Economics

PHARMACEUTICALS PRICE COMPARISON Description of the approach

Commissioned by Kaupan liitto January 2024

1 DATA COLLECTION AND METHODOLOGY

Data collection & management (1/2)

Purpose of this methodological annex

This annex accompanies the price comparison study (referred to as the "Price Comparison") and explains the methodological choices and data sources used in undertaking the comparison. Given the focus of the study, the methodology is designed to collect, process and compare price data, not to assess regulatory or (wholesale or retail) market factors underlying the observed differences.

Data collected from a sample of pharmaceutical providers

To assess the price differences in Finland and Sweden, we collected retail price data across the pharmaceutical retail markets, encompassing both prescription-free, over-thecounter (OTC) pharmaceutical products and prescription pharmaceuticals.

We gathered retail price data from a sample of eight sources, encompassing both Finland and Sweden, by collecting information from their websites.¹ Prices were collected between October 12th and November 15th, 2023. For Finland, prices are collected from the price search engine "Lääkehakupalvelu" of the Association of Finnish Pharmacies and websites of four pharmacies. For Sweden, prices are collected from pharmacies, both in-store and online, and grocery retailers. See Table 1 (page 4) for further details.

Data retrieved using a "web crawler"

We use a so-called "web crawler", a refined data collection process employing dynamic web scraping techniques, to retrieve information from our sample of pharmaceutical providers. Scraping several thousand observations entails a degree of instability when sending requests to websites, as basic techniques require significant load time.

To address this issue, we implement dynamic web scraping techniques utilizing parallel processing. This approach allows us to reliably collect thousands of observations within a narrow time frame. Through the utilization of web scraping, we retrieve a large sample of observations by scraping all available pharmaceutical product listings from the respective websites.² This encompasses both online and in-store prices where such information is accessible. See Table 1 (page 4) for details.

Integration of data with pharmaceutical product registries

Our approach to the price comparison for Finland and Sweden relies on the integration of collected retail price data with medicinal product registries of Finland (*Perusrekisteri*) and Sweden (*VARA*), from Fimea and eHälsomyndigheten, respectively.

This integration serves two primary objectives. First, by merging the collected price data with the national product registries, we enhance the data set by adding classification variables for each pharmaceutical product. This allows us to categorise pharmaceutical products into the two groups (OTC, prescription). Second, we use the product registries to retrieve variable information and harmonise the data between Finland and Sweden, thereby streamlining the process for effective data matching across the two countries. In our analysis, we presume that the information in the medicinal product registries is accurate, but we note some discrepancies between national registries.

Data cleaning

We enhance the data by eliminating unidentifiable observations and observations that are not present in the product registries. This ensures that the datasets only contain observations for identifiable pharmaceutical products. Specifically, our approach removes observations according to the following criteria:

- i. Not classified as pharmaceutical products.
- ii. Missing a VNR number corresponding to the product registries.
- iii. Not marketed according to the product registries.
- iv. Containing inconsistent price information.³

Moreover, we perform manual corrections to the information collected from the national product registries to mitigate national discrepancies.

Harmonisation of retail prices

To further facilitate the cross-country comparison, we employ a set of assumptions to harmonise the retail price data across Finland and Sweden. These assumptions, which are further detailed in the Assumptions and Definitions section below, serve several purposes, each with its own rationale.

¹⁾ The eight pharmaceutical providers represent full price information for prescription pharmaceuticals and significant part of OTC prices in Finland, and close to all sales of pharmaceuticals in Sweden. 2) For Apotek Hjärtat, we adopted a targeted approach, using a predefined list of active ingredients and products associated with OTC medications as search criteria to source relevant data. / 3) For example, on a few occasions, websites displaying a price of 0 for a small number of pharmaceutical products.

Data collection & management (2/2)

The sample consists of 20,160 pharmaceutical products

Based on our data collection and cleaning processes, we obtain an extensive dataset of retail prices from a total of eight pharmaceutical providers, including, prescription-free (OTC) and prescription pharmaceuticals in both Finland and Sweden.

The data set encompasses a total of 20,160 unique pharmaceutical products at a VNR level with 8,680 products from Finland and 15,243 products from Sweden (inclusive of 3,763 overlapping VNRs). See Table 1 for a detailed breakdown of the sample.

Table 1: Collection of retail prices for pharmaceutical products

Country	Provider	Source type	Source	Channel	Description	Unique VNR	Data collected
Finland	Lääkehaku-palvelu	Price search engine	laakehakupalvelu.apteekkari liitto.fi	Online/In- store	Retail prices for pharmaceutical products scraped using VNR numbers obtained from Fimea's product registry.	8,515	OTC Prescription
Finland	Yliopiston Apteekki	Pharmacy	Yliopistonapteekki.fi	Online/In- store	Retail prices of OTC products.	835	OTC
Finland	Itä-Suomen yliopiston apteekki	Pharmacy	yliopistonverkkoapteekki.fi	Online/In- store	Retail prices of OTC products.	634	OIC
Finland	Viherapteekki	Pharmacy	Viherapteekki.fi	Online/In- store	Retail prices of OTC products	416	OTC
Finland	Järvenpään lähiapteekki	Pharmacy	Verkkoapteekki.fi	Online/In- store	Retail prices of OTC products	117	OIC
Sweden	Apotea	Pharmacy	apotea.se	Online	Retail prices for all products scraped from Apotea's website	14,722	OTC, Prescription
Sweden	Apoteket	Pharmacy	apoteket.se	Online/In- store	Retail prices for all products scraped from Apoteket's website	14,543	OTC, Prescription
Sweden	Kronans Apotek	Pharmacy	kronansapotek.se	Online/In- store	Retail prices for all products scraped from Kronans Apotek	11,738	OTC, Prescription
Sweden	Apotek Hjärtat	Pharmacy	www.apotekhjartat.se	Online/In- store	Retail prices for OTC pharmaceuticals scraped using search keys obtained from eHälsomyindigheten's product registry ¹	781	OTC
Sweden	ICA	Food retailer	www.ica.se	Online	Retail prices scraped from a total of 376 ICA stores using (i) a list of product names, and (ii) a list of ICA stores obtained from Läkemedelsverket. ^{2,3}	66	OTC
Sweden	Hemköp	Food retailer	hemkop.se	Online	Retail prices scraped for all Prescription-free (OTC) pharmaceuticals using the website category page	53	OTC
Sweden	Соор	Food retailer	coop.se	Online	Retail prices scraped for all Prescription-free (OTC) pharmaceuticals using the website category page	39	OTC

1) Apotek Hjärtat's website prohibits the use of data collection by web scraping due to which data collection from their website is limited to OTC products. / 2) Läkemedelsverket. List of providers who sell pharmaceuticals online. (link). / 3) Läkemedelsverket. List of marketed prescription-free (OTC) pharmaceuticals in Sweden. (link).

Assumptions and definitions

Classification of pharmaceutical products

All pharmaceutical products are classified into two groups: prescription-free (OTC) and prescription pharmaceuticals. This classification is based on the decisions of national medicines regulators in Finland and Sweden. Moreover, we have looked separately at prescription pharmaceuticals, which belong to respective reference price systems, "viitehintajärjestelmä" and "periodens vara" in Finland and Sweden, respectively.

Volume weighting of prescription pharmaceuticals

To calculate the average price difference between Finland and Sweden for prescription medicine, weights based on number of packages sold from 2022 are used for both countries, respectively. Finnish and Swedish sales volumes are calculated with data from *Pharmaca* and *Tandvårds- och läkemedelförmånsverket ("TLV")*, respectively. If an individual product is missing sales volume from 2022, the product gets the same weight as the least sold product in the group of comparable products.²

Unit price for comparison

Comparison prices for each product are calculated as unit prices to account for different package sizes of products. Unit price is calculated by dividing the retail price of a product by its package size. This is in line with the international price comparison studies by TLV.

A small delivery fee of EUR 2.39 is charged once for transactions of prescription products. According to the most recent Finnish Statistic on Medicines 2021, 1.58 prescription pharmaceuticals were dispensed per visit.¹ Thus, the average delivery fee per product used to calculate Finnish prices is calculated as EUR 1.51.

The prices are for stand-alone products and do not incorporate bundled discounts sometimes provided in Sweden in the sales of OTC products (e.g., a pharmaceutical product and another product).

Value added tax

Finland and Sweden have different VAT rates for pharmaceutical products. In Finland, all pharmaceuticals have a VAT of 10%. In Sweden, OTC pharmaceuticals have a VAT of 25% and prescription pharmaceuticals have a VAT of 0%. Prices compared are harmonised with respect to VAT differences. The direction of the impact of harmonisation varies between OTC and prescription pharmaceuticals.

Overall average price difference

The overall average price difference is calculated as a weighted average by a group of comparable products, namely active ingredient, form, strength and package size (for prescription products). Finnish consumption data from Pharmaca is used for weighting measured in sales value nominated in Euro.

All price differences between Finland and Sweden are calculated as a percentage difference between the Swedish price from the Finnish price. (P^{SE}-P^{FI})/P^{FI} where a negative value indicates that the price in Sweden is cheaper than in Finland. Prices in Finland is used as the base price (denominator) because we seek to understand differences relative to Finland (conversely, using Sweden as a base would make any difference where the Swedish prices are lower appear larger than those reported).

Exchange rate

Our base comparison is static and focuses on the situation in October 2023. Swedish Krona is converted to Euro using the average exchange rate in October 2023, which corresponds with the time when the price data is collected. As reported in the main document (p. 7 and 14), we have conducted sensitivity checks on the impact of exchange rate changes through an average exchange rate spanning a longer period.

There are no objective criteria for selecting a time horizon for a static (one month) price comparison, and the impact on the difference depends on the length of the period. For example, the calculated overall price difference between OTC prices in Finland and Sweden diminishes on average by 6 percentage points when 3-year average interest rate is used (from 37 per cent to 31 per cent). The impact is smaller if a shorter time period (e.g. one year) is used.

While not studied in our study, a depreciation in exchange rates may imply an upward pressure on prices of internationally traded pharmaceutical products. Further analysis would be needed to understand the net impact of changes in exchange rate over time.

Calculating the comparison price

The average retail price used for comparison is calculated differently for different types of products to reflect different sales channels and regulations which affect the choice of product.

Group of comparable products

For the price comparison, we group products to the level of "group of comparable products" which we define as all products of the same active pharmaceutical ingredient, form, strength and package size (for prescription products only). The calculation of the average price for each group is described below.

Average retail prices for a group of comparable products in Finland

For Finnish prices, we use two alternative sources, Lääkehaku and websites of Yliopiston Apteekki and Itä-Suomen yliopiston apteekki, Järvenpään sivuapteekki and Viherapteekki for OTC pharmaceuticals. The price used in the comparison is the lowest competitive price from these sources. Based on our review of competitive prices, most OTC pharmaceuticals are sold at the regulated maximum price available on Lääkehaku.

For each group of comparable prescription products, the average price is calculated based on weights derived from annual sales in 2022 using data from Pharmaca. If an individual product is missing sales volume from 2022, the product gets the same weight as the least sold product in the group of comparable products. For OTC pharmaceuticals, we use unweighted averages, since we do not have access to OTC retail volumes in Sweden.

Weighted average retail price for OTC pharmaceuticals in Sweden

OTC pharmaceuticals in Sweden have multiple prices across different sales channels at different prices. It is not reasonable to use the cheapest price available, and we calculate weighted average prices, as follows:

- 1. For pharmacies, which have different prices for OTC pharmaceuticals online and in store, prices are weighted as 19% online prices and 81% in store prices.^{1,2}
- 2. Weighted average price for pharmacies and nonpharmacy retail is calculated based on market shares (scaled up to 100% for weighting of an individual product because the retailers in the sample cover the clear majority, but not the entire market and not all products are sold at all retailers).³
- 3. Weighted average price for OTC pharmaceuticals is calculated based on relative shares of pharmacy and non-pharmacy retail using weights 83% and 17% for pharmacy and non-pharmacy retail respectively.⁴

The average for a group of comparable OTC pharmaceuticals is calculated as the average price of individual products without volume-weighting (no volume data for individual OTC products in Sweden). We use sales channel-weighted prices for Sweden, as described above, and use Finnish volumes to calculate the overall weighted average price difference across the groups of comparable groups.

Swedish prescription pharmaceuticals

For prescription pharmaceuticals within a group of comparable pharmaceuticals, the average price is calculated based on weights derived from annual sales volumes at a product level in 2022, using data from the Swedish medical regulator TLV, similar to Finland. TLV's data includes online and in-store wholesale volumes for prescription pharmaceuticals. If an individual product is missing sales volume from 2022, it will get the same weight as the least sold product in the group of comparable products.

For comparable prescription pharmaceuticals belonging to the Swedish "periodens vara"-system, the Swedish comparison price is the price of the price of October 2023 product of the month.⁵ Under the "periodens vara"-system, the product for each month is selected through a competitive process and pharmacies have to offer the selected reimbursed product of the month to individuals regardless of which pharmaceutical their doctor has prescribed them. The patient only receives reimbursement for the "periodens vara"-product and must pay the difference resulting from using an alternative themselves, unless there are specific medical reasons for a deviation. There is recent more extensive research on the impacts of "periodens vara" and other Nordic models.⁶

1) For Apotea which is online only, online price gets a weight of 100%. / 2) TLV (2023). 2023 års uppföljning av apoteksmarknadens utveckling: Total sales divided between pharmacies online and in-store sales (Link). / 3) Pharmacies market shares: TLV (2023). 2023 års uppföljning av apoteksmarknadens utveckling (Link). Non-pharmacy retail market shares: DLF, Delfi (2022). Dagligvarukartan 2022 (Link). / 4) eHälsomyndigheten (2022). Detaljhandel med läkemedel 2022: Distribution of sales volume in pharmacies and alternative channels for OTC pharmaceuticals in Sweden (Link). / 5) See TLV's website for more information. (Link and Link) / 6) See e.g., Kortelainen et al. (2023). (Link).

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Matching of products

We use three matching methods

We use a three-step approach to match pharmaceutical products between Finland and Sweden, as described below. The approach relies on the product description data of Finnish and Swedish national medical authorities. This implies that in case of missing information or differences in how data is recorded by either Fimea or eHälsomyndigheten, some similar products may not have been matched. For OTC pharmaceuticals, data for most sold products has been checked and products have been matched using information available on pharmacies' websites.¹

Prescription pharmaceuticals

To provide a comprehensive understanding of price differences for different pharmaceutical products in Finland and Sweden, we use a three-step approach designed to achieve maximum coverage without compromising comparability:

- Matching by VNR number: We identify products sharing the same VNR number² across Finland and Sweden, a unique pharmaceutical identifier across Nordic countries.
- 2. Matching by product characteristics: For products where a matching VNR is not found, we identify products based on their characteristics. This method matches products with the same active pharmaceutical ingredient, strength, pharmaceutical form, and package size. Additionally, name matching based on a brand name together with by-hand confirmation is used to find matches that may have otherwise been missed due to missing details.
- 3. Matching by substitution group: As a final step, the third method matches products belonging to the same substitution group as defined by the national medical authorities (Fimea and Läkemedelsverket). This helps us match substitutable products between countries even if some of the product characteristics used for matching are missing in step 2.

This process of matching products is used across all prescription pharmaceuticals.

OTC pharmaceuticals

Matching of OTC pharmaceuticals follows the methodology described above, except for not requiring the same package size. This is primarily due to certain products being sold in different package sizes in the two countries, which affects the matching rate, including with respect to some commonly used products (e.g. paracetamol is sold in different package sizes in Finland and Sweden).³ Unlike prescription pharmaceuticals where a doctor has prescribed a specific package size, consumers may choose the package size they buy freely from the alternatives available. Therefore, prices are compared by unit prices, e.g., by one tablet or millilitre.

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2 OTC PHARMACEUTICALS

Overview of methodology: OTC pharmaceuticals

Data collection and matching

To assess the price differences for non-prescription (OTC) pharmaceutical products in Finland and Sweden, we undertook the collection of retail price data across pharmacies and other retail channels in Sweden. The collection and matching of retail prices of thousands of pharmaceutical products is a non-trivial exercise and involves several steps, as follows:

Step 1	Time period : We gathered retail price data from a sample of eight retail (both online and in-store) sales channels in Finland and Sweden. Prices were collected between October 12th and November 15th, 2023.
Step 2	Data collection methodology : We used a refined data collection process by employing so-called dynamic web scraping techniques to retrieve thousands of prices from our sample of pharmaceutical providers in Finland and Sweden. Our approach to the price comparison for Finland and Sweden relies on the integration of collected retail price data with medicinal product registries of Finland and Sweden, from Fimea and eHälsomyndigheten, respectively.
Step 3	Data cleaning and harmonisation: We ensured that the datasets only contain observations for identifiable pharmaceutical products. This means removing, for example, products not classified as pharmaceutical products and products with inconsistent price information. Through a process of manual corrections – listed in detail in the Annex A.2 – we identify a final sample of OTC products ready for matching.
Step 4	Matching : Our approach to identifying like-for-like products for price comparisons is three-fold: First, we match products based on a unique pharmaceutical identifier, the Nordic Article Number (VNR). Second, we match products with the same active pharmaceutical ingredient, strength and pharmaceutical form. Additionally, we use name matching based on brand name together with manual confirmation due to missing details. <i>Third</i> , we match products belonging to the same substitution group as defined by the national medical authorities. Following these steps, we find a matching product in Sweden for 61 per cent of pharmaceutical products available in Finland (60 per cent in terms of value).

Price comparisons – key assumptions:

- **Price difference** the price difference between Finland and Sweden is calculated at the level of a group of comparable products, namely active pharmaceutical ingredient, form and strength.
- Weighting of products –For individual products, Swedish prices are weighted based on the relative shares of the different retail sales channels.
- **Unit price for comparison** Comparison prices for each product are calculated as unit prices to account for different package sizes of products.
- **Exchange rate** To convert Swedish krona to Euros we use the average exchange rate in October 2023 although test sensitivities (see page 5).
- Value added tax To account for the differences in value added tax (VAT) we use tax-harmonised price differences.

Matching of OTC pharmaceuticals

Share of Finnish products matched to Swedish counterparts, as number of products and wholesale value

 The table on the right depicts the share of Finnish OTC matched to Swedish products – number of products and share of wholesale value.¹ 	Share of Finnish OTC products matched to Swedish products				
 Finland and Sweden have allowed different products for OTC sales. Not all OTCs in Finland have a corresponding product in Sweden and vice versa. 			Products matching to	ATC code not classified as	
 Overall, Swedish pharmacies had 936 unique products available, while Finnish pharmacies had 780 unique products in total. 		matched to Swedish OTC products	Swedish prescription products	medicine in VARA	Not matched
 9 per cent of Finnish OTC are on prescription in Sweden. 			products		
 For instance, paracetamol 1000mg is sold as OTC in Finland while in Sweden the maximum strength for OTC retail is 500 mg. 					
 Some products considered pharmaceuticals in Finland are not pharmaceuticals in Sweden. We base our product classification on the Swedish national product register, VARA.² 	Measured as number of	61%	9%	10%	19%
 10 per cent of Finnish OTC medicines do not have corresponding ATC codes which indicates these products are not classified as medicine in Finland. 					
 For example, dexpanthenol, a commonly used pharmaceutical cream in Finland, is not classified as a medicine in Sweden.³ 					
• We are unable to match ca. 19 per cent of the Finnish OTC products. The main reasons for this discrepancy include variations in dose classifications, dose strengths, and the unavailability of comparable products.					
 OTC package sizes differ between countries, and thus we use unit prices to enable matching and comparison of these. 	Share of sales				
 E.g. paracetamol is typically sold in packages of 20 tablets in Sweden while in Finland it is sold in packages of 10 and 30 tablets. 	measured in wholesale value of 2022	60%	7%	8%	25%

1) Item defined as unique VNR code which identifies individual pharmaceutical products from each other. VNR, broadly corresponds to EAN codes on regular retail products. Wholesale value is rounded up to the closest million euros. The wholesale value of matched products is sourced from a dataset from Pharmaca. Not all products in the price comparison had sales in 2022 in which case the sales of the least sold comparable product is used. Total value sold refers to identified products still on the market in October 2023 for which we have collected price information. 2) The register contains all medicines, consumables, and food items covered by high-cost protection, and it is administrated by eHälsomyndigheten. (3) Dexpanthenol is the active substance of e.g., Bepanthen.

3 PRESCRIPTION PHARMACEUTICALS

Overview of methodology: Prescription pharmaceuticals

Data collection and matching

To assess the price differences for prescription pharmaceutical products in Finland and Sweden, we undertook the collection of retail price data across pharmacies. In summary, the collection and matching of retail prices of thousands of pharmaceutical products involves several steps, which, alongside the key assumptions underlying our analysis, are set out on this page.

Step 1	Time period : We gathered retail price data from a sample of eighth retail sales channels in Finland and Sweden. Prices were collected between October 12th and November 15th, 2023.	group phan streng
Step 2	Data collection methodology : Our approach to the price comparison for Finland and Sweden relies on the integration of collected retail price data with medicinal product registries of Finland and Sweden, from Fimea and eHälsomyndigheten, respectively.	 Weig phan Finlan avera to far Unit each
Step 3	Data cleaning and harmonisation: We ensured that the datasets only contain observations for identifiable pharmaceutical products. This means removing, for example, products not classified as pharmaceutical products and products with inconsistent price information	 Excl we u altho Valu preso
Step 4	Matching : Our approach to identifying like-for-like products for price comparisons is three-fold: <i>First</i> , we match products based on a unique pharmaceutical identifier across Nordic countries. <i>Second</i> , we match products with the same active pharmaceutical ingredient, strength, package size and pharmaceutical form. Additionally, we use name matching based on brand name together with manual confirmation due to missing details. <i>Third</i> , we match products belonging to the same substitution group as defined by the national medical authorities.	Finlaı to all phar

Price comparisons – key assumptions and sensitivity checks:

- **Price difference** The price difference between Finland and Sweden is calculated at the level of a group of comparable products, namely active pharmaceutical ingredient, form, package size and strength.
- Weighting of products for prescription pharmaceuticals, we have access to volume data in Finland and Sweden. As such, we calculate weighted average prices within our defined substitution groups to facilitate the cross-country comparison.
- Unit price for comparison Comparison prices for each product are calculated as unit prices to account for different package sizes of products.
- **Exchange rate** To convert Swedish krona to Euros we use the average exchange rate in October 2023, although test sensitivities (see page 5).
- Value added tax Value added tax rates for prescription pharmaceuticals are different between Finland and Sweden. In Finland, a 10% VAT is applied to all pharmaceuticals while prescription pharmaceuticals have no VAT in Sweden.

Matching of prescription pharmaceuticals

Share of Finnish products matched to Swedish counterparts, as number of products and wholesale value

 The table on the right depicts the share of Finnish prescription pharmaceuticals matched to Swedish products – number of products and share of wholesale value.¹ In total, we find a matching product in Sweden for 80 per cent of prescription pharmaceuticals available in Finland. In terms of value, matched products correspond to 87 per cent of Finnish prescription pharmaceuticals sold in 2022. 	Finnish prescription pharmaceuticals	Products matched to Swedish prescription pharmaceuticals
 In comparison, TLV, in its price comparison study focusing on selected reimbursed pharmaceuticals in Sweden, finds corresponding products in Finland for 61 per cent and 74 per cent of products not part of periodens vara and part of periodens vara, respectively.² Not all products can be matched due to differences in national regulation. E.g., some Finnish prescription pharmaceuticals are considered OTC in Sweden or not available at all on the Swedish market in pharmacy retail. Unlike for OTC pharmaceuticals, package size is part of product matching to reflect the fact that the choice of package size bought is done by the doctor based on the patient's specific medical needs. 	Measured as number of products	80%
	Share of sales measured in wholesale value of 2022	87%

1) Item defined as unique VNR code which identifies individual pharmaceutical products from each other. VNR, broadly speaking, corresponds to EAN codes on regular retail products. Wholesale value is rounded up to the closest million euros. The wholesale value of matched products is sourced from a data set from Pharmaca. Not all products in the price comparison had sales in 2022 in which case the sales of the least sold comparable product is used. Total value sold refers to identified products still on the market in October 2023 for which we have collected price information. / 2) TLV (2023), Internationell prisjämförelse 2023, pp. 29 and 39.

CONTACT

Kalle Kantanen kak@copenhageneconomics.com

Copenhagen Economics Lönnrotinkatu 5 00100 Helsinki Finland

www.copenhageneconomics.com

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ANNEX A OTC PHARMACEUTICALS

Annex A.1: Number of OTC pharmaceutical products for human use sold in channels and chains in Sweden and Finland

Approximately 8 per cent¹ of Swedish OTC pharmaceuticals are sold in non-pharmacy retail

	Channel	Unique products ²	Chain	Unique products
			Aptotea.se	704
	Pharmacy	936	Apoteket	725
			Apoteket Hjärtat	781
Sweden			Kronans Apotek	719
		79	Соор	39
	Non-pharmacy retail		Hemköp	53
			ICA	66
			Yliopiston Apteekki	757
Finland	Pharmacy	780	Itä-Suomen yliopiston apteekki	634
T IIIGIIG			Viherapteekki	416
			Verkkoapteekki.fi	117

Annex A.2: List of manual changes made to certain pharmaceuticals in the data 1/2

Pharmaceutical subject to change	Old description/ value	New value (variable)	Country
N02BE01 (paracetamol)	Dispergoituva tabletti	Tabletti (form)	Finland
A02AX (calcium carbonate & heavy magnesium carbonate)	Old description contains "rennie"	Rennie (product name)	Finland
A02AX (calcium carbonate & heavy magnesium carbonate)	Imeskelytabletti	Purutabletti (form)	Finland
A06AC01 (ispagula husk)	Vi-siblin	Visiblin (product name)	Finland
A06AC01 (ispagula husk)	Vi-siblins	Visiblins (product name)	Finland
A06AC01 (ispagula husk)	Old description contains "x"	Rakeet, annospussi (form)	Finland
A06AC01 (ispagula husk)	610 mg/g	610 (strength)	Finland
A06AC01 (ispagula husk)	880 mg/g	880 (strength)	Finland
R02AA03 (2,4-dichlorobenzylalcohol, amylmetacresol & menthol)	Old description contains "strepsils"	Strepsils (product name)	Finland
A06AD11 (lactulose)	667	670 (strength	Finland
R06AE07 (cetirizine dihydrochloride)	Imeskelytabletti	Tabletti (form)	Finland
A06AG10 (docusate sodium & sorbitol)	120 ml	120 (package size)	Finland
A06AG10 (docusate sodium & sorbitol)	10 x 120 ml	1200 (package size)	Finland
A06AG10 (docusate sodium & sorbitol)	10 x 240 ml	2400 (package size)	Finland
A06AD65 (potassium chloride, Macrogol 3350, sodium bicarbonate & sodium chloride)	Movicolreadytotake	Movicol (product name)	Finland
A07BA01 (charcoal, activated)	500 ml	50 (g)(package size)	Finland
D01AC20 (hydrocortisone & miconazole nitrate)	DAKTACORT Emulsiovoide 20/10 mg/g 30 g	20 (strength)	Finland
A02BC05 (esomeprazole magnesium dihydrate)	Enterotabletti	Enterokapseli (form)	Finland
A06AC01 (ispagula husk)	Old description contains "granulat i dospåse"	Rakeet, annospussi (form)	Sweden
R02AA03 (2,4-dichlorobenzylalcohol, amylmetacresol & menthol)	Old description contains "strepsils"	Strepsils (product name)	Sweden

Annex A.2: List of manual changes made to certain pharmaceuticals in the data 2/2

Pharmaceutical subject to change	Old description/ value	New value (variable)	Country
G01AF02 (clotrimazole)	Vaginalkapsel, mjuk + kräm	Emulsiovoide + emätinpuikko (form)	Sweden
G01AF02 (clotrimazole)	Vaginaltablett och kräm	Emulsiovoide + emätinpuikko (form)	Sweden
A07FA02 (saccharomyces boulardii)	Pulver till oral suspension, dospåse	Jauhe oraalisuspensiota varten (form)	Sweden
N01BB20 (lidocaine & prilocaine)	Medicinskt plaster	Lääkelaastari (form)	Sweden
A06AD65 (potassium chloride, Macrogol 3350, sodium bicarbonate & sodium chloride)	Pulver till oral lösning i dospåse	Jauhe oraalisuspensiota varten (form)	Sweden
A06AD65 (potassium chloride, Macrogol 3350, sodium bicarbonate & sodium chloride)	Jauhe oraalisuspensiota varten	Jauhe oraaliliuosta varten (form)	Sweden
N07BA01 (nicotine)	Komprimerad sugtablett	Imeskelytabletti (form)	Sweden
N02BE01 (paracetamol)	lg	1 000 (strength)	Sweden
J01XB01 (colistimethate sodium)	-	Set strength at "1 000 000"	Sweden
R03AK07 (budesonide & formoterol fumarate dihydrate)	-	Set DDD per package at "90"	Sweden

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- 1. Läkemedelsverket (Swedish Medical Products Agency) (2023a). List of providers who sell pharmaceuticals online. Available at [Link].
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