EMA/587021/2024
20 November 2024

Human Medicines Division

Report to the European Commission

on companies and products that have benefited from any of the rewards and incentives in the Paediatric Regulation[1] and on the companies that have failed to comply with any of the obligations in this regulation

Year 2023

Prepared by: Paediatric Medicines Office
Scientific Evidence Generation Department
European Medicines Agency

[1] REGULATION (EC) No 1901/2006 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL on medicinal products for paediatric use (Regulation (EC) No 1901/2006 and Regulation (EC) No 1902/2006)

Table of contents

Acronyms, abbreviations

CHMP	Committee for Medicinal Products for Human Use
EC	European Commission
EMA, the Agency	European Medicines Agency
INN	International non-proprietary name
MA	Marketing authorisation
MAH	Marketing authorisation holder(s)
MS	Member States
NCA	National Competent Authorities
NPO	National Patent Offices
PA	Protocol assistance
Paediatric Regulation	REGULATION (EC) No 1901/2006 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL on medicinal products for paediatric use
PDCO	Paediatric Committee
PIP	Paediatric investigation plan
PUMA	Paediatric use marketing authorisation
SA	CHMP Scientific Advice
SAWP	Scientific Advice Working Party
SPC	Supplementary protection certificate

1. Introduction

1.1. Scope of the report

REGULATION (EC) No 1901/2006 of the European Parliament and of the Council on medicinal products for paediatric use (Paediatric Regulation) entered into force on 26 January 2007.

Article 50(1) states:

"On the basis of a report from the Agency, and at least on an annual basis, the Commission shall make public a list of the companies and of the products that have benefited from any of the rewards and incentives in this Regulation and the companies that have failed to comply with any of the obligations in this Regulation. The Member States shall provide this information to the Agency."

This report covers the year 2023 and lists the companies benefiting from and infringing the regulation.

1.2. Data collection and methodology

In December 2023 the Agency contacted the national patent offices (NPO) of each Member State (MS) with regard to the medicinal products that had obtained a six-month extension of the supplementary protection certificate (SPC) in 2023.

The Agency received contributions from the following Member State NPOs: Austria, Belgium, Bulgaria, the Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

Developers of a medicinal product identified as potentially infringing the Paediatric Regulation in 2023 either by not completing a paediatric investigation plan (PIP) by the agreed date or by failing to submit an annual report on deferred measures by the due date, were given an opportunity to comment on these findings between April and August 2024 before publication of any identified infringement. All information received by 31 August 2024 was considered for finalisation of this report.

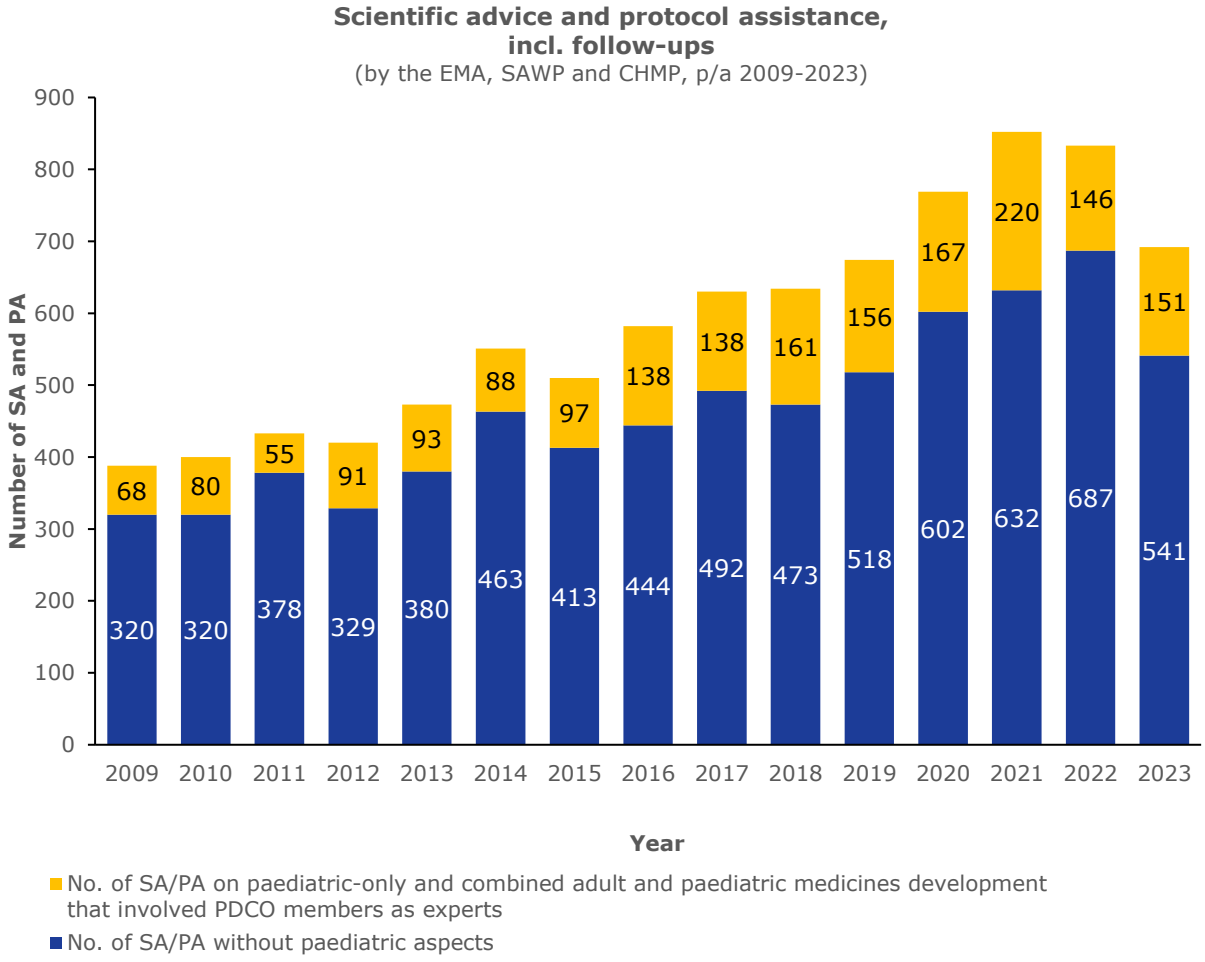
2. Companies and products that have benefited from the rewards and incentives in the regulation

2.1. Scientific advice or protocol assistance from the EMA

In accordance with Article 26 of the Paediatric Regulation, the Agency provides free scientific advice (SA) or protocol assistance (PA) on any question related to paediatric development of a medicinal product. The advice is prepared by the Scientific Advice Working Party (SAWP) and is adopted by the Committee for Medicinal Products for Human Use (CHMP). For the requests on paediatric development, members of the Paediatric Committee (PDCO) routinely contribute as experts to the provision of scientific advice through the SA/PA procedures (Figure 1).

The number of SA/PA procedures including paediatric questions (paediatric only advice and advice concerning adult and paediatric medicines development) in 2023 is overall in the range of previous years. PDCO members are involved in procedures relating to paediatric development as well as in procedures that do not directly include paediatric questions but where paediatric development could be affected.

Figure 1. Scientific advice and protocol assistance, incl. follow-ups (by the EMA, SAWP and CHMP, p/a 2009-2023)



Source EMA databases. *from 2017: includes also parallel consultation with regulators and health technology assessment bodies

2.2. Rewards

2.2.1. Extensions of the supplementary protection certificate

Extensions of the supplementary protection certificate (SPC) are granted by National Patent Offices (NPO) therefore the data provided in this report relies on the information provided by these offices. This report provides data only for SPC extensions that have been granted, unlike in years prior to 2015 when pending SPC extensions were also reported. Furthermore, products may be mentioned in annual reports of several years because SPC expiration (and therefore extension) may not be simultaneous in all EU countries, and hence a product may obtain SPC extension in different years in the various countries. In 2023, 54 active substances including fixed-dosed combinations (FDC) benefited from the six-month extension (see Table 1).

Table 1. List of companies / products receiving six-month SPC extension in 2023

Company / SPC holder	Substance (INN as applicable)	SPC extension granted in 2023
AbbVie Bahamas Ltd.	pibrentasvir	Czech Republic Germany Poland
Amgen Inc.; Amgen Europe B.V. (ES)	evolocumab	Austria Cyprus Denmark Greece Hungary Latvia Lithuania Malta Netherlands Portugal Slovenia Spain Sweden
Amgen K-A (GR, FR), Inc; Kirin-Amgen Inc (DE,)	romiplostim	France Germany Greece
Astellas Pharma Inc, Astellas Pharma & Wakanuga Pharmaceutical (GR,	ceftolozane	Belgium Finland France

HU, P, FI, FR, BE); Merck Sharp & Dohme B.V. (ES)		Greece Hungary Portugal Spain Sweden
Astellas Pharma Inc, Astellas Pharma & Wakanuga Pharmaceutical (IT)	ceftolozane / tazobactam	Germany Italy
AstraZeneca AB	dapagliflozin	Cyprus Finland France Greece Hungary Italy Lithuania Poland Romania Slovakia Spain Sweden
AstraZeneca AB	ticagrelor	Belgium Greece
Bayer Healthcare LLC;	damoctocog alfa pegol	Portugal
Bayer Intellectual PropertyGmbH	rivaroxaban	Austria
Bioverativ Therapeutics Inc.	Efmoroctocog-alfa	Hungary Poland
Enanta Pharmaceuticals, Inc	glecaprevir	Poland
Exelixis, Inc.; Roche Registration GmbH (ES)	cobimetinib	Cyprus Czech Republic Estonia Finland

		Germany Greece Hungary Italy Latvia Netherlands Portugal Slovenia Spain Sweden
Boehringer Ingelheim PharmaGmbH & Co. KG	afatinib	Greece Ireland Poland
Boehringer Ingelheim PharmaGmbH & Co. KG (GR,); Boehringer Ingelheim International GmbH	idarucizumab	France Greece Hungary Malta Poland Slovakia Spain Sweden
Boehringer Ingelheim PharmaGmbH & Co. KG	nintedanib	Denmark Hungary Italy Latvia Lithuania Netherlands Slovenia
Bristol Myers Squibb Pharma EEIG	nivolumab/relatlimab	Cyprus Spain
Bristol-Myers Squibb Company	relatlimab	Austria Bulgaria Denmark

		Greece Hungary Latvia Malta Netherlands Slovenia
Bristol-Myers Squibb Holdings Ireland Unlimited Company	apixaban	Cyprus Czech Republic Lithuania Portugal
Chugai Seiyaku Kabushiki Kaisha; Roche Registration Limited (ES)	emicizumab	Bulgaria Finland Hungary Italy Latvia Lithuania Netherlands Portugal Slovenia Spain
Eisai R&D Management Co. Ltd	eribulin	Belgium France Germany Greece Sweden
Eli Lilly and Company; Eli Lilly Nederland B.V. (ES)	dulaglutide	Bulgaria Finland Hungary Italy Latvia Lithuania Netherlands Poland

		Portugal Slovenia Spain
Dana-Faber Cancer Institute, Inc. Genetics Institute, LLC	Atezolizumab	Austria Cyprus Denmark Finland Germany Italy
Dana-Faber Cancer Institute, Inc. Genetics Institute, LLC	Avenulab	Cyprus
F. Hoffman-La Roche AG	netupitant	Cyprus Latvia Sweden
Gilead Pharmasset LLC	ledipasvir	Poland
Gilead Pharmasset LLC (RO); NuCana plc (GR, ES, CY); Gilead Sciences Ireland UC (ES)	sofosbuvir	Cyprus Estonia Greece Romania Spain
Gilead Sciences, INC	cobicistat	Romania
Gilead Sciences, INC; Gilead Sciences Ireland (ES)	Tenofovir alafenamide	Bulgaria Cyprus Czech Republic Estonia Finland France Germany Greece Hungary Italy Latvia

		Lithuania Netherlands Portugal Romania Slovenia Spain Sweden
GlaxoSmithKline Biologicals SA	HPV L1 VLPs 16 + 18 + 31	Bulgaria Cyprus Czech Republic Estonia Finland Greece Hungary Italy Latvia Portugal Slovakia Slovenia Sweden
GlaxoSmithKline Biologicals SA	HPV L1 VLPs 16 + 18 + 45	Bulgaria Cyprus Czech Republic Estonia Finland Greece Hungary Italy Latvia Portugal Slovakia Slovenia Sweden
GlaxoSmithKline	HPV L1 VLPs 16, 18 and 52	Bulgaria

Biologicals SA		Cyprus Czech Republic Estonia Finland Greece Hungary Italy Latvia Lithuania Portugal Slovakia Slovenia Sweden
Janssen Biotech, Inc.	golimumab	Belgium
Japan Tobacco, Inc.	elvitegravir	Belgium Czech Republic France Greece
Merck Sharp & Dohme BV (AU, CR, PO); Merck Sharp & Dohme Limited (ES); Ono Pharmaceutical Co. LTD. (AU, SW, FI, DK)	pembrolizumab	Austria Czech Republic Denmark Finland Poland Sweden
Merck Sharp & Dohme LLC (AU)	fidaxomicin	Austria
Merck Sharp & Dohme LLC	HPV 31 L1 protein	Germany Italy
Merck Sharp & Dohme LLC	HPV 58 L1 protein	Bulgaria Czech Republic Estonia Finland Germany

		Greece Hungary Italy Latvia Lithuania Portugal Slovakia Slovenia Sweden
Merck Sharp & Dohme LLC	HPV 45 L1 protein	Bulgaria Cyprus Czech Republic Estonia Finland Germany Greece Hungary Italy Latvia Portugal Slovakia Slovenia Sweden
Merck Sharp & Dohme LLC	HPV 52 L1 protein	Bulgaria Cyprus Czech Republic Estonia Finland Germany Greece Hungary Italy Latvia

		Portugal Slovakia Slovenia Sweden
Novartis AG	canakinumab	Belgium
Novartis AG ;	pazopanib	Greece
Novartis AG (SW, FR, PO, CY); Novartis Europharm Limited (ES)	secukinumab	Cyprus France Greece Poland Spain Sweden
Novo Nordisk A/S	insuline aspart	Netherlands
Novo Nordisk A/S	insuline degludec	Netherlands
N.V. Organon	corifollitropin alfa	Ireland Netherlands Poland
Ono Pharmaceutical CO., LTD.; Bristol-Myers Squibb Pharma EEIG (ES); E R Squibb & Sons LLC and ONO Pharmaceutical Co, Ltd, Honjo and ONO Pharmaceuticals Co. Ltd (SW); E.R.Squibb & Sons LLC (LT)	nivolumab	Austria Bulgaria Czech Republic Denmark Finland Greece Hungary Italy Latvia Lithuania Netherlands Portugal Slovenia Spain Sweden

Pfizer Ireland Pharmaceuticals; Novartis Vaccines and Diagnostics S.r.l. (ES); GlaxoSmithKline Biologicals S.A. (ES)	meningococcal group A, C, W-135 and Y conjugate vaccine	Bulgaria Greece Hungary Slovakia Slovenia Spain Sweden
Regeneron Pharmaceuticals, INC.	Aflibercept	Austria Belgium Bulgaria Cyprus Czech Republic Finland France Germany Greece Hungary Italy Latvia Lithuania Malta Netherlands Poland Portugal Slovakia Slovenia Sweden
Regeneron Pharmaceuticals, INC.; Sanofi-Aventis groupe (ES)	dupilumab	Austria Bulgaria Cyprus Czech Republic Denmark

		Finland Greece Hungary Italy Latvia Malta Netherlands Portugal Slovenia Spain Sweden
Sanofi Pasteur MSD SNC	Human papillomavirus 9-valent vaccine	Spain
Sanofi Pasteur Inc.	Meningococcal group C oligosaccharide conjugated to the CRM197 protein from Corynebacterium diphtheriae - Meningococcal group W-135 oligosaccharide conjugated to the CRM197 protein from Corynebacterium diphtheriae - Meningococcal group Y oligosaccharide conjugated to the CRM197 protein from Corynebacterium diphtheriae	Belgium
Sanofi Pasteur Inc.	Meningococcal oligosaccharide of group A, C, W135 and Y conjugated to corynebacterium diphtheriae protein CRM197.	Belgium
Shionogi & CO., LTD and ViiV Healthcare company	dolutegravir	Italy Netherlands Portugal Slovenia
UCB Biopharma SRL; UCB Pharma S.A. (ES)	brivaracetam	Bulgaria Cyprus Denmark Estonia Finland

		Italy Latvia Lithuania Netherlands Portugal Slovenia Spain

Source: NPO survey 2023

2.2.2. Orphan market exclusivity extension

In 2023, nine orphan medicinal products benefited from a two-year extension of their respective market exclusivity:

- Artesunate Amivas (artesunate) for the treatment of malaria;
- Brineura (cerliponase alfa) for the treatment of neuronal ceroid lipofuscinosis type 2;
- Finlee (dabrafenib) for the treatment of glioma;
- Idelvion (albutrepenonacog alfa) for the treatment of haemophilia B. [On the Union list of critical medicines];
- Soliris (eculizumab) for the treatment of myasthenia gravis;
- Takhzyro (lanadelumab) for the treatment of hereditary angioedema;
- Trecondi (treosulfan) as conditioning treatment prior to haematopoietic progenitor cell transplantation. [On the Union list of critical medicines];
- Vimizim (elosulfase alfa) for the treatment of mucopolysaccharidosis, type IVA (Morquio A Syndrome);
- Wakix (pitolisant hydrochloride) for the treatment of narcolepsy.

2.3. Paediatric use marketing authorisation

Two new paediatric use marketing authorisations (PUMA) were granted in 2023:

- Pedmarqsi (sodium thiosulfate) by Proveca Pharma Limited received a positive CHMP opinion in March 2023 for the prevention of ototoxicity induced by cisplatin chemotherapy in patients 1 month to less than 18 years of age with localised, non-metastatic, solid tumours. The EC decision was adopted in May 2023;
- Aqumeldi (enalapril maleate) by Proveca Pharma Limited received a positive CHMP opinion in September 2023 for the treatment of heart failure in children from birth to less than 18 years. The EC decision was adopted in November 2023.

2.4. Placing on the market

The " Register of deadlines to put a medicinal product on the market" (Article 33 of the Paediatric Regulation) lists the two-year timelines by which marketing authorisation holders (MAHs) have to place their medicinal products on the market following completion of an agreed PIP and obtaining a paediatric indication. The register includes information on the fulfilment of this requirement provided by NCAs and MAHs until the end of 2023.

The registry includes a column titled *'Product with paediatric indication placed on the market'* which notes the requirement to market the product in all applicable Member States by the established deadline. Starting from the 2023 Annual Report, the response to this column has been updated to:

- **Yes:** The product has been placed in the market in all applicable Member States by the established deadline.
- **No:** The product has not been placed on the market in all applicable Member States, or the deadline was not met.
- **Pending:** The deadline for placing the product on the market has not yet been reached.

3. Failure to comply with the obligations set out in the Paediatric Regulation

3.1. Submission of PIP and waiver applications to the PDCO

Article 16 of the Paediatric Regulation requires developers of a medicinal product to submit applications for agreement on a waiver or a PIP no later than upon completion of the human pharmacokinetic (PK) studies in adults as specified in Section 5.2.3 of Part I of Annex I to Directive 2001/83/EC, except when duly justified. Recital 10 of the Regulation states that paediatric investigation plans should be submitted early during product development, in time for studies to be conducted in the paediatric population, where appropriate, before marketing-authorisation applications are submitted.

The timing of submission should not be later than the end of healthy subject or patient pharmacokinetic (PK) studies, which can coincide with the initial tolerability studies, or the initiation of the adult phase II studies (proof-of-concept studies). If a phase II study in adults is already completed by the time of the PIP submission, the submission is generally considered delayed unless a valid justification is provided. However, submitting a first application for a new active substance during confirmatory or phase-III trials in adults, or after starting clinical trials in children, is likely to be considered unjustified. Late submissions have been reported since 2011 (Table 2) for applications with a delay greater than six months. The number of months of delay is calculated from the date of the completion of PK studies in adults or the initiation of adult phase II studies as declared by the applicant in the application for a PIP or a product-specific waiver request. Since 2014 only those deemed unjustified by the PDCO are being reported.

For further information on the timing of a PIP application please refer to guidance published on the EMA website (Q 1.1).

Table 2. Number of PIP and waiver procedures with a submission delay of greater than six months.

Procedur etype	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PIPs (% of total granted)	44 (59%)	34 (39%)	18 (20%)	12 (13%)	7 (10%)	20 (23%)	24 (28%)	9 (16%)	26 (25%)	38 (26%)	31 (22%)	43 (33.3%)	46 (35.9%)
Full waivers(% of total granted)	13 (42%)	11 (23%)	6 (11%)	4 (8%)	4 (8%)	14 (27%)	14 (16%)	9 (20%)	25 (25%)	26 (24%)	23 (20%)	37 (32.7%)	46 (33.6%)

Source: EMA Paediatric database

In 2023, a total of 128 PIPs received a positive opinion and 137 full product-specific waivers were granted by the PDCO.

The list of unjustified late submissions of PIP and waiver applications is presented in Annex I.

3.2. Completion of PIPs

The EMA decisions on PDCO opinions contain the agreed date of PIP completion.

For the analysis of timely completion, the PIPs with an agreed completion date up to 30 June 2023 were reviewed. This cut-off date was chosen because applicants must submit the completed study

reports within six months of completion (art. 46). Studies and PIPs completed after June 2023 may not have yet been subjected to a final compliance check.

In total, 629 PIPs were scheduled to be completed by 30 June 2023. Of these, 321 (51%) were completed. Among the remaining 308 that have not been completed, 168 were discontinued or a full waiver was granted in a subsequent modification. For 38 PIPs, a valid justification for the delayed completion has not been provided or found (e.g. a modification to amend the date of completion is pending/ongoing or development has been discontinued). These are listed in Annex II.

3.3. Annual reports on deferrals

According to article 34.4 of the Paediatric Regulation, MAHs should submit an annual report to the Agency providing an update on progress of deferred paediatric studies in accordance with the EMA decision agreeing the PIP and granting a deferral. In 2023 the EMA received 282 annual reports on deferred measures. All MAHs except one submitted their annual report on deferred measures due in 2023.

The list of companies that did not submit one or more annual reports since 2011 is included in Table 3.

Table 3. List of companies not submitting annual reports on deferred measures in due time

Company	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Aastrom Biosciences DK Aps					1								
Actelion Registration Ltd						1	1						
Aegerion Pharmaceuticals						1	1						
AMAG Pharmaceuticals, Inc.					1		1	1					
Amgen Europe B.V.			1										
APEIRON Biologics AG								1					
Bristol-Myers Squibb International Corporation													1
Clinigen Healthcare Ltd						1							
Clinuvel (UK) Limited					1								
Eisai Ltd.	1					1							
Forest Laboratories Limited				1	1								
Genzyme Europe B.V.	1												
GlaxoSmithKline	1												
Ipsen Pharma								1					
Janssen-Cilag International N.V.	1				1								
Kowa Pharmaceutical Europe CompanyLtd	1	1	4										
Merck Sharp & Dohme (Europe) Inc.	2	1	2										
Novartis (Europharm Limited, Vaccinesand diagnostics)		2	1										
Novo Nordisk A/S	1	1	2										
N.V. Organon						1							
Nycomed Danmark ApS						1							
Omrix Biopharmaceuticals SA			1		1								

Pfizer Limited	2												
Pharmaxis Pharmaceuticals Limited					1								
Roche Registration Limited	1	1	1		1							1	
Seqirus S.r.l.						1							
Sigma-Tau SpA		1	1		1								
Takeda Global Research and Dev.Centre (Europe) Ltd		1			1								
Teva Pharma GmbH						1							
Theravance, Inc.		1	1										
Total p/a:	11	9	14	1	10	8	3	3	0	0	0	1	1

Source: EMA database (PedRA)

Annex I. List of non-justified late submissions of applications for PIPs or waivers

This list includes only applications for which a decision on a PIP or a waiver was adopted by the European Medicines Agency in 2023.

The table below lists the agreed PIPs or waivers submitted in 2023 that were significantly delayed by at least 6 months for which no or an unacceptable justification (as determined by the PDCO) was provided.

Company	**Substance** (INN as applicable)	**Application type**
Alexion Europe SAS	humanised VHH-type bispecific antibody against Complement component 5 and serum albumin (ALXN1720)	PIP
Alexion Europe SAS	ravulizumab (ALXN1210)	Waiver
AlloVir International DAC	posoleucel	PIP
Amgen Europe BV	sotorasib	Waiver
Applied Therapeutics, Inc	govorestat	PIP
ASK Pharmaceuticals GmbH (ASK)	2-amino-5-(carbamylamino)pentanoic acid (L-citrulline)	PIP
Areteia Therapeutics	dexpramipexole dihydrochloride monohydrate	PIP
Autolus GmbH	obecabtagene autoleucel	PIP
Averoa SAS	ferric Citrate Coordination Complex (FCCC)	PIP
Bausch Health Ireland Limited	adapalene (micronized) / Benzoyl peroxide (hydrous) / Clindamycin phosphate	PIP
Bavarian Nordic A/S	MVA-BN-RSV vaccine (construct MVA-mBN294B)	PIP
Bayer AG	elinzanetant	Waiver
Biocon Pharma Malta-I Limited	itolizumab	PIP
Biohaven Bioscience Ireland Limited	taldefgrobep alfa	PIP
BIONET EUROPE	Pertussis Filamentous Haemagglutinin (FHA) / Genetically detoxified Pertussis Toxin (PTgen)	Waiver
CanariaBio Inc.	oregovomab	Waiver

Cassiopea S.p.A	clascoterone	PIP
Cogent Biosciences, Inc	bezuclastinib	Waiver
COMPASS Pathfinder Limited	3-[2-(Dimethylamino)ethyl]-1H-indol-4-yl dihydrogen phosphate	Waiver
Chimerix IRL Limited	dordaviprone	PIP
Chinook Therapeutics, Inc.	atrasentan	PIP
Daiichi Sankyo Europe GmbH	valemetostat tosilate	Waiver
Dimerix Bioscience Pty Ltd	repagermanium	PIP
Dr. Pfleger Arzneimittel GmbH	finasteride / tadalafil	Waiver
Eli Lilly and Company Limited	abemaciclib	Waiver
Enzyvant Therapeutics Ireland Limited	allogeneic cultured postnatal thymus-derived tissue	PIP
EQRx International, Inc.	lerociclib (dihydrochloride)	Waiver
ESPL Regulatory Consulting Limited	povidone-iodine	Waiver
ExCellThera	Haematopoietic stem cells and blood progenitors umbilical cord-derived expanded with (1R,4R)-N1-(2-benzyl-7-(2-methyl-2H-tetrazol-5-yl)-9H-pyrimido[4,5-b]indol-4-yl)cyclohexane-1,4-diamine dihydrobromide dihydrate (ECT-001-CB)	PIP
FGK Representative Service GmbH	efzofitimod	Waiver
Gilead Sciences International Ltd.	domvanalimab	Waiver
Gilead Sciences International Ltd.	zimberelimab	Waiver
GlaxoSmithKline Biologicals SA	Meningococcal group Y oligosaccharides conjugated to Corynebacterium diphtheriae CRM197 protein / Meningococcal group W-135 oligosaccharides conjugated to Corynebacterium diphtheriae CRM197 protein / Meningococcal group C oligosaccharides conjugated to Corynebacterium diphtheriae CRM197 protein / Meningococcal group A oligosaccharides conjugated to Corynebacterium diphtheriae CRM197 protein / Outer Membrane Vesicles	PIP

	(OMV) from N. meningitidis Strain NZ 98/254 / Recombinant Neisseria meningitidis group B fHbp 2-3-1.13NB fusion protein / Recombinant Neisseria meningitis group B Protein 961c / Recombinant Neisseria meningitis group B Protein 287-953 / Recombinant Neisseria meningitis group B Protein 936-741	
GlaxoSmithKline Biologicals Srl	Meningococcal group Y oligosaccharide conjugated to Corynebacterium diphteriae CRM197 protein (MenY-CRM) / Meningococcal group W-135 oligosaccharide conjugated to Corynebacterium diphteriae CRM197 protein (MenW-CRM) / Meningococcal group C oligosaccharide conjugated to Corynebacterium diphteriae CRM197 protein (MenC-CRM) / Meningococcal group A oligosaccharide conjugated to Corynebacterium diphteriae CRM197 protein (MenA-CRM)	Waiver
GlaxoSmithKline Biologicals SA	Varicella virus OKA strain (live, attenuated)	Waiver
GlycoMimetics, Inc.	Uproleselan	PIP
Horizon Therapeutics Ireland Designated Activity Company (DAC)	inebilizumab	PIP
Inovio Pharmaceuticals Inc.	DNA plasmid encoding HPV type 18 consensus E6 and E7 proteins (pGX3002 - Bizalimogene ralaplasmid) / DNA plasmid encoding HPV type 16 consensus E6 and E7 proteins (pGX3001-mavilimogene ralaplasmid)	Waiver
Jadran galenski laboratorij	Sodium hyaluronate / Xylometazoline hydrochloride	Waiver
Janssen-Cilag International N.V.	milvexian	PIP
Jazz Pharmaceuticals Ireland Limited	Zanidatamab	Waiver
JCR Pharmaceuticals Co., Ltd.	pabinafusp alfa	PIP
Junshi Biosciences	Tifcemalimab	PIP

Incyte Biosciences Distribution B.V.	Povorcitinib	PIP
Incyte Biosciences Distribution B.V.	ruxolitinib (phosphate)	Waiver
Ionis Pharmaceuticals	2'-O-(2-methoxyethyl) modified antisense oligonucleotide targeting fused in sarcoma (FUS) pre-mRNA (ION363)	PIP
Ipsen Pharma	Tazemetostat	Waiver
ITM Solucin GmbH	Lutetium (177Lu) edotreotide	PIP
KRKA, d.d., Novo mesto	sitagliptin / Dapagliflozin	Waiver
LANOVA FARMACEUTICI SRL	Amlodipine / Rosuvastatin	Waiver
Luzsana Biotechnology Europe	Fuzuloparib	Waiver
MAPS Europe B.V.	±3,4-methylenedioxymethamphetamine hydrochloride (MDMA)	PIP
Midas Pharma GmbH	doxazosin (mesylate) / Finasteride	Waiver
Medivis Srl	Povidone (iodinated)	Waiver
Merck, Sharp & Dohme (Europe) Inc	belzutifan	Waiver
Merck Sharp & Dohme (Europe) Inc.	pembrolizumab / vibostolimab	PIP
Mersana Therapeutics Inc.	Upifitamab rilsodotin	Waiver
Moderna Biotech Spain, S.L.	Modified mRNA encoding human methylmalonyl-coenzyme A mutase containing a polymorphism at position 671	PIP
Moderna Biotech Spain, S.L.	single-stranded 5' capped mRNA encoding the respiratory syncytial virus glycoprotein F stabilized in the prefusion conformation (mRNA-1345)	PIP
Moderna Biotech Spain S.L.	Single-stranded 5' capped mRNA encoding the HAs of the influenza virus strains A and B (mRNA-1010)	PIP
Mural Oncology, Inc.	Nemvaleukin alfa	PIP
NewAmsterdam Pharma BV	Ezetimibe / Obicetrapib	Waiver
NewAmsterdam Pharma BV	obicetrapib	Waiver
NewAmsterdam Pharma BV	obicetrapib	PIP

Nogra Pharma Limited	3-(4-acetamidophenyl)-2-(S)-methoxypropionic acid, or (S)-3-(4-acetamidophenyl)-2-methoxypropanoic acid	PIP
Novaliq GmbH	Ciclosporin	Waiver
Novo Nordisk A/S	Semaglutide	Waiver
Nykode Therapeutics ASA	Therapeutic DNA plasmid vaccine targeting HPV16 E6 and E7 proteins (VB10.16)	Waiver
OncoC4, Inc.	Gotistobart	Waiver
Otsuka Pharmaceutical Netherlands B.V.	cedazuridine / Decitabine	PIP
Palau Pharma, S.L.	Albaconazole	PIP
Pfizer Europe MA EEIG	modRNA encoding 4 influenza HA antigens (2 for influenza A and 2 for influenza B strains) (qIRV)	PIP
Pharmaplot PC	Ezetimibe / Rosuvastatin	Waiver
Pharmazac S.A.	Ezetimibe / Rosuvastatin	Waiver
Priothera SAS	mocravimod	PIP
Regeneron Ireland DAC	cemdisiran	PIP
Regeneron Ireland DAC	Immunoglobulin G4 [228-proline], anti-(Betula alleghaniensis allergen Bet v 1) (human monoclonal REGN5715 γ4-chain), disulphide with human monoclonal REGN5715 κ-chain, dimer (REGN5715) / Immunoglobulin G4 [227-proline], anti-(Betula alleghaniensis allergen Bet v 1) (human monoclonal REGN5714 γ4-chain), disulphide with human monoclonal REGN5714 κ-chain, dimer (REGN5714) / Immunoglobulin G4 [224-proline], anti-(Betula alleghaniensis allergen Bet v 1) (human monoclonal REGN5713 γ4-chain), disulphide with human monoclonal REGN5713 κ-chain, dimer (REGN5713)	PIP
Regeneron Ireland DAC	pozelimab	PIP
Reneo Pharmaceuticals Inc	Mavodelpar	PIP
Rigel Pharmaceuticals B.V.	olutasidenib	Waiver

Sanofi B.V.	venglustat	PIP
Sanofi Winthrop Industrie	Frexalimab	PIP
Sarepta Therapeutics Ireland	vesleteplirsen	PIP
Scholar Rock, Inc.	Apitegromab	PIP
Summit Therapeutics Sub Inc.	Ivonescimab	Waiver
Swyssi AG	Acetylsalicylic acid / Rosuvastatin (Calcium)	Waiver
Tarsus Pharmaceuticals, Inc.	Lotilaner	Waiver
Teva B.V.	Deutetrabenazine	Waiver
Teva B.V.	Salbutamol sulfate	Waiver
TransThera Sciences (Nanjing), Inc.	Tinengotinib (TT-00420)	Waiver
Verisfield Single Member S.A.	Thiocolchicoside / Diclofenac	Waiver
Zakłady Farmaceutyczne Polpharma S.A.	Indapamide / Ramipril	Waiver

Source: EMA database PedRA

Annex II. List of PIPs not completed by the agreed date until 30 June 2023

It should be noted that this list does not specify if the development of the medicinal product has been discontinued or not, as the EMA may not have been informed by the company accordingly.

The following list includes all PIPs due to be completed by 30 June 2023 without sufficient justification for the delay.

Procedure number	**Substance**	**Invented Name**	**Company**
EMEA-002266-PIP01-17	recombinant human acid ceramidase	N/A	Aceragen Inc.
EMEA-000488-PIP02-11	rubidium-82	Cardiogen-82	Advanced Accelerator Applications
EMEA-001134-PIP01-11	chimeric monoclonal anti-shiga toxin (Stx) antibodies Cαstx1 and Cαstx2	Shigamabs	Albany Regulatory Consulting Limited
EMEA-000337-PIP01-08	grass pollen preparation	N/A	Allergopharma J. GanzerKG
EMEA-000284-PIP01-08-M04	modified grass pollen extract	N/A	Allergy Therapeutics (UK)Limited
EMEA-000814-PIP01-09	birch/alder/hazel pollen Extract	POLLINEX Quattro 1.0 mL Birch/Alder/Hazel	Allergy Therapeutics (UK)Ltd
EMEA-000988-PIP01-10	ciclosporin	N/A	APT Pharmaceuticals Inc
EMEA-001369-PIP01-12	exon 45 specific phosphorothioate oligonucleotide	N/A	Biomarin InternationalLimited
EMEA-001374-PIP01-12	exon 53 specific phosphorothioate oligonucleotide	N/A	BioMarin InternationalLimited
EMEA-001267-PIP01-12	[N-{4-Chloro-2-[(1-oxido-4-pyridinyl)carbonyl]phenyl}-4-(1,1-dimethylethyl) benzenesulfonamide, sodium salt	N/A	ChemoCentryx, Inc.

EMEA-001513-PIP01-13	estetrol / levonorgestrel	N/A	Estetra S.A.
EMEA-001175-PIP01-11-M04	albiglutide	Eperzan	Glaxo Group Limited
EMEA-000580-PIP01-09	dalcetrapib	N/A	Roche Registration Limited
EMEA-000976-PIP01-10	grass pollen allergen extract from Cocksfoot (Dactylis glomerata L.)/ Sweet vernal grass (Anthoxanthum odoratum L.)/ Rye grass (Lolium perenne L.)/ Meadowgrass (Poa pratensis L.)/ Timothy (Phleum pratense L.)	Staloral 5 Grasses	Stallergenes S.A.
EMEA-000977-PIP01-10	house dust mites allergen extract from Dermatophagoides pteronyssinus and Dermatophagoides farinae (50/50)	STALORAL Mites	STALLERGENES S.A.
EMEA-001568-PIP03-14	ceftriaxone / sulbactam	Elores	Venus Pharma GmbH
EMEA-000487-PIP01-08	bromocriptine	Cycloset	Veroscience Eu Ltd
EMEA-000044-PIP01-07	TGplPTH1-34	N/A	Kuros Biosurgery International AG
EMEA-000651-PIP01-09-M02	Cholic acid	N/A	FGK Representative Service GmbH
EMEA-000341-PIP02-09-M05	L-asparaginase encapsulated in erythrocytes	GRASPA	ERYTECH pharma S.A.
EMEA-000487-PIP01-08	bromocriptine mesilate	Cycloset	VeroScience EU Ltd
EMEA-000362-PIP01-08-M04	Aliskiren hemifumarate	Rasilez	IQVIA RDS France
EMEA-000810-PIP01-09	12 Grass Pollen Extract, Cultivated Rye Pollen Extract and Birch Pollen Extract	POLLINEX Quattro 1.0 mL Grasses/Rye and Birch (50%:50%)	Allergy Therapeutics (UK) Ltd

EMEA-000811-PIP01-09	12 Grass Pollen Extract, Cultivated Rye Pollen Extract and Mugwort Pollen Extract	POLLINEX Quattro 1.0 mL Grasses/Rye and Mugwort (50%:50%)	Allergy Therapeutics (UK) Ltd
EMEA-000812-PIP01-09	12 Grass Pollen Extract, Cultivated Rye Pollen Extract and Birch/Alder/Hazel Pollen Extract	POLLINEX Quattro 1.0 mL Grasses/Rye and Birch/Alder/Hazel (50%:50%)	Allergy Therapeutics (UK) Ltd
EMEA-000880-PIP02-11-M04	Sonidegib	Odomzo	Sun Pharmaceutical Industries Europe B.V.
EMEA-000898-PIP01-10-M02	Meropenem	Not available	NeoMero Consortium
EMEA-001226-PIP01-11-M01	Surotomycin	N/A	Cubist (UK) Ltd.
EMEA-001413-PIP01-13	Allergoid preparation of Phleum pratense pollen extract	Allergovit Phleum	Allergopharma GmbH & Co. KG
EMEA-001909-PIP01-15	Cathine hydrochloride (D-Norpseudoephedrine hydrochloride)	ALVALIN RIEMSER, 40 mg/g, Tropfen zum Einnehmen, Lösung	Schuck GmbH
EMEA-002051-PIP02-16	allopregnanolone	N/A	Sage Therapeutics Inc
EMEA-001453-PIP01-13-M01	zuretinol acetate	N/A	Retinagenix LLC
EMEA-001255-PIP01-11-M03	Tilmanocept	LYMPHOSEEK	Navidea Biopharmaceuticals Europe Ltd.
EMEA-002407-PIP01-18	SAR422459 (lentiviral vector containing the human ABCA4 gene for treatment of Stargardt's disease)	N/A	Sanofi-Aventis Recherche & Développement
EMEA-000902-PIP01-10-M01	Adsorbed modified allergen extract of a mixture of 50% dermatophagoides pteronyssinus and 50% dermatophagoides farinae	PURETHAL D. pteronyssinus + D. farinae	HAL Allergy BV
EMEA-001571-PIP01-13	N-{2-(2,3-Difluorobenzylthio)-6-[(2R,3S)-3,4-dihydroxybut-2-	N/A	AstraZeneca AB

	yloxy]pyrimidin-4-yl}azetidine-1-sulfonamide		
EMEA-002311-PIP01-17-M02	ibalizumab	Trogarzo	Theratechnologies Europe Limited