

EMA/359497/2023 15 December 2023 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 Regulation¹ and on the companies that have failed to comply with any of the obligations in this regulation

Year 2022

Prepared by: Paediatric Medicines Office

Scientific Evidence Generation

DepartmentEuropean Medicines Agency



| EGULATION (EC) No 1901/2006 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL on medicinal products paediatric use (Regulation (EC) No 1901/2006 and Regulation (EC) No 1902/2006) | |
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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 (EC) No 1901/2006 of the EUROPEAN PARLIAMENT AND OF THE

Regulation 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 year 2022 and lists the companies benefiting from and infringing the regulation.

1.2. Data collection and methodology

In December 2022 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 2022.

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.

Between July 2023 and September 2023, companies identified as potentially infringing the <u>Paediatric Regulation</u> in 2022 with regard to non-completion of a paediatric investigation plan (PIP) by the agreed date and non- submission of an annual report on deferred measures by the due date, were given an opportunity to provide comments on the finding before publication of the identified infringement. All information received by 12 September 2023 was considered for finalisation of this report.

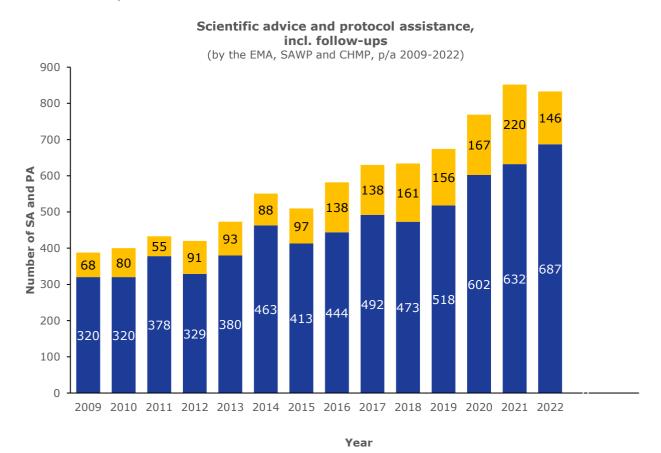
2. Companies and products that have benefited from therewards and incentives in the regulation

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 2022 is overall in the range of the years before 2021. 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 2009-2022)



- No. of SA/PA on paediatric-only and combined adult and paediatric medicines development that involved PDCO members as experts
- No. of SA/PA without paediatric aspects

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

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 2022, 44 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 2022

| Company / SPC holder | Substance (INN as applicable) | SPC extension granted in 2022 |
|--|-------------------------------|-------------------------------|
| AbbVie Bahamas Ltd | glecaprevir / pibrentasvir | Cyprus |
| AbbVie Bahamas Ltd.(FR, FI, | pibrentasvir | Bulgaria |
| HU, IR, SK); AbbVie Ireland Unlimited Company (BU, EE, | | Estonia |
| GR); AbbVie Deutschland | | Finland |
| GmbH & Co. KG (ES) | | France |
| | | Greece |
| | | Hungary |
| | | Ireland |
| | | Slovakia |
| | | Spain |
| Amgen Inc. (BU, CZ, LT); | denosumab | Bulgaria |
| Immunex Coorporation(DK); Daiichi Sankyo Company, | | Czech Republic |
| limited (HU) | | Denmark |
| | | Hungary |
| | | Lithuania |
| Amgen K-A, Inc; Kirin- | romiplostim | Austria |
| Amgen Inc (LV, NL) | | Belgium |
| | | Finland |
| | | Ireland |
| | | Italy |
| | | Latvia |

| | | Lithuania |
|-------------------------------|---------------|----------------|
| | | Netherlands |
| | | Portugal |
| | | Romania |
| | | Slovenia |
| Astellas Pharma Inc, Astellas | ceftolozane | Austria |
| Pharma & Wakanuga | certorozume | Netherlands |
| Pharmaceutical (NL) | | Netherlands |
| AstraZeneca AB | dapagliflozin | Bulgaria |
| | | Czech Republic |
| | | Estonia |
| | | Germany |
| | | Latvia |
| | | Malta |
| | | Netherlands |
| | | Portugal |
| | | Slovenia |
| AstraZeneca AB; | ticagrelor | Bulgaria |
| AstraZeneca UK Limited (EE) | | Cyprus |
| | | Czech Republic |
| | | Estonia |
| | | Finland |
| | | France |
| | | Germany |
| | | Hungary |
| | | Ireland |
| | | Italy |
| | | Latvia |
| | | Lithuania |
| | | Netherlands |
| | | Poland |
| | | Portugal |
| | | Romania |
| | | |

| | | Slovenia |
|--|----------------------------|----------------|
| | | Spain |
| | | Sweden |
| Bayer Healthcare LLC; | damoctocog alfa pegol | Finland |
| | | Hungary |
| | | Poland |
| Bayer Intellectual Property | rivaroxaban | Belgium |
| GmbH; Bavar intellectual property (RO); Bayer AG | | Cyprus |
| (ES) | | France |
| | | Poland |
| | | Romania |
| | | Spain |
| Enanta Pharmaceuticals, Inc; | glecaprevir | Bulgaria |
| AbbVie Deutschland GmbH & Co. KG (ES) | | Czech Republic |
| | | Estonia |
| | | Finland |
| | | France |
| | | Greece |
| | | Hungary |
| | | Ireland |
| | | Spain |
| Enanta Pharmaceuticals, Inc | glecaprevir / pibrentasvir | Cyprus |
| Exelixis, Inc. | cobimetinib | Austria |
| | | Bulgaria |
| Boehringer Ingelheim Pharma | afatinib | Bulgaria |
| GmbH & Co. KG; Boehringer Ingelheim International GmbH | | Cyprus |
| (ES) | | Czech Republic |
| | | Estonia |
| | | Finland |
| | | Germany |
| | | Hungary |
| | | Italy |

| | T | T |
|--|--------------------------------|----------------|
| | | Latvia |
| | | Lithuania |
| | | Netherlands |
| | | Portugal |
| | | Romania |
| | | Slovakia |
| | | Slovenia |
| | | Spain |
| | | Sweden |
| Boehringer Ingelheim Pharma | dabigatran etexilate | Bulgaria |
| GmbH & Co. KG | | Poland |
| Boehringer Ingelheim Pharma | idarucizumab | Bulgaria |
| GmbH & Co. KG (LV); Boehringer Ingelheim | | Cyprus |
| International GmbH | | Czech Republic |
| | | Estonia |
| | | Finland |
| | | Italy |
| | | Latvia |
| | | Netherlands |
| | | Portugal |
| | | Slovenia |
| Chiesi Farmaceutici S.p.A. | beclomethazone / formoterol | Italy |
| Eisai R&D Management Co. | eribulin | Austria |
| Ltd ; Eisai GmbH (ES) | | Cyprus |
| | | Finland |
| | | Hungary |
| | | Ireland |
| | | Italy |
| | | Netherlands |
| | | Portugal |
| | | Spain |
| Gilead Pharmasset LLC | ledipasvir | Bulgaria |

| Gilead Pharmasset LLC | sofosbuvir | Bulgaria |
|---------------------------------------|---------------------------|----------------|
| | | Czech Republic |
| | | France |
| | | Greece |
| | | Ireland |
| | | Poland |
| | | Slovakia |
| Gilead Sciences International Limited | elvitegravir | Spain |
| GlaxoSmithKline Biologicals SA | HPV L1 VLPs 16 + 18 + 31 | Lithuania |
| | | Netherlands |
| GlaxoSmithKline Biologicals SA | HPV L1 VLPs 16 + 18 + 45 | Lithuania |
| | | Netherlands |
| GlaxoSmithKline Biologicals SA | HPV L1 VLPs 16, 18 and 52 | Netherlands |
| Janssen Biotech, Inc. | golimumab | Sweden |
| Janssen Biotech, Inc. | ustekinumab | Belgium |
| | | Germany |
| | | Poland |
| Janssen Pharmaceutica N.V.; | etravirine | Belgium |
| | | Estonia |
| | | France |
| | | Portugal |
| Japan Tobacco, Inc. | elvitegravir | Austria |
| | | Bulgaria |
| | | Finland |
| | | Hungary |
| | | Lithuania |
| | | Netherlands |
| | | Portugal |
| | | Romania |
| | | Slovakia |
| | | Slovenia |

| Japan Tobacco, Inc | Elvitegravir/ cobicistat/ | Cyprus |
|-----------------------------|---------------------------|----------------|
| | emtricitabine/ tenofovir | Estonia |
| | disoproxil | Germany |
| | | Italy |
| | | Latvia |
| | | Malta |
| Merck Sharp & Dohme BV; | pembrolizumab | Bulgaria |
| Merck Sharp & Dohme Limited | | Cyprus |
| (ES) | | Estonia |
| | | Finland |
| | | France |
| | | Germany |
| | | Greece |
| | | Hungary |
| | | Latvia |
| | | Lithuania |
| | | Malta |
| | | Romania |
| | | Slovakia |
| | | Spain |
| | | Sweden |
| Merck Sharp & Dohme Corp.; | fidaxomicin | Belgium |
| | | Romania |
| Merck Sharp & Dohme LLC | HPV 31 L1 protein | Netherlands |
| Merck Sharp & Dohme LLC | HPV 58 L1 protein | Netherlands |
| Merck Sharp & Dohme LLC | HPV 45 L1 protein | Netherlands |
| Merck Sharp & Dohme LLC | HPV 52 L1 protein | Netherlands |
| Novartis AG; Novartis | pazopanib | Cyprus |
| Europharm Limited (ES) | | Czech Republic |
| | | Finland |
| | | France |
| | | Germany |
| | | Hungary |

| | Ireland |
|----------------------|-----------------------------------|
| | Italy |
| | Poland |
| | Portugal |
| | Slovenia |
| | Spain |
| | Sweden |
| secukinumab | Austria |
| | Bulgaria |
| | Czech Republic |
| | Estonia |
| | Finland |
| | Germany |
| | Hungary |
| | Italy |
| | Latvia |
| | Lithuania |
| | Netherlands |
| | Portugal |
| | Romania |
| | Slovakia |
| | Slovenia |
| liraglutide | Denmark |
| | Germany |
| corifollitropin alfa | Finland |
| | Germany |
| | Hungary |
| | Italy |
| | Portugal |
| conestat alfa | Germany |
| | liraglutide corifollitropin alfa |

| Phivco-1 LLC; Phivco UK Limited (CY) | maraviroc | Cyprus Denmark Slovakia |
|--|---------------------------------|---------------------------|
| Royalty Pharma Collection Trust. | alogliptin | Denmark |
| Royalty Pharma Collection Trust. | linagliptin | Denmark |
| Royalty Pharma Collection Trust. | saxagliptin | Denmark |
| Takeda Pharmaceutical Company Limited | phosphonocephem | Belgium |
| Theramex HQ UK Ltd | nomegestrol acetate / estradiol | Denmark |

Source: NPO survey 2022

2.2.2. Orphan market exclusivity extension

In 2022, four orphan medicinal products benefited from a two-year extension of their respective market exclusivity:

- Livmarli (maralixibat chloride) for the treatment of cholestatic pruritus in patients with Alagille syndrome (ALGS) 2 months of age and older;
- Nulibry (fosdenopterin) for the treatment of patients with molybdenum cofactor deficiency (MoCD)
 Type A;
- Voraxaze (glucarpidase) to reduce toxic plasma methotrexate concentration in adults and children (aged 28 days and older) with delayed methotrexate elimination or at risk of methotrexate toxicity;
- Zokinvy (Ionafarnib) for the treatment of patients 12 months of age and older with a genetically
 confirmed diagnosis of Hutchinson-Gilford progeria syndrome or a processing-deficient progeroid
 laminopathy associated with either a heterozygous LMNA mutation with progerin-like protein
 accumulation or a homozygous or compound heterozygous ZMPSTE24 mutation.

2.3. Paediatric use marketing authorisation

No paediatric use marketing authorisation (PUMA) was granted in 2022.

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 2022.

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 pharmaceutical companies to submit applications for

a PIP and a waiver no later than upon completion of the human pharmacokinetic (PK) studies in adults specified in Section 5.2.3 of Part I of Annex I to <u>Directive 2001/83/EC</u>, except when duly justified.

Late submissions are being reported since 2010 (Table 2) for applications with a delay greater than six months. From 2014 only those considered by the PDCO as not justified are being reported.

Table 2. – Number of procedures with a time lag six months or longer between completion of adult PK studies and submission of PIP or waiver application

| Procedure type | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|-------------|-------------|----------|-------------|---------|-------------|-------------|---------|-------------|-------------|----------|---------------|
| 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%) |
| Full waivers (% of total granted) | 13 (42%) | (23%) | 6 (11%) | (8%) | (8%) | 14 (27%) | 14 (16%) | 9 (20%) | 25 (25%) | 26 (24%) | 23 (20%) | 37 (32.7%) |

Source: EMA Paediatric database

In 2022, a total of 129 PIPs received a positive opinion and 113 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 expected date of PIP completion.

For the analysis of timely completion, the PIPs with an expected completion date until 30 June 2022 were reviewed. This cut-off date was chosen to account for the fact that applicants must submit the completed study reports within six months of completion (Art. 46) and studies (and PIPs) completed after June 2022 may not have yet been subjected to a final compliance check.

In total, 575 PIPs were scheduled to finish by 30 June 2022 of those, 305 (53%) were completed; of the remaining 270 that have not been completed, 156 were discontinued or a full waiver was granted in subsequent modification. For 33 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 <u>Paediatric Regulation</u>, 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 2022 the EMA received 332 annual reports on deferred measures. All MAHs except one submitted their annual report on deferred measures due in 2022.

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 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| 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 | | | | |
| 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 | 11 | 8 | 3 | 3 | 0 | 0 | 0 | 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 2022.

The below table shows the agreed PIPs or waivers submitted in 2022 with a significant delay of at least 6 months for which none or unacceptable (by the PDCO) justification was provided. The timing of submission should not be later than the end of healthy subject or patient PK, which can coincide with the initial tolerability studies, or the initiation of the adult phase II studies (proof-of-concept studies). In cases where a phase II study in adults is already completed by the time of the PIP submission, the submission is in principle considered delayed unless justified.

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.

Further information on the timing of a PIP application can be found on the EMA website (Q 1.1).

| Company | Substance (INN as applicable) | Application type |
|-----------------------------|--|------------------|
| AbbVie Ltd | adalimumab conjugated with (4S)-4- [2-(2-bromoacetamido)acetamido]-5- {3-[(4- {(4aR,4bS,5S,6aS,6bS,8R,9aR,10aS,1 0bS)-5-hydroxy-4a,6a-dimethyl-2- oxo-6b-[(phosphonooxy)acetyl]- 4a,4b,5,6,6a,6b,9a,10,10a,10b,11,12- dodecahydro-2H,8H- naphtho[2',1':4,5]indeno[1,2- d][1,3]dioxol-8-yl}phenyl)methyl] anilino}-5-oxopentanoic acid; ABBV- 154 | Waiver |
| Adamed Pharma S.A. | rosuvastatin (Calcium) / telmisartan | Waiver |
| Adamed Pharma S.A. | tadalafil / finasteride | Waiver |
| Adamed Pharma S.A. | hydrochlorothiazide / amlodipine / candesartan cilexetil | Waiver |
| ADC Therapeutics SA | camidanlumab tesirine | PIP |
| Advenchen Laboratories, LLC | catequentinib | PIP |
| Akero Therapeutics, Inc. | efruxifermin | PIP |
| AlloVir International DAC | posoleucel | PIP |
| Arena Pharmaceuticals, Inc. | etrasimod L-arginine | PIP |
| AstraZeneca AB | oleclumab | Waiver |
| AstraZeneca AB | monalizumab | Waiver |

| AstraZeneca AB | eplontersen | Waiver |
|---|---|--------|
| Biocodex SA | stiripentol | PIP |
| Biohaven Pharmaceutical Ireland DAC | troriluzole (hydrochloride) | PIP |
| BIOKOSMOS S.A. | fluorine (18F) PSMA-1007 | Waiver |
| Blueprint Medicines (Netherlands) B.V. | 2-{4-[4-(4-{5-[(1S)-1-amino-1-(4-fluorophenyl) ethyl]pyrimidin-2-yl}piperazin-1-yl)pyrrolo[2,1-f] [1,2,4]triazin-6-yl]-1H-pyrazol-1-yl}ethan-1-ol | Waiver |
| Boehringer Ingelheim International GmbH | peptide derivative of glucagon-like- peptide 1 and glucagon with fatty acid side chain | PIP |
| Calliditas Therapeutics France SAS | setanaxib | Waiver |
| Clene Netherlands B.V. | gold (Au) | Waiver |
| Cogent Biosciences, Inc | 3,4-dimethyl-N-(2-phenyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-1H-pyrazole-5-carboxamide | Waiver |
| Deciphera Pharmaceuticals | vimseltinib | Waiver |
| Desitin Arzneimittel GmbH | sirolimus | PIP |
| EigerBio Europe Limited | avexitide (acetate) | Waiver |
| EigerBio Europe Limited | lonafarnib | PIP |
| EigerBio Europe Limited | avexitide (acetate) | PIP |
| Eli Lilly and Company Limited | sintilimab | Waiver |
| EQRx Inc. | sugemalimab | Waiver |
| FibroGen, Inc. | pamrevlumab | PIP |
| G1 Therapeutics, Inc. | trilaciclib (dihydrochloride) | Waiver |
| Galderma International S.A.S. | botulinum toxin type A | Waiver |
| Gilead Sciences International Ltd. | sacituzumab govitecan | Waiver |
| GlaxoSmithKline Trading Services Limited | cobolimab | Waiver |
| Global Blood Therapeutics Netherlands B.V. | inclacumab | PIP |
| Helsinn Birex Pharmaceuticals Ltd. | infigratinib | Waiver |

| Horizon Therapeutics Ireland DAC | 2-[4-Methoxy-3-(2-m-tolyl-ethoxy)-benzoylamino]-indan-2-carboxylic acid | Waiver |
|--|---|--------|
| Immunovant Sciences, GmbH | batoclimab | PIP |
| Incyte Biosciences Distribution B.V. | parsaclisib (hydrochloride) | Waiver |
| Incyte Biosciences Distribution B.V. | pemigatinib | Waiver |
| Incyte Biosciences Distribution B.V. | ruxolitinib (phosphate) | PIP |
| Incyte Biosciences Distribution B.V. | retifanlimab | Waiver |
| Inmunotek S.L. | whole-cell heat-inactivated bacterial strains of Escherichia coli, Klebsiella pneumoniae, Proteus vulgaris and Enterococcus faecalis | PIP |
| Innate Pharma SA | lacutamab | Waiver |
| IntraBio Ltd. | acetyl-L-leucine ((s)-(acetylamino)-4- methylpentanoic acid) (IB1001) | PIP |
| Invex Therapeutics Ltd | exenatide (acetate) | PIP |
| Ionis Pharmaceuticals | 2'-O-(2'-methoxyethyl) modified antisense oligonucleotide targeting prekallikrein mRNA (ISIS 721744) | PIP |
| Iperboreal Pharma Srl | L-carnitine/glucose/calcium chloride dihydrate/magnesium chloride hexahydrate/sodium lactate/sodium chloride | PIP |
| Janssen-Cilag International NV | RSV preF protein | PIP |
| Jazz Pharmaceuticals Ireland Ltd | suvecaltamide (hydrochloride) | Waiver |
| Krka, d.d., Novo mesto | hydrochlorothiazide / amlodipine / telmisartan | Waiver |
| Krystal Biotech, Inc. | beremagene geperpavec | PIP |
| Lumos Pharma, Inc. | ibutamoren mesylate | PIP |
| Madrigal Pharmaceuticals EU Limited | resmetirom | PIP |
| Merck Healthcare KGaA | xevinapant | Waiver |
| Merck Sharp & Dohme (Europe), Inc. | live, attenuated, dengue virus, serotype 4 (DENV4) / live, attenuated, | PIP |

| Mitsubishi Tanabe Pharma GmbH Novartis Europharm Limited Novartis Europharm Limited | dengue virus, serotype 3 (DENV3) / live, attenuated, chimeric dengue virus, serotype 2 (DENV2) / live, attenuated, dengue virus, serotype 1 (DENV1) dersimelagon anti-TGFbeta fully human monoclonal antibody (NIS793) 1-{6-[(4M)-4-(5-Chloro-6-methyl-1H-indazol-4-yl)-5-methyl-3-(1-methyl-1H-indazol-5-yl)-1H-pyrazol-1-yl]-2-azaspiro[3.3]heptan-2-yl}prop-2-en-1- | PIP Waiver Waiver |
|--|---|-------------------|
| | one | |
| Novo Nordisk A/S | ziltivekimab | Waiver |
| NS Pharma, Inc. | viltolarsen | PIP |
| Orchard Therapeutics (Netherlands) B.V. | autologous CD34+ hematopoietic stem and progenitor cells (HSPCs) genetically modified with the lentiviral vector IDUA LV, encoding for the human a-L-iduronidase (IDUA) gene (OTL-203) | PIP |
| Orphinic Scientific Bis Sp. z o.o. | magnesium lactate dihydrate / tramadol (hydrochloride) | Waiver |
| OSE Immunotherapeutics | peptide KLBPVQLWV / peptide SMPPPGTRV / peptide YLQLVFGIEV / peptide RLLQETELV / peptide YLSGADLNL / peptide LLTFWNPPV / Peptide IMIGHLVGV / peptide KVAEIVHFL / peptide KVFGSLAFV / Pan HLA DR-binding epitope D-Ala-Lys- Cha-Val-Ala-Ala-Trp-Thr-Leu-Lys-Ala- Ala-D-Ala (OSE2101) | Waiver |
| OT4B | oxytocin | PIP |
| Otsuka Pharmaceutical Netherlands B.V. | cedazuridine / decitabine | PIP |
| Pharma Mar, S.A. | lurbinectedin | Waiver |
| Prilenia Therapeutics B.V. | pridopidine (hydrochloride) | PIP |
| Reata Ireland Limited | omaveloxolone | PIP |
| Roche Registration GmbH | ralmitaront | PIP |
| Roche Registration GmbH | obinutuzumab | PIP |

| ROXALL Medizin GmbH | freeze-dried allergen extract of Betula pendula pollen | PIP |
|--|---|--------|
| Sanofi-Aventis Groupe | dupilumab | PIP |
| UCB Pharma SA. | alprazolam | PIP |
| Urovant Sciences GmbH | vibegron | PIP |
| Vanessa Research Magyarorszag Kft/Vanessa Research Hungary Itd | zinc gluconate / alisitol / retinyl palmitate | PIP |
| VectivBio AG | apraglutide | PIP |
| Verisfield Single Member S.A. | yanocobalamin / pyridoxine (hydrochloride) / thiamine (hydrochloride) / diclofenac (potassium) | Waiver |
| Verisfield Single Member S.A. | cyanocobalamin / pyridoxine hydrochloride / thiamine hydrochloride / diclofenac sodium | Waiver |
| ViiV Healthcare UK Limited | dolutegravir / HIV-1 maturation inhibitor (GSK3640254) | PIP |
| ViiV Healthcare UK Limited | HIV-1 maturation inhibitor (GSK3640254) | PIP |
| Y-mAbs Therapeutics A/S | naxitamab | PIP |
| | | |

Source: EMA database PedRA

Annex II. List of PIPs not completed by the agreed date until 30 June 2022

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 2022 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 Castx1 and Castx2 | Shigamabs | Albany Regulatory Consulting Limited |
| EMEA-000337-PIP01-08 | grass pollen preparation | N/A | Allergopharma J. Ganzer KG |
| 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/H azel | 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-000786-PIP01-09-M02 | autologous CD34+ cells transduced with lentiviral vector containing the human Wiskott Aldrich Syndrom Protein gene | N/A | Genethon |
| EMEA-001175-PIP01-11-M04 | albiglutide | Eperzan | Glaxo Group Limited |
| EMEA-000532-PIP01-09 | sodium bituminosulphonate / clindamycin phosphate | IchthoseptalN | Ichthyol -Gesellschaft Cordes, Hermanni & Co. (GmbH & Co.) Kg |
| 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 |