Index

Securities in the Selected Universe are weighted as follows:

$$w_i^{Index} = 0.5 * w_i^{Anti-Viral} + 0.5 * w_i^{Vaccine}$$

where:

- $w_i^{Index}$  is the weight of stock  $i$  in the Virology Index
- $w_i^{Anti-Viral}$  is the weight of stock  $i$  in the Anti – Viral Universe
- $w_i^{Vaccine}$  is the weight of stock  $i$  in the Vaccine Universe

### 2.3.9 Capping

Additionally, constituent weights are capped at the security level to mitigate concentration risk in the Index. The security weight in the Index is capped at 5% at each rebalance only; capping is not applied between rebalances.

<sup>11</sup> See Appendix 2 for more details

<sup>12</sup> See Appendix 2 for detailed definition of the scores

## 3 Maintaining the Index

### 3.1 Semi-Annual Index Review

The Index is reviewed on a Semi-Annual basis in May and November and the changes are implemented at the end of May and November. In general, the pro forma Index is announced nine business days before the effective date.

During the Semi-Annual Index Review, the Eligible Universe, Anti-viral Universe, Vaccine Universe and the Selected Universe are updated.

In general, MSCI uses the latest available company data as of the previous end of the month date before rebalancing date of the semi-annual index review.

### 3.2 Ongoing event-related maintenance

The general treatment of corporate events in the Index aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the Index constituents that are involved. Further, changes in Index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

The following section briefly describes the treatment of common corporate events within the Index.

No new securities will be added (except noted below) to the Index between Index Reviews. Parent Index deletions will be reflected simultaneously.

### 3.3 Missing Data Treatment

The data as of the previous month end is used for calculating the index. In case of unavailability of previous month-end data on a particular rebalance date, the latest available data is used.

## EVENT TYPE

## EVENT DETAILS

### New additions to the Parent Index

A new security added to the Parent Index (such as IPO and other early inclusions) will not be added to the Index.

### Spin-Offs

All securities created as a result of the spin-off of an existing Index constituent will be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

### Merger/Acquisition

For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index.

If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.

### Changes in Security Characteristics

A security will continue to be an Index constituent if there are changes in characteristics (country, sector, size segment, etc.) Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology.

The MSCI Corporate Events methodology book is available at:

<https://www.msci.com/index-methodology>.



## Appendix I Data sources and data definitions

### Data sources used in index construction

The Index uses company-level pharmaceutical product and clinical trials data provided by Evaluate via the data services: Omnium Risk, Evaluate Omnium and Omnium Return.

Evaluate<sup>13</sup> is a leading provider of commercial intelligence and analytics about the global pharmaceutical industry through its Evaluate Pharma and Evaluate Omnium services. Evaluate Pharma offers a perspective on the pharmaceutical market's historic and potential future development by providing six-year consensus forecasts, company financials, pipeline estimates and deals data. Evaluate Omnium provides a gauge of the development risk and potential commercial opportunity across the phases of the clinical lifecycle.

### Definition of company level product and trials data items

#### *Product Classification by 'Therapy Category' and 'Therapy Sub-Category'*

Evaluate Pharma (EP) classifies products into a 'Therapy Category' based on scientific standards, industry consultations and feedback from EP customers. A 'Therapy Category' is further divided into a set of smaller 'Therapy Sub-Categories'. This mapping is based on the primary indication and therapeutic activity of the product. There is a one-to-one relation between a product and the therapeutic category. For example, 'Anti-Infectives' is a 'Therapy Category'. 'Anti-Virals' and 'Vaccines' are two 'Therapy Sub-Categories' under 'Anti-Infectives'.

#### *'Product to Indication' mapping*

This is based on a comprehensive analysis by EP of different sources such as company disclosed data, government agency data (for example, clinicaltrials.gov) and broker reports. Each product can be mapped to multiple indications.

#### *Product/Clinical Trial mapping*

EP maps a product to a clinical trial using analysis of each product mentioned in the clinical trial description, triangulated with company and indication information.

#### *Product Revenue Information*

EP provides company/product level historical reported, and consensus forecast sales at the product, or product group level. Forecasts may be up to 6 years forward.

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<sup>13</sup> <https://www.evaluate.com/>

## Appendix II Calculating Security-Level Scores

Data points defined in 1 to 8 below are obtained from Evaluate Pharma at the company level.

1. Category – A Category is defined as a collection of one or more Therapy Categories (or Therapy sub-categories) and/or an Indication (the standardized indication description maybe be at Level 1, 2 or 3)<sup>14</sup>
2. In-Scope Clinical Trials – Clinical Trials which meet the following conditions:
  - I. **Start Date:** Trials which have been started in the 36 months preceding the rebalance date
  - II. **Study Type:** Interventional
  - III. **Lead Sponsor:** Industry
  - IV. **Status of Study:** Trial status should not be Terminated, Suspended or Withdrawn
3. Selected Clinical Trials<sup>15</sup>– All In-Scope Clinical Trials resulting from Step 2 which are mapped to the Category defined in Step 1
4. Selected Products – All products which are mapped to the Category defined in Step 1
5. Product-level Cumulative Revenue<sup>16</sup> – obtained by aggregating:
  - I. The sum of Historical product-level revenue for Rebalance Year and one year prior to Rebalance Year,  
and
  - II. The sum of Forecasted product-level revenue from one year after Rebalance Year to six years after Rebalance Year

*Rebalance Year* is defined as the year of the rebalance date.
6. Product-level Revenue from All Products – The sum of Product-level Cumulative Revenue of all products mapped to that company
7. Product-level Revenue from Selected Products – The sum of Product-level Cumulative Revenue from all Selected Products mapped to that company
8. Company-level Cumulative Revenue – The sum of historical product-level revenue for Rebalance Year and one year prior to Rebalance Year, aggregated over all products mapped to a company. Rebalance Year is defined as the year of the rebalance date
9. Company's Latest Reported Revenue – The latest reported annual revenue as of the rebalance date
10. Calculation of derived scores at the company level:

<sup>14</sup> [https://en.wikipedia.org/wiki/Anatomical\\_Therapeutic\\_Chemical\\_Classification\\_System](https://en.wikipedia.org/wiki/Anatomical_Therapeutic_Chemical_Classification_System)

<sup>15</sup> For securities having no in-scope clinical trials, the number of selected clinical trials used for scoring is taken as zero

<sup>16</sup> For securities having no projected or reported revenue for the period in scope, product-level cumulative revenue is taken to be zero

- I. Category Trial Score = Number of Selected Clinical Trials/Number of In-Scope Clinical Trials
- II. Category Financial Relevance Score = Product-level Revenue from Selected Products/Product-level Revenue from All Products
- III. Category Score = 0, if
  - Company level Cumulative Revenue=0 and Company's Latest Reported Revenue = 0,
  - or,
  - Category Financial Relevance = 0 but Company-level Cumulative Revenue>0
 otherwise,  
 Category Score = Max (Category Trials Score, Category Financial Relevance)
- IV. Category Share of Enrollments = Total number of participants enrolled in Selected Clinical Trials/Total number of participants enrolled in Selected Clinical Trials mapped to all securities in MSCI Global Equity Data Universe
- V. Category Share of Revenue = Product-level Revenue from Selected Products/Sum of Product-level Revenue from Selected Products mapped to all securities in MSCI Global Equity Data Universe

## Appendix III: Methodology Set

*The Indexes are governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document as mentioned below:*

- Description of methodology set  
– <https://www.msci.com/index/methodology/latest/ReadMe>
- MSCI Corporate Events Methodology  
– <https://www.msci.com/index/methodology/latest/CE>
- MSCI Fundamental Data Methodology  
– <https://www.msci.com/index/methodology/latest/FundData>
- MSCI Index Calculation Methodology  
– <https://www.msci.com/index/methodology/latest/IndexCalc>
- MSCI Index Glossary of Terms  
– <https://www.msci.com/index/methodology/latest/IndexGlossary>
- MSCI Index Policies – <https://www.msci.com/index/methodology/latest/IndexPolicy>
- MSCI Global Industry Classification Standard (GICS) Methodology  
– <https://www.msci.com/index/methodology/latest/GICS>
- MSCI Global Investable Market Indexes Methodology  
– <https://www.msci.com/index/methodology/latest/GIMI>

*The Methodology Set for the Indexes can also be accessed from MSCI's webpage <https://www.msci.com/index-methodology> in the section 'Search Methodology by Index Name or Index Code'.*

## Appendix IV: Changes to this Document

**The following sections have been modified as of November 2024:**

- The Introduction Section has been modified
- Appendix II has been updated to incorporate the results of the consultation to apply the sales data fallback

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