



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

11 October 2018
EMA/COMP/506115/2018
Inspections, Human Medicines Pharmacovigilance and Committees Division

Committee for Orphan Medicinal Products (COMP)

Minutes for the meeting on 11-13 September 2018

Chair: Bruno Sepodes

11 September 2018, 08:30-19:30, room 02-F

12 September 2018, 08:30-19:30, room 02-F

13 September 2018, 08:30-16:00, room 02-F

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 COMP meeting reports once the procedures are finalised.

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

Further information with relevant explanatory notes can be found at the end of this document.

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 ongoing 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).



Table of contents

| | | |
|-------------|---|-----------|
| 1. | Introduction | 6 |
| 1.1. | Welcome and declarations of interest of members and experts | 6 |
| 1.2. | Adoption of agenda..... | 6 |
| 1.3. | Adoption of the minutes | 6 |
| 2. | Applications for orphan medicinal product designation | 6 |
| 2.1. | For opinion..... | 6 |
| 2.1.1. | - EMA/OD/074/18 | 6 |
| 2.1.2. | - EMA/OD/089/18 | 6 |
| 2.1.3. | - EMA/OD/094/18 | 7 |
| 2.1.4. | - EMA/OD/081/18 | 7 |
| 2.1.5. | Gefinitib - EMA/OD/090/18 | 8 |
| 2.1.6. | - EMA/OD/042/18 | 9 |
| 2.1.7. | - EMA/OD/078/18 | 9 |
| 2.1.8. | Melatonin - EMA/OD/077/18 | 10 |
| 2.1.9. | Peptides YMFPNAPYL, SGQAYMFPNAPYLPSCLES, RSELVRRHHNMHQRNMTKL and PGCNKRYFKLSHLQMHSRKHTG - EMA/OD/091/18 | 11 |
| 2.1.10. | - EMA/OD/087/18 | 12 |
| 2.1.11. | Avapritinib - EMA/OD/079/18 | 13 |
| 2.2. | For discussion / preparation for an opinion..... | 14 |
| 2.2.1. | (6aR, 10aR)-3-(1,1-dimethylheptyl)-delta8-tetrahydro-cannabinol-9-carboxylic acid - EMA/OD/114/18 | 14 |
| 2.2.2. | - EMA/OD/096/18 | 15 |
| 2.2.3. | - EMA/OD/040/18 | 15 |
| 2.2.4. | 6-(2-hydroxy-2-methylpropoxy)-4-(6-(6-((6-methoxypyridin-3-yl)methyl)-3,6- diazabicyclo[3.1.1]heptan-3-yl)pyridin-3-yl)pyrazolo[1,5-a]pyridine-3-carbonitrile - EMA/OD/125/18 | 15 |
| 2.2.5. | 6'-(R)-methyl-5-O-(5-amino-5,6-dideoxy-alpha-L-talofuranosyl)-paromamine sulfate - EMA/OD/102/18 | 16 |
| 2.2.6. | - EMA/OD/258/17 | 16 |
| 2.2.7. | Autologous CD34+ hematopoietic stem and progenitor cells genetically modified with the lentiviral vector IDUA LV, encoding for the alpha-L-iduronidase cDNA - EMA/OD/113/18 ... | 17 |
| 2.2.8. | - EMA/OD/110/18 | 17 |
| 2.2.9. | - EMA/OD/086/18 | 18 |
| 2.2.10. | - EMA/OD/085/18 | 18 |
| 2.2.11. | - EMA/OD/121/18 | 18 |
| 2.2.12. | - EMA/OD/111/18 | 18 |
| 2.2.13. | - EMA/OD/128/18 | 18 |
| 2.2.14. | - EMA/OD/106/18 | 18 |

| | | |
|-------------|--|-----------|
| 2.2.15. | - EMA/OD/122/18 | 18 |
| 2.2.16. | - EMA/OD/119/18 | 19 |
| 2.2.17. | - EMA/OD/108/18 | 19 |
| 2.2.18. | Glycine, L-alanine, L-arginine, L-aspartic acid, L-cysteine, L-cystine, L-glutamic acid, L-histidine, L-lysine monohydrate, L-methionine, L-phenylalanine, L-proline, L-serine, L-threonine, L-tryptophan, L-tyrosine, taurine - EMA/OD/100/18 | 19 |
| 2.2.19. | - EMA/OD/115/18 | 20 |
| 2.2.20. | - EMA/OD/130/18 | 20 |
| 2.2.21. | - EMA/OD/126/18 | 20 |
| 2.2.22. | - EMA/OD/093/18 | 20 |
| 2.2.23. | - EMA/OD/116/18 | 20 |
| 2.2.24. | - EMA/OD/117/18 | 20 |
| 2.2.25. | - EMA/OD/118/18 | 20 |
| 2.2.26. | - EMA/OD/124/18 | 21 |
| 2.2.27. | - EMA/OD/084/18 | 21 |
| 2.2.28. | - EMA/OD/103/18 | 21 |
| 2.2.29. | Recombinant adeno-associated viral vector containing a bioengineered capsid and a codon-optimised expression cassette to drive the expression of the SQ form of a B-domain deleted human coagulation factor - EMA/OD/104/18 | 21 |
| 2.2.30. | Recombinant adeno-associated viral vector serotype S3 containing codon-optimised expression cassette encoding human coagulation factor IX variant - EMA/OD/127/18..... | 22 |
| 2.2.31. | - EMA/OD/097/18 | 22 |
| 2.2.32. | - EMA/OD/129/18 | 22 |
| 2.3. | Revision of the COMP opinions..... | 23 |
| 2.4. | Amendment of existing orphan designations..... | 23 |
| 2.5. | Appeal..... | 23 |
| 2.6. | Nominations..... | 23 |
| 2.6.1. | New applications for orphan medicinal product designation - Appointment of COMP rapporteurs..... | 23 |
| 2.7. | Evaluation on-going..... | 23 |
| 3. | Requests for protocol assistance with significant benefit question | 23 |
| 3.1. | Ongoing procedures..... | 23 |
| 3.1.1. | - | 23 |
| 3.1.2. | - | 23 |
| 3.1.3. | - | 23 |
| 3.1.4. | - | 24 |
| 3.1.5. | - | 24 |
| 3.2. | Finalised letters | 24 |
| 3.2.1. | - | 24 |

| | | |
|-------------|--|-----------|
| 3.2.2. | - | 24 |
| 3.3. | New requests | 24 |
| 3.3.1. | - | 24 |
| 3.3.2. | - | 24 |
| 3.3.3. | - | 24 |
| 3.3.4. | - | 24 |
| 3.4. | Post - Protocol assistance Issues | 25 |
| 3.4.1. | - | 25 |

4. Review of orphan designation for orphan medicinal products at time of initial marketing authorisation 25

| | | |
|-------------|---|-----------|
| 4.1. | Orphan designated products for which CHMP opinions have been adopted | 25 |
| 4.1.1. | Symkevi - tezacaftor / ivacaftor – EMEA/H/C/004682, EMA/OD/156/16, EU/3/17/1828 | 25 |
| 4.2. | Orphan designated products for discussion prior to adoption of CHMP opinion | 25 |
| 4.2.1. | Luxturna - voretigene neparvovec - EMEA/H/C/004451 | 25 |
| 4.2.2. | Namuscla - mexiletine hcl – EMEA/H/C/004584, EMA/OD/074/14, EU/3/14/1353 | 26 |
| 4.2.3. | - volanesorsen – EMEA/H/C/004538, EMA/OD/180/13, EU/3/14/1249 | 26 |
| 4.2.4. | TAKHZYRO - lanadelumab – EMEA/H/C/004806, EMA/OD/075/15, EU/3/15/1551 | 26 |
| 4.2.5. | - viable t-cells – EMEA/H/C/002397 | 26 |
| 4.2.6. | Jivi - Pegylated B-domain-deleted sequence-modified recombinant human factor VIII – EMEA/H/C/004054, EMA/OD/128/10, EU/3/10/847 | 26 |
| 4.2.7. | Poteligeo -mogamulizumab – EMEA/H/C/004232, EMA/OD/091/16, EU/3/16/1756 | 26 |
| 4.2.8. | Exondys – eteplirsen – EMEA/OD/049/08, EU/3/08/586, EMEA/H/C/004355 | 27 |
| 4.3. | Appeal | 27 |
| 4.4. | On-going procedures | 27 |
| 4.5. | Orphan Maintenance Reports | 27 |

5. Review of orphan designation for authorised orphan medicinal products at time marketing authorisation extension 27

| | | |
|-------------|---|-----------|
| 5.1. | After adoption of CHMP opinion | 27 |
| 5.1.1. | Kalydeco – Ivacaftor - Type II variation - EMEA/H/C/002494/II/0063/G, EMEA/OD/010/08, EU/3/08/556 | 27 |
| 5.2. | Prior to adoption of CHMP opinion | 27 |
| 5.2.1. | Venclyxto – Venetoclax – Type II variation – EMEA/H/C/004106/II/0008, EMA/OD/124/12, EU/3/12/1080 | 27 |
| 5.2.2. | Rubraca - rucaparib - Type II variation – EMEA/H/C/004272/II/0001, EMA/OD/085/12, EU/3/12/1049 | 28 |
| 5.2.3. | Adcetris - Brentuximab vedotin – Type II variation – EMEA/H/C/002455/II/0055, EMEA/OD/073/08, EU/3/08/596 | 28 |
| 5.2.4. | Imnovid – pomalidomide - Type II variation – EMEA/OD/053/09, EU/3/09/672, EMEA/H/C/002682/II/0031/G | 28 |
| 5.3. | Appeal | 28 |

| | | |
|-------------|---|-----------|
| 5.4. | On-going procedures | 28 |
| 6. | Application of Article 8(2) of the Orphan Regulation | 28 |
| 7. | Organisational, regulatory and methodological matters | 28 |
| 7.1. | Mandate and organisation of the COMP | 28 |
| 7.1.1. | Strategic Review & Learning meetings, 23-24 October 2018, Vienna, Austria | 28 |
| 7.1.2. | Protocol Assistance Working Group (PAWG) | 29 |
| 7.1.3. | Non-Clinical Working Group..... | 29 |
| 7.1.4. | Election of COMP Chairperson..... | 29 |
| 7.1.5. | Condition Working Group..... | 29 |
| 7.2. | Coordination with EMA Scientific Committees or CMDh-v | 29 |
| 7.2.1. | Recommendations on eligibility to PRIME – report from CHMP..... | 29 |
| 7.2.2. | Regulatory Science Engagement Plan to 2025..... | 29 |
| 7.3. | Coordination with EMA Working Parties/Working Groups/Drafting Groups | 29 |
| 7.3.1. | Working Party with Patients’ and Consumers’ Organisations (PCWP) and Working Party with Healthcare Professionals’ Organisations (HCPWP) | 29 |
| 7.3.2. | Working Party with Healthcare Professionals’ Organisations (HCPWP) | 29 |
| 7.4. | Cooperation within the EU regulatory network | 30 |
| 7.4.1. | European Commission..... | 30 |
| 7.5. | Cooperation with International Regulators | 30 |
| 7.5.1. | Food and Drug Administration (FDA) | 30 |
| 7.5.2. | Japanese Pharmaceuticals and Medical Devices Agency (PMDA)..... | 30 |
| 7.5.3. | The Therapeutic Goods Administration (TGA), Australia..... | 30 |
| 7.5.4. | Health Canada..... | 30 |
| 7.6. | Contacts of the COMP with external parties and interaction with the Interested Parties to the Committee | 30 |
| 7.7. | COMP work plan | 30 |
| 7.8. | Planning and reporting | 30 |
| 7.8.1. | List of all applications submitted/expected and the COMP rapporteurship distribution of valid applications submitted in 2018 | 30 |
| 7.8.2. | Overview of orphan marketing authorisations/applications | 30 |
| 8. | Any other business | 30 |
| 8.1. | Telematics - Concept paper on strategy 2020-2025 | 30 |
| 8.2. | EMA Business Pipeline activity and Horizon scanning | 31 |
| | List of participants | 32 |
| | Explanatory notes | 35 |

1. Introduction

1.1. Welcome and declarations of interest of members and experts

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 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. 23 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 COMP agenda for 11-13 September 2018 was adopted with no amendments.

1.3. Adoption of the minutes

The minutes for 17-19 July 2018 were adopted with no amendments and will be published on the EMA website.

2. Applications for orphan medicinal product designation

2.1. For opinion

2.1.1. - [EMA/OD/074/18](#)

Treatment of polycythemia vera

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor formally withdrew the application for orphan designation, on 7 September 2018, prior to responding to the list of issues.

2.1.2. - [EMA/OD/089/18](#)

Treatment of neuronal ceroid lipofuscinosis

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor formally withdrew the application for orphan designation, on 17 August 2018, prior to responding to the list of issues.

2.1.3. - EMA/OD/094/18

Treatment of acute myeloid leukaemia

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Intention to diagnose, prevent or treat

To establish correctly if there exists a scientific rationale for the development of the proposed product for treatment of acute myeloid leukaemia (AML), the sponsor should further elaborate on:

the relevance of the data generated from the second *in vivo* non-clinical study and comment on the effect size (approx. 20% reduction of AML load in peripheral blood) and durability of the effect. This should be further elaborated within the context of how this could be translated into a meaningful clinical effect.

- Significant benefit

The arguments on significant benefit are based on the new mechanism of action and the potentially improved efficacy in the condition.

The sponsor is requested to complete the list of authorised treatments for the proposed condition. The sponsor is asked to justify the claim of chemoresistance in the reference study cited and how this external *in vitro* control data can be used to justify significant benefit for the proposed product over all authorised treatments for the condition.

In the written response, and during an oral explanation before the Committee on 11 September 2018, the sponsor further elaborated on the relevance and endpoints studied in the *in vivo* model discussed in the application. It was discussed that the endpoint of "leukemia load" studied in the *in vivo* model mimics the endpoint of minimal residual disease (MRD). The COMP disagreed on that extrapolation, since MRD requires at least morphologic complete response, and also considered that the issue of durability was not addressed. The Committee was also of the view that a favourable comparison, indirect or direct, versus the authorised counterparts could not be made on the basis of the presented data. Therefore the issue of significant benefit also remained unaddressed.

In communicating to the sponsor the outcome of the discussion, the sponsor formally withdrew the application for orphan designation, on 11 September 2018, prior to final opinion.

2.1.4. - EMA/OD/081/18

Prevention of graft-versus-host disease

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor formally withdrew the application for orphan designation on 21 August 2018, prior to responding to the list of issues.

Consorcio Centro de Investigación Biomédica en Red, M.P.; Treatment of Fanconi anaemia

COMP rapporteur: Lyubina Racheva Todorova

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Intention to diagnose, prevent or treat

The COMP is of the opinion that the product is intended to treat a medical condition that is distinctive in the sense that it fulfils the criteria for defining a condition for orphan designation (distinct histopathology, pathophysiology, clinical characteristics, and clinical classification systems). Hence, the COMP does not consider that head and neck squamous cell carcinoma (HNSCC) is a symptom or manifestation of Fanconi anaemia (FA). The COMP considers that HNSCC would be the valid condition for designation and the sponsor is invited to clarify if HNSCC fulfils the other criteria for designation including seriousness and prevalence. Alternatively, the sponsor would be required to justify as to why HNSCC in FA can be considered to be distinct from HNSCC in the general population.

To establish correctly if there exists a scientific rationale for the development of the proposed product for treatment of FA, the sponsor should further elaborate on the results of the phase III study of Iressa in HNSCC patients and should explain how the COMP could establish efficacy of gefitinib based on the provided non-clinical data only.

- Significant benefit

The sponsor is invited to submit significant benefit argumentation versus all products that are authorised for the treatment of HNSCC, which do not exclude FA patients in the therapeutic indication.

Should the significant benefit argumentation be based on an improved safety, the sponsor is requested to provide safety data of gefitinib compared to the currently authorised products, which would demonstrate that FA patients could be systemically treated.

In the written response, and during an oral explanation before the Committee on 12 September 2018 the sponsor further discussed the condition Fanconi anaemia (FA) and squamous carcinoma of the head and neck. It was stressed that FA is a cancer prone disease due to a defect in DNA repair and that patients have an extraordinary risk of developing solid tumours specially HNSCC. Around 50% of the solid tumours in FA are HNSCC making the estimated risk >500 fold compared to the general population. Based on these outlined characteristics, the COMP considered that HNSCC is an integral part of the natural history of the disease and is a major health issue for FA patients in terms of life expectancy and quality of life.

With regards to the issue of significant benefit the COMP requested the justification of significant benefit against chemotherapeutics authorised for the treatment of all patients with HNSCC. It was considered that FA patients are characterised by DNA repair deficiency and, therefore, their healthy cells do not tolerate chemotherapy and radiotherapy currently used to treat HNSCC in the general population. The sponsor discussed non-clinical and preliminary clinical safety data in FA with gefitinib. It was discussed that gefitinib is not haemotoxic in the general population with locally advanced or metastatic non-small cell lung cancer, gefitinib does not target DNA and is therefore non genotoxic, and therapeutic doses

of gefitinib are not (haemo)toxic in non-clinical models of FA. The COMP concluded that this is sufficient evidence to support significant benefit and medical plausibility suggesting that gefitinib could be tolerated by FA patients to treat HNSCC as a major manifestation of FA.

The Committee agreed that the condition, Fanconi anaemia, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing gefitinib was considered justified. The COMP considered that head and neck squamous cell carcinoma is a major manifestation of Fanconi anaemia. The justification for medical plausibility was based on data from valid non-clinical models demonstrating that the proposed product can reduce tumour volume in head and neck squamous cell carcinoma occurring in Fanconi anaemia.

The condition is life-threatening and chronically debilitating in particular due to bone marrow failure and the susceptibility to haematologic cancers, solid tumours, particularly squamous cell cancers of the head and neck and cervical/gynaecological cancers.

The condition was estimated to be affecting less than 0.1 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of head and neck squamous cell carcinoma in the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing gefitinib will be of significant benefit to those affected by the condition. The currently authorised treatments for the treatment of head and neck squamous cell carcinoma are not tolerated by Fanconi anaemia patients. The sponsor has provided non-clinical and preliminary clinical data that suggest that the proposed chemotherapeutic treatment of head and neck squamous cell carcinoma can be tolerated by Fanconi anaemia patients. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for gefitinib, for treatment of Fanconi anaemia, was adopted by consensus.

2.1.6. - EMA/OD/042/18

Treatment of osteosarcoma

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor formally withdrew the application for orphan designation on 26 July 2018, prior to responding to the list of issues.

2.1.7. - EMA/OD/078/18

Treatment of acute liver failure

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Number of people affected

The sponsor should justify the duration of the condition and justify the use of incidence as an appropriate epidemiological index.

- Significant benefit

The arguments on significant benefit are based on the new mechanism of action and the potential improved efficacy in the condition. The sponsor is invited to further elaborate on the available data to justify the clinically relevant advantage or major contribution to patient care. A discussion versus the effects of N-acetylcysteine is expected in that regard.

In the written response, and during an oral explanation before the Committee on 12 September 2018, the sponsor further elaborated on the raised issues.

As regards the prevalence issue, the applicant noted that the product is to be administered in an acute setting, and also made reference to other orphan medicinal product designations to justify that the condition is rare. The COMP acknowledged that acute liver failure is by definition a condition arising in acute settings without pre-existing chronic liver disease. It was however stressed that the acute onset of the condition is a different issue than the duration of its sequelae and as such the position of the sponsor would benefit from further discussion of the duration of the caused decompensation. Overall, the difficulty in delineating the duration of the proposed condition was taken into consideration, and the Committee retained their previous view as reflected in previous procedures. The criterion for rarity was therefore considered justified.

With regards to the issue of significant benefit, the sponsor reiterated their intention to administer the product irrespective of aetiology, and in settings similar to those triggering liver transplantation. The applicant argued that the timing of the administration *in vivo* model, was late to be reversed by administration of N-acetylcysteine (NAC), and that the settings would reflect all kinds of severe damaged liver, irrespectively of the cause of injury. As such it was argued that there is no "competition" with NAC.

The COMP considered that the discussion needs to be focused on the available data, instead of the intention to generate future data. The settings of the *in vivo* model would not allow extrapolations beyond the acetaminophen-induced liver injury settings. It was also considered that the sponsor has not studied the effects of N-acetylcysteine in the said model, and that if comparative or add-on effects could have been described, this would be helpful to support a clinically relevant advantage versus the standard of care.

In communicating to the sponsor the outcome of the discussion, the sponsor formally withdrew the application for orphan designation, on 13 September 2018, prior to final opinion.

2.1.8. Melatonin - EMA/OD/077/18

Worphmed Srl; Treatment of acute radiation syndrome

COMP rapporteur: Geraldine O'Dea

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Intention to diagnose, prevent or treat

To establish correctly if there exists a scientific rationale for the development of the proposed product for treatment of acute radiation syndrome, the sponsor should justify the choice of endpoints used in the non-clinical studies (e.g. lack of survival data, gastrointestinal and bone marrow manifestations) and elaborate on the interpretation of the results obtained in the experiments.

In the written response the sponsor further discussed the raised issues. To complement the data the sponsor presented additional literature studies which suggest that melatonin improves survival in a relevant non-clinical model of the condition. The Committee found the survival study relevant and satisfyingly addressing the issue raised. Consequently, the oral hearing was cancelled.

The Committee agreed that the condition, acute radiation syndrome, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing melatonin was considered justified based on non-clinical data demonstrating improved survival in a model of the condition.

The condition is life-threatening due to hematopoietic, gastrointestinal, neurological and vascular symptoms associated with multiple organ dysfunction leading to multiple organ failure and carcinogenesis.

The condition was estimated to be affecting less than 0.01 in 10,000 persons in the European Union, at the time the application was made.

The sponsor has also established that there exists no satisfactory method of treatment in the European Union for patients affected by the condition.

A positive opinion for melatonin, for treatment of acute radiation syndrome, was adopted by consensus.

2.1.9. [Peptides YMFNPAPYL, SGQAYMFNPAPYLPSCLES, RSEDLVRHHNMHQRNMTKL and PGCNKRYFKLSHLQMHSRKHTG - EMA/OD/091/18](#)

Sellas Life Sciences Limited; Treatment of multiple myeloma

COMP rapporteur: Karri Penttila

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Intention to diagnose, prevent or treat

To establish correctly if there exists a scientific rationale for the development of the proposed product for treatment of multiple myeloma, the sponsor should further elaborate on the preliminary data from the presented clinical studies. In order to understand the efficacy of the proposed product in combination with lenalidomide, the sponsor was asked to provide an adequate contextualisation of the provided results with a literature overview so the efficacy of the proposed product can be assessed versus lenalidomide.

Medical plausibility or significant benefit cannot be established without adequate contextualisation and external control data.

- Number of people affected

For the calculation and presentation of the prevalence estimate the sponsor is advised to refer to the "Points to Consider on the Calculation and Reporting of a Prevalence of a Condition for Orphan Designation".

It seems that prevalence was established using the formula: $P=I * D$. The sponsor was asked to use the latest available epidemiological data. Furthermore, by using the above formula,

the sponsor was asked to define and justify the disease duration, which adequately reflects the disease course of all multiple myeloma (MM) patients.

In the written response, and during an oral explanation before the Committee on 12 September 2018, the sponsor provided a revised prevalence calculation taking into consideration a longer disease duration of 7 years. The estimate of 4.7 per 10,000 was accepted by the COMP.

The sponsor also provided further elaboration on the previously presented preliminary clinical data. For contextualisation, published natural history data was provided on minimal residual disease (MRD) positive patients with adverse cytogenetics on maintenance treatment following autologous stem cell transplant, pointing towards a median progression free survival of 12 months. The preliminary clinical data that has been provided for this application studied the proposed product on top of lenalidomide in high risk and MRD positive patients undergoing maintenance treatment, and patients treated with the proposed product in conjunction with lenalidomide achieved a median overall survival of 23.6 months. The COMP considered that there was sufficient evidence to support medical plausibility and significant benefit for orphan designation.

The Committee agreed that the condition, multiple myeloma, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing peptides YMFPNAPYL, SGQAYMFPNAPYLPSCLES, RSDDELVRHHNMHQRNMTKL and PGCNKRYFKLSHLQMHSRKHTG was considered justified based on preliminary clinical data demonstrating that treatment improved progression free survival in patients affected by the condition.

The condition is chronically debilitating in particular due to the development of hypercalcemia, renal insufficiency, anaemia and bone lesions, and life-threatening with a median survival of approximately 7 years.

The condition was estimated to be affecting approximately 4.7 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing peptides YMFPNAPYL, SGQAYMFPNAPYLPSCLES, RSDDELVRHHNMHQRNMTKL and PGCNKRYFKLSHLQMHSRKHTG will be of significant benefit to those affected by the condition. The sponsor has provided preliminary clinical data to demonstrate that maintenance treatment after stem cell transplantation with the proposed product in combination with the currently authorised product improved progression free survival, when compared to historic data with the current best standard of care including the currently authorised product. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for peptides YMFPNAPYL, SGQAYMFPNAPYLPSCLES, RSDDELVRHHNMHQRNMTKL and PGCNKRYFKLSHLQMHSRKHTG, for treatment of multiple myeloma, was adopted by consensus.

2.1.10. - EMA/OD/087/18

Treatment of mitochondrial encephalopathy, lactic acidosis, and stroke-like episodes

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Intention to diagnose, prevent or treat

To establish correctly if there exists a scientific rationale for the development of the proposed product for treatment of mitochondrial encephalopathy, lactic acidosis, and stroke-like episodes, the sponsor should further:

- elaborate on the extrapolation of the argued effects of the metabolite, to the compound as proposed for designation.
- present any available results with the compound as applied for designation, in either relevant non-clinical models or in preliminary clinical observations,
- discuss the extent of the effects presented in the case study, given the uncontrolled nature of observations, the use of concomitant treatments and the relapse-remitting nature of the target condition

In the absence of any data with the product as applied for designation in either non-clinical models or patients affected by the condition, the medical plausibility cannot be considered justified. In the written response, and during an oral explanation before the Committee on 12 September 2018, the sponsor further elaborated on the raised issues. In response to using a prodrug rather than the actual active moiety, reference was made to a corresponding EMA regulatory procedure. As for the available data to justify medical plausibility, it was stated that no *in vivo* models are specific to the condition and statements of support from the investigators of the cited clinical study were presented. However, no further data had been added to the application and therefore the COMP considered that the inherent limitations of one case-study remained unaddressed.

In communicating to the sponsor the outcome of the discussion, the sponsor formally withdrew the application for orphan designation, on 13 September 2018, prior to final opinion.

2.1.11. Avapritinib - EMA/OD/079/18

PhaRA bvba; Treatment of mastocytosis

COMP rapporteur: Brigitte Bloechl-Daum

As agreed during the previous meeting, a list of issues was sent to the sponsor for response. The sponsor was asked to clarify the following issues:

- Significant benefit

The arguments on significant benefit are based on the new mechanism of action and the potential improved efficacy in the condition.

The sponsor was requested to further discuss the arguments provided for significant benefit and to elaborate on the preliminary results from their clinical study to justify the assumption of significant benefit over authorised medicinal products for the proposed orphan indication.

The sponsor should detail the results of any clinical data to support the significant benefit assumption in the context of the current therapeutic management of patients.

In the written response the sponsor elaborated on the available clinical data of the application and focused on a comparison with midostaurin. The primary endpoint was overall response rate (ORR) assessed by modified Valent criteria after all patients completed 6 months of treatment. At the end of this treatment period avapritinib had an ORR of 68% compared to midostaurin with an ORR of 28%. In addition the sponsor indicated that when patients were switched from midostaurin to avapritinib a similar ORR of 71% in patients previously treated with midostaurin was observed.

The COMP discussed these results and in conclusion considered that sufficient information had been submitted to support the basis of significant benefit and therefore the oral explanation was cancelled. The Committee concluded that they could be positive and recommend granting the orphan designation.

The Committee agreed that the condition, mastocytosis, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing avapritinib was considered justified based on preliminary non-clinical data showing improved survival as well as preliminary clinical data showing an improvement in overall response rate.

The condition is chronically debilitating due to symptoms such as flushing, tachycardia, pruritus, abdominal cramping, peptic ulcers and diarrhoea, and life-threatening due to bone marrow failure, hepatomegaly, splenomegaly, and poor survival with 5-year rates of around 60% in patients with systemic mastocytosis.

The condition was estimated to be affecting approximately 3 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing avapritinib will be of significant benefit to those affected by the condition. The sponsor has provided preliminary clinical data which demonstrate an improved overall response rate compared to the current approved medicine. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for avapritinib, for treatment of mastocytosis, was adopted by consensus.

2.2. For discussion / preparation for an opinion

2.2.1. (6aR, 10aR)-3-(1,1-dimethylheptyl)-delta8-tetrahydro-cannabinol-9-carboxylic acid - EMA/OD/114/18

Accelsiors CRO and Consultancy Services Ltd; Treatment of dermatomyositis

COMP rapporteur: Dinah Duarte

The Committee agreed that the condition, dermatomyositis, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing (6aR, 10aR)-3-(1,1-dimethylheptyl)-delta8-tetrahydro-cannabinol-9-carboxylic acid (Chemical) was considered justified based on preliminary clinical data in patients with the condition who show an improvement in skin lesions.

The condition is life-threatening and chronically debilitating due to skin lesions, cardiac impairment, and progressively debilitating muscle weakness and increased risk of malignancy.

The condition was estimated to be affecting approximately 1.3 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing (6aR,10aR)-3-(1,1-dimethylheptyl)-delta8-tetrahydro-cannabinol-9-carboxylic acid will be of significant benefit to those affected by the condition. The sponsor has provided preliminary clinical data that demonstrate an improvement in skin lesions in patients who are refractory to prior medicinal treatment. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for (6aR,10aR)-3-(1,1-dimethylheptyl)-delta8-tetrahydro-cannabinol-9-carboxylic acid, for treatment of dermatomyositis, was adopted by consensus.

2.2.2. - EMA/OD/096/18

Treatment of ATTR amyloidosis

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.3. - EMA/OD/040/18

Treatment of Kabuki syndrome

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.4. 6-(2-hydroxy-2-methylpropoxy)-4-(6-(6-((6-methoxypyridin-3-yl)methyl)-3,6-diazabicyclo[3.1.1]heptan-3-yl)pyridin-3-yl)pyrazolo[1,5-a]pyridine-3-carbonitrile - EMA/OD/125/18

Loxo Oncology Limited; Treatment of medullary thyroid carcinoma

COMP rapporteur: Katerina Kopečková

Following review of the application by the Committee, it was agreed to rename the indication to treatment of medullary thyroid carcinoma.

The Committee agreed that the condition, medullary thyroid carcinoma, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing 6-(2-hydroxy-2-methylpropoxy)-4-(6-(6-((6-methoxypyridin-3-yl)methyl)-3,6-diazabicyclo[3.1.1]heptan-3-yl)pyridin-3-yl)pyrazolo[1,5-a]pyridine-3-carbonitrile was considered justified based on preliminary clinical data showing that patients affected by the condition responded to treatment with the proposed product.

The condition is chronically debilitating due to the radical surgery, and life-threatening in patients with unresectable tumours or metastatic disease.

The condition was estimated to be affecting less than 0.5 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing 6-(2-hydroxy-2-methylpropoxy)-4-(6-(6-((6-methoxypyridin-3-yl)methyl)-3,6-diazabicyclo[3.1.1]heptan-3-yl)pyridin-3-yl)pyrazolo[1,5-a]pyridine-3-carbonitrile will be of significant benefit to those affected by the condition. The sponsor has provided preliminary clinical data that demonstrate that patients that are affected by the condition and have failed authorised treatments responded to treatment with the proposed product. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for 6-(2-hydroxy-2-methylpropoxy)-4-(6-(6-((6-methoxypyridin-3-yl)methyl)-3,6-diazabicyclo[3.1.1]heptan-3-yl)pyridin-3-yl)pyrazolo[1,5-a]pyridine-3-carbonitrile, for treatment of medullary thyroid carcinoma, was adopted by consensus.

2.2.5. 6'-(R)-methyl-5-O-(5-amino-5,6-dideoxy-alpha-L-talofuranosyl)-paromamine sulfate - EMA/OD/102/18

FGK Representative Service GmbH; Treatment of cystic fibrosis

COMP rapporteur: Eva Malikova

The Committee agreed that the condition, cystic fibrosis, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing 6'-(R)-methyl-5-O-(5-amino-5,6-dideoxy-alpha-L-talofuranosyl)-paromamine sulfate was considered justified based on non-clinical data in different models of the condition showing improvement of function of the ion transport channel, which is defective in cystic fibrosis.

The condition is life-threatening and chronically debilitating due to recurrent and resistant respiratory infections with development of bronchiectasis and terminal respiratory failure.

The condition was estimated to be affecting less than 1 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing 6'-(R)-methyl-5-O-(5-amino-5,6-dideoxy-alpha-L-talofuranosyl)-paromamine sulfate will be of significant benefit to those affected by the condition. The sponsor has provided non-clinical data showing that the proposed product improves the function of the defective ion transport channel in cystic fibrosis mutations for which no specific treatment is authorised. In addition the sponsor also provided non-clinical data showing additive effect of the proposed product with some of the authorised treatments for the condition. The Committee considered that this constitutes a clinically relevant advantage for the patients affected by the condition.

A positive opinion for 6'-(R)-methyl-5-O-(5-amino-5,6-dideoxy-alpha-L-talofuranosyl)-paromamine sulfate, for treatment of cystic fibrosis, was adopted by consensus.

2.2.6. - EMA/OD/258/17

Treatment of ovarian cancer

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.7. Autologous CD34+ hematopoietic stem and progenitor cells genetically modified with the lentiviral vector IDUA LV, encoding for the alpha-L-iduronidase cDNA - EMA/OD/113/18

Fondazione Telethon; Treatment of patients affected by mucopolysaccharidosis type I

COMP rapporteur: Armando Magrelli

Following review of the application by the Committee, it was agreed to rename the indication to treatment of mucopolysaccharidosis type I.

The Committee agreed that the condition, mucopolysaccharidosis type I, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing autologous CD34+ haematopoietic stem and progenitor cells genetically modified with the lentiviral vector IDUA LV, encoding for the alpha-L-iduronidase cDNA was considered justified based on non-clinical *in vivo* data which shows good engraftment of the product and a reduction in glycosaminoglycan (GAG) levels and improvement in neurological function.

The condition is chronically debilitating due to facial dysmorphism, hepatosplenomegaly, upper airway obstruction, skeletal deformity, cardiomyopathy, central nervous system manifestations and life-threatening with death ensuing by adolescence if the severe form of the disease is left untreated.

The condition was estimated to be affecting approximately 0.01 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing autologous CD34+ haematopoietic stem and progenitor cells genetically modified with the lentiviral vector IDUA LV, encoding for the alpha-L-iduronidase cDNA will be of significant benefit to those affected by the condition. The sponsor has provided non-clinical *in vivo* data that demonstrate an improvement of neurological functioning, which cannot be achieved with current approved medicines. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for autologous CD34+ haematopoietic stem and progenitor cells genetically modified with the lentiviral vector IDUA LV, encoding for the alpha-L-iduronidase cDNA, for treatment of mucopolysaccharidosis type I, was adopted by consensus.

2.2.8. - EMA/OD/110/18

Treatment of pancreatic cancer

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.9. - EMA/OD/086/18

Treatment of hepatocellular carcinoma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.10. - EMA/OD/085/18

Treatment of hepatocellular carcinoma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.11. - EMA/OD/121/18

Treatment of follicular lymphoma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.12. - EMA/OD/111/18

Treatment of peripheral T-cell lymphoma (nodal, other extranodal and leukemic/disseminated)

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

[Post-meeting note: The COMP adopted the list of issues by written procedure following its September meeting.]

2.2.13. - EMA/OD/128/18

Treatment of graft-versus-host disease

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.14. - EMA/OD/106/18

Treatment of cystic fibrosis

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.15. - EMA/OD/122/18

Treatment of transplant-associated thrombotic microangiopathy following Haematopoietic Stem Cell Transplantation

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

[Post-meeting note: The COMP adopted the list of issues by written procedure following its September meeting.]

2.2.16. - EMA/OD/119/18

Treatment of large hemispheric infarction

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.17. - EMA/OD/108/18

Treatment of noninsulinoma pancreatogenous hypoglycaemia syndrome

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.18. Glycine, L-alanine, L-arginine, L-aspartic acid, L-cysteine, L-cystine, L-glutamic acid, L-histidine, L-lysine monohydrate, L-methionine, L-phenylalanine, L-proline, L-serine, L-threonine, L-tryptophan, L-tyrosine, taurine - EMA/OD/100/18

Orphan Europe SARL; Treatment of maple syrup urine disease

COMP rapporteur: Ingeborg Barisic

The Committee agreed that the condition, maple syrup urine disease, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing glycine, L-alanine, L-arginine, L-aspartic acid, L-cysteine, L-cystine, L-glutamic acid, L-histidine, L-lysine monohydrate, L-methionine, L-phenylalanine, L-proline, L-serine, L-threonine, L-tryptophan, L-tyrosine, taurine was considered justified based on clinical observations in affected patients with acute decompensation who responded to treatment with the proposed product.

The condition is chronically debilitating due to psychomotor delay and life-threatening in particular due to decompensation episodes leading to progressive encephalopathy and cerebral oedema.

The condition was estimated to be affecting less than 0.1 in 10,000 persons in the European Union, at the time the application was made.

The sponsor has also established that there exists no satisfactory method in the European Union for patients affected by the condition.

A positive opinion for glycine, L-alanine, L-arginine, L-aspartic acid, L-cysteine, L-cystine, L-glutamic acid, L-histidine, L-lysine monohydrate, L-methionine, L-phenylalanine, L-proline, L-serine, L-threonine, L-tryptophan, L-tyrosine, taurine, for treatment of maple syrup urine disease, was adopted by consensus.

2.2.19. - EMA/OD/115/18

Treatment of Short Bowel Syndrome

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.20. - EMA/OD/130/18

Treatment of severe combined immunodeficiency

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

[Post-meeting note: The COMP adopted the list of issues by written procedure following its September meeting.]

2.2.21. - EMA/OD/126/18

Treatment of neuroblastoma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.22. - EMA/OD/093/18

Treatment of anti-glomerular basement membrane disease

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.23. - EMA/OD/116/18

Treatment of glioma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.24. - EMA/OD/117/18

Treatment of papillary thyroid cancer

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.25. - EMA/OD/118/18

Treatment of anaplastic thyroid cancer

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.26. - EMA/OD/124/18

Treatment of primary mediastinal large-B-cell lymphoma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.27. - EMA/OD/084/18

Prevention of bronchopulmonary dysplasia

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.28. - EMA/OD/103/18

Treatment of Focal Segmental Glomerulosclerosis

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.29. Recombinant adeno-associated viral vector containing a bioengineered capsid and a codon-optimised expression cassette to drive the expression of the SQ form of a B-domain deleted human coagulation factor - EMA/OD/104/18

Spark Therapeutics Ireland Ltd; Treatment of haemophilia A

COMP rapporteur: Fernando Méndez Hermida

The Committee agreed that the condition, haemophilia A, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing recombinant adeno-associated viral vector containing a bioengineered capsid and a codon-optimised expression cassette to drive the expression of the SQ form of a B-domain deleted human coagulation factor was considered justified based on preliminary clinical observations showing an improvement of FVIII levels, reduction of bleeds, and reduction of exogenous FVIII use in treated patients.

The condition is chronically debilitating due to recurrent bleeding in joints, gastrointestinal tract or in surgery, which may also be life-threatening.

The condition was estimated to be affecting approximately 0.8 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing recombinant adeno-associated viral vector containing a bioengineered capsid and a codon-optimised expression cassette to drive the expression of the SQ form of a B-domain deleted human coagulation factor VIII will be of significant benefit to those affected by the condition/to the population at risk of developing the condition. The sponsor has provided preliminary clinical data in treated patients, who responded to treatment with long-term improvement of FVIII levels. The Committee considered that this constitutes a clinically relevant advantage.

A positive opinion for recombinant adeno-associated viral vector containing a bioengineered capsid and a codon-optimised expression cassette to drive the expression of the SQ form of a B-domain deleted human coagulation factor VIII, for treatment of haemophilia A, was adopted by consensus.

2.2.30. [Recombinant adeno-associated viral vector serotype S3 containing codon-optimised expression cassette encoding human coagulation factor IX variant - EMA/OD/127/18](#)

Freeline Therapeutics Ltd; Treatment of haemophilia B

COMP rapporteur: Armando Magrelli

The Committee agreed that the condition, haemophilia B, is a distinct medical entity and meets the criteria for orphan designation.

The intention to treat the condition with the medicinal product containing recombinant adeno-associated viral vector serotype S3 containing codon-optimised expression cassette encoding human coagulation factor IX variant was considered justified based on preliminary clinical data showing increase of plasma FIX to protective levels with the proposed product.

The condition is life-threatening and chronically debilitating due to spontaneous bleeding episodes as well as substantially prolonged bleeding upon injury.

The condition was estimated to be affecting approximately 0.3 in 10,000 persons in the European Union, at the time the application was made.

In addition, although satisfactory methods of treatment of the condition exist in the European Union, the sponsor has provided sufficient justification for the assumption that the medicinal product containing Recombinant adeno-associated viral vector serotype S3 containing codon-optimised expression cassette encoding human coagulation factor IX variant will be of significant benefit to those affected by the condition. The sponsor has provided preliminary clinical data showing increase of FIX to protective levels, eliminating the need of exogenous replacement treatment. The Committee considered that this constitutes a clinically relevant advantage for the patients affected by the condition.

A positive opinion for recombinant adeno-associated viral vector serotype S3 containing codon-optimised expression cassette encoding human coagulation factor IX variant, for treatment of haemophilia B, was adopted by consensus.

2.2.31. [- EMA/OD/097/18](#)

Treatment of alcohol-dependence

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.2.32. [- EMA/OD/129/18](#)

Prevention of graft versus host disease

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

2.3. Revision of the COMP opinions

None

2.4. Amendment of existing orphan designations

None

2.5. Appeal

None

2.6. Nominations

2.6.1. New applications for orphan medicinal product designation - Appointment of COMP rapporteurs

COMP coordinators were appointed for twenty two applications submitted.

2.7. Evaluation on-going

The Committee noted that evaluation was on-going for nineteen applications for orphan designation.

3. Requests for protocol assistance with significant benefit question

3.1. Ongoing procedures

3.1.1. -

Treatment of glioma

The Committee was briefed on the significant benefit issues. The COMP adopted the proposed answers on the significant benefit issues.

3.1.2. -

Treatment of glioma

The Committee was briefed on the significant benefit issues. The COMP adopted the proposed answers on the significant benefit issues.

3.1.3. -

Treatment of glioma

The Committee was briefed on the significant benefit issues. The COMP adopted the proposed answers on the significant benefit issues.

3.1.4. -

Prevention of graft rejection following solid organ transplantation

The Committee was briefed on the significant benefit issues. The COMP adopted the proposed answers on the significant benefit issues.

3.1.5. -

Treatment of transthyretin-mediated amyloidosis

The Committee was briefed on the significant benefit issues. The COMP adopted the proposed answers on the significant benefit issues.

3.2. Finalised letters

3.2.1. -

Treatment of bronchiolitis obliterans syndrome

The finalised letter was circulated for information.

3.2.2. -

Treatment of graft-versus-host disease

The finalised letter was circulated for information.

3.3. New requests

3.3.1. -

Treatment of naevoid basal-cell carcinoma syndrome (Gorlin syndrome)

The new request was noted.

3.3.2. -

Treatment of ovarian cancer

The new request was noted.

3.3.3. -

Treatment of spinal cord injury

The new request was noted.

3.3.4. -

Treatment of Leber's hereditary optic neuropathy

The new request was noted.

3.4. Post - Protocol assistance Issues

3.4.1. -

Treatment of Fabry disease

The Committee was briefed on the significant benefit issues. The COMP adopted the proposed answers on the significant benefit issues.

4. Review of orphan designation for orphan medicinal products at time of initial marketing authorisation

4.1. Orphan designated products for which CHMP opinions have been adopted

4.1.1. Symkevi - tezacaftor / ivacaftor – EMEA/H/C/004682, EMA/OD/156/16, EU/3/17/1828

Vertex Pharmaceuticals (Europe) Ltd.; Treatment of cystic fibrosis

A list of issues was adopted on 21 June 2018.

An oral explanation was held on 17 July 2018.

Second list of issues was adopted by written procedure following its July meeting.

An oral explanation was held on 11 September 2018.

The Committee confirmed that all issues previously identified in this application had been addressed.

An opinion recommending not to remove Symkevi from the EC Register of Orphan Medicinal Products was adopted by consensus.

The orphan maintenance assessment report will be publicly available on the EMA website.

4.2. Orphan designated products for discussion prior to adoption of CHMP opinion

4.2.1. Luxturna - voretigene neparvovec - EMEA/H/C/004451

Spark Therapeutics Ireland Ltd

a) Treatment of retinitis pigmentosa EMA/OD/040/15, EU/3/15/1518

b) Treatment of Leber's congenital amaurosis EMA/OD/150/11, EU/3/12/981

A list of issues was adopted on 19 July 2018.

An oral explanation was held on 12 September 2018.

The Committee confirmed that all issues previously identified in this application had been addressed.

An opinion recommending not to remove Luxturna from the EC Register of Orphan Medicinal Products was adopted by consensus.

The orphan maintenance assessment report will be publicly available on the EMA website.

[Post-meeting note: The COMP adopted opinion by written procedure following its September meeting.]

4.2.2. [Namuscla - mexiletine hcl – EMEA/H/C/004584, EMA/OD/074/14, EU/3/14/1353](#)

LUPIN (EUROPE) LIMITED; Treatment of myotonic disorders

The COMP adopted a list of issues that will be sent to the sponsor to respond in writing.

4.2.3. [- volanesorsen – EMEA/H/C/004538, EMA/OD/180/13, EU/3/14/1249](#)

Akcea Therapeutics UK Ltd; Treatment of familial chylomicronemia syndrome

The status of the procedure at CHMP was noted.

4.2.4. [TAKHZYRO - lanadelumab – EMEA/H/C/004806, EMA/OD/075/15, EU/3/15/1551](#)

Shire Pharmaceuticals Ireland Limited; Treatment of hereditary angioedema

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

[Post-meeting note: The COMP adopted the list of issues by written procedure following its September meeting.]

4.2.5. [- viable t-cells – EMEA/H/C/002397](#)

Kiadis Pharma Netherlands B.V.

a) Treatment in haematopoietic stem cell transplantation EMA/OD/008/16, EU/3/16/1678

b) Treatment of acute myeloid leukaemia EMA/OD/103/14, EU/3/14/1356

c) Prevention of Graft-versus-Host Disease EMA/OD/121/07, EU/3/08/561

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee.

4.2.6. [Jivi - Pegylated B-domain-deleted sequence-modified recombinant human factor VIII – EMEA/H/C/004054, EMA/OD/128/10, EU/3/10/847](#)

Bayer AG; Treatment of haemophilia A

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

4.2.7. [Poteligeo - mogamulizumab – EMEA/H/C/004232, EMA/OD/091/16, EU/3/16/1756](#)

Kyowa Kirin Limited; Treatment of cutaneous T-cell lymphoma

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

4.2.8. Exondys – eteplirsen – EMEA/OD/049/08, EU/3/08/586, EMEA/H/C/004355

AVI Biopharma International Ltd; Treatment of Duchenne muscular dystrophy

The status of the procedure at CHMP was noted.

4.3. Appeal

None

4.4. On-going procedures

COMP co-ordinators were appointed for two applications.

4.5. Orphan Maintenance Reports

Documents were circulated in MMD.

5. Review of orphan designation for authorised orphan medicinal products at time marketing authorisation extension

5.1. After adoption of CHMP opinion

5.1.1. Kalydeco – Ivacaftor - Type II variation - EMEA/H/C/002494/II/0063/G, EMEA/OD/010/08, EU/3/08/556

Vertex Pharmaceuticals; Treatment of cystic fibrosis

CHMP rapporteur: Concepcion Prieto Yerro

A list of issues was adopted on 21 June 2018.

An oral explanation was held on 11 September 2018.

The Committee confirmed that all issues previously identified in this application had been addressed.

An opinion recommending not to remove Kalydeco from the EC Register of Orphan Medicinal Products was adopted by consensus.

The orphan maintenance assessment report will be publicly available on the EMA website.

5.2. Prior to adoption of CHMP opinion

5.2.1. Venclyxto – Venetoclax – Type II variation – EMEA/H/C/004106/II/0008, EMA/OD/124/12, EU/3/12/1080

AbbVie Limited; Treatment of chronic lymphocytic leukaemia

CHMP rapporteur: Filip Josephson;

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

5.2.2. [Rubraca - rucaparib - Type II variation – EMEA/H/C/004272/II/0001, EMA/OD/085/12, EU/3/12/1049](#)

Clovis Oncology UK Limited; Treatment of ovarian cancer

CHMP rapporteur: Jorge Camarero Jiménez

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

5.2.3. [Adcetris - Brentuximab vedotin – Type II variation – EMEA/H/C/002455/II/0055, EMA/OD/073/08, EU/3/08/596](#)

Takeda Pharma A/S; Treatment of Hodgkin lymphoma

CHMP rapporteur: Paula Boudewina van Hennik; CHMP co-rapporteur: Jan Mueller-Berghaus;

The COMP adopted a list of issues that will be sent to the sponsor. The sponsor will be invited to an oral explanation before the Committee at the October meeting.

5.2.4. [Imnovid – pomalidomide - Type II variation – EMEA/OD/053/09, EU/3/09/672, EMEA/H/C/002682/II/0031/G](#)

Celgene Europe Limited; Treatment of multiple myeloma

CHMP rapporteur: Robert James Hemmings

The status of the procedure at CHMP was noted.

5.3. **Appeal**

None

5.4. **On-going procedures**

COMP co-ordinators were appointed for one application.

6. **Application of Article 8(2) of the Orphan Regulation**

None

7. **Organisational, regulatory and methodological matters**

7.1. **Mandate and organisation of the COMP**

7.1.1. [Strategic Review & Learning meetings, 23-24 October 2018, Vienna, Austria](#)

Action: For information

7.1.2. Protocol Assistance Working Group (PAWG)

The working group on Protocol Assistance met on 11 September 2018

7.1.3. Non-Clinical Working Group

Proposed meeting time on 12 September 2018 at 08:30

7.1.4. Election of COMP Chairperson

The European Medicines Agency's (EMA) Committee for Orphan Medicinal Products (COMP) has elected Dr Violeta Stoyanova-Beninska as its new chair for a three-year mandate. She follows Professor Bruno Sepodes who served as COMP chair for two three-year terms, the maximum number allowed.

7.1.5. Condition Working Group

Proposed meeting time on 13 September 2018 at 08:00

7.2. Coordination with EMA Scientific Committees or CMDh-v

7.2.1. Recommendations on eligibility to PRIME – report from CHMP

Document was circulated in MMD.

Document(s) tabled:

PRIME eligibility requests - list of adopted outcomes July 2018

7.2.2. Regulatory Science Engagement Plan to 2025

Scope: presentation of EMA's regulatory science engagement plan

EMA gave presentation on Agency's regulatory science engagement plan to 2025.

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

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

Documents were circulated in MMD.

Document(s) tabled:

Draft Agenda PCWP meeting 25 Sep 2018

Draft Agenda Joint PCWP/HCPWP meeting 25 Sep 2018

Draft Agenda HCPWP meeting 26 Sep 2018

7.3.2. Working Party with Healthcare Professionals' Organisations (HCPWP)

Document was circulated in MMD.

Document(s) tabled:

Draft Agenda HCPWP meeting 26 Sep 2018

7.4. Cooperation within the EU regulatory network

7.4.1. European Commission

None

7.5. Cooperation with International Regulators

7.5.1. Food and Drug Administration (FDA)

None

7.5.2. Japanese Pharmaceuticals and Medical Devices Agency (PMDA)

None

7.5.3. The Therapeutic Goods Administration (TGA), Australia

None

7.5.4. Health Canada

None

7.6. Contacts of the COMP with external parties and interaction with the Interested Parties to the Committee

None

7.7. COMP work plan

None

7.8. Planning and reporting

7.8.1. List of all applications submitted/expected and the COMP rapporteurship distribution of valid applications submitted in 2018

An updated list of all applications submitted/expected and the COMP rapporteurship distribution of valid applications submitted in 2018 were circulated.

7.8.2. Overview of orphan marketing authorisations/applications

An updated overview of orphan applications for Marketing Authorisation was circulated.

8. Any other business

8.1. Telematics - Concept paper on strategy 2020-2025

Presentation on Concept paper on strategy 2020-2025 was given and the Committee was invited for written comments.

8.2. EMA Business Pipeline activity and Horizon scanning

Document was circulated in MMD.

Document tabled:

Q3/2018 Update of the Business Pipeline report for the human scientific committees

List of participants

List of participants including any restrictions with respect to involvement of members / experts following evaluation of declared interests for the 11-13 September 2018 meeting.

| Name | Role | Member state or affiliation | Outcome restriction following evaluation of e-DoI | Topics on agenda for which restrictions apply |
|----------------------------|--------|-----------------------------|---|---|
| Bruno Sepodes | Chair | Expert recommended by EMA | No interests declared | |
| Brigitte Blöchl-Daum | Member | Austria | No interests declared | |
| Lyubina Racheva Todorova | Member | Bulgaria | No interests declared | |
| Dinko Vitezic | Member | Croatia | No restrictions applicable to this meeting | |
| Elena Kaisis | Member | Cyprus | No interests declared | |
| Katerina Kopeckova | Member | Czech Republic | No restrictions applicable to this meeting | |
| Vallo Tillmann | Member | Estonia | No interests declared | |
| Karri Penttilä | Member | Finland | No interests declared | |
| Annie Lorence | Member | France | No interests declared | |
| Frauke Naumann-Winter | Member | Germany | No interests declared | |
| Nikolaos Sypsas | Member | Greece | No restrictions applicable to this meeting | |
| Armando Magrelli | Member | Italy | No interests declared | |
| Irena Rogovska | Member | Latvia | No interests declared | |
| Aušra Matulevičienė | Member | Lithuania | No interests declared | |
| Michel Hoffmann | Member | Luxembourg | No interests declared | |
| Robert Nistico | Member | Malta | No interests declared | |
| Violeta Stoyanova-Beninska | Member | Netherlands | No interests declared | |

| Name | Role | Member state or affiliation | Outcome restriction following evaluation of e-Dol | Topics on agenda for which restrictions apply |
|----------------------------|--------|---------------------------------------|--|--|
| Ingrid Wang | Member | Norway | No interests declared | |
| Bożenna Dembowska-Bagińska | Member | Poland | No restrictions applicable to this meeting | |
| Dinah Duarte | Member | Portugal | No interests declared | |
| Olimpia Neagu | Member | Romania | No interests declared | |
| Eva Malikova | Member | Slovak Republic | No interests declared | |
| Martin Mozina | Member | Slovenia | No interests declared | |
| Fernando Mendez Hermida | Member | Spain | No interests declared | |
| Darius Matusevicius | Member | Sweden | No restrictions applicable to this meeting | |
| Daniel O'Connor | Member | United Kingdom | No interests declared | |
| Pauline Evers | Member | Patients' Organisation Representative | No interests declared | |
| Julian Isla | Member | Patients' Organisation Representative | No interests declared | |
| Angelo Brunetta | Member | Patients' Organisation Representative | No participation in discussion, final deliberations and voting on: | <ul style="list-style-type: none"> - EMA/OD/121/18; Treatment of follicular lymphoma - EMA/OD/124/18; Treatment of primary mediastinal large-B-cell lymphoma Imnovid – pomalidomide - Type II variation – EMEA/OD/053/09, EU/3/09/672, EMEA/H/C/002682/11/00 31/G; Celgene Europe Limited; Treatment of multiple myeloma |
| Ingeborg Barisic | Member | Expert recommended by EMA | No restrictions applicable to this meeting | |
| Giuseppe Capovilla | Member | Expert recommended by EMA | No interests declared | |

| Name | Role | Member state or affiliation | Outcome restriction following evaluation of e-Dol | Topics on agenda for which restrictions apply |
|--|-------------------------|-----------------------------|---|---|
| M del Carmen T Ayuso | Expert witness-via TC * | | | |
| A representative from the European Commission attended the meeting | | | | |
| Meeting run with support from relevant EMA staff | | | | |

* Experts were only evaluated against the agenda topics or activities they participated in.

Explanatory notes

The notes below give a brief explanation of the main sections and headings in the COMP agenda and should be read in conjunction with the agenda or the minutes.

Abbreviations / Acronyms

CHMP: Committee for Medicinal Product for Human Use

COMP: Committee for Orphan Medicinal Products

EC: European Commission

OD: Orphan Designation

PA: Protocol Assistance

PDCO: Paediatric Committee

PRAC: Pharmacovigilance and Risk Assessment Committee

SA: Scientific Advice

SAWP: Scientific Advice Working Party

Orphan Designation *(section 2 Applications for orphan medicinal product designation)*

The orphan designation is the appellation given to certain medicinal products under development that are intended to diagnose, prevent or treat rare conditions when they meet a pre-defined set of criteria foreseen in the legislation. Medicinal products which get the orphan status benefit from several incentives (fee reductions for regulatory procedures (including protocol assistance), national incentives for research and development, 10-year market exclusivity) aiming at stimulating the development and availability of treatments for patients suffering from rare diseases.

Orphan Designations are granted by Decisions of the European Commission based on opinions from the COMP. Orphan designated medicinal products are entered in the Community Register of Orphan Medicinal Products.

Protocol Assistance *(section 3 Requests for protocol assistance with significant benefit question)*

The protocol assistance is the help provided by the Agency to the sponsor of an orphan medicinal product, on the conduct of the various tests and trials necessary to demonstrate the quality, safety and efficacy of the medicinal product in view of the submission of an application for marketing authorisation.

Sponsor

Any legal or physical person, established in the Community, seeking to obtain or having obtained the designation of a medicinal product as an orphan medicinal product.

Maintenance of Orphan Designation *(section 4 Review of orphan designation for orphan medicinal products for marketing authorisation).*

At the time of marketing authorisation, the COMP will check if all criteria for orphan designation are still met. The designated orphan medicinal product should be removed from the Community Register of Orphan Medicinal Products if it is established that the criteria laid down in the legislation are no longer met.

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