

## Stayveer

Procedural steps taken and scientific information after the authorisation

| Application<br>number | Scope  | Opinion/<br>Notification <sup>1</sup><br>issued on | Commission<br>Decision<br>Issued <sup>2</sup> /<br>amended<br>on | Product<br>Information<br>affected <sup>3</sup> | Summary |
|-----------------------|--|--|--|---|---------|
| N/0042                | Minor change in labelling or package leaflet not connected with the SPC (Art. 61.3 Notification)           | 22/10/2024   |  | PL  |         |
| IG/1738/G             | This was an application for a group of variations.<br>B.II.a.4.a - Change in coating weight of oral dosage | 16/05/2024   |  | SmPC and PL                                     |         |

<sup>&</sup>lt;sup>1</sup> Notifications are issued for type I variations and Article 61(3) notifications (unless part of a group including a type II variation or extension application or a worksharing application). Opinions are issued for all other procedures.

<sup>3</sup> SmPC (Summary of Product Characteristics), Annex II, Labelling, PL (Package Leaflet).



<sup>&</sup>lt;sup>2</sup> A Commission decision (CD) is issued for procedures that affect the terms of the marketing authorisation (e.g. summary of product characteristics, annex II, labelling, package leaflet). The

CD is issued within two months of the opinion for variations falling under the scope of Article 23.1a(a) of Regulation (EU) No. 712/2012, or within one year for other procedures.

|         | forms or change in weight of capsule shells - Solid<br>oral pharmaceutical forms<br>B.II.a.1.a - Change or addition of imprints, bossing<br>or other markings including replacement, or addition<br>of inks used for product marking - Changes in<br>imprints, bossing or other markings   |            |            |                              |  |
|---------|--|------------|------------|------------------------------|--|
| WS/2583 | <ul> <li>This was an application for a variation following a worksharing procedure according to Article 20 of Commission Regulation (EC) No 1234/2008.</li> <li>Update of section 4.6 of the SmPC to update the wording concerning breast feeding based on literature and post marketing data. The Package Leaflet is updated accordingly. In addition, the MAH took the opportunity to update the list of local representatives in the Package Leaflet.</li> <li>C.I.4 - Change(s) in the SPC, Labelling or PL due to new quality, preclinical, clinical or pharmacovigilance data</li> </ul> | 08/02/2024 |            | SmPC,<br>Labelling and<br>PL | Section 4.6 of the SmPC has been updated to state that<br>data from a case report describe the presence of bosentan<br>in human milk in a low concentration. There is insufficient<br>information about the effects of bosentan on the breastfed<br>infant. A risk to the breastfed infant cannot be excluded.<br>Breast-feeding is not recommended during treatment with<br>bosentan.<br>For more information, please refer to the Summary of<br>Product Characteristics. |
| IG/1619 | A.4 - Administrative change - Change in the name<br>and/or address of a manufacturer or an ASMF holder<br>or supplier of the AS, starting material, reagent or<br>intermediate used in the manufacture of the AS or<br>manufacturer of a novel excipient   | 11/07/2023 | n/a        |                              |  |
| WS/2404 | This was an application for a variation following a worksharing procedure according to Article 20 of Commission Regulation (EC) No 1234/2008.  | 09/02/2023 | 16/02/2024 | SmPC,<br>Labelling and<br>PL |  |

|                      | B.II.f.1.d - Stability of FP - Change in storage conditions of the finished product or the diluted/reconstituted product  |            |            |                          |   |
|----------------------|---|------------|------------|--------------------------|---|
| IG/1538              | A.4 - Administrative change - Change in the name<br>and/or address of a manufacturer or an ASMF holder<br>or supplier of the AS, starting material, reagent or<br>intermediate used in the manufacture of the AS or<br>manufacturer of a novel excipient  | 08/08/2022 | n/a        |                          |   |
| W5/2260              | This was an application for a variation following a<br>worksharing procedure according to Article 20 of<br>Commission Regulation (EC) No 1234/2008.<br>B.I.a.1.z - Change in the manufacturer of AS or of a<br>starting material/reagent/intermediate for AS - Other<br>variation   | 07/07/2022 | n/a        |                          |   |
| PSUSA/425/2<br>02111 | Periodic Safety Update EU Single assessment -<br>bosentan   | 10/06/2022 | n/a        |                          | PRAC Recommendation - maintenance   |
| WS/2052/G            | This was an application for a group of variations<br>following a worksharing procedure according to<br>Article 20 of Commission Regulation (EC) No<br>1234/2008.<br>Grouped variation application;<br>• Type II variation C.I.4: Update of section<br>4.6 of the SmPC to correct the information related to<br>male fertility based on a review of study AC-052-402<br>carried out by the MAH.<br>• Type IA variation, A.7: Deletion of a batch | 10/06/2021 | 07/06/2022 | SmPC, Annex<br>II and PL | The information regarding the clinical study of bosentan in<br>men with PAH (AC-052-402) has been updated regarding<br>the proportion of subjects with a decreased sperm<br>concentration of at least 50% from baseline after 6 months<br>of treatment.<br>For more information, please refer to the Summary of<br>Product Characteristics. |

|                      | release site Actelion Manufacturing GmbH, Grenzach-<br>Wyhlen, Germany.<br>In addition, the WSA took the opportunity to update<br>the list of local representatives in the Package<br>Leaflet. The WSA also took the opportunity to<br>correct some errors in the national translations.<br>A.7 - Administrative change - Deletion of<br>manufacturing sites<br>C.I.4 - Change(s) in the SPC, Labelling or PL due to<br>new quality, preclinical, clinical or pharmacovigilance<br>data |            |            |                     |                                   |
|----------------------|---|------------|------------|---------------------|-----------------------------------|
| PSUSA/425/2<br>02011 | Periodic Safety Update EU Single assessment -<br>bosentan   | 10/06/2021 | n/a        |                     | PRAC Recommendation - maintenance |
| N/0032               | Minor change in labelling or package leaflet not connected with the SPC (Art. 61.3 Notification)  | 23/09/2020 | 07/06/2022 | Labelling and<br>PL |                                   |
| PSUSA/425/2<br>01911 | Periodic Safety Update EU Single assessment -<br>bosentan   | 11/06/2020 | n/a        |                     | PRAC Recommendation - maintenance |
| IAIN/0031/G          | This was an application for a group of variations.<br>B.II.b.1.a - Replacement or addition of a<br>manufacturing site for the FP - Secondary packaging<br>site<br>B.II.b.2.c.1 - Change to importer, batch release<br>arrangements and quality control testing of the FP -<br>Replacement or addition of a manufacturer<br>responsible for importation and/or batch release -<br>Not including batch control/testing  | 10/04/2020 | 15/09/2020 | Annex II and<br>PL  |                                   |

| IA/0029 | B.I.b.1.b - Change in the specification parameters<br>and/or limits of an AS, starting<br>material/intermediate/reagent - Tightening of<br>specification limits  | 12/12/2019 | n/a        |  |  |
|---------|--|------------|------------|--|--|
| II/0028 | Update of section 4.2 of the SmPC in order to include<br>that patients should be given the Package Leaflet<br>and the Patient Alert Card which are included in the<br>pack and update of annex II.D to remove the<br>Prescriber kit from the additional risk minimisation<br>measures and also to remove the obligation to<br>implement a formal "Controlled Distribution System"<br>in EU countries following the assessment of LEG<br>10.2. The RMP version 11 has also been submitted.<br>In addition, the Marketing authorisation holder<br>(MAH) took the opportunity to update the contact<br>details of the local representative in the UK, to bring<br>the PI in line with the latest QRD template version<br>10, and with the guideline on Excipients in the<br>labelling and package leaflet of medicinal products<br>for human use (EMA/CHMP/302620/2017), and to<br>implement some corrections to the Bulgarian<br>translations. | 05/09/2019 | 15/09/2020 | SmPC, Annex<br>II, Labelling<br>and PL |  |
| II/0027 | Submission of the final report from study AC-052-<br>516 (a category 1 study). This is a non-interventional<br>observational study of the disease characteristics and  | 11/07/2019 | 15/09/2020 | Annex II                               |  |

|                      | outcomes of Pulmonary Arterial Hypertension in<br>children and adolescents in real-world clinical<br>settings. Annex IID is updated accordingly.<br>An updated RMP version 10 has was agreed during<br>the procedure.<br>C.I.11.b - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Implementation of<br>change(s) which require to be further substantiated<br>by new additional data to be submitted by the MAH<br>where significant assessment is required |            |            |                              |                                   |
|----------------------|--|------------|------------|------------------------------|-----------------------------------|
| PSUSA/425/2<br>01811 | Periodic Safety Update EU Single assessment -<br>bosentan  | 14/06/2019 | n/a        |                              | PRAC Recommendation - maintenance |
| T/0025               | Transfer of Marketing Authorisation  | 08/02/2019 | 11/03/2019 | SmPC,<br>Labelling and<br>PL |                                   |
| IA/0024/G            | This was an application for a group of variations.<br>B.I.b.1.b - Change in the specification parameters<br>and/or limits of an AS, starting<br>material/intermediate/reagent - Tightening of<br>specification limits<br>B.I.b.1.d - Change in the specification parameters<br>and/or limits of an AS, starting<br>material/intermediate/reagent - Deletion of a non-<br>significant specification parameter (e.g. deletion of<br>an obsolete parameter)   | 08/08/2018 | n/a        |                              |                                   |

| II/0023              | Update of Annex II.D and the RMP (version 9.2)<br>following the submission of the final (13th) study<br>report of the DUO Registry (a Category 3 non-<br>interventional post-approval safety study and<br>additional risk minimisation measure in the bosentan<br>European Risk Management Plan). The MAH took the<br>opportunity to include some editorial changes in the<br>SmPC and to update the list of local representatives<br>in the PL.<br>C.I.11.b - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Implementation of<br>change(s) which require to be further substantiated<br>by new additional data to be submitted by the MAH<br>where significant assessment is required | 12/07/2018 | 11/03/2019 | SmPC, Annex<br>II and PL |  |
|----------------------|---|------------|------------|--------------------------|--|
| PSUSA/425/2<br>01711 | Periodic Safety Update EU Single assessment -<br>bosentan   | 14/06/2018 | n/a        |                          | PRAC Recommendation - maintenance  |
| R/0021               | Renewal of the marketing authorisation.   | 09/11/2017 | 08/01/2018 |                          | Based on the review of data on quality, safety and efficacy,<br>the CHMP considered that the benefit-risk balance of<br>Stayveer in the approved indication remains favourable and<br>therefore recommended the renewal of the marketing<br>authorisation with unlimited validity. |
| PSUSA/425/2<br>01611 | Periodic Safety Update EU Single assessment -<br>bosentan   | 20/07/2017 | 26/09/2017 | SmPC and PL              | Refer to Scientific conclusions and grounds recommending<br>the variation to terms of the Marketing Authorisation(s)' for<br>PSUSA/425/201611.   |
| IB/0018/G            | This was an application for a group of variations.<br>B.I.d.1.a.1 - Stability of AS - Change in the re-test   | 25/09/2017 | n/a        |                          |  |

|                      | period/storage period - Reduction<br>B.I.d.1.b.3 - Stability of AS - Change in the storage<br>conditions - Change in storage conditions of the AS  |            |            |  |  |
|----------------------|--|------------|------------|--|--|
| IA/0020/G            | This was an application for a group of variations.<br>A.7 - Administrative change - Deletion of<br>manufacturing sites<br>A.7 - Administrative change - Deletion of<br>manufacturing sites<br>A.7 - Administrative change - Deletion of<br>manufacturing sites   | 04/08/2017 | n/a        |  |  |
| IA/0019              | A.7 - Administrative change - Deletion of<br>manufacturing sites   | 04/08/2017 | n/a        |  |  |
| IB/0017              | C.I.z - Changes (Safety/Efficacy) of Human and<br>Veterinary Medicinal Products - Other variation  | 21/05/2017 | 26/09/2017 | SmPC, Annex<br>II, Labelling<br>and PL |  |
| PSUSA/425/2<br>01511 | Periodic Safety Update EU Single assessment -<br>bosentan  | 21/07/2016 | 22/09/2016 | SmPC and PL                            | Refer to Scientific conclusions and grounds recommending<br>the variation to terms of the Marketing Authorisation(s)' for<br>PSUSA/425/201511. |
| IB/0015/G            | This was an application for a group of variations.<br>B.II.e.1.b.1 - Change in immediate packaging of the<br>finished product - Change in type/addition of a new<br>container - Solid, semi-solid and non-sterile liquid<br>pharmaceutical forms<br>B.II.e.1.b.1 - Change in immediate packaging of the<br>finished product - Change in type/addition of a new<br>container - Solid, semi-solid and non-sterile liquid | 15/09/2016 | 26/09/2017 | SmPC,<br>Labelling and<br>PL           |  |

| IG/0665B.II.d.2.a - Change in test procedure for the finished<br>product - Minor changes to an approved test<br>procedure10/03/2016n/aWS/0899/GThis was an application for a group of variations<br>following a worksharing procedure according to<br>Article 20 of Commission Regulation (EC) No<br>1234/2008.25/02/201622/09/2016SmPC, Annex<br>II, Labelling<br>and PLSubmission of a revised RMP in order to align the<br>additional risk minimisation measures of three safety<br>concerns (`Pulmonary oedema associated with veno-<br>occlusive disease', `Interaction with sildenafil' and<br>`Interaction with antiretrovirals'), with the<br>requirements defined in Annex II of the Marketing<br>Authorisation. The RMP is also being updated with<br>the to outcome of previous procedures and other<br>corrections. In addition, Annex II has been modified<br>to reflect that the submission cycle of interim reports<br>of the paediatric registries should be 3-yearly.<br>Furthermore, the MAH took the opportunity to align<br>the product information with the latest QRD template<br>version 9.1 and to update the list of local<br>representatives in the package leaflet.C.I.11.b - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Implementation of<br>change(s) which require to be further substantiated10/03/2016n/aN/a |           | pharmaceutical forms  |            |            |               |
|--|-----------|---|------------|------------|---------------|
| following a worksharing procedure according to       II, Labelling         Article 20 of Commission Regulation (EC) No       1234/2008.         Submission of a revised RMP in order to align the       additional risk minimisation measures of three safety         concerns (`Pulmonary oedema associated with veno-occlusive disease', `Interaction with sildenafil' and `Interaction with antiretrovirals'), with the       requirements defined in Annex II of the Marketing         Authorisation. The RMP is also being updated with       the outcome of previous procedures and other       representatives in the submission cycle of interim reports         of the paediatric registries should be 3-yearly.       Furthermore, the MAH took the opportunity to align       the product information with the latest QRD template         version 9.1 and to update the list of local       representatives in the package leaflet.       C.1.11.b - Introduction of, or change(s) to, the         obligations and conditions of a marketing       authorisation, including the RMP - Implementation of       change(s) which require to be further substantiated  | IG/0665   | product - Minor changes to an approved test   | 10/03/2016 | n/a        |               |
| by new additional data to be submitted by the MAH  | WS/0899/G | following a worksharing procedure according to<br>Article 20 of Commission Regulation (EC) No<br>1234/2008.<br>Submission of a revised RMP in order to align the<br>additional risk minimisation measures of three safety<br>concerns (`Pulmonary oedema associated with veno-<br>occlusive disease', `Interaction with sildenafil' and<br>`Interaction with antiretrovirals'), with the<br>requirements defined in Annex II of the Marketing<br>Authorisation. The RMP is also being updated with<br>the outcome of previous procedures and other<br>corrections. In addition, Annex II has been modified<br>to reflect that the submission cycle of interim reports<br>of the paediatric registries should be 3-yearly.<br>Furthermore, the MAH took the opportunity to align<br>the product information with the latest QRD template<br>version 9.1 and to update the list of local<br>representatives in the package leaflet. | 25/02/2016 | 22/09/2016 | II, Labelling |

|                      | where significant assessment is required<br>C.I.11.z - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Other variation<br>C.I.11.z - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Other variation<br>C.I.11.z - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Other variation<br>C.I.11.z - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Other variation<br>C.I.11.z - Introduction of, or change(s) to, the<br>obligations and conditions of a marketing<br>authorisation, including the RMP - Other variation |            |            |                          |  |
|----------------------|---|------------|------------|--------------------------|--|
| PSUSA/425/2<br>01411 | Periodic Safety Update EU Single assessment -<br>bosentan   | 25/06/2015 | 20/08/2015 | SmPC and PL              | Refer to Scientific conclusions and grounds recommending<br>the variation to terms of the Marketing Authorisation(s)' for<br>PSUSA/425/201411. |
| II/0011              | Update of SmPC sections 4.2, 4.5, 4.6, 4.8, 5.1, 5.2<br>and 5.3 to reflect non-clinical and clinical data<br>generated in studies conducted according to the<br>agreed Paediatric Investigation Plan for bosentan<br>(EMEA-000425-PIP02-10-M04) in line with<br>application II-66 for Tracleer (bosentan) approved by<br>CHMP in November 2014. The Annex II and the<br>Package Leaflet have been updated accordingly.<br>Further, the MAH took the opportunity to make<br>editorial changes in the SmPC and to update the<br>contact details of the local representatives in the<br>Package Leaflet. In addition, taking into account the<br>new data in the paediatric population, an updated<br>version of the RMP (version 7) aligned with RMP  | 25/06/2015 | 28/07/2015 | SmPC, Annex<br>II and PL | For further information, please refer to the scientific<br>discussion 'Stayveer-H-C-2644-II-11'.   |

|           | version 7 for Tracleer was provided.<br>C.I.6.a - Change(s) to therapeutic indication(s) -<br>Addition of a new therapeutic indication or<br>modification of an approved one   |            |            |                              |                                   |
|-----------|--|------------|------------|------------------------------|-----------------------------------|
| N/0009    | Minor change in labelling or package leaflet not connected with the SPC (Art. 61.3 Notification)   | 13/06/2014 | 19/12/2014 | PL                           |                                   |
| PSUV/0006 | Periodic Safety Update   | 12/06/2014 | n/a        |                              | PRAC Recommendation - maintenance |
| IG/0441/G | This was an application for a group of variations.<br>B.I.a.2.a - Changes in the manufacturing process of<br>the AS - Minor change in the manufacturing process<br>of the AS<br>B.I.a.2.a - Changes in the manufacturing process of<br>the AS - Minor change in the manufacturing process<br>of the AS<br>B.II.b.3.a - Change in the manufacturing process of<br>the finished or intermediate product - Minor change<br>in the manufacturing process<br>B.II.b.3.a - Change in the manufacturing process of<br>the finished or intermediate product - Minor change<br>in the manufacturing process<br>B.II.b.3.a - Change in the manufacturing process of<br>the finished or intermediate product - Minor change<br>in the manufacturing process | 23/05/2014 | n/a        |                              |                                   |
| IB/0007/G | This was an application for a group of variations.<br>B.II.e.5.a.2 - Change in pack size of the finished<br>product - Change in the number of units (e.g.<br>tablets, ampoules, etc.) in a pack - Change outside<br>the range of the currently approved pack sizes   | 10/04/2014 | 19/12/2014 | SmPC,<br>Labelling and<br>PL |                                   |

|           | B.II.e.5.a.2 - Change in pack size of the finished<br>product - Change in the number of units (e.g.<br>tablets, ampoules, etc.) in a pack - Change outside<br>the range of the currently approved pack sizes  |            |            |                              |  |
|-----------|---|------------|------------|------------------------------|--|
| II/0003   | To replace sites responsible for manufacture of active<br>substance.<br>B.I.a.1.z - Change in the manufacturer of AS or of a<br>starting material/reagent/intermediate for AS - Other<br>variation  | 20/02/2014 | n/a        |                              |  |
| IB/0005/G | This was an application for a group of variations.<br>C.I.2.a - Change in the SPC, Labelling or PL of a<br>generic/hybrid/biosimilar products following<br>assessment of the same change for the reference<br>product - Implementation of change(s) for which NO<br>new additional data is required to be submitted by<br>the MAH<br>C.I.8.a - Introduction of or changes to a summary of<br>Pharmacovigilance system - Changes in QPPV<br>(including contact details) and/or changes in the<br>PSMF location | 09/02/2014 | 19/12/2014 | SmPC,<br>Labelling and<br>PL |  |
| IAIN/0004 | B.II.b.2.c.2 - Change to importer, batch release<br>arrangements and quality control testing of the FP -<br>Including batch control/testing   | 08/01/2014 | 19/12/2014 | Annex II and<br>PL           |  |
| IG/0352/G | This was an application for a group of variations.<br>B.II.d.1.a - Change in the specification parameters   | 05/09/2013 | n/a        |                              |  |

| and/or limits of the finished product - Tightening of  |  |  |  |
|--|--|--|--|
| specification limits                                   |  |  |  |
| B.II.d.2.a - Change in test procedure for the finished |  |  |  |
| product - Minor changes to an approved test            |  |  |  |
| procedure  |  |  |  |
|  |  |  |  |