



# Syntax PharmaShares AbbVie-Humira Index (AHP) Rulebook

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# **1** Index Objectives

The Syntax PharmaShares Indices (each an "Index") are designed to track in combination the performances of a pharmaceutical company's share price and the portion of the reported global net sales of that company's lead drug that are owned and accrued for the benefit of the company (the "Revenue").

The Syntax PharmaShares AbbVie-Humira Index tracks the combined performance of AbbVie Inc.'s listing of common stock shares (ABBV) on the New York Stock Exchange (NYSE) and the Revenue of the pharmaceutical drug Humira (also known as adalimumab) that are owned and accrued for the benefit of AbbVie Inc.

### **2 Index Parameters**

Launch Date: 28 December 2022

First Value Date: 9 May 2013

Index Calendar: US (NYSE)

Index Trading Hours: US (NYSE)

Corporate Action Handling: Equal-weight Methods

Regular Dividend Reinvestment: Pro rata Method

Reconstitution: May be triggered by a corporate action or sale of drug rights

Rebalancing: Triggered by update to Revenue for an included Drug

Snapshot Date: The publication date of updated Revenue for the Drug Weight Date: The first applicable trade date after the Snapshot Date Rebalance Date: The first applicable trade date after the Snapshot Date

Effective Date: The first applicable trade date after the Rebalance Date

Inter-Basket Changes: Constituent entities are neither added nor removed in the Rebalancing except as compelled by reasons that could have triggered an Intra-Basket Change had they occurred between Rebalancings. The Constituent security or Constituent listing of a Constituent entity may be replaced in the Rebalancing by another that provides sufficiently equivalent exposure to the same Constituent entity, as per the Administrator's Expert Judgment. Additions and removals of all kinds may be made in the Reconstitution.

Intra-Basket Changes: Index Constituents may be removed at any time due to corporate actions or events severely affecting liquidity, business integrity, or the relevance of business engagement. Except where specified in the *Syntax Index Calculations & Adjustments Rulebook* for handling of corporate actions such as mergers or spinoffs, Index Constituents are not added between Rebalancings.

# **3 Basket Construction**

### 3.1 Selection

The first Basket — and all subsequent Baskets except potentially upon and following the event of a corporate action affecting the ownership of the Drug — shall include the following Constituents: AbbVie Inc. (the "Company" unless and until replaced) Humira, also known as adalimumab (the "Drug")

### 3.2 Weighting

The Constituents shall be equally weighted at each Rebalancing, with the Target Index Market Cap for each equaling 50 million USD.

The "Index Price" for a Drug on a given trade date is that Drug's Revenue in United States Dollars (USD) latest reported in a regulated release or filing (as described under the section *Data Sourcing*) as of the day prior to that trade date.



The Index Shares for the Company are calculated as follows:

$$Q_{c,t} = \frac{T_c}{O_t}$$

Where:

 $Q_{c,t}$  is the quantity of Index Shares for the Company on trade date t

 $T_c$  is the Target Index Market Cap for the Company as of the market open on trade date t

Ot is the Index Price for the Company as of the market open on trade date t

The Index Shares for the Drug are calculated as follows:

$$Q_{d,t} = \frac{T_d}{D_{t-1}}$$

Where:

 $Q_{d,t}$  is the quantity of Index Shares for the Drug on trade date t

 $T_d$  is the Target Index Market Cap for the Drug as of the market open on trade date t

 $D_{t-1}$  is the Index Price for the Drug on trade date t-1

# **4** Daily Calculation

### 4.1 Index Variants

The Index is calculated in US Dollar (USD) on an end-of-day (EOD) basis by Syntax Indices in the following variants:

Ticker	Name	Return	Base	Launch	Base
TICKEI		Туре	Date	Date	Level
	Syntax PharmaShares AbbVie-Humira Index	Price	9 May	28 Dec	1000
AHF		Return	2013	2022	
	Syntax PharmaShares AbbVie-Humira Total	Gross Total	9 May	28 Dec	1000
ALIFG	Return Index	Return	2013	2022	

### 4.2 Index Divisor

For a given trade date, the Index Divisor is calculated as follows:

$$D_t = \frac{\sum_{i=1}^n O_{i,t} * Q_{i,t}}{L_{p,t-1}}$$

Where:

 $D_t$  is the Index Divisor on trade date t

L<sub>p,t-1</sub> is the Price Return Index Level on the applicable trade date immediately preceding trade date t

Q<sub>i,t</sub> is the quantity of Index Shares of Index Constituent i held on trade date t

O<sub>it</sub> is the Index Price of Index Constituent i as of the market open on trade date t

### 4.3 Index Levels

### 4.3.1 Price Return Index Variant Level

The end-of-day (EOD) Index Level of the Price Return Index Variant is calculated equivalently to that of a Laspeyres Price Index, as follows:

$$L_{p,t} = L_{p,t-1} * \frac{\sum_{i=1}^{n} C_{i,t} * Q_{i,t}}{\sum_{i=1}^{n} O_{i,t} * Q_{i,t}}$$

Where:

 $L_{\rho,t}$  is the Price Return Index Level on trade date t

L<sub>p,t-1</sub> is the Price Return Index Level on the applicable trade date immediately preceding trade date t

Q<sub>it</sub> is the quantity of Index Shares of Index Constituent i held on trade date t

O<sub>it</sub> is the Index Price of Index Constituent i as of the market open on trade date t

C<sub>it</sub> is the Index Price of Index Constituent i as of the market close on trade date t

### 4.3.2 Gross Total Return Index Variant Level

The Index Level of the Gross Total Return Index Variant is calculated assuming reinvestment of each regular cash dividend into all the Index Constituents *pro rata* by their Index Weights occurring at the market close on the Ex-Date, investing in each Index Constituent at its closing Index Price.

$$L_{g,t} = L_{g,t-1} * \frac{\sum_{i=1}^{n} (C_{i,t} + I_{i,t}) * Q_{i,t}}{\sum_{i=1}^{n} Q_{i,t} * Q_{i,t-1}}$$

Where:

 $L_{g,t}$  is the Gross Total Return Index Level on trade date t

Lg,t-1 is the Gross Total Return Index Level on the applicable trade date immediately preceding trade date t

Q<sub>i,t</sub> is the quantity of Index Shares of Index Constituent *i* held on trade date *t* 

 $Q_{i,t-1}$  is the quantity of Index Shares of Index Constituent *i* held on the applicable trade date immediately preceding trade date *t* 

O<sub>it</sub> is the Index Price of Index Constituent i as of the market open on trade date t



 $C_{i,t}$  is the Index Price of Index Constituent *i* as of the market close on trade date *t*  $I_{i,t}$  is the Index Dividend gone ex for Index Constituent *i* effective on trade date *t* 

### **5 Corporate Actions & Events**

Information regarding the day-to-day calculation and maintenance of this and other Syntax Indices — as well as regarding the definitions of key terms used throughout this and other Syntax Index Rulebooks — is available in an accompanying document, the *Syntax Index Calculations & Adjustments Rulebook*.

# 6 Data Sourcing

Each update to the Revenue value for a Drug shall be sourced from the earliest available regulated publication of the financial results for a financial reporting period, such as a company's press release that requires an accompanying SEC Form 8-K or CSE Form 5, or an SEC Form 10-Q, Form 10-K, Form F-10 or Form 20-F if the filing is not preceded by a regulated announcement.

Each closing share price for a listing of a Company shall be sourced from Refinitiv.

# 7 Termination

The Index shall remain in daily calculation from its Launch Date through at least 30 calendar days after any termination notice provided to stakeholders.

# 8 Key Terms

### Basket

A set of Constituents and their Index Shares and/or reset Index Weights that is established at a Rebalancing and, apart from effects of price movements and isolated adjustments reflecting corporate actions or events, held constant until the next Rebalancing.

### Constituent



A member of a Basket, assigned some non-zero quantity of Index Shares and/or some non-zero Index Weight.

### Ex-Date

The date starting upon and after which a purchase of shares in some security no longer entitles the purchaser to a certain benefit (e.g., share subscription rights, dividend payments, spun-off shares). Generally, the Ex-Date is defined by the share listing's exchange relative to a shareholder record date defined by the issuer entity.

### Index Dividend

Total per-share amount (expressed in the currency of the Index calculation) of regular cash dividend(s) for the constituent listing gone ex as of market open on the file date

### Index Level

The numeric value for some point of time within a time series representing the relative performance of an Index or Index Variant.

### Index Market Cap

The hypothetical market value of all a Constituent's Index Shares as of some time, expressed in the currency of the Index calculation, equal to the product of the Constituent's Index Shares and Index Price at that time.

### **Index Price**

The per-share or otherwise per-unit, per-Index Share price of a Constituent as of some time, expressed in the currency of the Index calculation. Unless otherwise specified, this is the Local Price converted to (if not already expressed in) the currency of the Index calculation.

### **Index Shares**

The quantity of a Constituent's shares or equivalent units of ownership represented in an Index as of some time, such that the product of the Constituent's Index Shares and Index Price at each given time equals the Constituent's Index Market Cap at that same time.

### Index Variant

One of a set of parallel calculations of an Index's performance, each following a distinct methodology for regular calculation and resulting in a time series of Index Levels potentially different from those of another Variant of the same Index.



### Index Weight

The portion of the hypothetical market value of all the Constituents' Index Shares (expressed in the currency of the Index calculation) accounted for by a certain Constituent as of some time.

#### Local Price

The local-currency per-share price quoted for a Constituent listing as of some time on its exchange. Unless otherwise specified, this is the listing exchange's definition of the closing price; the Local Price may be otherwise defined as the last-traded price, the volume-weighted average price (VWAP), the bid-ask midpoint, etc.

### Rebalancing

A scheduled reset of the Index Shares and/or Index Weights across a set of Constituents as per the applicable Index methodology, initiating a new Basket. This may include addition or removal of Constituents.

### Target Index Market Cap

The Index Market Cap targeted in the market-open (i.e., adjusted-close) data for one or more Constituents (up to and including the entire Basket in aggregate), usually associated with a Rebalancing.