22 April 2022
EMA/PDCO/202678/2022 Rev.1
Human Medicines Division

Paediatric Committee (PDCO)

Minutes for the meeting on 22-25 March 2022

Chair: Koenraad Norga – Vice-Chair: Sabine Scherer

Disclaimers

Some of the information contained in this set of minutes is considered commercially confidential or sensitive and therefore not disclosed. With regard to intended therapeutic indications or procedure scopes listed against products, it must be noted that these may not reflect the full wording proposed by applicants and may also vary during the course of the review. Additional details on some of these procedures will be published in the PDCO Committee meeting reports (after the PDCO Opinion is adopted), and on the Opinions and decisions on paediatric investigation plans webpage (after the EMA Decision is issued).

Of note, this set of minutes is a working document primarily designed for PDCO members and the work the Committee undertakes.

Note on access to documents

Some documents mentioned in the minutes cannot be released at present following a request for access to documents within the framework of Regulation (EC) No 1049/2001 as they are subject to on-going procedures for which a final decision has not yet been adopted. They will become public when adopted or considered public according to the principles stated in the Agency policy on access to documents (EMA/127362/2006).

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1. Introductions

1.1. Welcome and declarations of interest of members, alternates and experts

The Chairperson opened the meeting by welcoming all participants. Due to the current coronavirus (COVID-19) outbreak, and the associated EMA Business Continuity Plan (BCP), the meeting was held remotely.

In accordance with the Agency's policy on handling of declarations of interests of scientific Committees' members and experts, based on the declarations of interest submitted by the Committee members, alternates and experts and based on the topics in the agenda of the current meeting, the Committee Secretariat announced the restricted involvement of some meeting participants in upcoming discussions as included in the pre-meeting list of participants and restrictions.

Participants in this meeting were asked to declare any changes, omissions or errors to their declared interests and/or additional restrictions concerning the matters for discussion. No new or additional interests or restrictions were declared.

Discussions, deliberations and voting took place in full respect of the restricted involvement of Committee members and experts in line with the relevant provisions of the Rules of Procedure and as included in the list of participants. All decisions taken at this meeting were made in the presence of a quorum of members (i.e. 17 or more members were present in the room). All decisions, recommendations and advice were agreed by consensus, unless otherwise specified.

1.2. Adoption of agenda

The agenda for 22-25 March 2022 meeting was adopted with amendments.

1.3. Adoption of the minutes

The minutes for 22-25 February 2022 meeting were adopted and will be published on the EMA website.

2. Opinions

Some information related to this section cannot be disclosed at the present time as it is deemed to contain commercially confidential information.

2.1. Opinions on Products

2.1.1. Ibutamoren mesylate - Orphan - EMEA-003032-PIP01-21

Lumos Pharma, Inc.; Treatment of growth hormone deficiency

Day 120 opinion

Endocrinology-Gynaecology-Fertility-Metabolism

Summary of Committee discussion:

Based on the assessment of this application and the additional information provided by the applicant, a positive opinion for the PIP for the proposed medicine for children and adolescents from 3 years to less than 18 years of age, in the condition treatment of growth hormone deficiency was adopted. The PDCO agreed on a waiver in the subset of children from birth to less than 3 years of age on the grounds that the specific medicinal product is likely to be ineffective.

2.1.2. Peptide derivative of glucagon-like-peptide 1 and glucagon with fatty acid side chain (BI 456906) - EMEA-002942-PIP02-20

Boehringer Ingelheim International GmbH; Treatment of obesity

Day 120 opinion

Gastroenterology-Hepatology

Summary of Committee discussion:

Based on the assessment of this application and the additional information provided by the applicant, a positive opinion for the PIP for the proposed medicine for children and adolescents from 6 years to less than 18 years of age, in the condition treatment of obesity was adopted. The PDCO agreed on a waiver in a subset of children from birth to less than 6 years of age on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments. The PDCO granted a deferral for the completion of this PIP.

2.1.3. Zinc gluconate / alisitol / retinyl palmitate - Orphan - EMEA-002198-PIP01-21

Vanessa Research Magyarorszag Kft; Treatment of microvillus inclusion disease

Day 120 opinion

Gastroenterology-Hepatology

Summary of Committee discussion:

Based on the assessment of this application and the additional information provided by the applicant, a positive opinion for the PIP for the proposed medicine for children from birth to less than 18 years of age, in the condition treatment of microvillus inclusion disease was adopted.

2.1.4. Mitapivat - Orphan - EMEA-002684-PIP02-21

Agios Netherlands B.V.; Treatment of thalassaemia

Day 120 opinion

Haematology-Hemostaseology

Summary of Committee discussion:

Based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed a PIP for mitapivat for the treatment of thalassaemia with a deferral and a waiver for the paediatric population from birth to less than 1 year of age on the grounds that clinical studies with the specific medicinal product cannot be expected to be of significant therapeutic benefit to or fulfil a therapeutic need of the specified paediatric subset(s).

2.1.5. Deucravacitinib - EMEA-002350-PIP02-20

Bristol-Myers Squibb International Corporation; Treatment of chronic idiopathic arthritis (including rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and juvenile idiopathic arthritis)

Day 120 opinion

Immunology-Rheumatology-Transplantation

Summary of Committee discussion:

The applicant had clarified the outstanding issues prior to Day 120 in a written response. Based on the assessment of this application and the additional information provided by the applicant, a positive opinion for the PIP for deucravacitinib for the paediatric population from birth to less than 5 years of age, in the condition of treatment of chronic idiopathic arthritis (including rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and juvenile idiopathic arthritis) was adopted. The PDCO agreed on a waiver in a subset of children on the grounds that the specific medicinal product does not represent a significant therapeutic benefit as clinical studies are not feasible. The PDCO granted a deferral for the completion of this PIP.

2.1.6. Adeno-associated viral vector serotype rh.10 expressing beta-galactosidase - Orphan - EMEA-003020-PIP01-21

Lysogene; Treatment of GM1 gangliosidosis

Day 120 opinion

Neurology

Summary of Committee discussion:

The PDCO re-discussed at Day 120 during the March 2022 plenary meeting a PIP for adeno-associated viral vector (AAV) serotype rh.10 expressing human beta-galactosidase (AAVrh10-CAG-βgal) (LYS-GM101) for the treatment of GM1 gangliosidosis.
LYS-GM101, injected in the cisterna, is expected to enter neurons and make them produce a functional beta galactosidase, which would remove from the cell the accumulated ganglioside that causes GM1 gangliosidosis.
The PDCO took into consideration all the conclusions reached at Day 90 as well as additional clarifications provided by the applicant between Day 90 and Day 120 and adopted a positive opinion on a paediatric investigation plan with a deferral in the condition of treatment of GM1 gangliosidosis.

2.1.7. Lorlatinib - EMEA-002669-PIP03-21

Treatment of ALK-aberrant neuroblastoma

Day 120 opinion

Oncology

Note: Withdrawal request received on 24 March 2022

2.1.8. Virus-like particle of SARS-CoV-2 spike protein (recombinant, adjuvant) (CoVLP) - EMEA-003008-PIP01-21

Medicago Inc.; Prevention of coronavirus disease 2019 (COVID-19)

Day 120 opinion

Vaccines

Summary of Committee discussion:

In the written response the applicant addressed the issues raised by the Committee at Day 90. Based on the assessment of this application, the additional information provided by the applicant and the additional changes implemented in the development plan, a positive opinion for the PIP for the proposed vaccine for the paediatric population from birth to less than 18 years of age, in the condition prevention of coronavirus disease 2019 (COVID-19) was adopted.
The PDCO granted a deferral for the completion of this PIP.

2.1.9. SARS-CoV-2 virus, beta-propiolactone inactivated - EMEA-003077-PIP01-21

Valneva Austria GmbH; Prevention of coronavirus disease 2019 (COVID-19)

Day 120 opinion

Vaccines

Summary of Committee discussion:

The PDCO agreed on a PIP for SARS-CoV-2 virus, beta-propiolactone inactivated adjuvanted with CpG 1018 and a deferral. The PIP contains four paediatric studies, covering all paediatric ages from birth to less than 18 years of age.

2.1.10. Atorvastatin / perindopril (arginine) / indapamide / amlodipine - EMEA-003173-PIP01-21

Les Laboratoires Servier; Treatment of hypertension

Day 60 opinion

Cardiovascular Diseases

Summary of Committee discussion:

Based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed with the applicant's request for a waiver. The PDCO

recommended granting a waiver for atorvastatin / perindopril (arginine) / indapamide / amlodipine for all subsets of the paediatric population (0 to 18 years of age) for the condition of treatment of hypertension on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments.
The PDCO emphasised that the granting of a waiver for the condition mentioned above should not prevent the applicant from considering a development in the paediatric population in indications where there is a paediatric need.

2.1.11. Dupilumab - EMEA-001501-PIP11-21

Sanofi-Aventis Group; Treatment of chronic pruritus of unknown origin

Day 60 opinion

Dermatology

Summary of Committee discussion:

The PDCO confirmed the outcome of Day 30 discussion and based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed with the applicant´s request for a waiver.
The PDCO recommended granting a waiver for dupilumab for all subsets of the paediatric population (from birth to less than 18 years of age) for the condition of treatment of chronic pruritus of unknown origin on the grounds of disease not occurring in the specific subset of population.

2.1.12. Adeno-associated virus vector serotype 1 containing the human GRN gene - Orphan - EMEA-003167-PIP01-21

Passage Bio, Inc.; Treatment of frontotemporal dementia

Day 60 opinion

Neurology

Summary of Committee discussion:

Based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for adeno-associated virus vector serotype 1 containing the human GRN gene for all subsets of the paediatric population (0 to 18 years of age) in the condition of treatment of frontotemporal dementia on the grounds that the disease or condition for which the specific medicinal product is intended does not occur in children.
The PDCO recommended to grant the waiver for all pharmaceutical forms and all routes of administration to which the applicant agreed.
The PDCO emphasised that the granting of a waiver for the condition mentioned above should not prevent the applicant from considering a development in the paediatric population in indications where there is a paediatric need.

2.1.13. Anti-CD40L humanized monoclonal antibody (SAR441344) - EMEA-002945-PIP02-21

sanofi-aventis groupe; Treatment of multiple sclerosis

Day 60 opinion

Neurology

Summary of Committee discussion:

In the written response, the applicant addressed the remaining issues raised by the Committee. Based on the assessment of this application and discussions at the Paediatric Committee the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for the proposed medicine for all subsets of the paediatric population (from birth to less than 18 years of age) for the condition of treatment of progressive multiple sclerosis on lack of significant therapeutic benefit.
The PDCO emphasised that the granting of a waiver for the condition mentioned above should not prevent the applicant from considering a development in the paediatric population in indications where there is a paediatric need. The PDCO identified relapsing multiple sclerosis as an unmet need. In principle according to the Paediatric Regulation, incentives for the development for use in the paediatric population are available even if a waiver has been granted in another condition.

2.1.14. Izaflortaucipir (^{18}F) - EMEA-003040-PIP02-21

Life Molecular Imaging GmbH; Diagnosis of Alzheimer's disease

Day 60 opinion

Neurology

Summary of Committee discussion:

Based on the assessment of this application, the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for izaflortaucipir (^{18}F) for all subsets of the paediatric population (from birth to 18 years of age) in the condition of diagnosis of Alzheimer's disease.
The PDCO emphasised that the granting of a waiver for the condition mentioned above should not prevent the applicant from considering a development in the paediatric population in indications where there is a paediatric need. In principle according to the Paediatric Regulation, incentives for the development for use in the paediatric population are available even if a waiver has been granted in another condition.

2.1.15. Latozinemab - Orphan - EMEA-002997-PIP02-22

Alector, Inc.; Treatment of amyotrophic lateral sclerosis

Day 60 opinion

Neurology

Summary of Committee discussion:

Based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for latozinemab for all subsets of the paediatric population from birth to less than 18 years of age for the condition treatment of amyotrophic lateral sclerosis on the grounds that the specific medicinal product does not

represent a significant therapeutic benefit as clinical studies are not feasible.

2.1.16. 3,4-dimethyl-N-(2-phenyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-1H-pyrazole-5-carboxamide - EMEA-003169-PIP01-21

Cogent Biosciences, Inc; Treatment of gastrointestinal stromal tumours

Day 60 opinion

Oncology

Summary of Committee discussion:

Based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for 3,4-dimethyl-N-(2-phenyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-1H-pyrazole-5-carboxamide for all subsets of the paediatric population (0 to 18 years of age) in the condition of treatment of gastrointestinal stromal tumours, on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments for paediatric patients.
The PDCO emphasised that the granting of a waiver for the condition mentioned above should not prevent the applicant from considering a development in the paediatric population in indications where there is a paediatric need.

2.1.17. Human IgG4-based bispecific antibody binding to both B-cell maturation antigen (BCMA) and cluster of differentiation 3 (CD3) (REGN5458) - EMEA-003175-PIP01-21

Regeneron Ireland DAC; Treatment of multiple myeloma

Day 60 opinion

Oncology

Summary of Committee discussion:

Based on the assessment of this application and further discussions at the Paediatric Committee, the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for Human IgG4-based bispecific antibody binding to both B-cell maturation antigen (BCMA) and cluster of differentiation 3 (CD3) (REGN5458) for all subsets of the paediatric population (birth to less than 18 years of age) in the condition of treatment of multiple myeloma based on the ground that the disease does not occur in children. Since the agreed waiver ground is disease not occurring, the possibility to apply this to all pharmaceutical forms and all routes of administrations was agreed to by the applicant.
The PDCO emphasised that the granting of a waiver for the condition mentioned above should not prevent the applicant from considering a development in the paediatric population in indications where there is a paediatric need. In principle according to the Paediatric Regulation, incentives for the development for use in the paediatric population are available even if a waiver has been granted in another condition.

2.1.18. Infigratinib - Orphan - EMEA-002594-PIP03-21

Helsinn Birex Pharmaceuticals Ltd.; Treatment of urothelial carcinoma

Day 60 opinion

Oncology

Summary of Committee discussion:

The PDCO re-discussed at Day 60, during the March 2022 plenary meeting, an application for a product specific waiver for infigratinib, an orally and selective inhibitor of FGFR1, FGFR2, and FGFR3, for the treatment of urothelial carcinoma on the grounds of lack of significant therapeutic benefit in the paediatric population because clinical studies would not be feasible.
The PDCO confirmed all conclusions reached at Day 30 and adopted a positive opinion at Day 60 on a product specific waiver for this product for all subsets of the paediatric population (from birth to less than 18 years of age) in the condition of "treatment of urothelial carcinoma" on the grounds that this disease does not occur in the paediatric population.
The applicant agreed for the waiver to be extended to all pharmaceutical forms and all routes of administration.

2.1.19. Sacituzumab govitecan - Orphan - EMEA-002645-PIP03-21

Gilead Sciences International Ltd.; Treatment of lung carcinoma (small cell and non-small cell carcinoma)

Day 60 opinion

Oncology

Summary of Committee discussion:

The PDCO re-discussed at Day 60, during the March 2022 plenary meeting, an application for a product specific waiver for sacituzumab govitecan, an antibody-drug conjugate comprised of a monoclonal antibody targeting trophoblastic cell-surface antigen 2 (Trop-2), linked to SN-38, the active metabolite of irinotecan, a topoisomerase inhibitor. Trop-2 is highly expressed on most epithelial cancers, including lung cancer.
The applicant requested a product specific waiver for the treatment of lung carcinoma based on the ground that the disease does not occur in the paediatric population.
The PDCO confirmed all conclusions reached at Day 30 and adopted a positive opinion at Day 60 on a product specific waiver for this product for all subsets of the paediatric population (from birth to less than 18 years of age) in the condition of "treatment of lung carcinoma (small cell and non-small cell carcinoma)" on the grounds that this disease does not occur in the paediatric population.
The applicant agreed for the waiver to be extended to all pharmaceutical forms and all routes of administration.

2.1.20. Zandelisib - EMEA-003158-PIP01-21

Kyowa Kirin Holdings B.V.; Treatment of mature B cell neoplasms

Day 60 opinion

Oncology

Summary of Committee discussion:

The PDCO re-discussed at Day 60, during the March 2022 plenary meeting, an application for a product specific waiver for zandelisib, a phosphatidylinositol 3-kinase δ (PI3Kδ) inhibitor, for the treatment of mature B cell neoplasms on the grounds that the disease does not occur and on the grounds of lack of significant therapeutic benefit. The PDCO confirmed all conclusions reached at Day 30 and adopted a positive opinion at Day 60 on a product specific waiver for this product for all subsets of the paediatric population (from birth to less than 18 years of age) in the condition of "treatment of mature B cell neoplasms" on the grounds that clinical studies with the specific medicinal product cannot be expected to be of significant therapeutic benefit to or fulfil a therapeutic need of the specified paediatric subset(s).

2.1.21. Triazolopyrimidine derivative - EMEA-003095-PIP01-21

Diabetic retinopathy / Treatment of diabetic retinopathy

Day 60 opinion

Ophthalmology

Note: Withdrawal request received on 25 March 2022

2.1.22. (2S) 4 [2 methoxyethyl [4 (5,6,7,8 tetrahydro 1,8 naphthyridin 2 yl)butyl] amino] 2 (quinazolin 4 ylamino)butanoic acid - EMEA-003159-PIP01-21

Pliant Therapeutics Inc.; Treatment of idiopathic pulmonary fibrosis

Day 60 opinion

Pneumology - Allergology

Summary of Committee discussion:

Based on the assessment of this application and discussions at the Paediatric Committee the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for the proposed medicine for all subsets of the paediatric population (from birth to less than 18 years of age) for the condition of treatment of idiopathic pulmonary fibrosis on the grounds that the disease or condition for which the specific medicinal product is intended does not occur in the specified paediatric subset(s).

2.1.23. Bilastine / pseudoephedrine - EMEA-003164-PIP01-21

FAES FARMA, S.A.; Treatment of allergic rhinitis

Day 60 opinion

Pneumology - Allergology

Summary of Committee discussion:

Based on the assessment of this application the PDCO agreed with the applicant's request for a waiver. The PDCO recommended granting a waiver for bilastine / pseudoephedrine for all subsets of the paediatric population (0 to 18 years of age) in the condition of 'treatment of allergic rhinitis'.

2.2. Opinions on Compliance Check

2.2.1. Treosulfan - EMEA-C-000883-PIP01-10-M05

medac Gesellschaft für klinische Spezialpräparate mbH; Conditioning treatment prior to haematopoietic progenitor cell transplantation

Day 60 opinion

Immunology-Rheumatology-Transplantation

Summary of Committee discussion:

The PDCO took note of outcomes of preceding partial compliance check procedures:
• EMEA-C1-000883-PIP01-10-M04.
The PDCO adopted on 25 March 2022 an opinion confirming the compliance of all studies in the agreed paediatric investigation plan as set out in the latest Agency's Decision (P/0346/2020) of 9 September 2020.

2.2.2. Oritavancin - EMEA-C2-001270-PIP01-12-M04

Menarini International Operations Luxembourg S.A.; Treatment of acute bacterial skin and skin structure infections

Day 60 letter

Infectious Diseases

Summary of Committee discussion:

The PDCO discussed the completed Study 2 (TMC-ORI-11-01) and considered that this is compliant with the latest Agency's Decision (P/0498/2021) of 3 December 2021.
The PDCO finalised this partially completed compliance procedure on 25 March 2022.

2.2.3. Dabrafenib - EMEA-C3-001147-PIP01-11-M07

Novartis Europharm Limited; Treatment of solid malignant tumours (excluding melanoma and glioma)

Day 60 letter

Oncology

Summary of Committee discussion:

The PDCO discussed the completed Study 4 (BRF-PEDS-01) and considered that these are compliant with the latest Agency's Decision (P/0410/2020) of 23 October 2020.
The PDCO finalised this partially completed compliance procedure on 25 March 2022.

2.2.4. Trametinib - EMEA-C2-001177-PIP01-11-M06

Novartis Europharm Limited; Treatment of all conditions included in the category of malignant neoplasms (except melanoma, haematopoietic and lymphoid tissue, and glioma)

Day 60 letter

Oncology

Summary of Committee discussion:

The PDCO discussed the completed Study 3 (MEK-PIP-01) and considered that this is compliant with the latest Agency's Decision (P/0392/2020) of 23 October 2020.
The PDCO finalised this partially completed compliance procedure on 25 April 2022.

2.3. Opinions on Modification of an Agreed Paediatric Investigation Plan

2.3.1. Regdanvimab - EMEA-002961-PIP01-21-M01

Celltrion Healthcare Hungary Kft.; Treatment of coronavirus disease 2019 (COVID-19)

Day 60 opinion

Vaccines

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency’s latest decision (P/0234/2021 of 8 June 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.2. Human, recombinant, non-fucosylated IgG1k monoclonal antibody targeting OX-40 receptor on activated T cells - EMEA-002886-PIP01-20-M01

Amgen Europe B.V.; Treatment of atopic dermatitis

Day 60 opinion

Dermatology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.

The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency’s latest decision (P/0320/2021 of 13 August 2021).

The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO

opinion.

2.3.3. Remibrutinib - EMEA-002582-PIP01-19-M01

Novartis Europharm Limited; Treatment of chronic spontaneous urticaria

Day 60 opinion

Dermatology

Summary of Committee discussion:

The PDCO adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0158/2020 of 17 April 2020).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.4. Bis-choline tetrathiomolybdate - Orphan - EMEA-002232-PIP02-19-M02

Alexion Europe S.A.S.; Treatment of Wilson disease

Day 60 opinion

Endocrinology-Gynaecology-Fertility-Metabolism

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that some of the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0261/2021 of 7 July 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.5. Dapagliflozin - EMEA-000694-PIP02-14-M03

AstraZeneca AB; Treatment of type 1 diabetes mellitus

Day 60 opinion

Endocrinology-Gynaecology-Fertility-Metabolism

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted and agreed on the granting of a product specific waiver for all subsets of the paediatric population on the grounds that the specific medicinal product is likely to be unsafe in part or all of the paediatric population.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0302/2017 of 12 October 2017). The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.6. Tirzepatide - EMEA-002360-PIP01-18-M02

Eli Lilly and Company Ltd; Treatment of type 2 diabetes mellitus

Day 60 opinion

Endocrinology-Gynaecology-Fertility-Metabolism

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0540/2021 of 31 December 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.7. Tolvaptan - EMEA-001231-PIP02-13-M09

Otsuka Pharmaceutical Netherlands B.V.; Treatment of dilutional hyponatraemia / Treatment of polycystic kidney disease

Day 60 opinion

Endocrinology-Gynaecology-Fertility-Metabolism / Uro-nephrology

Summary of Committee discussion:

The applicant clarified after Day 30 that the study initiation visits of the ARPKD studies (Studies 7 and 8) had in fact not yet taken place. Therefore, the PDCO was concerned that the study initiations would potentially be pushed far into the future. To mitigate this concern the applicant was requested to propose new (non-deferred) initiation dates for the studies. The applicant's updated proposal was deemed acceptable. A positive opinion was adopted.

2.3.8. Odevixibat - Orphan - EMEA-002054-PIP01-16-M03

Albireo AB; Treatment of progressive familial intrahepatic cholestasis

Day 60 opinion

Gastroenterology-Hepatology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0246/2021 of 9 July 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.9. Potassium sulphate / magnesium sulphate heptahydrate / sodium sulphate anhydrous - EMEA-000816-PIP02-10-M03

IPSEN Consumer Healthcare; Diagnosis of organic and/or functional bowel diseases

Day 60 opinion

Gastroenterology-Hepatology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0035/2019 of 29 January 2019).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.10. Betibeglogene autotemcel - Orphan - EMEA-001665-PIP01-14-M06

bluebird bio (Netherlands) B.V.; Treatment of beta-thalassaemia

Day 60 opinion

Haematology-Hemostaseology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could not be accepted.
The PDCO therefore adopted a negative opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0232/2021 of 16 June 2021).

2.3.11. Luspatercept - Orphan - EMEA-001521-PIP01-13-M06

Bristol-Myers Squibb Pharma EEIG; Treatment of myelodysplastic syndromes / Treatment of beta-thalassaemia

Day 60 opinion

Haematology-Hemostaseology

Summary of Committee discussion:

The PDCO re-discussed at Day 60 during the March 2022 plenary meeting a request for modification for luspatercept for the treatment of beta-thalassaemia. This PIP includes also a product-specific waiver for the treatment of myelodysplastic syndromes.
The applicant requested to delete a clinical study and to expand two other clinical studies as a result. In addition, the applicant requested to modify the modelling and simulation and extrapolation studies to take into account the proposed changes in the clinical studies and to delete the requirement to develop a self-administration device for paediatric patients. Based on the review of the documentation submitted by the applicant for modifying the agreed paediatric investigation plan, the PDCO considered that the

proposed changes could be acceptable.
Therefore, the PDCO adopted a positive opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0037/2021 of 27 January 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.12. Brincidofovir - Orphan - EMEA-001904-PIP03-18-M02

Chimerix IRL Limited; Treatment of smallpox

Day 60 opinion

Infectious Diseases

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0320/2020 of 12 August 2020).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.13. Cefiderocol - EMEA-002133-PIP01-17-M02

Shionogi B.V.; Treatment of infections due to aerobic gram-negative bacteria

Day 60 opinion

Infectious Diseases

Summary of Committee discussion:

Based on the review of the rationale submitted by the applicant for modifying the agreed paediatric investigation plan, the PDCO considered that the correction of the pharmaceutical form term and some of the proposed changes in study timelines could be accepted. The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency´s latest decision (P/0382/2020 of 18 September 2020).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.14. Eslicarbazepine acetate - EMEA-000696-PIP02-10-M08

BIAL - Portela & Ca, SA; Treatment of epilepsy with partial onset seizures

Day 60 opinion

Neurology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan the PDCO considered that most of the proposed

changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0272/2019 of 14 August 2019).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.15. Cemiplimab - EMEA-002007-PIP02-17-M02

Regeneron Ireland DAC; Treatment of all conditions included in the category of malignant neoplasms (except haematopoietic and lymphoid tissue)

Day 60 opinion

Oncology

Summary of Committee discussion:

In the written response, the applicant addressed the remaining issues raised by the Committee. Based on the review of the rationale submitted by the applicant for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted. The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0293/2021 of 12 August 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.16. Lenvatinib - EMEA-001119-PIP03-19-M02

Eisai GmbH; Treatment of all conditions included in the category of malignant neoplasms except haematopoietic and lymphoid tissue neoplasms, papillary thyroid cancer, follicular thyroid cancer and osteosarcoma

Day 60 opinion

Oncology

Summary of Committee discussion:

In the written response, the applicant addressed the remaining issues raised by the Committee.
Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0205/2021 of 10 May 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.17. Venetoclax - Orphan - EMEA-002018-PIP02-16-M05

AbbVie Ltd; Treatment of solid tumour malignant neoplasms / Treatment of haematopoietic and lymphoid malignant neoplasms

Day 60 opinion

Oncology / Haematology-Hemostaseology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0217/2021 of 9 June 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.18. Sonlicromanol - Orphan - EMEA-002113-PIP01-16-M01

Khondrion BV; Treatment of mitochondrial respiratory chain/oxidative phosphorylation defects

Day 60 opinion

Other

Summary of Committee discussion:

Based on the review of the rationale submitted by the applicant for modifying the agreed paediatric investigation plan and taking into account the applicant's justification after Day 30 the PDCO adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0004/2021 of 14 January 2021).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.19. Sufentanil (citrate) / ketamine (hydrochloride) - EMEA-001739-PIP02-16-M01

Cessatech A/S; Treatment of acute pain

Day 60 opinion

Pain

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed changes could be accepted.
The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0413/2019 of 6 December 2019).
The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.3.20. Etranacogene dezaparvovec - EMEA-002722-PIP01-19-M01

CSL Behring GmbH; Treatment of haemophilia B

Day 30 opinion

Haematology-Hemostaseology

Summary of Committee discussion:

Based on the review of the rationale submitted by the application for modifying the agreed paediatric investigation plan, the PDCO considered that the proposed change for the pharmaceutical form could be accepted.

The PDCO therefore adopted a favourable opinion on the modification of the agreed PIP as set in the Agency's latest decision (P/0517/2020 of 2 January 2021).

The new PDCO opinion on the modified agreed PIP supersedes the previous PDCO opinion.

2.4. Opinions on Re-examinations

No item

2.5. Opinions on Review of Granted Waivers

No item

2.6. Finalisation and adoption of Opinions

No item

2.7. Partial Compliance Checks completed by EMA

The following partial compliance checks have been identified by the PME coordinator and PDCO rapporteur as not needing to be referred to the PDCO for discussion. The PDCO has been informed in writing.

2.7.1. Ad26.RSV.preF is a monovalent, recombinant, replication-incompetent human adenovirus serotype 26-vectored vaccine encoding the pre-fusion conformation-stabilised F protein derived from the RSV A2 strain - EMEA-C1-002172-PIP02-17-M01

Janssen-Cilag International NV; Prevention of lower respiratory tract disease caused by respiratory syncytial virus

Day 30 letter

Vaccines / Infectious Diseases

2.7.2. Landiolol hydrochloride - EMEA-C2-001150-PIP02-13-M04

Orpha-Devel Handels und Vertriebs GmbH; Treatment of supraventricular arrythmias

Day 30 letter

Cardiovascular Diseases

3. Discussion of applications

Some information related to this section cannot be disclosed at the present time as it is deemed to contain commercially confidential information.

3.1. Discussions on Products D90-D60-D30

3.1.1. Dersimelagon - EMEA-002850-PIP02-21

Treatment of X-linked protoporphyria / Treatment of erythropoietic protoporphyria

Day 90 discussion

Dermatology

3.1.2. Humanised KLB/FGFR1c monoclonal antibody - EMEA-003058-PIP01-21

Treatment of non-alcoholic steatohepatitis

Day 90 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.1.3. Apraglutide - Orphan - EMEA-003016-PIP01-21

VectivBio AG; Treatment of short bowel syndrome

Day 90 discussion

Gastroenterology-Hepatology

3.1.4. Recombinant adeno-associated viral (rAAV) vector expressing the human ornithine transcarbamylase (hOTC) gene - EMEA-002983-PIP01-21

Treatment of ornithine transcarbamylase deficiency

Day 90 discussion

Gastroenterology-Hepatology

3.1.5. Sirolimus - EMEA-002982-PIP01-21

Treatment of ornithine transcarbamylase deficiency

Day 90 discussion

Gastroenterology-Hepatology

3.1.6. 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) - Orphan - EMEA-003025-PIP02-21

ExCellThera; Allogeneic haematopoietic stem cell transplantation

Day 90 discussion

Immunology-Rheumatology-Transplantation / Oncology / Haematology-Hemostaseology

3.1.7. Reparixin - Orphan - EMEA-001693-PIP03-21

Dompé farmaceutici S.p.A.; Treatment of coronavirus disease 2019 (COVID-19)

Day 90 discussion

Infectious Diseases

3.1.8. Omaveloxolone - Orphan - EMEA-002487-PIP01-18

Reata Ireland Limited; Treatment of Friedrich's ataxia

Day 90 discussion

Neurology

3.1.9. Cedazuridine: (4R)-1-[(2R,4R,5R)-3,3-difluoro-4-hydroxy-5-(hydroxymethyl)oxolan-2-yl]-4-hydroxy-1,3-diazinan-2-one / decitabine: 4-amino-1-[(2R,4S,5R)-4-hydroxy-5-(hydroxymethyl)oxolan-2-yl]-1,3,5-triazin-2(1H)-one - Orphan - EMEA-003071-PIP01-21

Otsuka Pharmaceutical Netherlands B.V.; Treatment of acute myeloid leukaemia

Day 90 discussion

Oncology / Haematology-Hemostaseology

3.1.10. Whole-cell heat-inactivated bacterial strains of *Escherichia coli, klebsiella pneumoniae, proteus vulgaris* and *enterococcus faecalis* - EMEA-003026-PIP02-21

Prevention of urinary tract infections

Day 90 discussion

Vaccines / Infectious Diseases / Uro-nephrology

3.1.11. Cedirogant - EMEA-003142-PIP02-21

Treatment of moderate to severe psoriasis

Day 60 discussion

Dermatology

3.1.12. Sirolimus - Orphan - EMEA-003168-PIP01-21

Desitin Arzneimittel GmbH; Treatment of tuberous sclerosis

Day 60 discussion

Dermatology

3.1.13. Manganese chloride tetrahydrate - EMEA-003035-PIP02-21

Diagnostic evaluation of liver lesions by magnetic resonance imaging (MRI)

Day 60 discussion

Diagnostic

3.1.14. Avexitide acetate - Orphan - EMEA-003125-PIP02-21

EigerBio Europe Limited; Treatment of congenital hyperinsulinism

Day 60 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.1.15. Glucagon analogue linked to a human immunoglobulin Fc fragment - Orphan - EMEA-003170-PIP01-21

Hanmi Pharm. Co., Ltd.; Treatment of congenital hyperinsulinism

Day 60 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.1.16. Insulin lispro - EMEA-003166-PIP01-21

Treatment of diabetes mellitus type 1 / Treatment of diabetes mellitus type 2

Day 60 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.1.17. Semaglutide - EMEA-001441-PIP07-21

Treatment of obesity

Day 60 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.1.18. Efavaleukin alfa - EMEA-003156-PIP01-21

Treatment of systemic lupus erythematosus (SLE)

Day 60 discussion

Immunology-Rheumatology-Transplantation

3.1.19. HIV-1 maturation inhibitor - EMEA-003153-PIP01-21

Treatment of human immunodeficiency virus (HIV-1) infection

Day 60 discussion

Infectious Diseases

3.1.20. HIV-1 maturation inhibitor / dolutegravir - EMEA-003152-PIP01-21

Treatment of human immunodeficiency virus (HIV-1) infection

Day 60 discussion

Infectious Diseases

3.1.21. Interferon beta-1a - EMEA-003056-PIP01-22

Treatment of coronavirus disease 2019 (COVID-19)

Day 60 discussion

Infectious Diseases

Note: Withdrawal request received on 18 March 2022

3.1.22. Batoclimab - EMEA-003162-PIP01-21

Treatment of myasthenia gravis

Day 60 discussion

Neurology

3.1.23. Pridopidine hydrochloride - Orphan - EMEA-003174-PIP01-21

Prilenia Therapeutics B.V.; Treatment of Huntington disease (HD)

Day 60 discussion

Neurology

3.1.24. Satralizumab - Orphan - EMEA-001625-PIP03-21

Roche Registration GmbH; Treatment of myelin oligodendrocyte glycoprotein antibody-associated disease

Day 60 discussion

Neurology

3.1.25. Camidanlumab tesirine - EMEA-003160-PIP01-21

Treatment of Hodgkin lymphoma

Day 60 discussion

Oncology

3.1.26. Emactuzumab - EMEA-003172-PIP01-21

Treatment of tenosynovial giant cell tumour, local and diffuse type

Day 60 discussion

Oncology

3.1.27. Obecabtagene autoleucel - EMEA-003171-PIP01-21

Treatment of acute lymphoblastic leukaemia

Day 60 discussion

Oncology

3.1.28. Freeze-dried allergen extract of *Betula pendula* pollen - EMEA-003117-PIP02-21

Diagnosis of IgE mediated allergy to tree pollen of the birch group

Day 60 discussion

Pneumology - Allergology

3.1.29. Cannabidiol - EMEA-003176-PIP01-21

Treatment of fragile X syndrome

Day 60 discussion

Psychiatry

3.1.30. Atrasentan - Orphan - EMEA-001666-PIP02-21

Chinook Therapeutics, Inc.; Treatment of primary IgA nephropathy

Day 60 discussion

Uro-nephrology

3.1.31. EMEA-003165-PIP01-21

Treatment of chronic kidney disease

Day 60 discussion

Uro-nephrology

3.1.32. Fusion protein composed of the first 2 immunoglobulin (Ig)-like domains of the human ROBO2 fused to human IgG1 Fc - EMEA-003157-PIP01-21

Treatment of focal segmental glomerulosclerosis (FSGS)

Day 60 discussion

Uro-nephrology

3.1.33. Repagermanium - Orphan - EMEA-003154-PIP01-21

Dimerix Bioscience Pty Ltd; Treatment of focal segmental glomerulosclerosis (FSGS)

Day 60 discussion

Uro-nephrology

3.1.34. Pneumococcal polysaccharide serotype 35B – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 31 – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 24F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 23B – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 23A – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 16F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 15C – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 15A – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 20 – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 17F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 12F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 11A – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 10A – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 9N – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 8 – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 33F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 22F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 19A – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 7F – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 6A – diphtheria CRM197 conjugate / Pneumococcal polysaccharide serotype 3 – diphtheria CRM197 conjugate - EMEA-003155-PIP01-21

Prevention of disease caused by *Streptococcus pneumoniae*

Day 60 discussion

Vaccines

3.1.35. Yellow fever virus, strain vYF-247 - EMEA-003030-PIP02-21

Prevention of yellow fever disease

Day 60 discussion

Vaccines

3.1.36. Indapamide / perindopril arginine - EMEA-003186-PIP01-22

Treatment of (essential) primary hypertension

Day 30 discussion

Cardiovascular Diseases

3.1.37. A 2'-MOE antisense oligonucleotide targeting apoC-III - EMEA-003177-PIP01-21

Treatment of familial chylomicronaemia syndrome / Treatment of severe and extreme hypertriglyceridaemia

Day 30 discussion

Cardiovascular Diseases

3.1.38. Treprostinil - EMEA-003182-PIP01-22

Treatment of pulmonary arterial hypertension (PAH) group 1

Day 30 discussion

Cardiovascular Diseases

3.1.39. Beremagene geperpavec - Orphan - EMEA-002472-PIP03-22

Krystal Biotech, Inc.; Treatment of dystrophic epidermolysis bullosa

Day 30 discussion

Dermatology

3.1.40. Lenzilumab - EMEA-003188-PIP01-22

Treatment of coronavirus disease 2019 (COVID-19)

Day 30 discussion

Immunology-Rheumatology-Transplantation

3.1.41. Flortaucipir F18 - EMEA-003187-PIP01-22

Diagnosis of Alzheimer's disease

Day 30 discussion

Neurology

3.1.42. Methylphenidate hydrochloride - EMEA-003189-PIP01-22

Treatment of attention-deficit hyperactivity disorder

Day 30 discussion

Neurology

3.1.43. Tolebrutinib - EMEA-002566-PIP02-22

Treatment of myasthenia gravis

Day 30 discussion

Neurology

3.1.44. Anti-TGFbeta fully human monoclonal antibody - EMEA-003178-PIP01-21

Metastatic pancreatic ductal adenocarcinoma

Day 30 discussion

Oncology

3.1.45. Sugemalimab - EMEA-003179-PIP01-22

Treatment of lung cancer

Day 30 discussion

Oncology

3.1.46. Enzastaurin hydrochloride - EMEA-003096-PIP02-22

Treatment of vascular Ehlers-Danlos syndrome

Day 30 discussion

Other

3.1.47. COVID-19 Vaccine (recombinant, adjuvanted) - EMEA-003191-PIP01-22

Prevention of coronavirus disease 2019 (COVID-19)

Day 30 discussion

Vaccines / Infectious Diseases

3.2. Discussions on Compliance Check

The following compliance checks have been identified for discussion and the members of the PDCO have been invited to comment on issues of possible non-compliance.

3.2.1. Alirocumab - EMEA-C1-001169-PIP01-11-M05

sanofi-aventis recherche & développement; Treatment of elevated cholesterol

Day 30 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.2.2. Elosulfase alfa - EMEA-C2-000973-PIP01-10-M03

BioMarin International Limited; Treatment of mucopolysaccharidosis, type IVA (Morquio A syndrome)

Day 30 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.2.3. Lumacaftor / ivacaftor - EMEA-C6-001582-PIP01-13-M10

Vertex Pharmaceuticals (Ireland) Limited; Treatment of cystic fibrosis

Day 30 discussion

Other

3.3. Discussions on Modification of an Agreed Paediatric Investigation Plan

3.3.1. Nemolizumab - EMEA-001624-PIP01-14-M05

Galderma International S.A.S; Treatment of atopic dermatitis

Day 30 discussion

Dermatology

3.3.2. Canagliflozin (1S)-1,5-anhydro-1-[3-[[5-(4-fluorophenyl)-2-thienyl]methyl]-4-methylphenyl]-D-glucitol hemihydrate - EMEA-001030-PIP01-10-M10

Janssen-Cilag International NV; Treatment of type 2 diabetes mellitus

Day 30 discussion

Endocrinology-Gynaecology-Fertility-Metabolism

3.3.3. Aztreonam / avibactam - EMEA-002283-PIP01-17-M03

Pfizer Europe MA EEIG; Treatment of infections caused by aerobic gram-negative bacteria

Day 30 discussion

Infectious Diseases

3.3.4. Posaconazole - EMEA-000468-PIP02-12-M07

Merck Sharp & Dohme (Europe), Inc.; Treatment of invasive fungal infections / Prevention of invasive fungal infections

Day 30 discussion

Infectious Diseases

3.3.5. Efinaconazole - EMEA-001627-PIP01-14-M02

Almirall, S.A.; Treatment of onychomycosis (tinea unguium)

Day 30 discussion

Infectious Diseases / Dermatology

3.3.6. Dopamine hydrochloride - EMEA-001105-PIP01-10-M06

Brepco Biopharma Limited; Treatment of vascular hypotensive disorders

Day 30 discussion

Neonatology - Paediatric Intensive Care / Cardiovascular Diseases

3.3.7. Inebilizumab - Orphan - EMEA-001911-PIP01-15-M04

Horizon Therapeutics Ireland DAC; Treatment of neuromyelitis optica spectrum disorders

Day 30 discussion

Neurology

3.3.8. Erdafitinib - EMEA-002042-PIP02-20-M01

Janssen-Cilag International N.V.; Treatment of all conditions included in the category of malignant neoplasms (except urothelial carcinoma, haematopoietic and lymphoid tissue neoplasms)

Day 30 discussion

Oncology

3.3.9. Tisagenlecleucel - Orphan - EMEA-001654-PIP01-14-M04

Novartis Europharm Limited; Treatment of B cell acute lymphoblastic leukaemia/lymphoblastic lymphoma

Day 30 discussion

Oncology

3.3.10. Zanubrutinib - EMEA-002354-PIP02-18-M01

BeiGene Ireland Ltd.; Treatment of lymphoplasmacytic lymphoma / Treatment of mature B cell neoplasms (excluding lymphoplasmacytic lymphoma)

Day 30 discussion

Oncology

3.3.11. Lanadelumab - Orphan - EMEA-001864-PIP01-15-M07

Takeda Pharmaceuticals International AG Ireland Branch; Treatment of hereditary angioedema

Day 30 discussion

Other

3.3.12. Sodium chloride solution 4.2% (w/v) / 3,5-diamino-6-chloro-N-(N-(4-(4-(2-(hexyl((2S,3R,4R,5R)-2,3,4,5,6-pentahydroxyhexyl)amino)ethoxy)phenyl)butyl)-carbamimidoyl)pyrazine-2-carboxamide - Orphan - EMEA-002935-PIP01-20-M01

Parion Sciences, Inc.; Treatment of primary ciliary dyskinesia (PCD)

Day 30 discussion

Pneumology - Allergology

3.3.13. Loxapine - EMEA-001115-PIP01-10-M08

Ferrer Internacional, S.A.; Treatment of bipolar disorder / schizophrenia

Day 30 discussion

Psychiatry

3.3.14. Mirabegron - EMEA-000597-PIP03-15-M05

Astellas Pharma Europe B.V.; Treatment of neurogenic detrusor overactivity

Day 30 discussion

Uro-nephrology

3.3.15. Ravulizumab (ALXN1210) - Orphan - EMEA-001943-PIP01-16-M07

Alexion Europe SAS; Treatment of atypical haemolytic uremic syndrome

Day 30 discussion

Uro-nephrology

3.3.16. Ravulizumab (ALXN1210) - Orphan - EMEA-002077-PIP01-16-M05

Alexion Europe SAS; Treatment of paroxysmal nocturnal haemoglobinuria

Day 30 discussion

Uro-nephrology

3.3.17. Ravulizumab (ALXN1210) - EMEA-001943-PIP02-20-M01

Alexion Europe SAS; Treatment of patients with haematopoietic stem cell transplant associated thrombotic microangiopathy (HSCT-TMA)

Day 30 discussion

Uro-nephrology / Haematology-Hemostaseology

4. Nominations

Information related to this section cannot be disclosed at the present time as it is deemed to contain commercially confidential information.

4.1. List of submissions of applications with start of procedure 21 March 2022 for Nomination of Rapporteur and Peer reviewer

Summary of Committee discussion:

The PDCO approved the lists of Rapporteurs and Peer Reviewers.

4.2. Nomination of Rapporteur for requests of confirmation on the applicability of the EMA decision on class waiver

Summary of Committee discussion:

The PDCO approved the lists of Rapporteurs and Peer Reviewers.

4.3. Nominations for other activities

No item

5. Scientific Advice Working Party (SAWP) and Paediatric Committee (PDCO) Interaction

Information related to this section cannot be disclosed at the present time as it is deemed to contain commercially confidential information.

5.1. New Scientific Advice

No item

5.2. Final Scientific Advice (Reports and Scientific Advice letters)

No item

6. Discussion on the applicability of class waivers

6.1. Discussions on the applicability of class waiver for products

No item

7. Discussion on the inclusion of an indication within a condition in an agreed PIP/waiver

7.1. Discussion on the possibility to include an indication within a condition in an agreed PIP/waiver

No item

8. Annual reports on deferrals

The members of the PDCO took note of the products listed in the Annex B.

9. Organisational, regulatory and methodological matters

9.1. Mandate and organisation of the PDCO

9.1.1. PDCO membership

The PDCO Committee welcomed Dr Róbert Pórszász as new Alternate representing Hungary.

9.1.2. Vote by Proxy

No item

9.1.3. Strategic Review & Learning meeting (SRLM)

Strategic Review & Learning meeting – joint COMP/PDCO meeting under the French Presidency of the Council of the EU, to be held virtually on 31 March 2022

PDCO member: Sylvie Benchetrit

Summary of Committee discussion:

The PDCO noted the agenda for the meeting and topics to be discussed.

9.2. Coordination with EMA Scientific Committees or CMDh-v

9.2.1. Committee for Medicinal Products for Human Use (CHMP)

Summary of Committee discussion:

The list of procedures, related to medicinal products with paediatric indications to be evaluated by the CHMP starting in February 2022, was presented to the PDCO members.

9.3. Coordination with EMA Working Parties/Working Groups/Drafting Groups

9.3.1. Non-clinical Working Group: D30 Products identified

PDCO member: Karen van Malderen

Summary of Committee discussion:

The Chair of the Non-clinical Working Group (NcWG) identified the products which will require NcWG evaluation and discussion.

9.3.2. Formulation Working Group

PDCO member: Brian Aylward

Summary of Committee discussion:

The Chair of the Formulation Working Group (FWG) identified the products which will require FWG evaluation and discussion.

9.3.3. Working Party with Patients' and Consumers' Organisations (PCWP) and Working Party with Healthcare Professionals' Organisations (HCPWP)

Nomination of a representative (and alternate) for PCWP/HCPWP for a new three-year mandate (June 2022 to May 2025).

PDCO member: Koenraad Norga

Summary of Committee discussion:

The Chair informed the Committee of the upcoming nomination of a representative (and alternate) for PCWP/HCPWP for a new three-year mandate (June 2022 to May 2025).

9.3.4. EMA Emergency task force (ETF) – PDCO nominations

PDCO member: Koenraad Norga

Summary of Committee discussion:

The Chair provided the Committee an update on the PDCO nominations for the EMA ETF.

9.3.5. Update on recommendation for the membership of Working Parties

PDCO member: Koenraad Norga

Summary of Committee discussion:

The Chair provided the Committee an update on the call for nominations for the experts for the working parties.

9.4. Cooperation within the EU regulatory network

9.4.1. European Network of Paediatric Research (Enpr) - European Medicines Agency (EMA)

Summary of Committee discussion:

No item

9.5. Cooperation with International Regulators

9.5.1. Report from the Paediatric Cluster Teleconference

Summary of Committee discussion:

No item

9.6. Contacts of the PDCO with external parties and interaction with the Interested Parties to the Committee

No item

9.7. PDCO work plan

No item

9.8. Planning and reporting

9.8.1. EMA Business Pipeline activity and Horizon scanning

Q1/2022 Update of the Business Pipeline report for the human scientific committees

Summary of Committee discussion:

The business pipeline report for Q1/2022 was provided for information.

10. Any other business

10.1. COVID-19 update

Summary of Committee discussion:

The update was cancelled.

10.2. Introducing DARWIN EU® Coordination Centre and next steps for RWE

Summary of Committee discussion:

PDCO noted the presentation on the Data Analysis and Real World Interrogation Network (DARWIN EU®) and Real World Evidence (RWE) pilots. An introduction was given about DARWIN EU® and the Coordination Centre, explaining what DARWIN EU® will do, the process for conducting studies, and the implementation roadmap.

Looking ahead at 2022, DARWIN EU® will onboard its first data partners and conduct its first studies for a number of use cases across the medicinal products' lifecycle. Various pilots are ongoing with EMA Committees and the SAWP. The pilot with PDCO is ongoing. Further pilots are expected with HTA and Payers, NCAs and EHDS, later in the year. The current status of RWE studies conducted using in-house databases was shown, together with various studies initiated for each committee and various procedures (e.g. signals, referrals, ATMP, PIP, PSUSA etc.). The study on the prevalence of hypereosinophilic syndrome (HES) in children was presented as an example.

A reminder was given on the process for delivering RWE, with a note that PDCO members are encouraged to continue sending research questions and RWE requests.

In addition, the members were instructed to visit the DARWIN EU® webpage.

10.3. Data protection notice – processing of scientific Committees (CxMP) members/alternates' contact details

Summary of Committee discussion:

The PDCO noted the information about the data protection notice.

10.4. Compliance check training

Summary of Committee discussion:

A presentation and discussion on the compliance check procedure, as a refresher training, was held.

10.5. Call for interest to update guideline on clinical investigation of medicinal products

Summary of Committee discussion:

As a result of the ongoing revision of the guideline on clinical investigation of medicinal products in the treatment or prevention of diabetes mellitus, a call for interest was made in order to identify PDCO members that could participate in the revision of the guideline to ensure specific considerations for the paediatric population are taken into account.

11. Breakout sessions

11.1. Neonatology

Summary of Committee discussion:

The break-out session was cancelled.

11.2. Paediatric oncology

Summary of Committee discussion:

The group discussed ongoing PIPs.

11.3. Vaccines

Summary of Committee discussion:

The Committee discussed the approach to boosters of COVID-19 vaccines in paediatrics.

The Chair thanked all participants and closed the meeting.

12. List of participants

List of participants including any restrictions with respect to involvement of members / alternates / experts following evaluation of declared interests for the 22-25 March 2022 meeting.

Name	Role	Member state or affiliation	Outcome restriction following evaluation of e-DoI	Topics on agenda for which restrictions apply
Koenraad Norga	Chair	Belgium	No interests declared	
Karl-Heinz Huemer	Member	Austria	No interests declared	
Johanna Wernsperger	Alternate	Austria	No interests declared	
Marleen Renard	Member	Belgium	No participation in discussion, final deliberations and voting on:	3.3.4. Posaconazole - EMEA-000468-PIP02-12-M07
Karen Van Malderen	Alternate	Belgium	No interests declared	
Dimitar Roussinov	Member	Bulgaria	No restrictions applicable to this meeting	
Zena Gunther	Member	Cyprus	No interests declared	
Maria Eleni Avraamidou	Alternate	Cyprus	No interests declared	
Tomas Boran	Member	Czechia	No interests declared	
Tereza Bazantova	Alternate	Czechia	No interests declared	
Nanna Borup Johansen	Member	Denmark	No interests declared	
Irja Lutsar	Member	Estonia	No interests declared	
Jana Lass	Alternate	Estonia	No interests declared	
Pauliina Lehtolainen-Dalkilic	Member	Finland	No interests declared	
Anne Paavola	Alternate	Finland	No interests declared	
Sylvie Benchetrit	Member	France	No interests declared	
Dominique Ploin	Alternate	France	No interests declared	
Sabine Scherer	Member (Vice-Chair)	Germany	No interests declared	
Yuansheng Sun	Alternate	Germany	No interests declared	
Eleni Katsomiti	Member	Greece	No interests declared	
Anastasia Mountaki	Alternate	Greece	No interests declared	
Ágnes Gyurasics	Member (CHMP member)	Hungary	No interests declared	

Name	Role	Member state or affiliation	Outcome restriction following evaluation of e-DoI	Topics on agenda for which restrictions apply
Brian Aylward	Member	Ireland	No interests declared	
Sara Galluzzo	Member	Italy	No interests declared	
Dina Apele-Freimane	Member	Latvia	No restrictions applicable to this meeting	
Dovile Zacharkiene	Member	Lithuania	No interests declared	
Carola de Beaufort	Member (CHMP alternate)	Luxembourg	No interests declared	
Herbert Lenicker	Alternate	Malta	No interests declared	
Roderick Houwen	Member	Netherlands	No participation in discussion, final deliberations and voting on: No participation in final deliberations and voting on:	2.3.4. Bis-choline tetrathiomolybdate - Orphan - EMEA-002232-PIP02-19-M02 2.3.8. Odevixibat - Orphan - EMEA-002054-PIP01-16-M03
Maaike van Dartel	Alternate	Netherlands	No interests declared	
Siri Wang	Member	Norway	No interests declared	
Anette Solli Karlsen	Alternate	Norway	No interests declared	
Marek Migdal	Member	Poland	No participation in discussion, final deliberations and voting on:	3.1.12. Sirolimus - Orphan - EMEA-003168-PIP01-21
Helena Fonseca	Member	Portugal	No interests declared	
Hugo Tavares	Alternate	Portugal	No interests declared	
Dana Gabriela Marin	Member (CHMP alternate)	Romania	No interests declared	
Peter Sisovsky	Member	Slovakia	No interests declared	
Peter Szitanyi	Alternate	Slovakia	No interests declared	
Stefan Grosek	Member	Slovenia	No interests declared	
Fernando de Andrés Trelles	Member	Spain	No interests declared	
Maria Jesus Fernández Cortizo	Alternate	Spain	No interests declared	
Eva Agurell	Member	Sweden	No interests declared	
Johannes Taminiau	Member	Healthcare Professionals' Representative	No interests declared	
Fernando Cabanas	Member	Healthcare Professionals'	No restrictions applicable to this	

Name	Role	Member state or affiliation	Outcome restriction following evaluation of e-DoI	Topics on agenda for which restrictions apply
		Representative	meeting	
Doina Plesca	Alternate	Healthcare Professionals' Representative	No interests declared	
Francesca Rocchi	Member	Healthcare Professionals' Representative	No restrictions applicable to this meeting	
Catherine Cornu	Alternate	Healthcare Professionals' Representative	No restrictions applicable to this meeting	
Jaroslav Sterba	Member	Patients' Organisation Representative	No restrictions applicable to this meeting	
Tomasz Grybek	Alternate	Patients' Organisation Representative	No interests declared	
Michal Odermarsky	Alternate	Patients' Organisation Representative	No restrictions applicable to this meeting	
María Estela Moreno Martín	Expert	Spain	No interests declared	
Celine Chu	Observer	France	No interests declared	
Meeting run with support from relevant EMA staff				
* Experts were evaluated against the agenda topics or activities they participated in				

13. Explanatory notes

The Notes give a brief explanation of relevant agenda items and should be read in conjunction with the agenda.

Paediatric investigation plan (PIP) (section 2.1 Opinion on PIPs and section 3.1 Discussions on PIPs)
A paediatric investigation plan (PIP) is a development plan aimed at ensuring that the necessary data are obtained through studies in children, when it is safe to do so, to support the authorisation of a medicine for children. Pharmaceutical companies submit proposals for PIPs to the European Medicines Agency's Paediatric Committee (PDCO). This Committee is responsible for agreeing or refusing the plan.

Compliance checks (section 2.2 Opinions on Compliance check, section 3.2 Discussions on Compliance check)
A compliance check may be necessary before any application for marketing authorisation (even for an adult indication) can be considered valid, if there was no deferral for at least one of the studies agreed in the PIP, or after the due date of initiation or completion of a study/measure. The same applies to some regulatory applications for authorised products, as described above.

Modification of an Agreed Paediatric Investigation Plan (section 2.3 Opinions on Modification of an agreed PIP, section 3.3 Discussions on Modification of an agreed PIP)
The development plan for a medicine can be modified at a later stage as knowledge increases. Modifications can also be made if the applicant encounters such difficulties with the implementation of a PIP, which render it unworkable or no longer appropriate.
In some cases, studies can be deferred until after the studies in adults have been conducted. This ensures that research in children is done only when it is safe and ethical to do so. Even when studies are deferred, the PIP will include details of the paediatric studies and their timelines.

Class waiver (section 6 Discussion on the applicability of class waiver)
As some diseases do not affect children (for example Parkinson's disease), the development of medicines for these diseases should not be performed in children. In these cases, a PIP is not required and it will be waived**.** For more information on the classes of diseases subject to waivers, see class waivers.

Annual reports on deferrals (section 8)
If the medicinal product is approved in the EU, annual reports on the deferred measures in the PIP must be submitted to the Agency.

More detailed information on the above terms can be found on the EMA website:
www.ema.europa.eu/