



Review of vaccine price data

Submitted by WHO European Region
Member States through the WHO/UNICEF
Joint Reporting Form for 2013



World Health
Organization

REGIONAL OFFICE FOR

Europe

Review of vaccine price data

Submitted by WHO European Region
Member States through the WHO/UNICEF
Joint Reporting Form for 2013

Keywords

DATA ANALYSIS
PRICING
UNICEF
VACCINES
WORLD HEALTH ORGANIZATION

ISBN 978 92 890 5107 1

Address requests about publications of the
WHO Regional Office for Europe to:
Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request
form for documentation, health information,
or for permission to quote or translate,
on the Regional Office website
(<http://www.euro.who.int/pubrequest>).

Abstract

This report aims to assist national immunization programme managers, health budgeting experts and experts responsible for vaccine procurement in accessing, understanding and utilizing available vaccine market information in order to improve the efficiency of vaccine procurement and countries' abilities to make financially sustainable, informed decisions on vaccine procurement and new vaccine introduction. It consolidates data that were collected for the year 2013 and provided by 23 Member States of the WHO European Region through the Joint Reporting Form (JRF) of WHO and the United Nations Children's Fund (UNICEF). The report provides a brief overview of the availability and transparency of vaccine pricing information at the country level, the vaccine procurement mechanisms, the procured vaccines and vaccine price information for each of the individual vaccine products. Individual procurement records include some of the variables expected to have a potential impact on price, including the country income group, volume of procurement, product formulation and presentation, delivery terms and vaccine procurement mechanism.

© World Health Organization 2015

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

Images

© M. Bring – cover

© WHO – page VI

© WHO/I. Sergienko – page 6, 19 & 22

Contents

ACKNOWLEDGEMENTS.....	IV
ABBREVIATIONS.....	V
INTRODUCTION.....	1
GLOBAL RECOGNITION OF THE NEED FOR VACCINE PRICE TRANSPARENCY.....	1
WHO EUROPEAN REGION RESPONSE ON VACCINE PRICE TRANSPARENCY.....	2
REPORTING OF VACCINE PRICE DATA.....	3
AVAILABILITY AND TRANSPARENCY OF VACCINE PRICING INFORMATION.....	4
VACCINE PROCUREMENT MECHANISMS.....	5
PROCURED VACCINES.....	7
MANUFACTURER BASE OF PROCURED VACCINES.....	9
REPORTED VACCINE PRICES.....	11
COUNTRY INCOME LEVEL AND VACCINE PRICES PAID.....	13
VACCINE PROCUREMENT VOLUMES AND PRICE.....	14
VACCINE PRESENTATION AND PRICE.....	15
VACCINE FORMULATION AND PRICE.....	15
WHO'S V3P PLATFORM.....	18
REFERENCES.....	20
APPENDIX 1. JRF TEMPLATE USED TO COLLECT VACCINE PRICING DATA FOR 2013.....	23
APPENDIX 2. MEMBER STATES' REPORTING STATUS OF VACCINE PRICING DATA IN THE ANNUAL WHO/UNICEF JRF, 2013.....	24
APPENDIX 3. COUNTRY-SPECIFIC VACCINE PRICE DATA BY INDIVIDUAL PRODUCT.....	25
APPENDIX 4. NATIONAL CURRENCY EXCHANGE RATES TO US DOLLARS.....	41
APPENDIX 5. CLASSIFICATION OF MEMBER STATES BY COUNTRY INCOME GROUP.....	43
APPENDIX 6. LIST OF WHO PREQUALIFIED VACCINES AS OF 1 JANUARY 2015.....	45
APPENDIX 7. OTHER VACCINE PRICE DATA SOURCES.....	51

Acknowledgements

This publication was developed by the Vaccine-preventable Diseases and Immunization Programme of the WHO Regional Office for Europe and was coordinated by Oleg Benes, Technical Officer at the Regional Office, within the framework of the global WHO Vaccine Product, Price and Procurement (V3P) Project. The following individuals have contributed to the production of the publication and their inputs are acknowledged with sincere gratitude:

- Shawn S. Gilchrist, independent consultant;
- Sarah Schmitt, independent consultant, financing, planning and procurement;
- Stephanie Mariat, Vaccine Product, Price and Procurement (V3P) Project, WHO headquarters;
- Tania Cernuschi, Technical Officer, Vaccine Pricing, Supply and Procurement, WHO headquarters;
- Michael Hinsch, independent consultant, Vaccine Product, Price and Procurement (V3P) Project, WHO headquarters;
- Miloud Kaddar, Health Economist, WHO headquarters;
- Catharina de Kat-Reynen, Consultant, Vaccine-preventable Diseases and Immunization, WHO Regional Office for Europe.

Abbreviations

aP

acellular pertussis

BCG

bacille Calmette–Guérin (tuberculosis) vaccine

DT

diphtheria and tetanus toxoids, paediatric formulation

DTaP

diphtheria and tetanus toxoids and acellular pertussis vaccine, paediatric formulation

DTaP-Hib

diphtheria and tetanus toxoids and acellular pertussis and *Haemophilus influenzae* type b vaccine

DTaP-Hib-HepB-IPV

diphtheria and tetanus toxoids and acellular pertussis, *Haemophilus influenzae* type b, hepatitis B and inactivated poliovirus vaccine

DTaP-Hib-IPV

diphtheria and tetanus toxoids and acellular pertussis, *Haemophilus influenzae* type b and inactivated poliovirus vaccine

DTaP-IPV

diphtheria and tetanus toxoids and acellular pertussis and inactivated poliovirus vaccine

DT-IPV

diphtheria and tetanus toxoids and inactivated poliovirus vaccine

DTP

diphtheria–tetanus–pertussis vaccine

DTwP

diphtheria and tetanus toxoids and whole-cell pertussis vaccine, paediatric formulation

DTwP-Hib-HepB

diphtheria and tetanus toxoids and whole-cell pertussis, *Haemophilus influenzae* type b and hepatitis B vaccine

EVAP

European Vaccine Action Plan 2015–2020

GNI

gross national income

GVAP

Global Vaccine Action Plan

HepA

hepatitis A vaccine

HepAHepB

hepatitis A and hepatitis B vaccine

HepB_adult

hepatitis B vaccine, adult formulation

HepB_paediatric

hepatitis B vaccine, paediatric formulation

Hib

Haemophilus influenzae type b

HibMenC

Haemophilus influenzae type b and meningococcal serogroup C vaccine

HIC

high-income country

HPV

human papillomavirus

Incoterms®

Set of rules published by the International Chamber of Commerce defining the responsibilities of sellers and buyers for the delivery of goods under sales contracts

CIF

cost insurance and freight

CIP

carriage and insurance paid to

DAP

delivered at place

DDP

delivered duty paid

EXW

ex works

FCA

free carrier

Influenza_adult

seasonal influenza vaccine, adult formulation

Influenza_paediatric

seasonal influenza vaccine, paediatric formulation

IPV

inactivated poliovirus vaccine

JE

Japanese encephalitis live attenuated vaccine

JE_inactd

Japanese encephalitis inactivated vaccine

JRF

WHO/UNICEF Joint Reporting Form

LIC

low-income country

LMIC

lower-middle-income country

Men AC

bivalent meningococcal A and C vaccine

Men ACWY

quadrivalent meningococcal A, C, W and Y vaccine

MenC_conj

meningococcal C conjugate vaccine

MIC

middle-income country

MMR

measles, mumps and rubella vaccine

MMRV

measles, mumps, rubella and varicella vaccine

MR

measles–rubella vaccine

OPV

oral poliovirus vaccine

PCV

pneumococcal conjugate vaccine

PFS

pre-filled syringe

Pneumo_ps

pneumococcal polysaccharide vaccine

TBE

tick-borne encephalitis

Td

tetanus and diphtheria vaccine, adult/adolescent formulation

TdaP

tetanus, diphtheria and acellular pertussis vaccine, adult/adolescent formulation

Tdap-IPV

tetanus, diphtheria, acellular pertussis and inactivated poliovirus vaccine, adult/adolescent formulation

TT

tetanus toxoid

Typhoid-hepatitis A

typhoid fever and hepatitis A vaccine

UMIC

upper-middle-income country

UNICEF

United Nations Children's Fund

UNICEF SD

UNICEF Supply Division

V3P

vaccine product, price and procurement

WAP

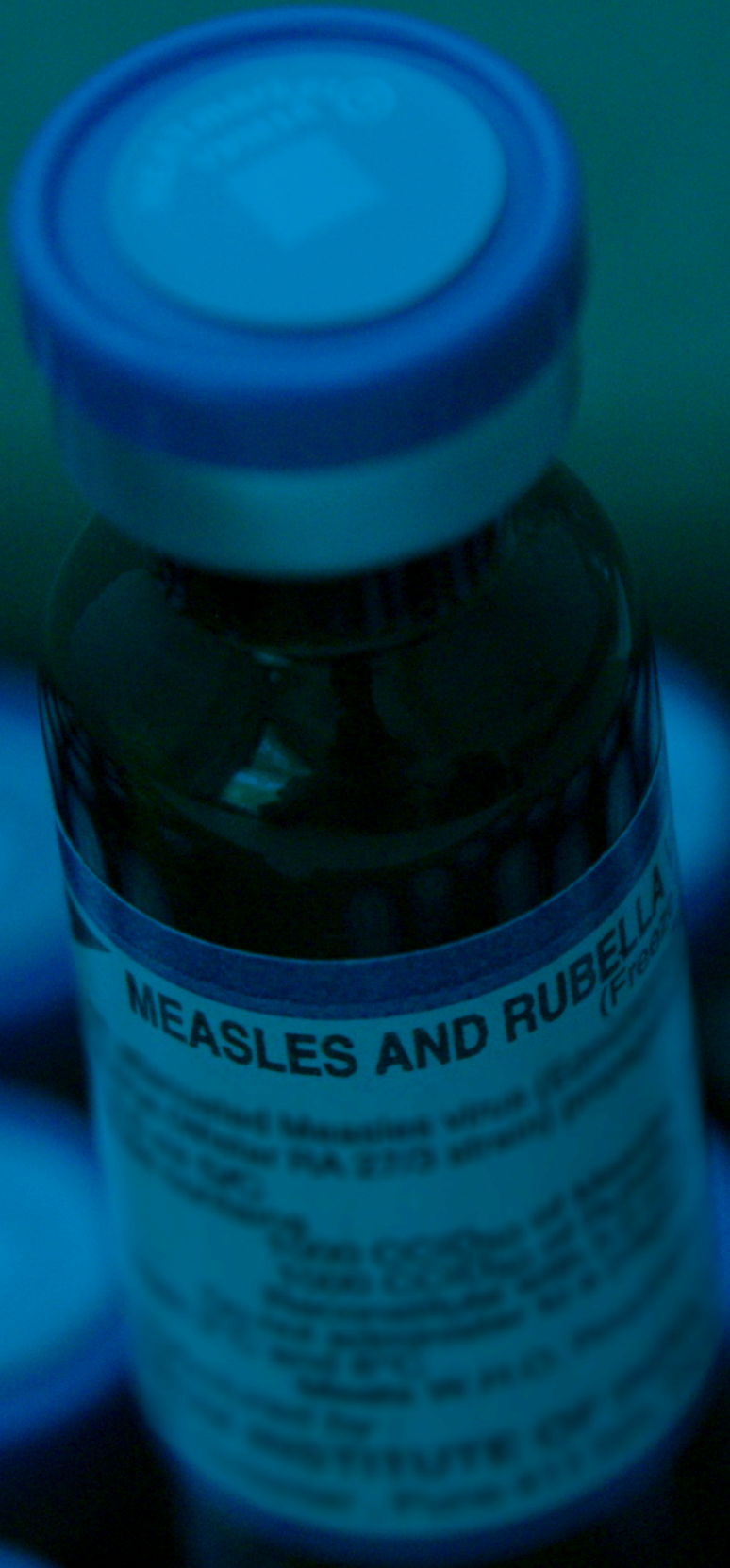
weighted average price

wP

whole-cell pertussis

YF

yellow fever



MEASLES AND RUBELLA
(Freeze-dried)

Measles virus (MV) and rubella virus (RV) are the only two human viruses that are transmitted by the respiratory route. Measles is a highly contagious disease that causes a fever, cough, and rash. Rubella is a milder disease that causes a fever and a rash. Both diseases can be prevented by vaccination.

Each vial contains 0.5 mL of a freeze-dried suspension of measles and rubella virus. The suspension is stable at room temperature for up to 24 months.

For information on the use of this vaccine, please refer to the package insert.

Introduction

Information contained in the report was provided by Member States of the WHO European Region through the annual Joint Reporting Form (JRF) of WHO and the United Nations Children's Fund (UNICEF). Reporting countries are solely responsible for the accuracy of the data provided.

Users should exercise caution when interpreting vaccine price data, taking into account specific contexts, circumstances and factors that may affect prices paid by individual countries. The utilized price measures aim to illustrate price variations and encourage more transparency to understand the underlying causes. They should not be considered representative or set any price benchmarks.

Global recognition of the need for vaccine price transparency

In recent years, considerable emphasis has been placed on the importance of price transparency in vaccines. The lack of price transparency has been raised in many regional and global meetings, and affordable pricing remains a concern for many countries. Vaccine pricing is considerably less transparent than pricing for other lifesaving pharmaceuticals. Efforts have been made by a few manufacturers to publish some of the criteria used to establish pricing in some markets. However, no single manufacturer reports all the specific prices in all markets in which they sell.

The role of increasing transparency has, therefore, been taken up by the purchasing side; both UNICEF Supply Division (SD) and the Pan American Health Organization (PAHO) Revolving Fund have made considerable improvements to vaccine price transparency by making publically available some of the price arrangements they have in place with some manufacturers. Other efforts to improve vaccine price transparency include the Médecins Sans Frontières' Right-Shot publication (1), the GAVI market-shaping efforts particularly for GAVI graduating countries (2) and the WHO Vaccine, Product, Price and Procurement (V3P) Project (3).

Member States endorsed the Global Vaccine Action Plan (GVAP) at the Sixty-fifth World Health Assembly in resolution WHA65.17 (4–5). In the annual progress report on the Decade of Vaccines and Global Vaccine Action Plan, information on vaccine prices at the global level was requested (6). This request stems from the concern that middle-income countries (MICs), not supported by donor funding, are particularly challenged to introduce newer and more costly vaccines. Monitoring GVAP progress, the WHO Strategic Advisory Group of Experts on immunization defined vaccine affordability as one of five priority problems in GVAP implementation and called for greater transparency in this area by encouraging countries to exercise more control on vaccine market and commit to sharing vaccine pricing information and working together to allow evidence-based assessment of the scale and scope of market imbalances, and allow solutions to be developed once the problems are understood (7).

The most crucial aspect to all of these efforts is the willingness of countries to share pricing data and information. Strong commitment for improved transparency from the purchasing side is essential to ensure continued improvements in affordable and equitable pricing to all countries.

WHO European Region response on vaccine price transparency

The European Vaccine Action Plan 2015–2020 (EVAP), adopted by the 64th session of the WHO Regional Committee for Europe on 18 September 2014, sets a regional vision and goals for immunization and control of vaccine-preventable diseases from 2015 to 2020 and beyond. Increasing access to quality-assured vaccines at affordable prices is one key component to achieving sustainable introduction of new vaccines. In this context, EVAP calls on Member States to “Support price transparency efforts regionally and globally through increased sharing of vaccine price information.” (8).

In 2014, the JRF was used to collect information on the prices of procured vaccines from Member States of the WHO European Region (Appendix 1). The collected data established a minimum framework for sharing vaccine pricing information at the regional level. It integrates and contributes to the broader global efforts aimed at increasing transparency of vaccine prices to empower countries in making informed vaccine introduction decisions.

This report is designed to consolidate the collected data and information to report back to Member States. The intention is to assist national immunization programme managers, health budgeting experts and experts responsible for vaccine procurement in accessing, understanding and utilizing available vaccine market information, leading to improved efficiency of vaccine procurement and the ability to make financially sustainable, informed decisions on vaccine procurement and new vaccine introduction.

The data collected in 2014 refers to vaccines procured during the previous year, 2013. Twenty-three Member States submitted complete data (see Appendix 2).

This report provides a brief overview of the availability and transparency of vaccine pricing information at the country level, the vaccine procurement mechanisms and the procured vaccines. In addition, it incorporates standardized tables, displaying vaccine price information for each of the individual vaccine products (see Appendix 3). Vaccine price data provided by individual countries are expressed in US dollars (using the World Bank’s average annual exchange rates for 2013 in Appendix 4) (9) and ranked from minimum to maximum value. Average price estimates (median value and weighted average price (WAP)) were also calculated. Individual procurement records include some of the variables expected to have a potential impact on price, including the country income group, volume of procurement, product formulation and presentation, delivery terms and vaccine procurement mechanism.

Limitations of data

The data provided in this report should not be overanalysed as very few conclusions can be drawn from this limited data set. In collating this data and the report, every attempt was made to make the information as clear as possible and to limit misinterpretation of the data. This is a good start to regional efforts to improve vaccine price transparency. However, room for improvement exists in the coming years. It is hoped and anticipated that over time:

- the tools for data collection will improve and be simple for the countries to complete;
- the understanding of the importance of providing data will improve, resulting in all Member States in the Region providing these important data annually; and
- the significance of data accuracy, which allows for improved analysis and comparability, will lead to improved understanding of the data and how they can be utilized.

Reporting of vaccine price data

The collection and reporting of vaccine price data is intended to improve market transparency, reduce the asymmetry of information available to purchasers and assist in making pricing appropriate, fair and efficient.

Of the 53 Member States in the Region, 47 submitted their JRF reports for 2013 (see Appendix 2).

Twenty-three Member States (43%) responded to the request to complete the vaccine price section of the 2013 JRF. Partial data on the vaccine procurement system and procured products were provided by seven additional Member States. Therefore the denominators in the report vary according to the number of reporting Member States against a specific indicator.

Member States from all income groups shared vaccine price data. The upper-middle- and high-income groups showed lower participation rates in submitting complete pricing data – 33% (4/12) and 39% (13/33) accordingly.

Table 1 shows the distribution of countries reporting vaccine pricing information by income groups, as per the World Bank's classification (10). See Appendix 5 for a detailed classification of Member States by income group.

TABLE 1. Reported vaccine pricing data through the JRF by country income group

Country income group (no. of countries)	JRF reports		
	Submitted (%)	With complete pricing data (%)	With incomplete pricing data (%)
High-income country (HIC) (33)	29	13	4
Upper-middle-income country (UMIC) (12)	11	4	2
Lower-middle-income country (LMIC) (6)	5	4	1
Low-income-country (LIC) (2)	2	2	0
Total (53)	47 (89%)	23 (43%)	7 (13%)

Key point

Member States of all income groups shared vaccine price data through the annual JRF reports. The participation rate was lower among upper-middle-income and high-income countries.

Availability and transparency of vaccine pricing information

The JRF report included three questions aimed to assess the availability of vaccine pricing information at the national level, existing practices of publishing national vaccine pricing data in the public domain, and the presence of legal provisions that prevent sharing of vaccine pricing information. The number of countries responding to each question varied; therefore, different denominators are used in calculations.

Key point

Vaccine pricing information is widely available in Member States of different income groups; however, these data are rarely published or made accessible.

Limited legal restrictions provide an opportunity to increase vaccine pricing transparency and expand benefits from better informed decision-making on vaccine procurement and new vaccine introduction.

Of the reporting Member States, 21 out of 29 (72%) reported that vaccine pricing information was available at the national level. Fewer HICs (65%) reported having vaccine pricing information available compared to countries of lower income groups (83%). Decentralized vaccine procurement to subnational authorities or outsourcing to private procurement services in some HICs might explain the difference.

Nine out of 25 reporting Member States (36%) publish vaccine pricing information in the public domain.

Restrictions on the ability to share vaccine price information were reported by three out of 26 reporting Member States (12%), all of which are HICs. In one case, reference was made to specific legal provisions establishing the transparency restriction, while two others referred to an existing practice of keeping vaccine pricing data confidential.

A summary of availability and transparency of vaccine pricing information is provided in Table 2.

TABLE 2. Availability and transparency of vaccine pricing information by country income group

Country income group (no. of countries)	Vaccine price information								
	Available at national level			Published in public domain			Restricted by legal provisions		
	Yes	No	Total no. of answers	Yes	No	Total no. of answers	Yes	No	Total no. of answers
HIC (33)	11	6	17	4	12	16	3	13	16
UMIC (12)	5	2	7	3	2	5	0	5	5
LMIC (6)	3	0	3	2	1	3	0	3	3
LIC (2)	2	0	2	0	1	1	0	2	2
Total (53)	21	8	29	9	16	25	3	23	26

Vaccine procurement mechanisms

Information regarding the use of different vaccine procurement mechanisms was provided by 29 Member States, which reported purchasing vaccines through government agencies, international procurement agencies or a combination of both.

All HICs that reported through the JRF and most UMICs utilize national procurement mechanisms operated by government agencies.

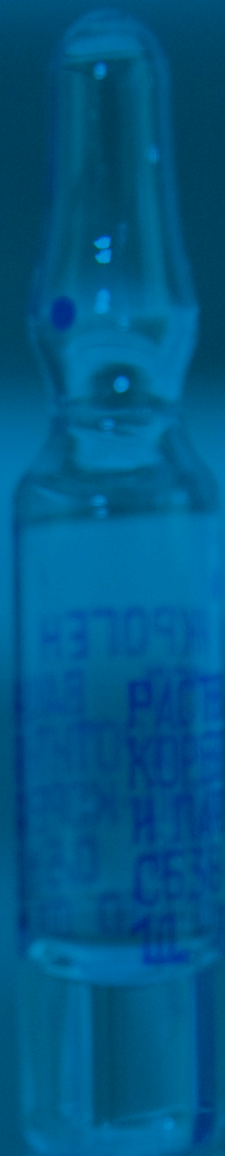
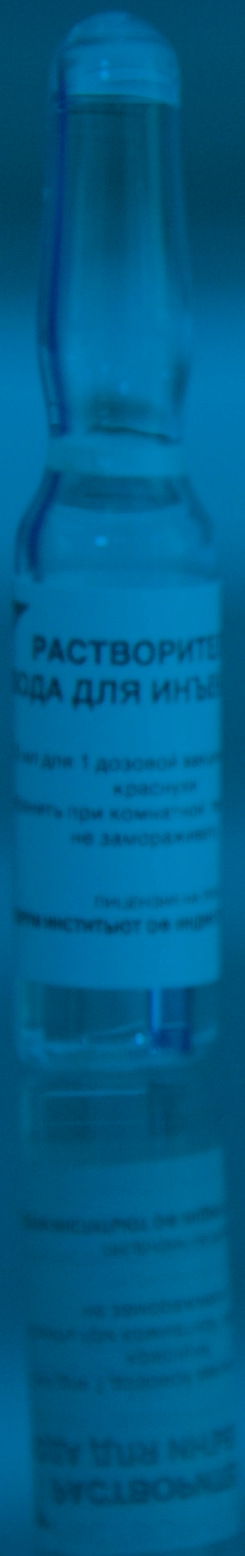
LICs and LMICs reported benefiting largely from the procurement services provided by international procurement agencies such as UNICEF SD.

Table 3 summarizes the vaccine procurement mechanisms used.

TABLE 3. Procurement mechanisms reported by Member States in 2013 by country income group

Country income group	Procurement mechanism ^a			Total country responses
	National procurement by a government agency	International procurement agency	Other, including donors	
HIC (33)	16	0	2	16
UMIC (12)	5	1	1	6
LMIC (6)	2	5	2	5
LIC (2)	1	2	2	2
Total (53)	24	8	7	29

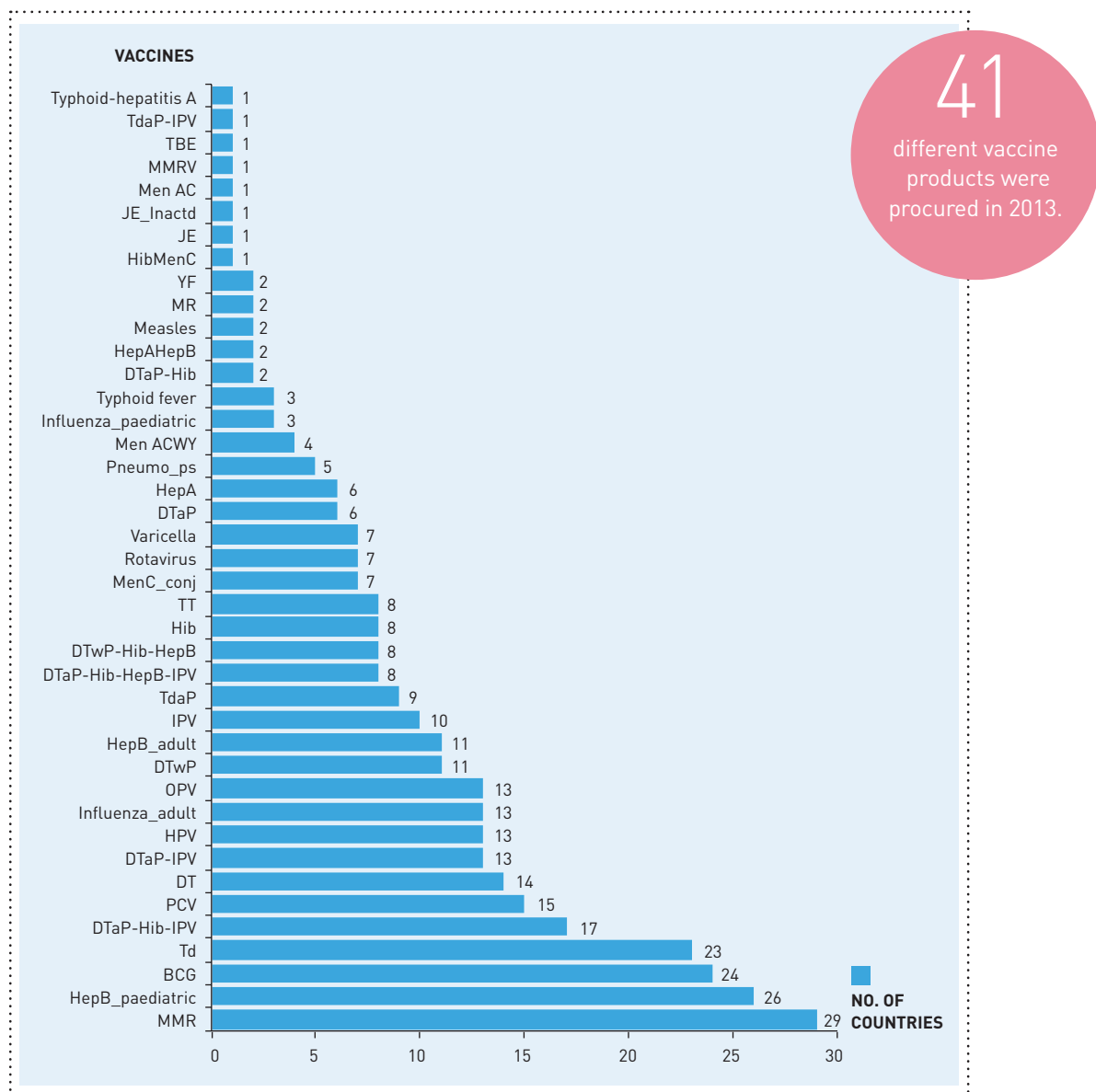
^a Each Member State reported one or more applicable procurement mechanisms.



Procured vaccines

Information on the names of the vaccine products procured was submitted by 30 Member States and included data for one or more products. In total, 41 different vaccine products were procured in 2013. Of these, 13 products were procured in multiple product presentations, including pre-filled syringes (PFS) and single or multidose ampoules and vials. The list of procured vaccines is in Fig. 1, ranked by frequency of the number of procuring countries per product.

FIG. 1. Frequency of procured vaccines reported by 30 Member States



BCG: bacille Calmette–Guérin (tuberculosis) vaccine; DT: diphtheria and tetanus toxoids, paediatric formulation; DTaP: DT and acellular pertussis vaccine, paediatric formulation; DTaP-Hib: DTaP and Haemophilus influenzae type b vaccine; DTaP-Hib-HepB-IPV: DTaP, Haemophilus influenzae type b, hepatitis B and inactivated poliovirus vaccine; DTaP-Hib-IPV: DTaP, Haemophilus influenzae type b and inactivated poliovirus vaccine; DTaP-IPV: DTaP and inactivated poliovirus vaccine; DTwP: diphtheria and tetanus toxoids and whole-cell pertussis vaccine, paediatric formulation; DTwP-Hib-HepB: DTwP, Haemophilus influenzae type b vaccine and hepatitis B vaccine; HepA: hepatitis A vaccine; HepAHepB: hepatitis A and hepatitis B vaccine; HepB_adult: hepatitis B vaccine, adult formulation; HepB_paediatric: hepatitis B vaccine, paediatric formulation; Hib: Haemophilus influenzae type b; HibMenC: Hib and meningococcal serogroup C vaccine; HPV: human papillomavirus; Influenza_adult: seasonal influenza vaccine, adult formulation; Influenza_paediatric: seasonal influenza vaccine, paediatric formulation; IPV: inactivated poliovirus vaccine; JE: Japanese encephalitis live attenuated vaccine; JE_inactd: Japanese encephalitis inactivated vaccine; Men AC: meningococcal AC vaccine; Men ACWY: meningococcal ACWY vaccine; MenC_conj: meningococcal C conjugate vaccine; MMR: measles, mumps and rubella vaccine; MMRV: measles, mumps, rubella and varicella vaccine; MR: measles–rubella vaccine; OPV: oral poliovirus vaccine; PCV: pneumococcal conjugate vaccine; Pneumo_ps: pneumococcal polysaccharide vaccine; TBE: tick-borne encephalitis; Td: tetanus and diphtheria vaccine, adult/adolescent formulation; TdaP: Td and acellular pertussis vaccine, adult/adolescent formulation; Tdap-IPV: Tdap and IPV, adult/adolescent formulation; TT: tetanus toxoid; Typhoid-hepatitis A: typhoid fever and hepatitis A vaccine; YF: yellow fever

Across the 30 reporting Member States, MMR was the most commonly procured vaccine, followed by HepB_paediatric, BCG and Td vaccines. Combinations of diphtheria–tetanus–pertussis– (DTP) and IPV-containing vaccines varied between countries: the most common procured product was pentavalent DTaP-Hib-IPV (17 countries), followed by DTaP-IPV (13 countries).

Of the more recently introduced vaccines, PCV and HPV vaccines were procured in 15 and 13 Member States, respectively. Rotavirus vaccine was reported by 7 and varicella vaccine by 6 Member States.

Vaccines were procured in various presentations, from single dose to 20 doses per primary container (Table 4). Most vaccines (70%) were in single dose presentations, followed by 10 dose presentations (21%) and 20 dose presentations (4%). BCG and OPV vaccines were only in 10 or 20 dose presentations. Multidose presentations were represented mainly by traditional antigens and combinations: DT, DTwP, hepatitis B, MMR, Td and TT and vaccines.

TABLE 4. Frequency of procured vaccine presentations

Vaccine product	Vaccine presentation (doses/primary container)					Vaccine product	Vaccine presentation (doses/primary container)				
	1 ^a	2	5	10	20		1a	2	5	10	20
BCG	–	–	–	15	11	Measles	2	1	–	–	–
DT	3	1	–	9	–	Men AC	–	–	–	1	–
DTaP	5	–	–	–	–	Men ACWY	2	–	–	–	–
DTaP-Hib	1	–	–	–	–	MenC_conj	5	–	–	–	–
DTaP-Hib-HepB-IPV	7	–	–	–	–	MMR	22	6	–	4	–
DTaP-Hib-IPV	17	–	–	–	–	MMRV	1	–	–	–	–
DTaP-IPV	13	–	–	–	–	MR	–	–	–	2	–
DTwP	4	1	–	8	–	OPV	–	–	–	13	4
DTwP-Hib-HepB	10	2	–	1	–	Pneumo_ps	3	–	–	–	–
HepA	5	–	–	–	–	PCV	17	–	–	–	–
HepAHepB	3	–	–	–	–	Rotavirus	9	–	–	–	–
HepB_adult	8	–	–	1	–	TBE	2	–	–	–	–
HepB_paediatric	23	1	–	3	–	Td	10	2	–	11	–
Hib	6	–	–	–	–	Tdap	7	–	–	–	–
HibMenC	1	–	–	–	–	Tdap-IPV	1	–	–	–	–
HPV	13	–	–	–	–	TT	2	2	–	3	–
Influenza_adult	14	–	–	–	–	Typhoid fever	1	–	1	–	–
Influenza_paediatric	3	–	–	–	–	Typhoid-hepatitis A	1	–	–	–	–
IPV	10	–	–	–	–	Varicella	6	–	–	–	–
JE	1	–	–	–	–	YF	1	–	–	–	–
JE_inactd	1	–	–	–	–						

^a 1 dose presentation includes one-dose ampoules, vials or vaccine pre-filled syringes.

Manufacturer base of procured vaccines

A competitive supply environment represents an important driver to optimizing vaccine prices: as competition increases and supply is sufficient to meet demand, prices can decrease to a sustainable plateau.

Table 5 classifies vaccine products into three groups – limited, moderate or large – based on the number of manufacturers of procured vaccines, as reported by participating Member States.

TABLE 5. Distribution of procured vaccine products by number of vaccine manufacturers

Manufacturer base					
Limited (1-3 manufacturers)		Moderate (3-4 manufacturers)		Large (≥ 5 manufacturers)	
Vaccine	No. of manufacturers	Vaccine	No. of manufacturers	Vaccine	No. of manufacturers
HepAHepB	1	Influenza_adult	3	DTwP	5
HibMenC	1	Influenza_paediatric	3	BCG	6
JE	1	IPV	3	TT	6
JE_inactd	1	Measles	3	DT	7
Men ACWY	1	MenC_conj	3	HepB_paediatric	7
MMRV	1	PCV	3	Td	13
MR	1	TdaP	3		
TBE	1	Typhoid fever	3		
Typhoid-hepatitis A	1	DTwP-Hib-HepB	4		
YF	1	HepB_adult	4		
DTaP	2	MMR	4		
DTaP-Hib	2	OPV	4		
DTaP-Hib-HepB-IPV	2				
DTaP-Hib-IPV	2				
HepA	2				
Hib	2				
HPV	2				
Pneumo_ps	2				
Rotavirus	2				
Tdap-IPV	2				
Varicella	2				

These data do not represent the number of globally available manufacturers, nor does it imply similar quality standards for each manufacturer reported. The number of manufacturers available to supply vaccines in each Member State may differ due to market authorization and national regulatory requirements. Furthermore, the manufacturers reported as having supplied vaccines may not represent all those available in each Member State.

More than half of the procured vaccines (22) were only supplied by one or two manufacturers. Among these are new and underused vaccines, such as rotavirus, PCV, HPV, acellular pertussis (aP) and IPV-based vaccine combinations. A moderate manufacturer base was reported for 12 products, including commonly used OPV, IPV, MMR and DTwP-Hib-HepB vaccines. The list of vaccines with a healthy competitive manufacturer base was relatively short and included traditional vaccines.

Key point

Member States are encouraged to review local versus international suppliers and seek opportunities to optimize locally available competition.

A restricted manufacturer base may limit the ability of Member States to obtain an optimum vaccine price and may increase the supply chain uncertainty, both in terms of gaining access to vaccine supply (i.e. willingness of the supplier to supply the product to a specific market) and gaining uninterrupted supply of contracted products (i.e. in case of manufacturing or supply disruptions).

The data collection tool did not provide the opportunity to review other factors that may discourage or limit the competition at the country level, such as regulatory requirements (i.e. market authorization fee policies, dossier review timing and requirements, local language and representation requirements), programmatic requirements (product formulation and presentation, vaccine vial monitors), as well as procurement policies and contractual terms (i.e. long-term forecasting, annual versus multiyear contracting, payment mechanisms and timelines, additional/bundled services, etc.).

Member States are encouraged to review local versus international suppliers and seek opportunities to optimize locally available competition. A vaccine market review needs to inform programmatic decisions on adopting specific product formulations or presentations to ensure access to quality products at an affordable price.

WHO provides a system for the prequalification of vaccines to determine the acceptability, in principle, of vaccines from different sources for supply to UNICEF and other United Nations agencies that purchase vaccines (11). The list of WHO prequalified vaccines and their manufacturers as of 1 January 2015 is in Appendix 6; the list is continuously updated (12). Furthermore, information regarding vaccines registered with the European Medicines Agency can be found at its website (13).

Reported vaccine prices

Vaccine pricing is a complex and multidimensional subject. A number of important demand side (purchasing) factors may influence the vaccine price such as procurement mechanism, scale of procurement, procurement methodology and contractual terms (such as payment and delivery terms).

Since countries reported prices using different procurement parameters and data were not available or insufficient to disaggregate according to these parameters, the main purpose of this report is to show variation of prices and some of the factors potentially influencing prices. Price information tables per vaccine product provide country-specific parameters collected for each procured vaccine (see Appendix 3). The tables are standardized. Vaccine price data were provided by individual countries, and prices are expressed in US dollars (using the World Bank's average annual exchange rates for 2013 (9)) and ranked from minimum to maximum value. Individual procurement records include some of the variables expected to have a potential impact on price, including the country income group, volume of procurement, product formulation and presentation, delivery terms and vaccine procurement mechanism. Country names and manufacturers are not included in this report, assuming that such information should not represent an essential pricing driver. Where Member States reported procurement through UNICEF SD and provided a "price" paid, this price is recorded as reported and may differ from prices reported by UNICEF SD (14).

Quantitative price estimates were also calculated. However, the quantitative measures used do not account for the heterogeneity of individual procurement factors. In some instances, this leads to underestimating or overestimating the vaccine prices. Therefore, the utilized quantitative measures and the subsequent results should not be considered representative but rather illustrative.

Key point

The utilized price measures aim to illustrate price variations and encourage more transparency to understand the underlying causes.

They should not be considered representative or set any price benchmarks.

Minimum and maximum price values for a specific product define the observed range of price variation. The average measures of price in this analysis include the median price and the WAP. WAP represents the average price weighted by the volume of each purchased product. WAP is sensitive, in particular, to the price paid for larger volumes. The median price represents a mid-range vaccine price value across reported procurements, is not dependent on extreme price values nor on procured volumes, and would represent better the price obtained during an average procurement regardless of the procured volume. A large difference between WAP and the median price indicates a skewed distribution of the price paid for a vaccine product, which could be caused by multiple factors. Data interpretation would require, in addition, a detailed review of individual procurement context that is beyond the scope of the data collection mechanism used in this report. Table 6 summarizes the quantitative price data and displays important price variations for most of the procured vaccine products.

TABLE 6. Minimum, maximum, median and average prices reported by vaccine product

Vaccines with reported price data	No. of reported procurements	Vaccine price per dose ^a (US\$)			
		Minimum	Maximum	Median	WAP
DT-IPV	1	8.10	8.10	N/A	N/A
Influenza_paediatric	1	5.46	5.46	N/A	N/A
Men AC	1	17.62	17.62	N/A	N/A
YF	1	16.23	16.23	N/A	N/A
OPV	12	0.14	7.67	0.22	0.26
DTwP	8	0.10	3.08	0.38	1.03
BCG	18	0.06	12.50	0.39	0.29
MR	2	0.52	0.60	0.56	0.58
TT	7	0.08	4.02	0.61	0.83
Td	20	0.10	22.29	1.57	4.34
DT	10	0.11	16.51	1.81	0.36
Measles	3	1.44	5.98	2.09	1.80
DTwP-Hib-HepB	11	2.14	2.95	2.70	2.39
Rotavirus	6	2.46	15.57	2.73	9.80
HepB_paediatric	21	0.16	11.95	3.41	1.48
Influenza_adult	11	2.73	14.29	4.62	4.55
MMR	26	0.98	14.38	6.56	5.06
IPV	9	4.94	12.94	7.21	6.32
Typhoid fever	2	4.22	13.88	9.05	4.24
DTaP	7	2.65	22.58	9.15	5.58
Hib	6	4.03	19.26	9.42	6.55
HepB_adult	8	1.11	19.58	11.71	7.19
TdaP	8	10.42	24.04	12.67	11.23
Pneumo_ps	3	10.38	22.39	13.68	10.40
Men ACWY	3	12.19	42.76	14.21	41.48
DTaP-IPV	9	8.72	30.23	14.68	10.20
DTaP-Hib-IPV	12	7.98	44.49	17.20	13.16
MenC_conj	5	10.76	28.88	19.19	18.76
HepA	6	7.45	34.26	23.21	7.91
HepAHepB	3	26.96	45.16	36.57	36.69
Varicella	5	17.35	50.46	41.17	19.87
HPV	11	20.94	93.40	41.38	36.86
DTaP-Hib	2	21.21	41.67	43.39	37.21
DTaP-Hib-HepB-IPV	9	22.85	59.15	43.39	37.21
PCV	15	3.53	66.28	43.96	35.12

^a Sorted by median price

N/A: not applicable

Generally, new and underused vaccines show significantly higher average prices and price variations compared to traditional vaccines, such as BCG, OPV, DTP and MMR. Procurement context, programmatic and product details are essential in understanding the nature of the variations. For example, in the case of pneumococcal conjugate vaccines, two countries benefit from a subsidized donor price, which is considerably lower than the unsubsidized prices. However, in the case of many other vaccines (i.e. DTaP-Hib-HepB-IPV, DTaP-Hib-IPV) there are no subsidy mechanisms that would influence the price variation. A particular challenge is interpreting the price of rotavirus vaccine, where both price subsidy mechanisms (to countries benefiting from GAVI support) and different primary vaccination schedules are applied depending on the vaccine product used (2 versus 3 doses per schedule). Furthermore, some vaccines, while preventing the same diseases, may have different antigen formulations, i.e. pneumococcal conjugate vaccine (PCV10 versus PCV13)¹ and HPV vaccine (quadrivalent versus bivalent vaccine). Price information tables in Appendix 2 provide additional information to allow the reader to make an informed comparison.

¹ PCV 10 (or PCV 13) valent includes antigens from the 10 (or 13) most common serotypes causing invasive pneumococcal disease among children.

Country income level and vaccine prices paid

Tiered pricing is a form of price differentiation: charging different prices, in different markets, for the same product. Generally, vaccine manufacturers adopt their own individual policies to charge higher vaccine prices in wealthier countries while keeping prices lower for countries that cannot afford the price on the open market and for donor supported procurement. Two products are analysed further: hepatitis B vaccine – a widely implemented product with a large supplier base – and HPV vaccine, a relatively new product with a limited supplier base.

The data collected show that high vaccine prices are exhibited not only in HICs but also in MICs.

Fig. 2a–2b show price variations of hepatitis B (paediatric dose) and HPV vaccines across countries of different income groups. Hepatitis B vaccine is a widely used product, and its procurement and prices were reported by countries of all income groups. In contrast, HPV vaccine prices were reported only by HICs and UMICs. The figures display the median value, the 25–75-percentile (interquartile) range, as well as minimum and maximum price values paid by Member States.

FIG 2A. HepB–paediatric vaccine price by country income group

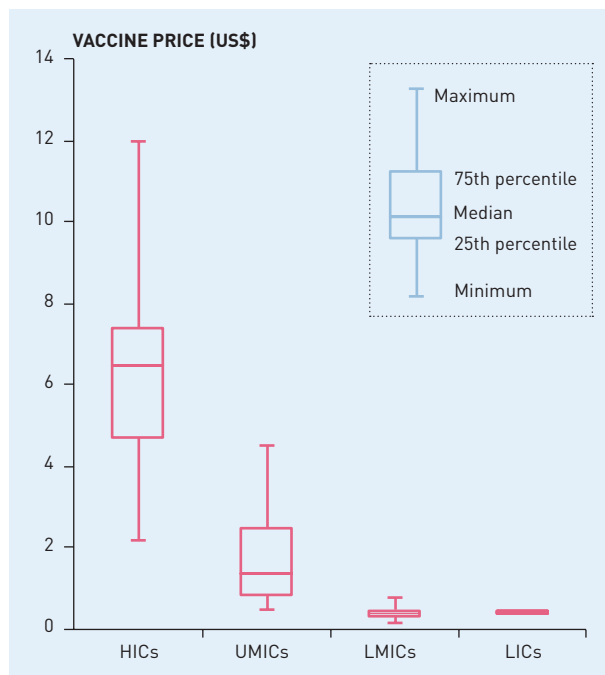
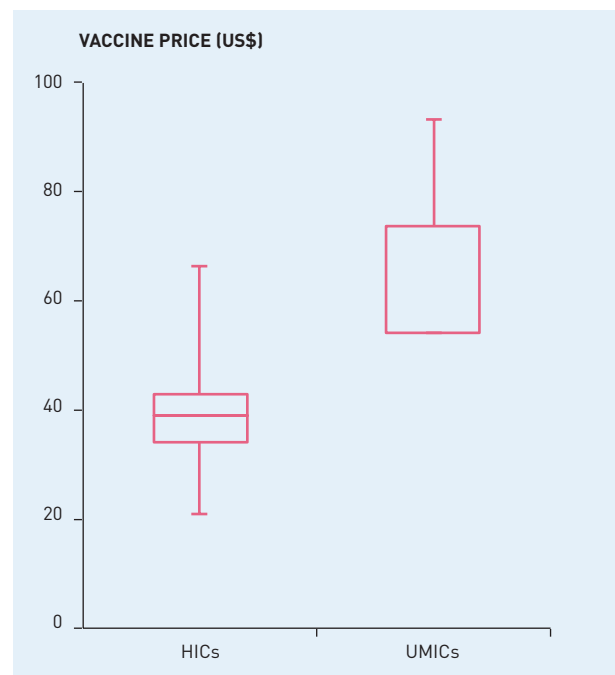


FIG 2B. HPV vaccine price by country income group



The reported data show tiered pricing for the hepatitis B vaccine; the price increase follows the income level of the Member States. The situation is very different, however, in the case of the HPV vaccine, a new and underused vaccine. MICs paid a considerably higher price than HICs. Why did MICs pay a higher price for a new and initially very expensive vaccine? This raises an important price equity issue that needs to be addressed in the context of

Key point

Compared to HICs, UMICs paid a higher price for HPV vaccines, raising price equity and sustainability concerns.

reaching EVAP objectives. The cost–efficiency of introducing new vaccines is a key concern, and unsustainable high vaccine prices may prevent Member States from deciding to introduce new vaccines.

High variation of vaccine prices within income groups is observed for both vaccines, which indicates potential opportunities to improve procurement efficiency.

Vaccine procurement volumes and price

Did the procurement of larger vaccine volumes result in lower prices? In general, the larger the volumes of procured vaccine, the lower the prices were. This trend is valid for both the procured HepB_paediatric and HPV vaccines, although important price variations for the same procured volumes are seen as well.

Fig. 3a–3b depict the prices paid by Member States per purchased volume.

FIG 3A. HepB–paediatric vaccine price/dose by procured volume and country income group

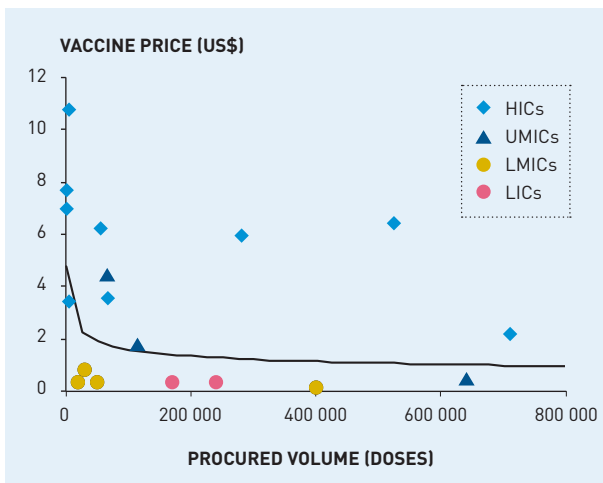
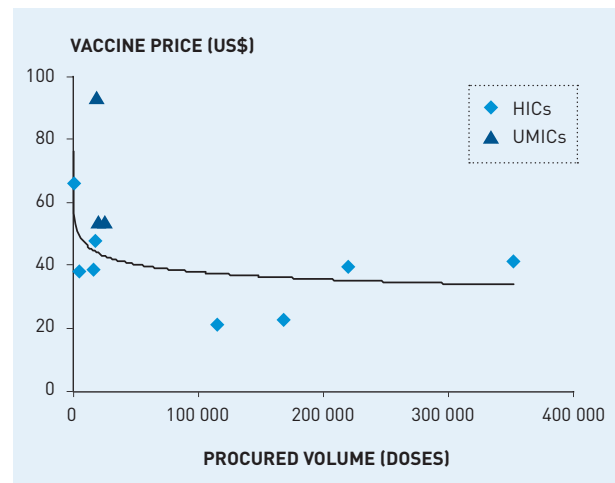


FIG 3B. HPV price/dose by procured volume and country income group



As expected, LICs and LMICs paid the lowest price per volume for HepB_paediatric vaccines. All but one UMIC fit in the price/volume trend as well. HICs paid the highest hepatitis B vaccine prices, following the trend of decreasing price per purchased volume. By comparing similar procured volumes, Fig. 3b shows that all three HPV price points reported by UMICs are higher than prices reported for HICs.

Understanding why UMICs could not achieve at least the same or a lower price per volume compared to HICs and addressing procurement inefficiencies are key to making the new vaccines more affordable and equitable.

Key point

Compared to HICs, UMICs could not achieve at least the same or a lower price per volume in procuring HPV vaccines.

Vaccine presentation and price

Vaccine presentation is another important price driver. In general, prices per dose are lower with the increasing presentation size of a product. The prices of two products available in various presentations (HepB and MMR) are analysed further. Fig. 4a–4b show that for both HepB and MMR vaccines, the price of 10 dose presentations are lower than 1- or 2-dose presentations. However, 10-dose presentations were procured only by LICs and LMICs; UMICs procured 1- and 2-dose presentations, and HICs procured exclusively single-dose presentations.

Fig. 4a–4b show, in a number of situations, that UMICs paid a higher price per dose for the same vaccine presentation compared to some HICs. Both HepB and MMR vaccines have a high variation of vaccine price within the same presentation.

FIG 4A. HepB_paediatric vaccine price/dose by vaccine presentation and country income group

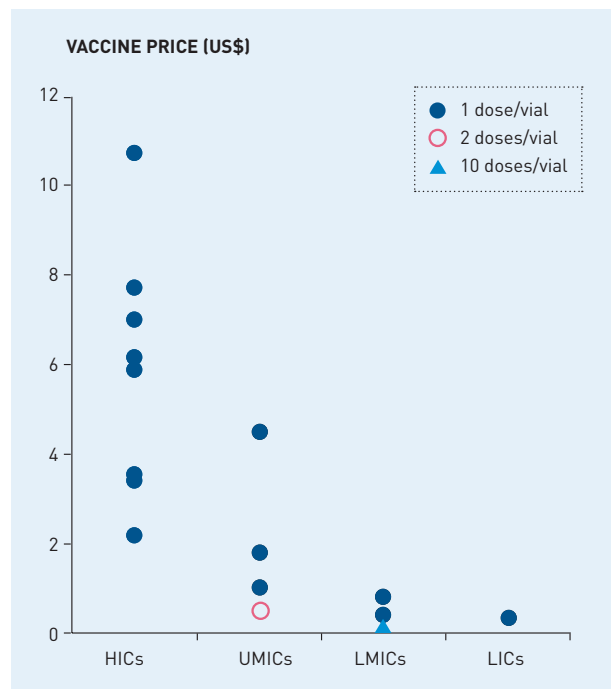
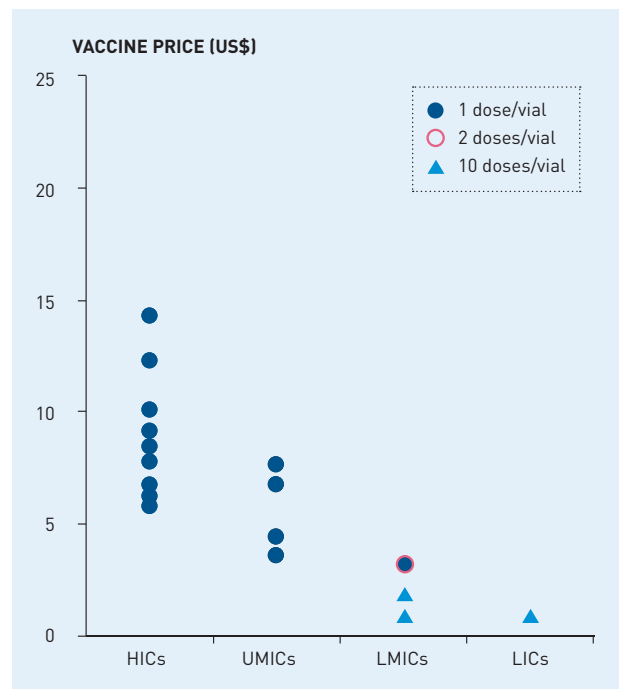


FIG 4B. MMR price/dose by vaccine presentation and country income group



Key point

Compared to HICs, UMICs favor single dose presentations and often paid a higher vaccine price for the same presentation.

Vaccine formulation and price

Prices vary by product formulation as well; for example, aP-containing vaccines continue to be significantly more expensive than whole-cell pertussis (wP) containing products. According to WHO, both aP-containing and wP-containing vaccines have excellent safety records. The marginal benefit of changing from wP-containing to aP-containing vaccines should therefore be carefully weighed against the issue of affordability (15). The limited supplier base in aP-containing vaccines, compared to the moderate or large supplier bases for wP-containing products (Table 5), would also advantage wP-containing vaccines in terms of gaining procurement efficiencies and securing an uninterrupted supply.

Table 7 shows that procurement of aP- and wP-containing vaccines vary by income group; the higher the income group, the higher the share of procured aP-containing vaccines. In particular, LICs reported procuring exclusively wP formulations; LMICs reported aP formulations in two out of 11 procurements; UMICs reported a larger share of aP-containing vaccines (10 out of 16 procured products); and HICs reported procurement of aP-containing vaccines in all but one case.

TABLE 7. Frequency of procured formulations of pertussis-containing vaccines by country income group

Vaccine	HICs	UMICs	LMICs	LICs	TOTAL
DTaP	5	1	2	–	8
DTaP-Hib	2	–	–	–	2
DTaP-Hib-HepB-IPV	6	3	–	–	9
DTaP-Hib-IPV	14	4	–	–	18
DTaP-IPV	12	2	–	–	14
DTwP	1	4	4	2	11
DTwP-Hib-HepB	–	2	5	6	13
Total aP-containing vaccines	39	10	2	0	51
Total wP-containing vaccines	1	6	9	8	24

Equivalent aP and wP products were reported for one type of combined vaccine – DTP. Other reported vaccine combinations vary by their antigens. Fig. 5a–5b compare prices for two types of products; one contains three antigens (DTwP versus DTaP) and the other contains five antigens (DTwP-Hib-HepB versus DTaP-Hib-IPV).

Fig. 5a shows that DTwP prices were low with little variation, with the exception of the price paid by one HIC for a domestic wP product. For DTaP, prices were significantly higher and showed a large variation. The price paid by LMICs and UMICs for DTaP reached the level paid by HICs.

FIG 5A. DTwP and DTaP vaccine price by country income group

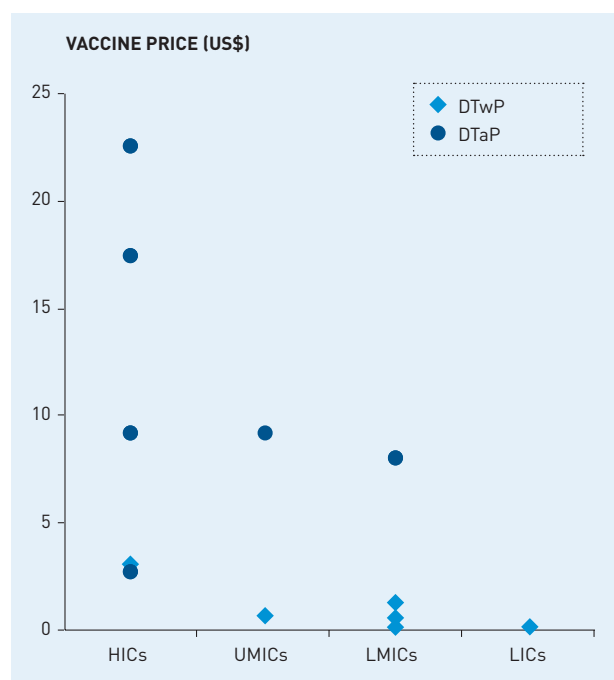
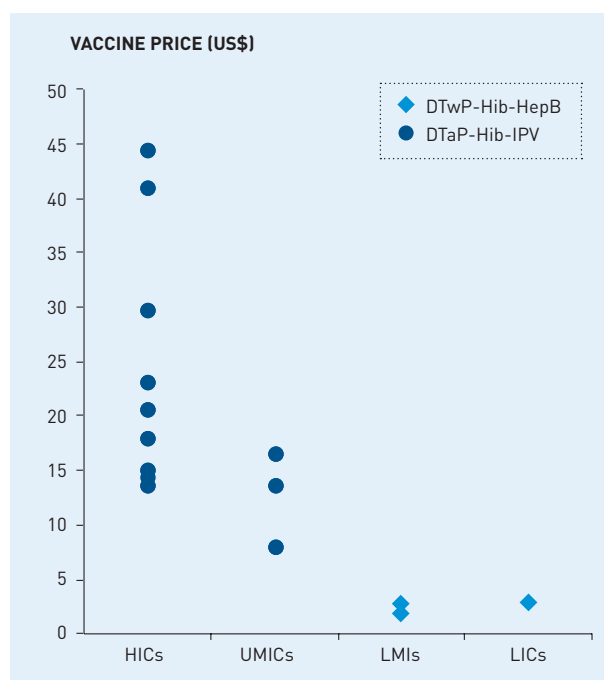


FIG 5B. DTwP-Hib-HepB and DTaP-Hib-IPV vaccine price by country income group



A similar pattern is observed for pentavalent vaccine combinations in Fig 5b. DTwP-Hib-HepB was introduced in LMICs with GAVI support and was procured mainly through UNICEF SD. Vaccine prices were low, with little variation, reflecting mainly the use of different vaccine presentations rather than income group differences.

DTaP-Hib-IPV prices were considerably higher, with large variations both between and within income groups. UMICs paid generally lower prices; however, in a number of cases, the prices reached or surpassed those paid by some HICs.

Key point

Prices of vaccine formulations vary. The cost implications of a specific formulation choice need to be carefully considered against attained benefits.

It should be noted that aP product combinations may bring a comparative advantage by providing a broader range of antigens in one product, including IPV, which is not available in wP-containing vaccines. These gain importance in the context of the Polio Eradication and Endgame Strategic Plan 2013–2018 (16), which recommends introduction of at least one dose of IPV into routine immunization schedules (17). It is equally true, however, that standalone IPV products are available at much lower prices and could be administered concomitantly with wP-combined products. The GAVI Alliance’s decision to support the introduction of standalone IPV in GAVI-eligible and graduating countries could represent a cost-efficient example of product formulation choice (18).

WHO's V3P platform

WHO established the V3P platform to collect detailed and comprehensive vaccine price information from countries and make it publicly available (3). In doing so, V3P participates in global reporting on vaccine prices to further partners' efforts on improving price transparency and to inform continued discussion on affordable pricing. The information collected by V3P is used to monitor global price and price transparency trends for the GVAP vaccine price report that is part of the GVAP monitoring. (4).

The V3P platform is a one-stop-shop website that includes: a price database collecting and disseminating data on vaccine prices and key procurement factors; a repository of V3P-specific documentation, analyses as well as key reports and updates; and a gateway with links to other vaccine and immunization related sources.

Member States are encouraged to share and benefit from more detailed information by accessing the V3P database directly (19). A national focal point to share pricing information shall be nominated in advance and details communicated to WHO in order to grant access to the input tool of the V3P database. Alternatively, countries can also choose to share their vaccine price data through their JRF.

Key point

WHO's V3P platform collects detailed and comprehensive vaccine price information from countries and makes it publicly available through its online database.

Appendix 7 provides additional sources for published vaccine pricing data, which can be accessed through the V3P resource gateway (20).



200 IU/ml
Poliovirus Vaccine, Oral
WHO requirements

References²

1. The right shot: bringing down barriers to affordable and adapted vaccines, 2nd edition. Geneva: Médecins Sans Frontières; 2015 (www.msfaaccess.org/rightshot2).
2. Making vaccines more affordable. In: GAVI The Vaccine Alliance [website]. Geneva: GAVI Alliance; 2015 (<http://www.gavi.org/about/gavis-business-model/making-vaccines-affordable/>).
3. The Vaccine Product, Price and Procurement (V3P) Project. In: World Health Organization [website]. Geneva: World Health Organization; 2015 (http://www.who.int/immunization/programmes_systems/procurement/v3p/en/).
4. Global Vaccine Action Plan 2011–2020. Geneva: World Health Organization; 2013 (http://www.who.int/immunization/global_vaccine_action_plan/en/).
5. World Health Assembly resolution WHA65.17. Global vaccine action plan. Sixty-fifth World Health Assembly, Geneva, 21–26 May 2012. Geneva: World Health Organization; 2012 (http://apps.who.int/gb/ebwha/pdf_files/WHA65/A65_R17-en.pdf).
6. Global vaccine action plan. Report by the Secretariat, 22 March 2013. Provisional agenda item 16.1 to Sixty-sixth World Health Assembly, Geneva, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_19-en.pdf).
7. Meeting of the Strategic Advisory Group of Experts on immunization, October 2014 – conclusions and recommendations. *Wkly Epidemiol Rec.* 2014;50(89):561–76 (<http://www.who.int/wer/2014/wer8950.pdf?ua=1>).
8. European Vaccine Action Plan 2015–2020. Copenhagen: WHO Regional Office for Europe; 2014 (<http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2014/european-vaccine-action-plan-20152020>).
9. Official exchange rate (LCU per US\$, period average) [online dataset]. Washington, DC: World Bank; 2015 (<http://api.worldbank.org/countries/indicators/DPANUSLCU?page=30000&date=2005:2013>).
10. Gross national income per capita 2012, Atlas method and PPP. Washington, DC: World Bank; 2013 (<http://databank.worldbank.org/data/download/GNIPC.xls>, accessed 23 September 2013).
11. A system for the prequalification of vaccines for UN supply. In: World Health Organization [website]. Geneva: World Health Organization; 2015 (http://www.who.int/immunization_standards/vaccine_quality/pq_system/en/).
12. WHO prequalified vaccines [online dataset]. Geneva: World Health Organization; 2015 (http://www.who.int/immunization_standards/vaccine_quality/PQ_vaccine_list_en/en/).
13. European Medicines Agency [website]. London: European Medicines Agency; 2015 (<http://www.ema.europa.eu>).
14. Vaccine price data. In: UNICEF [website]. Copenhagen: United Nations Children’s Fund; 2015 (http://www.unicef.org/supply/index_57476.html).

² Websites accessed 3 March 2015 unless noted otherwise.

15. Revised guidance on the choice of pertussis vaccines: July 2014. *Wkly Epidemiol Rec.* 2014;30(89):337–40 (<http://www.who.int/wer/2013/wer8930.pdf?ua=1>).
16. Polio Eradication and Endgame Strategic Plan 2013–2018. Geneva: World Health Organization; 2013 (<http://www.polioeradication.org/ResourceLibrary/Strategyandwork.aspx>).
17. Polio vaccines: WHO position paper, January 2014. *Wkly Epidemiol Rec.* 2014;9(89):73–92 (<http://www.who.int/wer/2014/wer8909.pdf>).
18. Inactivated polio vaccine support. In: GAVI The Vaccine Alliance [website]. Geneva: GAVI Alliance; 2015 (<http://www.gavi.org/support/nvs/inactivated-polio-vaccine/>).
19. V3P web platform. Price database [online database]. Geneva: World Health Organization; 2015 (http://who.int/immunization/programmes_systems/procurement/v3p/platform/module1/v3pdataentry/en/).
20. Resource gateway V3P. In: World Health Organization [website]. Geneva: World Health Organization; 2015 (http://www.who.int/immunization/programmes_systems/procurement/v3p/platform/module3/en/).



reaktionsvarer
reaktionsvarer
10x1 d...

05-2015
UA834

05-2015
UA834

05-2015
UA834

80re
disses

on, inaktivitet)

idelse.

male yærpe

for at



Appendix 1.

JRF template used to collect vaccine pricing data for 2013

2B1.

Is information on prices of vaccines, procured for the national immunization programme, available at the national level in your country? If no, please explain why vaccine price information is not available at the national level.

2B2.

Is information on prices of vaccines, procured for the national immunization programme, published on a public domain in your country? If yes, please indicate the domain where national vaccine price information can be accessed.

2B3.

Are there legal provisions restricting sharing information on prices of vaccine, procured for the national immunization programme, in your country? If yes, please provide details on provisions that do restrict sharing vaccine price information.

A Vaccine/ Supplies	B Vial size (doses per vial)	C Name of manu- facturer	D Country of manu- facture	E Which agency procured the vaccine	F Total no. of procured doses (units for syringes and safety boxes)	G Currency	H Contracted or quoted terms of delivery	I Total cost paid according to quoted Incoterm®	J FCA price per dose (FCA cost/no. of doses)	K DDP price per dose (DDP cost/no. of doses)	L Notes

Appendix 2.

Member States' reporting status of vaccine pricing data in the annual WHO/UNICEF JRF, 2013

TABLE A2.1. Reporting status

Country	Reporting status ^a	Country	Reporting status ^a
Albania	• Complete	Lithuania	• Incomplete
Andorra	• Complete	Luxembourg	• Not reported
Armenia	• Complete	Malta	• Not reported
Austria	• Missing JRF	Monaco	• Missing JRF
Azerbaijan	• Not reported	Montenegro	• Not reported
Belarus	• Incomplete	Netherlands	• Complete
Belgium	• Not reported	Norway	• Incomplete
Bosnia and Herzegovina	• Missing JRF	Poland	• Complete
Bulgaria	• Not reported	Portugal	• Complete
Croatia	• Complete	Republic of Moldova	• Complete
Cyprus	• Not reported	Romania	• Complete
Czech Republic	• Not reported	Russian Federation	• Not reported
Denmark	• Not reported	San Marino	• Complete
Estonia	• Complete	Serbia	• Not reported
Finland	• Complete	Slovakia	• Complete
France	• Not reported	Slovenia	• Complete
Georgia	• Incomplete	Spain	• Complete
Germany	• Not reported	Sweden	• Not reported
Greece	• Not reported	Switzerland	• Not reported
Hungary	• Not reported	Tajikistan	• Complete
Iceland	• Complete	The former Yugoslav Republic of Macedonia	• Complete
Ireland	• Missing JRF	Turkey	• Complete
Israel	• Incomplete	Turkmenistan	• Incomplete
Italy	• Missing JRF	Ukraine	• Missing JRF
Kazakhstan	• Complete	United Kingdom	• Not reported
Kyrgyzstan	• Complete	Uzbekistan	• Complete
Latvia	• Complete		

^a Incomplete indicates return of the JRF form with partial data filled out. Missing JRF indicates that no JRF form was submitted by the country. Not reported indicates that the JRF form was returned with empty vaccine price template. For more details please see the section on "reporting of vaccine price data".

Appendix 3.

Country-specific vaccine price data by individual product

Price information tables (Tables A3.1–A3.35) provide country-specific parameters collected for each procured vaccine. The details are in the chapter “Reported vaccine prices”. Vaccine prices are expressed in US dollars – using the World Bank’s average annual exchange rates for 2013 *(1)* – and country income groups are based on gross national income (GNI) per capita data from the World Bank *(2)*.

Where Member States reported procurement through UNICEF SD and provided a “price” paid, this price is recorded as reported and may differ from prices reported by UNICEF SD *(3)*.

The appendix tables use the following subset of Incoterms® 2010, a set of rules published by the International Chamber of Commerce, which define the responsibilities of sellers and buyers for the delivery of goods under sales contracts *(4)*:

- cost insurance and freight (CIF)
- carriage and insurance paid to (CIP)
- delivered at place (DAP)
- delivered duty paid (DDP)
- ex works (EXW)
- free carrier (FCA).

TABLE A3.1. BCG

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	20	UNICEF SD	44 000	CIF	0.06	Includes 10% value-added tax(VAT) & 3% excise tax
2	LMIC	20	UNICEF SD	225 200	CIF	0.07	–
3	LMIC	20	UNICEF SD	800 000	FCA	0.07	–
4	LIC	20	UNICEF SD	420 000	FCA	0.10	–
5	LMIC	20	UNICEF SD	44 000	CIF	0.14	Includes 10% VAT & 3% excise tax
6	LIC	20	UNICEF, WHO or PAHO	330 000	FCA	0.14	–
7	LMIC	20	Government agency	200 000	DDP	0.19	–
8	UMIC	10	Government agency	15 000 000	DDP	0.20	–
9	HIC	10	Government agency	57 000	FCA	0.37	–
10	UMIC	20	Government agency	1 329 500	DDP	0.41	–
11	HIC	20	Government agency	N/D	DDP	0.56	–
12	UMIC	10	Government agency	40 000	DDP	0.62	–
13	HIC	10	N/D	6 000	CIP	0.62	–
14	HIC	10	Government agency	50 150	DDP	1.37	–
15	HIC	10	Government agency	43 530	DDP	1.39	DDP service points
16	UMIC	20	Government agency	418 400	N/D	1.53	–
17	HIC	10	Government agency	137 000	N/A	4.58	In-country production
18	HIC	10	Government agency	30 877	DDP	12.50	–
					Median	0.39	
					WAP	0.29	

N/A: not applicable; N/D: no data or information available; PAHO: Pan American Health Organization.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.2. dt

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	UNICEF SD	24 000	CIF	0.11	Includes 10% VAT & 3% excise tax
2	LIC	10	UNICEF SD	160 000	FCA	0.12	–
3	LIC	10	Government agency	220 000	FCA	0.13	–
4	LMIC	10	Government agency	48 000	DDP	0.24	–
5	UMIC	10	Government agency	10 000	DDP	0.46	–
6	HIC	1	Government agency	200	DDP	3.15	DDP service points
7	UMIC	1	Government agency	20 000	DDP	3.44	–
8	HIC	N/D	Government agency	250	EXW	5.58	–
9	HIC	10	Government agency	800	FCA	14.47	–
10	HIC	1	Government agency	1 495	N/A	16.51	In-country production
					Median	1.81	
					WAP	0.36	

N/A: not applicable; N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.3. DTaP

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	523 000	CIF	2.65	–
2	LMIC	1	UNICEF SD	20 110	CIF	8.00	–
3	LMIC	1	UNICEF SD	48 000	CIF	8.00	–
4	HIC	1	Government agency	N/D	DDP	9.15	–
5	UMIC	1	Government agency	373 200	DDP	9.21	–
6	HIC	N/D	Government agency	20	EXW	17.50	–
7	HIC	1	Government agency	900	N/D	22.58	Entry tax free
					Median	9.15	
					WAP	5.58	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.4. DTaP-Hib

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	98 631	DDP	21.21	–
2	HIC	N/D	Government agency	10	EXW	41.67	–
					Median	31.44	
					WAP	21.22	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.5. DTaP-Hib-HepB-IPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	205 000	N/D	22.85	–
2	UMIC	1	N/D	740 900	DDP	30.73	–
3	UMIC	1	Government agency	177 000	N/D	32.76	–
4	HIC	N/D	Government agency	1 025 768	FCA	38.06	Tax free, 2-year procurement
5	HIC	1	Government agency	73 858	DDP	43.39	DDP service points
6	HIC	1	Government agency	720 000	DDP	44.76	–
7	HIC	1	Government agency	161 388	DAP	47.87	Pharmacy price
8	HIC	1	Government agency	2 000	N/D	53.78	Entry tax free
9	HIC	N/D	Government agency	800	EXW	59.15	–
					Median	43.39	
					WAP	37.21	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.6. DTaP-Hib-IPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	5 000 000	DDP	7.98	–
2	UMIC	1	Government agency	705 098	DDP	13.44	–
3	HIC	1	Government agency	14 490	N/D	13.55	–
4	HIC	1	N/D	93 980	DAP	13.94	–
5	HIC	1	Government agency	N/D	DDP	15.03	–
6	UMIC	1	Government agency	471 700	N/D	16.56	–
7	HIC	1	Government agency	181 830	DDP	17.85	–
8	HIC	1	Government agency	64 000	FCA	20.44	–
9	HIC	1	Government agency	288 759	DDP	23.17	–
10	HIC	N/D	Government agency	1 188 321	FCA	29.79	Tax free, 2-year procurement
11	HIC	1	Government agency	459	DDP	40.93	DDP service points
12	HIC	1	Government agency	1 700	N/D	44.49	Entry tax free
					Median	17.20	
					WAP	13.16	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.7. DTaP-IPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	1 500 000	DDP	8.72	–
2	HIC	1	Government agency	68 092	DDP	9.23	–
3	HIC	1	Government agency	116 252	DDP	12.64	–
4	HIC	1	Government agency	15 000	FCA	12.67	–
5	HIC	1	Government agency	186 000	DDP	14.68	–
6	HIC	1	Government agency	5 612	N/D	16.14	–
7	HIC	N/D	Government agency	400	EXW	22.97	–
8	HIC	1	Government agency	50 326	DAP	23.24	Pharmacy price
9	HIC	1	Government agency	22 022	DDP	30.23	DDP service points
					Median	14.68	
					WAP	10.20	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.8. DT-IPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	200 000	DDP	8.10	–

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.9. DTwP

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	UNICEF SD	48 000	CIF	0.10	Includes 10% VAT & 3% excise tax
2	LIC	10	UNICEF SD	186 000	FCA	0.20	–
3	LMIC	10	UNICEF SD	550 000	FCA	0.20	–
4	LIC	10	UNICEF SD	240 000	FCA	0.23	–
5	LMIC	10	Government agency	49 500	DDP	0.53	–
6	UMIC	10	Government agency	150 000	DDP	0.68	–
7	LMIC	1	Government agency	30 000	DDP	1.26	–
8	HIC	1	Government agency	450 000	N/A	3.08	–
						Median	0.38
						WAP	1.03

N/A: not applicable.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.10. DTwP-Hib-HepB

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	UNICEF SD	1 600 000	N/D	2.14	GAVI price
2	LIC	1	UNICEF SD	44 100	FCA	2.40	GAVI price
3	LIC	1	UNICEF SD	633 100	FCA	2.61	GAVI price
4	LMIC	1	UNICEF SD	58 450	CIF	2.70	Includes 10% VAT & 3% excise tax
5	LIC	1	UNICEF SD	100 000	FCA	2.70	GAVI price
6	LIC	1	UNICEF SD	160 600	FCA	2.70	GAVI price
7	LIC	1	UNICEF SD	100 000	FCA	2.70	GAVI price
8	LIC	1	UNICEF SD	42 100	FCA	2.70	GAVI price
9	LMIC	1	UNICEF SD	49 950	CIP	2.79	GAVI price
10	LMIC	1	UNICEF SD	89 050	CIP	2.79	GAVI price
11	LMIC	2	UNICEF SD	97 300	CIF	2.95	GAVI price
						Median	2.70
						WAP	2.39

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.11. HepA

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	3 000 000	DDP	7.45	–
2	HIC	N/D	Government agency	129 504	FCA	18.39	Tax free, 2-year procurement
3	HIC	1	Government agency	104	DDP	22.58	–
4	HIC	1	N/D	91	DAP	23.85	–
5	HIC	N/D	Government agency	50	EXW	25.40	–
6	HIC	1	Government agency	388	DDP	34.26	–
					Median	23.21	
					WAP	7.91	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms[®] 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.12. HepAHepB

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	288	DDP	26.96	Paediatric
2	HIC	1	Government agency	2 800	DDP	36.57	Adult
3	HIC	1	N/D	370	DAP	45.16	–
					Median	36.57	
					WAP	36.69	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms[®] 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.13. HepB_adult

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	1	Government agency	155 700	DDP	1.11	–
2	HIC	1	Government agency	20 301	DDP	9.08	–
3	HIC	1	N/D	4 433	DAP	9.08	–
4	HIC	N/D	Government agency	289 696	FCA	10.15	Tax free, 2-year procurement
5	HIC	1	Government agency	6 300	DDP	13.28	–
6	HIC	1	Government agency	150	N/D	13.74	Entry tax free
7	HIC	N/D	Government agency	50	EXW	17.56	–
8	HIC	1	Government agency	428	DDP	19.58	DDP service points
					Median	11.71	
					WAP	7.19	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms[®] 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.14. HepB_paediatric

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	UNICEF SD	400 000	FCA	0.16	–
2	LIC	1	UNICEF SD	240 000	FCA	0.37	–
3	LMIC	1	UNICEF SD	19 500	CIF	0.38	Includes 10% VAT & 3% excise tax
4	LMIC	1	UNICEF SD	50 000	CIF	0.38	–
5	LIC	1	UNICEF SD	170 000	FCA	0.38	–
6	UMIC	2	Government agency	639 800	DDP	0.49	–
7	LMIC	1	Government agency	30 000	DDP	0.80	–
8	UMIC	1	Government agency	7 000 000	DDP	1.00	–
9	UMIC	1	Government agency	114 300	N/D	1.80	–
10	HIC	1	Government agency	709 307	N/A	2.19	–
11	HIC	1	Government agency	2 468	DDP	3.41	DDP service points
12	HIC	1	Government agency	67 000	FCA	3.56	–
13	UMIC	1	Government agency	65 000	DDP	4.50	–
14	HIC	1	Government agency	281 188	DDP	5.90	–
15	HIC	1	N/D	55 130	DAP	6.17	–
16	HIC	N/D	Government agency	524 413	FCA	6.51	Tax free, 2-year procurement
17	HIC	1	Government agency	N/D	DDP	6.71	–
18	HIC	1	Government agency	1 150	N/D	7.04	Entry tax free
19	HIC	1	Government agency	1 300	N/D	7.70	Entry tax free
20	HIC	1	Government agency	7 500	DDP	10.74	–
21	HIC	N/D	Government agency	20	EXW	11.95	–
					Median WAP	3.41	
						1.48	

N/A: not applicable; N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.15. Hib

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	95 000	DDP	4.03	–
2	HIC	1	Government agency	568 580	CIF	6.89	–
3	HIC	1	N/D	395	DAP	8.63	–
4	HIC	N/D	Government agency	11 610	FCA	10.21	Tax free, 2-year procurement
5	HIC	N/D	Government agency	10	EXW	14.61	–
6	HIC	1	Government agency	150	DDP	19.26	–
					Median WAP	9.42	
						6.55	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.16. HPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	116 420	DDP	20.94	–
2	HIC	1	Government agency	170 000	DDP	22.77	–
3	HIC	1	Government agency	5 915	N/D	38.07	–
4	HIC	1	Government agency	16 212	DDP	38.65	DDP service points
5	HIC	1	Government agency	219 424	DDP	39.71	–
6	HIC	N/D	Government agency	352 179	FCA	41.38	Tax free, 1-year procurement
7	HIC	1	N/D	17 516	DAP	47.97	–
8	UMIC	1	Government agency	20 250	DDP	53.97	–
9	UMIC	1	Government agency	22 050	DDP	53.98	–
10	HIC	N/D	Government agency	50	EXW	66.40	–
11	UMIC	1	Government agency	19 000	DDP	93.40	–
						Median	41.38
						WAP	36.86

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.17. Influenza_adult

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	200 000	DDP	2.73	–
2	HIC	1	N/D	83 400	CIP	3.59	–
3	HIC	1	Government agency	560 777	DDP	3.76	–
4	HIC	1	Government agency	594 180	DDP	4.04	–
5	UMIC	1	Government agency	999 428	DDP	4.48	–
6	HIC	N/D	Government agency	2 500	EXW	4.77	–
7	LMIC	PFS	Government agency	160 000	DDP	4.95	–
8	HIC	1	Government agency	1 072 315	DDP	5.13	–
9	HIC	1	Other	58 649	N/D	5.14	–
10	LMIC	1	Other	56 922	N/D	14.29	–
						Median	4.62
						WAP	4.55

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.18. Influenza_paediatric

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	N/D	350	CIP	5.46	–

N/A: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.19. IPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	N/D	DDP	4.94	–
2	HIC	1	Government agency	640 000	CIF	6.06	–
3	UMIC	1	Government agency	436 000	N/D	6.48	–
4	HIC	1	Government agency	1 500	FCA	6.92	–
5	HIC	1	N/D	255	DAP	7.21	–
6	HIC	N/D	Government agency	20	EXW	8.47	–
7	HIC	1	Government agency	2 025	DDP	10.49	–
8	HIC	1	Government agency	20 800	DDP	10.56	–
9	HIC	1	Government agency	24	DDP	12.94	DDP service points
						Median	7.21
						WAP	6.32

N/D: no data or information available.

TABLE A3.20. Measles

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	200 000	DDP	1.44	–
2	UMIC	2	Government agency	250 000	DDP	2.09	–
3	HIC	1	N/D	300	CIP	5.98	–
						Median	2.09
						WAP	1.80

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.21. MMR

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LIC	10	UNICEF SD	180 000	FCA	0.98	–
2	LMIC	10	UNICEF SD	1 358 400	FCA	0.98	–
3	LMIC	10	Government agency	93 000	DDP	1.97	–
4	LMIC	1	Government agency	47 000	DDP	3.23	–
5	LMIC	2	UNICEF SD	37 000	CIF	3.25	Includes 10% VAT & 3% excise tax
6	LMIC	2	UNICEF SD	20 000	CIF	3.25	–
7	LMIC	2	UNICEF SD	65 000	CIF	3.25	–
8	LMIC	2	UNICEF SD	35 000	CIF	3.25	–
9	UMIC	1	Government agency	679 500	DDP	3.66	–
10	UMIC	1	Government agency	2 300 000	DDP	4.41	–
11	HIC	1	N/D	29 710	DAP	5.84	–
12	HIC	1	Government agency	N/D	DDP	6.12	–
13	HIC	1	Government agency	29 000	FCA	6.51	–
14	HIC	1	Government agency	112 430	DDP	6.61	–
15	HIC	1	Government agency	965 000	CIF	6.72	–
16	UMIC	1	Government agency	40 000	DDP	6.87	–
17	UMIC	1	Government agency	250 000	N/D	7.56	–
18	HIC	1	Government agency	38 982	DDP	7.63	DDP service points
19	HIC	N/D	Government agency	1 352 383	FCA	7.76	Tax free, 2-year procurement
20	HIC	1	Government agency	264 986	DDP	8.54	–
21	HIC	1	Government agency	2 100	N/D	9.16	Entry tax free
22	HIC	1	Government agency	380 000	DDP	9.18	–
23	HIC	1	Government agency	333	DAP	10.16	Pharmacy price
24	HIC	1	Government agency	102 886	DAP	10.16	Pharmacy price
25	HIC	1	Government agency	9 866	N/D	12.28	–
26	HIC	N/D	Government agency	600	EXW	14.38	–
					Median	6.56	
					WAP	5.06	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms[®] 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.22. MR

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LIC	10	UNICEF SD	160 000	FCA	0.52	LIC
2	LIC	10	Government agency	503 800	FCA	0.60	LIC
					Median	0.56	
					WAP	0.58	

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms[®] 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.23. Men AC

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	Other	950	FCA	17.62	–

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.24. Men ACWY

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	N/D	Government agency	10	EXW	12.19	–
2	HIC	1	N/D	200	DAP	14.21	–
3	HIC	N/D	Government agency	4 500	FCA	42.76	Tax free, 2-year procurement
					Median	14.21	
					WAP	41.48	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.25. MenC_conj

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	1	Government agency	126 148	DDP	10.76	–
2	HIC	1	Government agency	180 000	DDP	19.12	–
3	HIC	N/D	Government agency	2 105 500	FCA	19.19	Tax free, 2-year procurement
4	HIC	1	Government agency	9 463	N/D	20.24	–
5	HIC	1	Government agency	2 600	N/D	28.88	Entry tax free
					Median	19.19	
					WAP	18.76	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.26. OPV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	20	UNICEF SD	2 700 000	FCA	0.14	–
2	LMIC	10	UNICEF SD	137 000	CIF	0.17	Includes 10% VAT & 3% excise tax
3	LMIC	10	UNICEF SD	120 000	CIF	0.18	Includes 10% VAT & 3% excise tax
4	LMIC	10	UNICEF SD	250 000	CIF	0.18	–
5	LIC	10	UNICEF SD	600 000	FCA	0.18	–
6	LIC	10	UNICEF SD	1 100 000	FCA	0.21	–
7	UMIC	10	Government agency	3 600 000	DDP	0.23	–
8	UMIC	20	Government agency	1 500 000	DDP	0.23	–
9	UMIC	10,20	Government agency	578 000	DDP	0.28	–
10	LMIC	10	Government agency	300 000	DDP	0.30	–
11	UMIC	10	Government agency	180 000	DAP	0.34	–
12	HIC	10	Government agency	79 000	CIF	7.67	–
					Median	0.22	
					WAP	0.26	

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.27. Pneumo_ps

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	N/D	Government agency	373 600	FCA	10.38	Tax free, 2-year procurement
2	HIC	1	N/D	1 000	CIP	13.68	–
3	HIC	N/D	Government agency	80	EXW	22.39	–
					Median	13.68	
					WAP	10.40	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.28. PCV

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	1	UNICEF SD	54 000	CIP	3.53	GAVI price
2	LMIC	1	UNICEF SD	12 600	CIP	3.99	GAVI price
3	LMIC	1	UNICEF SD	103 500	CIF	16.00	Includes 10% VAT & 3% excise tax
4	HIC	1	Government agency	197 080	DDP	30.00	–
5	HIC	1	Government agency	720 000	DDP	30.25	–
6	UMIC	1	Government agency	735 200	CIP	41.28	–
7	HIC	1	Government agency	118 110	DAP	42.49	Pharmacy price
8	HIC	1	N/D	220	DAP	43.96	–
9	HIC	1	Government agency	52 450	DDP	44.24	DDP service points
10	HIC	1	Government agency	124 488	CIF	46.77	–
11	HIC	1	Government agency	12 887	N/D	52.03	–
12	HIC	1	Government agency	43 023	DAP	56.90	Pharmacy price
13	HIC	1	N/D	1 090	DAP	57.78	–
14	HIC	N/D	Government agency	90	EXW	59.49	–
15	HIC	1	Government agency	2 600	N/D	66.28	Entry tax free
						Median	43.96
						WAP	35.12

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.29. Rotavirus

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	1	UNICEF SD	54 000	CIP	2.46	GAVI price, 2 dose schedule
2	LMIC	1	UNICEF SD	30 000	CIF	2.50	GAVI price, 2 dose schedule
3	LMIC	1	UNICEF SD	40 500	CIF	2.50	GAVI price, 2 dose schedule
4	LMIC	1	UNICEF SD	36 000	CIP	2.96	GAVI price, 2 dose schedule
5	HIC	1	Government agency	60 003	FCA	13.67	3 dose schedule
6	HIC	1	Government agency	160 167	DDP	15.57	3 dose schedule
						Median	2.73
						WAP	9.80

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.30. Td

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	UNICEF SD	32 500	CIF	0.10	Includes 10% VAT & 3% excise tax
2	LMIC	10	UNICEF SD	900 000	FCA	0.11	–
3	LMIC	10	UNICEF SD	60 000	CIF	0.11	Includes 10% VAT & 3% excise tax
4	LMIC	10	UNICEF SD	140 000	CIF	0.11	–
5	LIC	10	UNICEF SD	610 000	FCA	0.11	–
6	UMIC	2	Government agency	579 200	DDP	0.22	–
7	LMIC	10	Government agency	380 000	DDP	0.22	–
8	UMIC	10	Government agency	45 000	DDP	0.42	–
9	HIC	N/D	Government agency	N/D	DDP	0.95	–
10	HIC	1	Government agency	713 500	N/A	1.07	–
11	UMIC	1	Government agency	7 000 000	DDP	2.07	–
12	HIC	1	Government agency	1 386 370	DDP	3.72	–
13	HIC	1	N/D	57 690	CIP	3.96	–
14	UMIC	10	Government agency	334 000	N/D	4.35	–
15	HIC	1	Government agency	188 245	DDP	5.78	–
16	HIC	N/D	Government agency	14 802 208	FCA	5.86	Tax free, 2-year procurement
17	HIC	1	Government agency	20 000	FCA	7.24	–
18	HIC	1	Government agency	134 292	DDP	8.90	DDP service points
19	LIC	1	Donor agency	198 240	FCA	21.59	–
20	LIC	1	Donor agency	218 110	FCA	22.29	–
					Median	1.57	
					WAP	4.34	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.31. TdaP

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	N/D	Government agency	786,512	FCA	10.42	Tax free, 2-year procurement
2	HIC	1	Government agency	137,960	DDP	10.54	–
3	HIC	1	N/D	18,000	DAP	10.62	–
4	HIC	1	Government agency	6,496	N/D	11.62	–
5	HIC	1	Government agency	25,000	FCA	13.72	–
6	HIC	1	Government agency	800	N/D	13.94	Entry tax free
7	HIC	N/D	Government agency	10	EXW	16.53	–
8	HIC	1	Government agency	52,847	DAP	24.04	Pharmacy price
					Median	12.67	
					WAP	11.23	

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

TABLE A3.32. TT

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	LMIC	10	UNICEF SD	75 000	CIF	0.08	Includes 10% VAT & 3% excise tax
2	UMIC	10	Government agency	10 000	DAP	0.39	–
3	HIC	10	Government agency	N/D	DDP	0.46	–
4	HIC	1	Government agency	676 000	N/A	0.61	–
5	LMIC	2	Other	226 594	N/D	1.04	–
6	HIC	N/D	Government agency	2 100	EXW	3.98	–
7	HIC	1	N/D	49 946	CIP	4.02	–
						Median	0.61
						WAP	0.83

N/A: not applicable; N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.33. Typhoid fever

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	5	Government agency	22 300	DDP	4.22	–
2	HIC	N/D	Government agency	50	EXW	13.88	–
						Median	9.05
						WAP	4.24

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.34. Varicella

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	UMIC	1	Government agency	4 000 000	DDP	17.35	–
2	HIC	1	Government agency	15 118	DDP	33.71	DDP service points
3	HIC	1	N/D	30	DAP	41.17	–
4	HIC	1	Government agency	82 170	CIF	42.27	–
5	HIC	N/D	Government agency	261 301	FCA	50.46	Tax free, 2-year procurement
						Median	41.17
						WAP	19.87

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank [2].

^b Based on Incoterms® 2010 [4].

^c Estimated using World Bank national currency exchange rates for 2013 [1] and sorted by value.

TABLE A3.35. YF

No.	Country income group ^a	Vial size (doses per vial)	Agency procuring the vaccine	Total no. of procured doses	Contracted terms of delivery ^b	Contracted price/dose (US\$) ^c	Note
1	HIC	N/D	Government agency	20 782	FCA	16.23	Tax free, 2-year procurement

N/D: no data or information available.

^a Based on 2012 GNI per capita data from the World Bank (2).

^b Based on Incoterms® 2010 (4).

^c Estimated using World Bank national currency exchange rates for 2013 (1) and sorted by value.

References

1. Official exchange rate (LCU per US\$, period average) [online dataset]. The World Bank. Washington (DC): World Bank; 2015 (http://api.worldbank.org/countries/indicators/DPANUSLCU?per_page=30000&date=2005:2013, accessed 3 March 2015).
2. Gross national income per capita 2012, Atlas method and PPP. Washington (DC): World Development Indicators database, World Bank, 17 December 2013; (<http://data.worldbank.org/indicator/NY.GNP.PCAP.CD/countries?display=default>, accessed 10 April 2015).
3. GNI per capita, Atlas method (current US\$), World Development Indicators database, World Bank, 17 December 2013; (<http://data.worldbank.org/indicator/NY.GNP.PCAP.CD/countries?display=default>, accessed 10 April 2015)
4. Vaccine price data. In: UNICEF [website]. Copenhagen: United Nations Children's Fund; 2015 (http://www.unicef.org/supply/index_57476.html, accessed 3 March 2015).
5. Incoterms® 2010 English Edition. Paris: ICC Services/Publications; 2010 (<http://store.iccwbo.org/incoterms-2010>, accessed 3 March 2015).

Appendix 4.

National currency exchange rates to US dollars

TABLE A4.1. Currency exchange rates

Country	National currency unit (US\$)
Albania	105.6868952
Andorra	0.753044299
Armenia	409.6257493
Austria	0.753044299
Azerbaijan	0.783989877
Belarus	31.86116229
Belgium	0.753044299
Bosnia and Herzegovina	1.472875868
Bulgaria	1.472850962
Croatia	5.706861977
Cyprus	0.753044299
Czech Republic	19.5569568
Denmark	5.616163495
Estonia	0.753044299
Finland	0.753044299
France	0.753044299
Georgia	1.663217208
Germany	0.753044299
Greece	0.753044299
Hungary	223.5797258
Iceland	122.1498011
Ireland	0.753044299
Israel	3.609613389
Italy	0.753044299
Kazakhstan	152.2029076
Kyrgyzstan	48.4355765
Latvia	0.514933059
Lithuania	2.60012939
Luxembourg	0.753044299
Malta	0.753044299
Monaco	-
Montenegro	-
Netherlands	0.753044299
Norway	5.877132471
Poland	3.159547548
Portugal	0.753044299
Republic of Moldova	12.5176209
Romania	3.327299041

TABLE A4.1. contd

Country	National currency unit (US\$)
Russian Federation	31.86116229
San Marino	0.753044299
Serbia	85.16711863
Slovakia	0.753044299
Slovenia	0.753044299
Spain	0.753044299
Sweden	6.512863035
Switzerland	0.926714741
Tajikistan	4.764233333
The former Yugoslav Republic of Macedonia	46.52953394
Turkey	1.905672178
Turkmenistan	-
Ukraine	8.154950542
United Kingdom	0.639561394
Uzbekistan	2092.344834

Source: Official exchange rate (LCU per US\$, period average) [online dataset]. Washington (DC): World Bank; 2015 (http://api.worldbank.org/countries/indicators/DPANUSLCU?per_page=30000&date=2005:2013).

Appendix 5.

Classification of Member States by country income group

TABLE A5.1. Classification of countries

Country	GNI per capita (US\$)	Income group ^a
Albania	4030	LMIC
Andorra	N/D	HIC
Armenia	3720	LMIC
Austria	47660	HIC
Azerbaijan	6220	UMIC
Belarus	6530	UMIC
Belgium	44660	HIC
Bosnia and Herzegovina	4750	UMIC
Bulgaria	6840	UMIC
Croatia	13490	HIC
Cyprus	26110	HIC
Czech Republic	18120	HIC
Denmark	59850	HIC
Estonia	16150	HIC
Finland	46490	HIC
France	41750	HIC
Georgia	3270	LMIC
Germany	44260	HIC
Greece	23260	HIC
Hungary	12380	UMIC
Iceland	38330	HIC
Ireland	39110	HIC
Israel	28380	HIC
Italy	33860	HIC
Kazakhstan	9780	UMIC
Kyrgyzstan	990	LIC
Latvia	14120	HIC
Lithuania	13830	HIC
Luxembourg	71620	HIC
Malta	19760	HIC
Monaco	N/D	HIC
Montenegro	7220	UMIC
Netherlands	47970	HIC
Norway	98860	HIC
Poland	12660	HIC
Portugal	20620	HIC
Republic of Moldova	2070	LMIC
Romania	8820	UMIC

TABLE A5.1. contd

Country	GNI per capita (US\$)	Income group ^a
Russian Federation	12700	HIC
San Marino	N/D	HIC
Serbia	5280	UMIC
Slovak Republic	17180	HIC
Slovenia	22800	HIC
Spain	29620	HIC
Sweden	55970	HIC
Switzerland	80970	HIC
Tajikistan	860	LIC
The former Yugoslav Republic of Macedonia	4620	UMIC
Turkey	10830	UMIC
Turkmenistan	5410	UMIC
Ukraine	3500	LMIC
United Kingdom	38670	HIC
Uzbekistan	1720	LMIC

^a LIC: low-income country (GNI = US\$ 1035 or less)

LMIC: lower-middle-income country (GNI = US\$ 1036–4085)

UMIC: upper-middle-income country (GNI = US\$ 4086–12 615)

HIC: high-income country (GNI = US\$ 12 616 or more)

N/D - No GNI per capita data available. Estimated to be high income.

Source: GNI per capita, Atlas method (current US\$), World Development Indicators database, World Bank, 17 December 2013; (<http://data.worldbank.org/indicator/NY.GNP.PCAP.CD/countries?display=default>, accessed 10 April 2015).

Appendix 6.

List of WHO prequalified vaccines as of 1 January 2015¹

TABLE A6.1. WHO prequalified vaccines

Vaccine	Manufacturer name	Presentation	Doses/ primary container
BCG	Japan BCG Laboratory	Ampoule	20
	National Center of Infectious and Parasitic Diseases	Ampoule	10
	National Center of Infectious and Parasitic Diseases	Ampoule	20
	Serum Institute of India Limited	Vial	20
	Statens Serum Institut	Two vial set (active + excipient)	10
Cholera: inactivated oral	Crucell Sweden AB	Vial + Buffer Sachet	1
	Shantha Biotechnics Limited	Vial	1
Diphtheria–tetanus	Bio Farma	Vial	10
	National Center of Infectious and Parasitic Diseases	Vial	10
	National Center of Infectious and Parasitic Diseases	Vial	20
	Sanofi Pasteur SA	Vial	10
	Sanofi Pasteur SA	Vial	20
	Serum Institute of India Limited	Ampoule	1
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20
Diphtheria–tetanus (for adults)	Bio Farma	Vial	10
	Biological E. Limited	Vial	1
	Biological E. Limited	Vial	10
	National Center of Infectious and Parasitic Diseases	Vial	10
	National Center of Infectious and Parasitic Diseases	Vial	20
	Sanofi Pasteur SA	Vial	10
	Serum Institute of India Limited	Ampoule	1
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20
Diphtheria–tetanus–pertussis (whole cell)	Bio Farma	Vial	10
	Biological E. Limited	Vial	1
	Biological E. Limited	Vial	10
	Sanofi Pasteur SA	Ampoule	1
	Sanofi Pasteur SA	Vial	10
	Sanofi Pasteur SA	Vial	20
	Serum Institute of India Limited	Ampoule	1
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20

¹ WHO prequalified vaccines [online dataset]. Geneva: World Health Organization; 2015 (http://www.who.int/immunization_standards/vaccine_quality/PQ_vaccine_list_en/en/, accessed 25 February 2015).

TABLE A6.1. contd

Vaccine	Manufacturer name	Presentation	Doses/ primary container
Diphtheria–tetanus–pertussis (whole cell)–<i>Haemophilus influenzae</i> type b	Novartis Vaccines & Diagnostics Srl	Vial	1
	Novartis Vaccines & Diagnostics Srl	Vial	10
	Sanofi Pasteur SA	Two vial set (active + active)	10
	Sanofi Pasteur SA	Vial + Ampoule	1
	Serum Institute of India Limited	Two vial set (active + active)	1
Diphtheria–tetanus–pertussis (whole cell)–hepatitis B	Bio Farma	Vial	5
	Bio Farma	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	2
	GlaxoSmithKline Biologicals SA	Vial	10
	Serum Institute of India Limited	Ampoule	1
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20
Diphtheria–tetanus–pertussis (whole cell)–hepatitis B–<i>Haemophilus influenzae</i> type b	Berna Biotech Korea Corp.	Vial	1
	Berna Biotech Korea Corp.	Compact Prefilled Auto-disable Device	1
	Bio Farma	Vial	5
	Bio Farma	Vial	10
	Biological E. Limited	Two vial set (active + active)	1
	Biological E. Limited	Two vial set (active + active)	10
	Biological E. Limited	Vial	1
	Biological E. Limited	Vial	10
	GlaxoSmithKline Biologicals SA	Two vial set (active + active)	1
	GlaxoSmithKline Biologicals SA	Two vial set (active + active)	2
	LG Life Sciences	Vial	1
	LG Life Sciences	Vial	2
	Panacea Biotec	Vial	1
	Panacea Biotec	Vial	10
	Serum Institute of India Limited	Two vial set (active + active)	1
	Serum Institute of India Limited	Two vial set (active + active)	2
	Serum Institute of India Limited	Two vial set (active + active)	10
	Serum Institute of India Limited	Vial	1
	Serum Institute of India Limited	Vial	2
	Serum Institute of India Limited	Vial	10
Shantha Biotechnics Private Ltd.	Vial	1	
Shantha Biotechnics Private Ltd.	Vial	10	
Diphtheria–tetanus–pertussis (acellular) <i>Haemophilus influenzae</i> type b	GlaxoSmithKline Biologicals SA	Vial	1
	Centro de Ingeniería Genética y Biotecnología	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	2
	GlaxoSmithKline Biologicals SA	Vial	10
	Merck & Co., Inc.	Vial	1
	Novartis Vaccines & Diagnostics Srl	Vial	1
	Sanofi Pasteur SA	Vial	1
	Sanofi Pasteur SA	Vial	10
	Serum Institute of India Limited	Vial	1
Hepatitis A (adult)	GlaxoSmithKline Biologicals SA	Vial	1
Hepatitis A (junior)	GlaxoSmithKline Biologicals SA	Vial	1
Hepatitis B	Berna Biotech Korea Corp.	Vial	1
	Berna Biotech Korea Corp.	Vial (thiomersal free)	1
	Berna Biotech Korea Corp.	Vial	2
	Berna Biotech Korea Corp.	Vial	10
	Bio Farma	Uniject	1

TABLE A6.1. contd

Vaccine	Manufacturer name	Presentation	Doses/ primary container
Hepatitis B	Centro de Ingeniería Genética y Biotecnología	Vial	1
	Centro de Ingeniería Genética y Biotecnología	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	20
	LG Life Sciences	Vial	1
	LG Life Sciences	Vial	2
	LG Life Sciences	Vial	6
	LG Life Sciences	Vial	10
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Ampoule or Vial	1
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Ampoule or Vial	1
	Shantha Biotechnics Limited	Vial	1
	Shantha Biotechnics Limited	Vial	2
	Shantha Biotechnics Limited	Vial	6
	Shantha Biotechnics Limited	Vial	10
Shantha Biotechnics Limited	Vial	20	
HPV	GlaxoSmithKline Biologicals SA	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	2
	Merck & Co., Inc.	Vial	1
Influenza seasonal	GlaxoSmithKline Biologicals-Canada	Vial	10
	Green Cross Corporation	Vial	1
	Green Cross Corporation	Vial	10
	Novartis Vaccines & Diagnostics Ltd	Vial	10
	Sanofi Pasteur SA	Vial	10
	Sanofi Pasteur-USA	Vial	1
	Sanofi Pasteur-USA	Vial	10
Influenza, pandemic H1N1	CSL Limited A.C.N. 051 588 348	Vial	10
	GlaxoSmithKline Biologicals-Germany	Two vial set (active + adjuvant)	10
	Green Cross Corporation	Vial	1
	MedImmune	Sprayer	1
	Novartis Vaccines & Diagnostics Ltd	Vial	10
	Novartis Vaccines and Diagnostics	Vial	17
	Novartis Vaccines and Diagnostics S.r.l.	Vial	10
	Sanofi Pasteur SA	Vial	10
	Sanofi Pasteur-USA	Vial	1
	Sanofi Pasteur-USA	Vial	10
	Serum Institute of India Limited	Vial + Ampoule	1
	Serum Institute of India Limited	Vial + Ampoule	5
Japanese encephalitis	Biological E Limited	Vial	1
	Chengdu Institute of Biological Products Co. Ltd China	Vial	1
	Chengdu Institute of Biological Products Co. Ltd China	Vial	5
	GPO-MBP Government Pharmaceutical Organization Merieux Biological Products Company Limited	Vial	4
Measles	Bio Farma	Vial	10

TABLE A6.1. contd

Vaccine	Manufacturer name	Presentation	Doses/ primary container
Measles	Bio Farma	Vial	20
	GPO-MBP Co., Ltd.	Vial	10
	Sanofi Pasteur SA	Vial	10
	Serum Institute of India Limited	Vial	1
	Serum Institute of India Limited	Vial	2
	Serum Institute of India Limited	Vial	5
	Serum Institute of India Limited	Vial	10
Measles and rubella	Serum Institute of India Limited	Vial	1
	Serum Institute of India Limited	Vial	2
	Serum Institute of India Limited	Vial	5
	Serum Institute of India Limited	Vial	10
Measles, mumps and rubella	GlaxoSmithKline Biologicals SA	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	2
	Merck & Co., Inc.	Vial	1
	Sanofi Pasteur SA	Vial	1
	Sanofi Pasteur SA	Vial	10
	Serum Institute of India Limited	Vial	1
	Serum Institute of India Limited	Vial	2
	Serum Institute of India Limited	Vial	5
	Serum Institute of India Limited	Vial	10
Meningococcal A conjugate	Serum Institute of India Limited	Vial	10
Meningococcal A+C	BioManguinhos	Vial	10
	Sanofi Pasteur SA	Vial	10
Meningococcal ACYW-135 (polysaccharide)	Sanofi Pasteur-USA	Two vial set (active + excipient)	10
Meningococcal ACYW-135 (conjugate)	Novartis Vaccines and Diagnostics	Two vial set (active + active)	1
	Sanofi Pasteur SA	Vial	1
Pneumococcal (conjugate)	GlaxoSmithKline Biologicals SA	Vial (10 valent)	1
	GlaxoSmithKline Biologicals SA	Vial (10 valent)	2
	Pfizer	Vial (13 valent)	1
	Pfizer	Vial (7 valent)	1
Polio vaccine – inactivated (IPV)	Bilthoven Biologicals	Vial	1
	Bilthoven Biologicals	Vial	5
	GlaxoSmithKline Biologicals SA	Vial	1
	GlaxoSmithKline Biologicals SA	Vial	2
	Sanofi Pasteur SA	Vial	10
	Statens Serum Institut	Vial	1
Polio vaccine – oral (OPV) bivalent types 1 and 3	Bio Farma	Vial	20
	GlaxoSmithKline Biologicals SA	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	20
	Haffkine Bio Pharmaceutical Corporation Ltd	Vial	20
	Novartis Vaccines and Diagnostics S.r.l.	Plastic Tube	20
	Sanofi Pasteur SA	Vial	20
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20
Polio vaccine – oral (OPV) monovalent type 1	Bio Farma	Vial	20
	GlaxoSmithKline Biologicals SA	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	20
	Haffkine Bio Pharmaceutical Corporation Ltd	Vial	20
	Novartis Vaccines & Diagnostics Srl	Plastic Tube	20
	Sanofi Pasteur SA	Vial	20

TABLE A6.1. contd

Vaccine	Manufacturer name	Presentation	Doses/ primary container
Polio vaccine – oral (OPV) monovalent type 2	GlaxoSmithKline Biologicals SA	Vial	20
	GlaxoSmithKline Biologicals SA	Vial	10
Polio vaccine – oral (OPV) monovalent type 3	GlaxoSmithKline Biologicals SA	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	20
Polio vaccine – oral (OPV) trivalent	Bio Farma	Vial	10
	Bio Farma	Vial	20
	GlaxoSmithKline Biologicals SA	Vial	10
	GlaxoSmithKline Biologicals SA	Vial	20
	Haffkine Bio Pharmaceutical Corporation Ltd	Vial	20
	Novartis Vaccines & Diagnostics Srl	Plastic Tube	10
	Novartis Vaccines & Diagnostics Srl	Plastic Tube	20
	Sanofi Pasteur SA	Vial	10
	Sanofi Pasteur SA	Vial	20
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20
Rabies	Zyodus Cadila	Vial	1
	Chiron Behring Vaccines Private Ltd.	Vial	1
	Novartis Vaccines and Diagnostics	Vial	1
	Sanofi Pasteur SA	Vial	1
Rotavirus	GlaxoSmithKline Biologicals SA	Plastic Tube	1
	GlaxoSmithKline Biologicals SA	Applicator	1
	GlaxoSmithKline Biologicals SA	Vial	1
	Merck & Co., Inc.	Plastic Tube	1
Rubella	Serum Institute of India Limited	Vial	1
	Serum Institute of India Limited	Vial	2
	Serum Institute of India Limited	Vial	5
	Serum Institute of India Limited	Vial	10
Tetanus toxoid	Bio Farma	Vial	10
	Bio Farma	Vial	20
	Bio Farma	Uniject	1
	Biological E. Limited	Vial	20
	Biological E. Limited	Vial	1
	Biological E. Limited	Vial	10
	National Center of Infectious and Parasitic Diseases	Vial	10
	National Center of Infectious and Parasitic Diseases	Vial	20
	Sanofi Pasteur SA	Vial	10
	Sanofi Pasteur SA	Vial	20
	Serum Institute of India Limited	Ampoule	1
	Serum Institute of India Limited	Vial	10
	Serum Institute of India Limited	Vial	20
	Shantha Biotechnics Limited	Vial	10
	Shantha Biotechnics Limited	Vial	20
Typhoid	Sanofi Pasteur SA	Vial	20
Yellow fever	BioManguinhos	Vial	5
	BioManguinhos	Vial	10
	BioManguinhos	Vial	50
	Federal State Unitary Enterprise of Chumakov Institute of Poliomyelitis and Vira Encephalitides of Russian Acad. Med. Sci.	Ampoule	2

TABLE A6.1. contd

Vaccine	Manufacturer name	Presentation	Doses/ primary container
Yellow fever	Federal State Unitary Enterprise of Chumakov Institute of Poliomyelitis and Viral Encephalitides of Russian Acad. Med. Sci.	Ampoule	5
	Federal State Unitary Enterprise of Chumakov Institute of Poliomyelitis and Viral Encephalitides of Russian Acad. Med. Sci.	Ampoule	10
	Institut Pasteur de Dakar	Vial	5
	Institut Pasteur de Dakar	Vial	20
	Institut Pasteur de Dakar	Vial	10
	Sanofi Pasteur SA	Vial	10

Appendix 7.

Other vaccine price data sources

1. CDC vaccine price list. In: Centers for Disease Control and Prevention [website]. Atlanta, GA: Centers for Disease Control and Prevention; 2015 (<http://www.cdc.gov/vaccines/programs/vfc/awardees/vaccine-management/price-list/>).
2. PAHO Revolving Fund. In: Pan American Health Organization [website]. Washington, DC: Pan American Health Organization; 2015 (http://www.paho.org/hq/index.php?option=com_content&view=article&id=1864&Itemid=40713&lang=en).
3. Vaccine price data. In: UNICEF [website]. New York, NY: United Nations Children's Fund; 2015 (http://www.unicef.org/supply/index_57476.html).
4. Vaccine Product, Price and Procurement (V3P) web platform. In: World Health Organization [website]. Geneva: World Health Organization; 2015 (http://www.who.int/immunization/programmes_systems/procurement/v3p/platform/en/).

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania	:	Hungary	:	Russian Federation
Andorra	:	Iceland	:	San Marino
Armenia	:	Ireland	:	Serbia
Austria	:	Israel	:	Slovakia
Azerbaijan	:	Italy	:	Slovenia
Belarus	:	Kazakhstan	:	Spain
Belgium	:	Kyrgyzstan	:	Sweden
Bosnia and Herzegovina	:	Latvia	:	Switzerland
Bulgaria	:	Lithuania	:	Tajikistan
Croatia	:	Luxembourg	:	The former Yugoslav Republic of Macedonia
Cyprus	:	Malta	:	Turkey
Czech Republic	:	Monaco	:	Turkmenistan
Denmark	:	Montenegro	:	Ukraine
Estonia	:	Netherlands	:	United Kingdom
Finland	:	Norway	:	Uzbekistan
France	:	Poland	:	
Georgia	:	Portugal	:	
Germany	:	Republic of Moldova	:	
Greece	:	Romania	:	

World Health Organization Regional Office for Europe

UN City, Marmorvej 51,
DK-2100 Copenhagen Ø, Denmark

Tel.: +45 45 33 70 00
Fax: +45 45 33 70 01

Email: contact@euro.who.int
Website: www.euro.who.int

ISBN 978-92-890-5107-1



9 789289 051071 >