

# European Price Comparison of Medicines used in Hospitals

Study protocol

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Commissioned by the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection



# European Price Comparison of Medicines used in Hospitals

Discounts and Real Prices

Study protocol

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The views expressed in this publication are those of the authors and not necessarily of the commissioning institution.

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# Summary

Gesundheit Österreich GmbH (GÖG) was commissioned by the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK) to conduct a European price comparison of medicines used in hospitals that takes "real prices" into account.

The present study protocol describes the methods for this study. The focus is on a primary data collection of "real prices" (i.e. discounted prices) for selected medicines used in hospitals in Austria and in three to five other countries, which are set in relation to the list prices (available via the pharmaceutical price information service of the GÖG). Confidentiality about data suppliers is a central principle of the survey.

## Key words

Medicine prices, hospital, European price comparison, discount, transparency

# Feedback

The GÖG invites comments on the planned study and its methodology.

Feedback can be sent in writing to [pharmanews@goeg.at](mailto:pharmanews@goeg.at) by 18 April 2019.

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# Abbreviations

AMNOG	Gesetz zur Neuordnung des Arzneimittelmarktes / Act on the Reform of the Market for Medicinal Products
BMASGK	Federal Ministry of Labour, Social Affairs, Health and Consumer Protection
BMGF	Bundesministerium für Gesundheit und Frauen / Federal Ministry of Health and Women's Affairs
ECB	European Central Bank
EU	European Union
GÖG	Gesundheit Österreich GmbH / Austrian Public Health Institute
HAI	Health Action International
MEA	Managed Entry Agreement
PHIS	Pharmaceutical Health Information System
PPI	Pharma Price Information (medicine price information service provided by GÖG)
PPRI	Pharmaceutical Pricing and Reimbursement Information
PPP	Pharmacy purchasing price
PRP	Pharmacy retail price
UK	United Kingdom
VAT	Value added tax
WHO	World Health Organization



# 1 Background

The continuous monitoring and regular analysis of medicine prices support policy-makers in the development of pharmaceutical pricing policies. As one of its legally defined tasks, Gesundheit Österreich GmbH (GÖG / Austrian Public Health Institute) is mandated to perform medicine price analyses.

There is need for a price study on the **inpatient sector**:

- » Many of the **high-priced medicines** that have increasingly entered the market in recent years are used either exclusively or **primarily in hospitals** (Vogler et al. 2018).
- » **Medicine procurement in the inpatient sector** differs from that of the outpatient sector in many countries, including Austria. While outpatient medicine prices are the same throughout Austria, given the application of statutory (maximum) price regulation (Bundesministerium für Gesundheit und Frauen (BMGF) 2019) and price negotiation of the Main Association of Social Insurance Institutions, procurement of medicines in the inpatient sector is decentralised, performed by hospitals or owners of the hospitals (usually provinces). In most cases, those responsible for the procurement of medicines are in direct contact with the manufacturers and negotiate the prices for the hospital or hospitals of the same owner (Jommi 2018; Klemp et al. 2011; Morel et al. 2013; Pauwels et al. 2017; Stemar 2015).
- » Discounts and similar agreements (so-called managed entry agreements / MEA, such as price-volume agreements, risk-sharing agreements, capping) are applied in the inpatient sector (Ferrario/Kanavos 2013; Ferrario/Kanavos 2015). Due to the confidential nature of these discounts, the validity of international price comparisons based on list prices is limited.

A decade ago, commissioned by the European Commission and the Austrian Federal Ministry of Health, the research project “Pharmaceutical Health Information System“ (PHIS) was conducted in order to gain knowledge about pharmaceutical provision and procurement in hospitals in Europe. For selected medicines in Austria and four other European countries, the real prices (in comparison to the published list prices) were collected and analysed as of September 2009. The PHIS study showed differences in the extent of discounts granted between studied countries and, in particular, between medicines: Whereas no discounts were granted for monopoly pharmaceuticals, medicines which, after hospitalisation, continued to be prescribed in the outpatient sector (as long-term therapy) achieved high discounts or were offered free of charge in some countries (Austria) (Vogler et al. 2010; Vogler et al. 2013a; Vogler et al. 2013b). Ten years later, the PHIS study is still one of the few research projects internationally that has investigated real prices and discounts in hospitals (see Appendix 1 for further information and results of the PHIS study and other relevant studies in this field).

Against this background, GÖG was commissioned to carry out a European price comparison of medicines used in hospitals in 2019, which considers “real prices” of medicines. This adds to previous price studies that were based on list prices (Schneider et al. 2018; Vogler et al. 2014; Vogler et al. 2016).

## 2 Objectives of the study

The general objective of the study is to collect and analyse real prices of selected medicines in the inpatient sector in Austria and some other EU Member States.

The specific objectives of the study are:

- » Definition of the concept of “price” (list price versus “real price” in the light of application of MEA) for medicines used in hospitals and an assessment as to whether and in what form these prices can be collected, calculated (ex-post) and analysed<sup>1</sup>
- » Survey of prices and related MEA (e.g. discounts) of (selected) medicines in Austria and comparable countries
- » Analysis of price data against the background of the national pharmaceutical system
- » Qualitative survey to investigate further information, e.g. on the availability and shortages of medicines

It is not an objective of this study to evaluate different procurement models in the inpatient sector with regard to their impact on medicine prices or access to medicines.

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<sup>1</sup>

Regardless of the question about confidentiality, the design of a pricing model can be complex, making it difficult to determine the actual price.

### 3 Project organisation

Relevant actors of the study are summarised in Table 3.1.

Table 3.1:  
Key actors in the context of the study

Actor	Role / Task
Federal Ministry of Labour, Social Affairs, Health and Consumer Protection	Commissioning party
Project team at GÖG	Implementation of the study
"Sounding Board": representatives of all key hospital owners (provinces, orders) in Austria, represented by the management, the central procurement department or hospital pharmacy	Feedback on the draft methodology, receipt of the study protocol, support through contacts to respondents, receipt of the study prior to publication (possibility to provide feedback) Presentation of the study and its methodology (study protocol) at a meeting in March 2019 and, if needed, another meeting in autumn 2019 to present the preliminary results
Informal expert group: selected hospital pharmacists in Austria	Informal exchange on the study methodology, in particular on product selection, feedback on the study protocol, advance receipt of the study before publication (possibility to provide feedback) Information exchange at meetings in January and March 2019
Scientific Advisory Board of GÖG: individual members	Informal exchange on the study methodology, feedback on the study protocol, receipt of the study before publication (possibility to provide feedback) Information exchange at a meeting in January 2019
Hospital owners, hospital pharmacists and their organizations in Austria and other countries	Possible data providers for the selected countries (depending on the selected method, possibly different for the countries of the study)
Researchers of other countries, international organisations	Possibility to comment on the study protocol (available in German and English version)

## 4 Methodology

### 4.1 Survey method

#### **Type of price comparison:**

- » Single price comparison of selected medicines

Justification: Given the major challenge to survey "real price" data, a sample of individual medicines is aimed to be analysed. An average price comparison is not considered feasible.

#### **Country and hospital selection:**

- » Austria and around 3–5 further European countries. The following countries are under consideration: Denmark, Germany, the Netherlands, Norway, Portugal, Slovenia; the selection of countries will be finalised after having explored the feasibility of data surveys in the countries (discussion with collaboration partners in the countries).
- » It is aimed to survey the prices of around five hospitals per country (caveat: Denmark and Norway have one hospital price country-wide; in other countries prices of the hospitals of one owner can be the same as well. The selection of hospitals to be surveyed will be guided by the respective country contacts.

Justification: The selection criteria for this survey are (1) European countries with similar economic strength, (2) countries which had already been investigated in the 2009 PHIS study, and (3) differences in the characteristics of the organisation of the pharmaceutical system and medicine procurement in the inpatient sector.

#### **Selection of products:**

- » representative selection of medicines based on defined criteria (see below)
- » guided by technical advice provided by an informal expert group
- » provisional list of the 21 active ingredients; for further information see appendix 2 in chapter 6.2

Justification: Inclusion criteria for this study were (1) medicines with a high budget impact for the inpatient sector, (2) medicines of different indication groups, (3) a mixture of on-patent medicines and medicines for which patent protection has expired, and (4) medicines which also account for high public expenditure in the outpatient sector (due to their price or quantity, e.g. long-term prescribing for outpatients following a first prescription in the hospital sector).

**Date of survey:**

- » Data collection will be carried out in Q2/2019
- » Reference date of price data is 31 December 2018

Justification: Latest possible date is considered.

**Scope of the survey:**

- » Real prices (i.e. discounted prices, if determinable in the case of ex-post managed-entry agreements / MEA)
- » Design of the MEA (i.e. which type of a MEA)
- » Further data: quantitative data for 2018; expenditure data for 2018 for the selected medicines
- » Hospital list prices (ex-factory price or pharmacy purchasing price (PPP) in some countries) – they are not part of the primary data collection, but are obtained from the GÖG Pharma Price Information (PPI) system
- » Supplementary information on the hospitals surveyed and the procurement of medicines in the inpatient sector in the countries surveyed

Justification: Together with an informal group of experts (hospital pharmacists), a methodology will be developed on how managed-entry agreements are taken into account in the ex-post calculation in order to generate comparable data. In addition, volume and expenditure data and background information on the surveyed hospitals will be collected to support the interpretation and analysis of the data (including allowing for sensitivity analyses if needed).

**Survey method:**

- » For real prices, volume and expenditure data of selected medicines: primary survey in approximately 2–3 hospitals per country, by means of an on-site survey or written answers (XLS file for price data and questionnaire). Data will be surveyed either by the members of the GÖG project team or, in specified cases, by local collaboration partners.
- » The method will be adjusted for those settings where real hospital prices are the same across a country (e.g. Denmark and Norway) or within a hospital owner group.
- » For further data on the hospital: questionnaire to be answered within the scope of the primary survey (alternatively: written answer)
- » For background information on medicine procurement: literature, information (written, interviews) from relevant actors (e.g. procurement bodies) in the study countries.
- » List prices will be retrieved from the GÖG Pharma Price Information (PPI) service

Justification: Real price data are not publicly available, thus primary data collection is required. Furthermore, confidentiality issues need to be considered (as below).

**Confidentiality:**

- » Confidentiality will be ensured for all participating institutions that share data
- » Anonymisation and aggregation of the findings in order to avoid any tracing back of individual institutions
- » If higher confidentiality is requested: an alternative approach is used in which data providers inform anonymously to the project team (survey sheet in XLS format, which will be anonymised; similar to the approach used by Morgan et al. (2017))

Justification: Accessing “real prices” is a highly sensitive research topic, and it thus requires an appropriate method that does not violate any contractual obligations of the data providers.

**Comparator product:**

- » same active substance, same pharmaceutical form, same strength and pack size
- » deviations in packaging or pack size (up to 50% of the package size of the reference product) are taken into account
- » consideration of generic and biosimilar and parallel imported products

Justification: In cases of medicine price comparisons, particularly for single price comparisons, it has been recommended in literature to use identical medicines (like-by-like comparison) or to allow only minor variations to the pack size (Busse/Panteli 2016; Busse et al. 2016; Vogler et al. 2017). However, since price surveys and comparisons are confronted with the limitation that they reflect a certain point in time (unless they are analyses of price developments), price differences might be attributable to different status of patent expiry in the countries. Thus, this study also considers the same medicines in the off-patent market or parallel imports.

## 4.2 Methods related to analysis

**Analysis parameters:**

- » Unit of the analysis: based on a standard unit of administration (i.e. tablet, capsule, vial) – unit price;
- » Exchange rates: Reference rates of the European Central Bank – average rates for November 2018 (monthly average exchange rate)
- » Weighting of prices: no weighting according to countries’ income level; sensitivity analysis: weighting according to volume depending on data availability.

### Evaluations and presentation of results:

- » Comparison of real and list prices and discounts / MEA between the countries investigated
- » Analysis with regard to different medicines
- » Analysis with regard to volume data
- » Sensitivity analysis with regard to the three parameters (comparison between list price and real prices, medicines, volume data) to validate robustness of the results (depending on data availability)
- » Analysis of pricing policies in the inpatient sectors (depending on data availability, either quantitative or qualitative through interviews)
- » Analysis with regard to shortages (depending on data availability, either quantitative or qualitative through interviews)

## 5 Project schedule

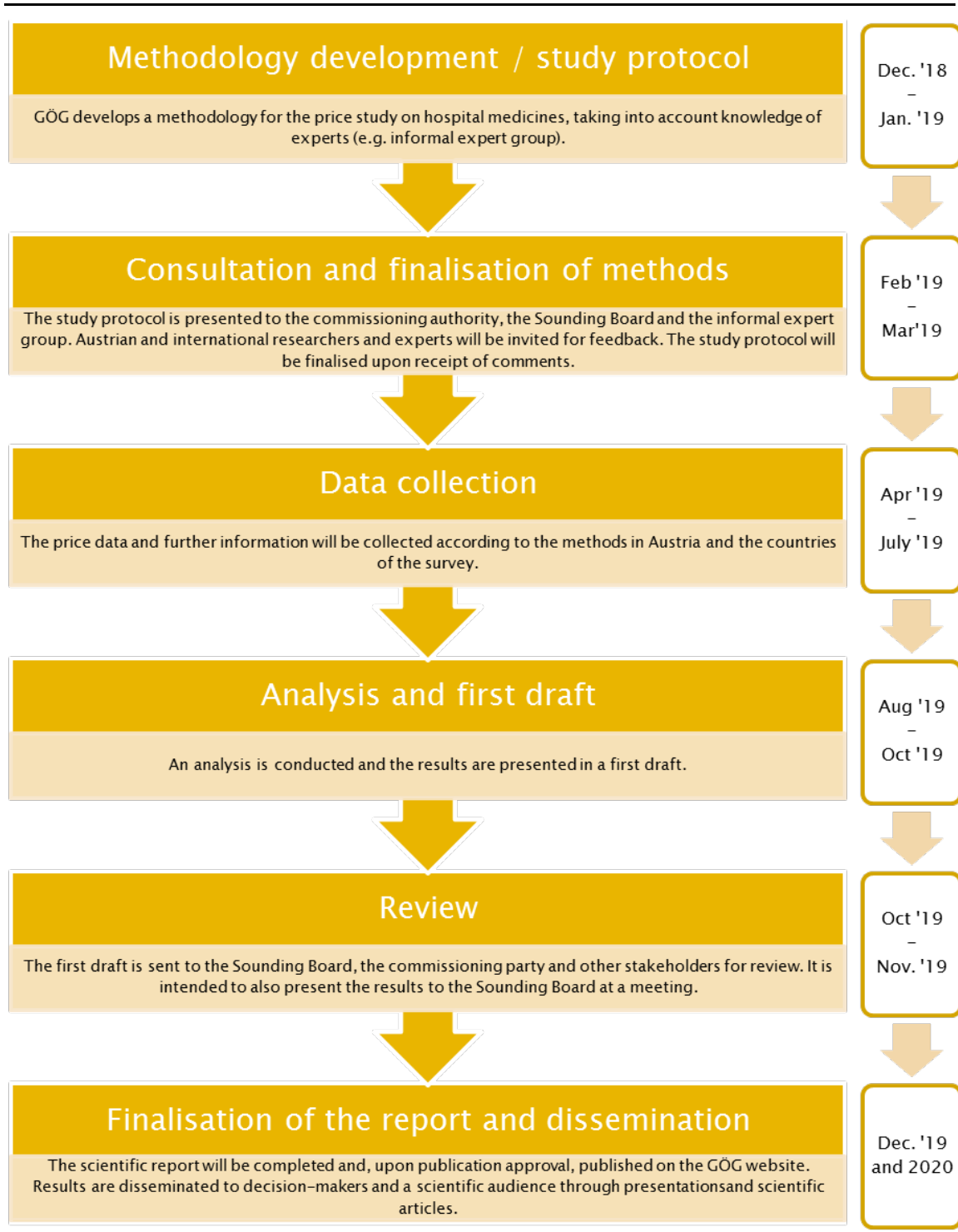
### 5.1 Review process

- » National and international actors and experts are invited to review the study protocol.
- » In January 2019, key elements of the methodology were presented to the GÖG Scientific Advisory Board. Some members agreed to review the proposed methodology according to scientific standards.
- » Elements of the methodology were presented in meetings with members of the Informal Advisory Group (January 2019) and the “Sounding Board” (hospital owners representatives, March 2019), and they are also invited to review the study protocol.
- » GÖG welcomes any comments and aims to consider them if appropriate.

### 5.2 Time-line

Figure 5.1 describes the time schedule and procedures for the study.

Figure 5.1:  
Time schedule for the study



Source: Gesundheit Österreich GmbH (GÖG)



## 6 Appendix

### 6.1 Studies on real prices and discounts

In total, there are only a few studies on real prices of medicines used in hospitals. In the following the results of some of the major studies will be presented.

#### **PHIS project – EU project on medicines management and prices in hospitals**

One focus of the PHIS project (PHIS = Pharmaceutical Pricing and Reimbursement Information) commissioned by the European Commission was a survey of the organization of the inpatient pharmaceutical system in the countries of the network (36 European countries) and a survey of hospital prices in five case study countries (Austria, Netherlands, Norway, Portugal, Slovakia). Prices (list prices and "real prices") for twelve medicines as of September 2009 were collected from a total of 25 hospitals.

The price survey showed differences in "real prices" and the extent of discounts between the case study countries. The highest median discounts were found in Norway, followed by the Netherlands. Study results suggested that higher discounts could be obtained with centralised than with decentralised procurement. In all countries surveyed, the patent status of the medicines examined had an effect on the level of discounts: whereas hospitals were usually not granted discounts for patent-protected medicines – predominantly cancer medicines – and had to pay the list price, medicines used as long-term therapy after a hospital stay in the outpatient sector tended to have high discounts (Vogler et al. 2010; Vogler et al. 2013b). In Austria, a pattern of extreme values was evident – either hospitals bought the medicines at list prices or they received them for free from the pharmaceutical companies (Vogler et al. 2013a).

The PHIS project carried out methodology work to provide a definition of "real prices" in view of different price and financing models, e.g. discounts, price-volume agreements, bundling with the purchase of other medicines or other products, or cost-free products (Vogler et al. 2010).

#### **Relevance of discount agreements and average amount of discounts**

In its European overview for 27 countries, the PHIS project also surveyed the relevance of discount arrangements (in numerous countries) and cost-free medicines (only a few countries besides Austria, e.g. Cyprus, Ireland, Slovakia) in the inpatient sector. Occasionally, countries also provided the average amount of discounts (Vogler et al. 2010).

A similar overview is provided by a study carried out in 2011 on the significance of discounts granted by the pharmaceutical industry to public payers, as well as their design and average amount. The study covered both the outpatient and the inpatient sectors; the information was provided by members of the PPRI (Pharmaceutical Pricing and Reimbursement Information) network (Vogler et al. 2012).

## **Real prices of cancer medicines**

The study of van Harten et al. (2016) collected list and real prices of nine anti-cancer medicines in June/July 2015 using questionnaires in 21 hospitals in 15 countries. The study showed not only considerable differences in list prices (up to 92%) and real prices (58%) between countries, but also in the level of discounts. While Italy and Spain achieved discounts of 30 per cent and more for some medicines, Central and Eastern European countries paid the list price for a number of the medicines studied (van Harten et al. 2016).

For some medicines, however, no real price data could be collected, as some interviewees were concerned about (legal) consequences and were not willing to provide price information from confidential agreements on medicines. Furthermore, the Belgian government pointed out that the real price communicated for Belgium was de facto even lower (De Block 2016). Despite these weaknesses, this study by van Harten et al. (2016) is one of the few scientific papers that published real prices for hospital medicines.

## **Study on access to medicines used in hospitals, including hospital prices**

A study by Health Action International (HAI) investigated access to patented medicines in hospitals in four European countries (Austria, France, Latvia and Spain). The prices of selected medicines were analysed and the authors came to the conclusion that hospital prices do not seem to be related to the economic power of the countries. However, official list prices were used in this study because the real prices were not accessible. The lack of transparency of real prices was highlighted as an important limitation, and the recommendation was made that EU Member States should be obliged to disclose confidential discounts in a publicly accessible database (Hawlik/Devalière 2016).

## **Anonymous surveys on discounts**

Morgan et al. (2017) collected the average amount of discounts in eleven economically strong countries in America, Europe and Australasia, but only for medicines in the outpatient sector. The discounts for both primary care medicines and specialised medicines were usually between 20 and 29 percent of the list price, with one third of respondents stating that they could obtain discounts of more than 60 percent on one or more medicines (Morgan et al. 2017). It is worth mentioning that in this study the data was already submitted to the researcher anonymously.

## **Review of literature on real prices**

A systematic literature search came to the conclusion that hardly any studies on real prices are available in the published literature (Mardetko et al. 2018): Only five studies were found on the subject of "discounts". In addition to the above-mentioned studies, these included a study on Germany in which an average price difference of approximately 22 percent (18 percent for medicines for rare diseases) was found between the price announced by the pharmaceutical manufacturer upon market authorisation and the price determined after price negotiations (Theidel/von

der Schulenburg 2016)<sup>2</sup>, and a study on off-patent medicines in the pharmacy market. In this study, an average discount of 39.3 percent of the reimbursement price was observed for 179 generics, which pharmacies were able to obtain at purchase – with the possibility of higher discounts with a higher number of suppliers (Puig-Junoy 2012).

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However, the study did not take into account further individual discounts between companies and individual health insurance funds ("selective discount contracts") or hospitals or hospital associations.

## 6.2 Proposal for medicines to be selected in the study

Table 6.1:

Proposal for the selection of medicines for this price study: 21 active substances with 52 medicines ranked according to medicine groups (high, medium, low)<sup>3</sup> and alphabetically according to the active substance name.

Active ingredient	Medicine	ATC code	Strength / Dosage	Content	Pharmaceutical form	Pack size	Packaging
<i>Medicines group 1</i>							
Bevacizumab	Bevacizumab, 100 mg in 4 ml, concentrate, 1 vial	L01XC07	25 mg/ml	4 ml	Concentrate for solution for infusion	1	vial
Bevacizumab	Bevacizumab, 400 mg in 16 ml, concentrate, 1 vial	L01XC07	25 mg/ml	16 ml	Concentrate for solution for infusion	1	vial
Enoxaparin	Enoxaparin, 40 mg in 0.4 ml, solution for injection, 10 pre-filled syringe	B01AB05	40 mg (100 mg/ml)	0.4 ml	Solution for injection	10	pre-filled syringes
Human normal immunoglobulin (IVIg)	IVIg, 1,000 mg in 10 ml, solution for infusion, 1 vial	J06BA02	1,000 mg (100 mg/ml)	10 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 2,500 mg in 25 ml, solution for infusion, 1 vial	J06BA02	2,500 mg (100 mg/ml)	25 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 5,000 mg in 10 ml, solution for infusion, 1 vial	J06BA02	5,000 mg (100 mg/ml)	50 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 10,000 mg in 10 ml, solution for infusion, 1 vial	J06BA02	10,000 mg (100 mg/ml)	100 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 1,650 mg in 10 ml, solution for infusion, 1 vial	J06BA01	1,650 mg (165 mg/ml)	10 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 3,300 mg in 20 ml, solution for infusion, 1 vial	J06BA01	3,300 mg (165 mg/ml)	20 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 1,000 mg in 5 ml, solution for infusion, 1 vial	J06BA01	1,000 mg (200 mg/ml)	5 ml	Solution for infusion	1	vial

3

The development of medicines groups is based on the WHO/HAI methodology to survey medicine prices (WHO/HAI 2008) which recommends to establish medicines groups of different relevance ("core list" and further groups). Medicines included in the medicines group 1 should have high data availability.

Active ingredient	Medicine	ATC code	Strength / Dosage	Content	Pharmaceutical form	Pack size	Packaging
Human normal immunoglobulin (IVIg)	IVIg, 2,000 mg in 10 ml, solution for infusion, 1 vial	J06BA01	2,000 mg (200 mg/ml)	10 ml	Solution for infusion	1	vial
Human normal immunoglobulin (IVIg)	IVIg, 4,000 mg in 20 ml, solution for infusion, 1 vial	J06BA01	4,000 mg (200 mg/ml)	20 ml	Solution for infusion	1	vial
Pembrolizumab	Pembrolizumab, 50 mg, powder for concentrate, 1 vial	L01XC18	50 mg		Powder for concentrate for solution for infusion	1	vial
Pembrolizumab	Pembrolizumab, 100 mg, concentrate for solution for infusion, vial	L01XC18	100 mg (25 mg/ml)	4 ml	Concentrate for solution for infusion	1	vial
Ranibizumab	Ranibizumab, 2.3 mg in 0.23 ml, solution for injection, 1 vial	S01LA04	2.3 mg 10 mg/ml	0.23 ml	Solution for injection	1	vial
Ranibizumab	Ranibizumab, 1.65 mg in 0.165 ml, solution for injection, 1 pre-filled syringe	S01LA04	1.65 mg 10 mg/ml	0.165 ml	Solution for injection	1	pre-filled syringe
Rituximab	Rituximab 100 mg in 10 ml, concentrate 2 vial	L01XC02	100 mg	10 ml	Concentrate for solution for infusion	2	vial
Rituximab	Rituximab, 500 mg in 50 ml concentrate, 1 vial	L01XC02	500 mg	50 ml	Concentrate for solution for infusion	1	vial
Trastuzumab	Trastuzumab 150 mg, powder for concentrate, 1 vial	L01XC03	150 mg (21 mg/ml)	(7.2 ml)	Powder for concentrate for solution for infusion	1	vial
Trastuzumab	Trastuzumab 600 mg in 5 ml, solution for injection, 1 vial	L01XC03	600 mg 120 mg/ml	5 ml	Solution for injection	1	vial
<b>Medicines group 2</b>							
Abirateronacetat	Abirateronacetat, 250 mg, film-coated tablet, 120 pcs.	L02BX03	250 mg		Film-coated tablet	120	Bottle
Anidulafungin	Anidulafungin, 100 mg, powder for concentrate, 1 vial	J02AX06	100 mg (3.33 mg/ml)	(30 ml)	Powder for concentrate for solution for infusion	1	vial
Clopidogrel	Clopidogrel, 75 mg, fct, 28 pcs.	B01AC04	75 mg		Film-coated tablet	28	Tablets in blister
Clopidogrel	Clopidogrel, 75 mg, fct, 84 pcs.	B01AC04	75 mg		Film-coated tablet	84	Tablets in blister
Denosumab	Denosumab, 60 mg in 1 ml, solution for injection, 1 pre-filled syringe	M05BX04	60 mg 60 mg/ml	1 ml	Solution for injection	1	pre-filled syringe
Denosumab	Denosumab, 120 mg in 1.7 ml	M05BX04	120 mg 70 mg/ml	1.7 ml	Solution for injection	1	vial

Active ingredient	Medicine	ATC code	Strength / Dosage	Content	Pharmaceutical form	Pack size	Packaging
Docetaxel	Docetaxel, 20 mg in 1 ml, concentrate, vial	L01CD02	20 mg 20 mg/ml	1 ml	Concentrate for solution for infusion	1	vial
Docetaxel	Docetaxel, 80 mg in 4 ml, concentrate, vial	L01CD02	80 mg 20 mg/ml	4 ml	Concentrate for solution for infusion	1	vial
Docetaxel	Docetaxel, 160 mg in 8 ml, concentrate, vial	L01CD02	160 mg 20 mg/ml	8 ml	Concentrate for solution for infusion	1	vial
Nivolumab	Nivolumab, 40 mg in 4 ml, concentrate, 4 vials	L01XC17	40 mg 10 mg/ml	4 ml	Concentrate for solution for infusion	4	vial
Talimogene laherparepvec	Talimogene, 10e6. PFU in 1 ml, solution for injection, 1 vial	L01XX51	10e6 PFU/ml	1 ml	Solution for injection	1	vial

**Medicines group 3**

Apixaban	Apixaban, 2.5 mg, caps, 10 pcs.	B01AF02	2.5 mg		Hard capsule	10	Capsules in blister
Apixaban	Apixaban, 2.5 mg, caps, 20 pcs.	B01AF02	2.5 mg		Hard capsule	20	Capsules in blister
Apixaban	Apixaban, 2.5 mg, caps, 60 pcs.	B01AF02	2.5 mg		Hard capsule	60	Capsules in blister
Apixaban	Apixaban, 5 mg, caps, 20 pcs.	B01AF02	5 mg		Hard capsule	20	Capsules in blister
Apixaban	Apixaban, 5 mg, caps, 28 pcs.	B01AF02	5 mg		Hard capsule	28	Capsules in blister
Apixaban	Apixaban, 5 mg, caps, 60 pcs.	B01AF02	5 mg		Hard capsule	60	Capsules in blister
Dexmedetomidine	Dexmedetomidine, 200 mcg in 2 ml, concentrate, 5 ampoules	N05CM18	200 mcg 100 mcg/ml	2 ml	Concentrate for solution for infusion	5	Ampoules (glass) <sup>2</sup>
Dexmedetomidine	Dexmedetomidine, 200 mcg in 2 ml, concentrate, 25 ampoules	N05CM18	200 mcg 100 mcg/ml	2 ml	Concentrate for solution for infusion	25	Ampoules (glass)
Dexmedetomidine	Dexmedetomidine, 400 mcg in 4 ml, concentrate 4 ampoules	N05CM18	400 mcg 100 mcg/ml	4 ml	Concentrate for solution for infusion	4	vial
Dexmedetomidine	Dexmedetomidine, 1000 mcg in 10 ml, concentrate, 4 vials	N05CM18	1,000 mcg 100 mcg/ml	10 ml	Concentrate for solution for infusion	4	vial
Etanercept	Etanercept, 50 mg in 1 ml, solution for injection, 4 pre-filled syringes	L04AB01	50 mg 50 mg/ml	1 ml	Solution for injection	4	pre-filled syringe
Etanercept	Etanercept, 50 mg in 1 ml, solution for injection, 4 pre-filled pen	L04AB01	50 mg 50 mg/ml	1 ml	Solution for injection	4	pre-filled pen

Active ingredient	Medicine	ATC code	Strength / Dosage	Content	Pharmaceutical form	Pack size	Packaging
Imatinib	Imatinb, 100 mg, fct, 60 pcs.	L01XE01	100 mg		Film-coated tablet	60	Tablets in blister
Imatinib	Imatinb, 100 mg, fct, 180 pcs.	L01XE01	100 mg		Film-coated tablet	180	Tablets in blister
Imatinib	Imatinb, 400 mg, fct, 30 pcs.	L01XE01	400 mg		Film-coated tablet	30	Tablets in blister
Infliximab	Infliximab, 100 mg, powder for concentrate, 1 vial	L04AB02	100 mg (10 mg/ml)	(10 ml)	Powder for concentrate for solution for infusion	1	vial
Pantoprazole	Pantoprazole, 20 mg, gastr. tab, 28 pcs.	A02BC02	20 mg		Gastro-resistant tablet	28	Tablets in blister
Pantoprazole	Pantoprazole, 40 mg, gastr. tab, 28 pcs.	A02BC02	40 mg		Gastro-resistant tablet	28	Tablets in blister
Pantoprazole	Pantoprazole, 40 mg, powder for solution for injection, 1 vial	A02BC02	40 mg		Powder for solution for injection	1	vial
Rosuvastatin	Rosuvastatin, 10 mg, fct, 28 pcs.	C10AA07	10 mg		Film-coated tablet	28	Tablets in blister
Rosuvastatin	Rosuvastatin, 20 mg, fct, 30 pcs.	C10AA07	20 mg		Film-coated tablet	30	Tablets in blister

ATC = Anatomical Therapeutic Chemical Code, fct = film-coated tablet, PFU = plaque forming unit

Source: Gesundheit Österreich GmbH, advised by hospital pharmacists, Presentation: Gesundheit Österreich GmbH

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