



## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

## Product Review

**Fasenra (benralizumab) 30 mg**  
**AstraZeneca AB, Sweden BioManufacturing Center (SBC)**

**14 Nov 2022 to 13 Nov 2023**

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

## Table of Contents

<b>1</b>	<b>Summary and Conclusion .....</b>	<b>3</b>
<b>2</b>	<b>Batches Reviewed, Approved and Rejected .....</b>	<b>10</b>
<b>3</b>	<b>Reprocessed and Reworked Batches.....</b>	<b>11</b>
<b>4</b>	<b>Product Reviews from Previous Manufacturing Stage(s) .....</b>	<b>13</b>
<b>5</b>	<b>Critical (Key) Starting and Packaging Materials.....</b>	<b>14</b>
<b>6</b>	<b>Analytical Data .....</b>	<b>17</b>
6.1	Drug Product (DP).....	18
6.2	Finished Pack (FP).....	19
<b>7</b>	<b>Changes.....</b>	<b>22</b>
7.1	Changes.....	22
7.2	Marketing Authorization Variations .....	22
7.3	Post-Marketing Commitments .....	22
<b>8</b>	<b>Stability Data .....</b>	<b>23</b>
8.1	Stability Studies.....	23
8.2	Trends and Out of Spec Results.....	23
<b>9</b>	<b>Deviations.....</b>	<b>24</b>
<b>10</b>	<b>Complaints (Product Quality).....</b>	<b>25</b>
<b>11</b>	<b>Recalls, Stock Recoveries, Field Alert Reports (FAR) / Biological Product Deviation Reports (BPDR) .....</b>	<b>27</b>
<b>12</b>	<b>Returned and Salvaged Goods .....</b>	<b>28</b>
<b>13</b>	<b>Contractual Agreements / Arrangements.....</b>	<b>29</b>
<b>14</b>	<b>Qualification Status of Relevant Equipment and Utilities .....</b>	<b>31</b>
<b>15</b>	<b>Other .....</b>	<b>33</b>
15.1	Visual Examination of Reserve Samples .....	33
15.2	Regulatory Inspections Completed.....	33
15.3	Site Compliance Improvement Plan .....	33
15.4	EU Technical Justification of Sampling Review .....	33
15.5	Transportation Quality Events .....	33
15.6	Shipping Validation Activities.....	34
15.7	Process Validation Activities.....	34
<b>16</b>	<b>Revision History .....</b>	<b>35</b>
<b>17</b>	<b>Appendices.....</b>	<b>36</b>
17.1	Appendix 1: Reference Numbers.....	36
17.2	Appendix 2: Batches Reviewed.....	37
17.3	Appendix 3: Starting and Packaging Material Batches Reviewed .....	40
17.4	Appendix 4: Analytical Data – CPV Report.....	42
17.5	Appendix 5: Changes .....	43
17.6	Appendix 6: Deviations.....	46

# Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

## 1 Summary and Conclusion

The scope of this Product Review covers [Fasenra \(benralizumab\) 30 mg](#) pre-filled syringe sub-assembly (PFS-SA), accessorized pre-filled syringe (APFS) and Autoinjector (AI) operations for QA released Fasenra 30 mg batches for the period [14 Nov 2022](#) to [13 Nov 2023](#) at [AstraZeneca AB, Sweden BioManufacturing Center \(SBC\)](#)

This Product Review is a local review for Fasenra 30 mg PFS-SA, AFPS and AI with the purpose to provide input to and having all applicable information of the product being gathered and specified into an Integrated Summary Product Review (ISPR) issued by AstraZeneca Global Technical Operations. The purpose of this review is also to fulfil requirements as is specified for Product Reviews in Eudralex Annex 21.

This report covers manufactured drug product and finished pack as well as the analysis and release of batches imported to EU. Product reviews are required for products with a marketing authorization. This PR covers the review period 14 Nov 2022 until 13 Nov 2023.

This product review provides documented evidence that during this period the processes used to manufacture and or package this product remained under a state of control and that the validation status has been maintained and is compliant with registered specifications.

This review identified no recommendations for improvement.

**A summary of this review can be found below:**

Batches Reviewed, Approved & Rejected
<p>There were in total eightytwo (82) batches dispositioned during the review period. There were eightytwo (82) batches approved and zero (0) batches fully or partially rejected during the review period. The split between imported and manufactured batches that have been dispositioned are fortynine (49) imported FP batches and thirtythree (33) manufactured batches (19 FP and 14 Bulk Pack batches).</p> <p>Compared with the previous review the number of batches rejected has:</p> <p><input type="checkbox"/> Decreased    <input checked="" type="checkbox"/> Remained Unchanged    <input type="checkbox"/> Increased</p> <p>Since the previous period, it has been an increase in the number of released batches by 21% (from sixtyeight (68) previous period to eightytwo (82) in this period). The increase is attributable to increased number of batches thirtythree (33) manufactured at SBC compared to thirteen (13) batches previous period. The number of EU import batches fortynine (49) is lower than previous period fiftyfive (55).</p> <p>Zero (0) batches were fully rejected compared to two (2) partially rejected intermediate batches (filled syringes) and one (1) partially rejected EU Import Finished Pack batch during the previous period.</p> <p>Based on this review of batches reviewed, approved and rejected:</p> <p><input checked="" type="checkbox"/> There is no evidence noted of a trend to indicate a quality or system issue.</p> <p><input type="checkbox"/> A trend indicating a quality or system issue has been identified.</p>

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### Reprocessed & Reworked Batches

There were two (2) batches subject to reprocessing or rework during the review period. The reprocessing were performed on semi-finished DP. Compared to previous period the number of reprocessed DP batches are at the same level taking into account the increased number of batches produced, twelve (12) semi-finished DP batches compared to seven (7) batches during previous period.

Based on this review of batches reprocessed or reworked:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.
- ☐ A trend indicating a quality or system issue has been identified.

Reprocessing of final bulk is an established and regulatory approved process and no further actions are needed.

### Product Reviews from Previous Manufacturing Stage(s)

This section is not applicable in this report as an Integrated Summary Product Review, which considers all steps and sites involved in the Drug Substance and Drug Product manufacturing process, will be issued after the individual site reports are approved.

### Starting and Packaging Materials

The starting materials and packaging components have all been purchased in accordance with registered specifications.

Testing of these materials by both the supplier and AstraZeneca has:

- ☐ Confirmed that all batches delivered met the registered specification, there were no rejections of materials.
- ☒ Identified that not all batches delivered met the registered specification, there were rejections of materials.

A total of sixty-nine (69) batches were reviewed during the period 14 Nov 2022 until 13 Nov 2023. One (1) batch were rejected and the material was not released for commercial manufacturing. All batches reviewed during the review period are listed in Appendix 3 for Starting and Packaging Material Batches Reviewed.

Booklet batch 284691 article number 110029458 has been rejected due not meeting specification in incoming testing. Lab investigation QE-084171 was raised for this deviation which resulted in a complaint against supplier to determine root cause, see supplier deviation QE-086488.

During the review period, any issues identified with materials were managed as complaints or deviations, investigated, CAPA agreed and addressed, as applicable.

Based on this review of materials:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.
- ☐ A trend indicating a quality or system issue has been identified.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### Analytical Data

This evaluation is based on a review of analytical data from DP batches manufactured at SBC and imported FP batches. A disposition decision was made for all batches meeting registered specification to release for distribution.

There were:

- ☐ No batches outside of registered specification (OOS) during the review period.
- ☒ Results outside of registered specification (OOS) during the review period.

One confirmed OOS (QE-084993) for Osmolality was registered for the Excipient Addition Buffer (EAB) lot MAGG during the review period. The deviation was detected during manufacturing (QE-084289) and the samples was sent to QC and analyzed before a decision to reject the batch was made. The buffer lot MAGG was not used for further processing.

Based on the review of OOS results:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.
- ☐ A trend(s) indicating a quality or system issue has been identified.

The risk based process metrics established at the site:

- ☒ Confirm the capability of the process for the finished product and critical in-process attributes, continues to operate in line with the requirements established during either initial validation or with Continued Process Verification.
- ☐ The risk based process metrics at the site indicated a concern with the capability of the process.

Real time trending tools were deployed to assure process capability during this time period. Trending signals were identified and actioned via the OOT investigations process (section 9.0).

Appropriate process metrics deployed as part of Continued Process Verification:

- ☒ Confirm the capability and stability of the process for the product (including critical in-process parameters / attributes) to assure the process operated under control.
- ☐ Are used to confirm the capability and stability of the process for the product (including critical in-process parameters / attributes) during this review period. The issues identified (poor capability or stability of the process or any trends) were managed as part of the CPV process and investigated at the time they arose with CAPA agreed.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### Changes

There were fortysix (46) changes implemented, risk assessed and managed by the site during the review period. These changes were managed in accordance with site change control procedures. Each record is individually reviewed by the impacted departments and assessed for the impact to product quality.

The impacts of these changes on the product was assessed through evaluation of compliance to registered specification and no adverse effects were observed.

The accumulation of minor / incremental changes has also been considered and there is no additional action needed.

The number of changes impacting on the site is assessed during the site Management Review process which assures that the capacity of the site to respond effectively to change is actively managed.

### Stability Data

The Fasenra/benralizumab stability program is consistent with ICH guidelines (including Q1A and Q5C) and other applicable regulatory expectations. The completed stability studies of DP continue to support the shelf life claims in all current licenses.

### Deviations

There were zero (0) critical and nine (9) major deviations raised, risk assessed and managed by the site during the review period. These deviations were managed in accordance with site deviation procedures.

Compared with the previous review the number of deviations has:

☒ Decreased      ☐ Remained Unchanged      ☐ Increased

Compared to previous review, there is a decrease of the total number of deviations.

The number of deviations impacting on the site, together with trend analysis, is assessed during the Site Management Review process. This assures the site actively manages the capability to respond to deviations.

Based on this review of deviations:

☒ There is no evidence of a trend to indicate a quality or system issue.  
☐ A trend(s) indicating a quality or system issue has been identified.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### Complaints

There were six (6) Product Quality Complaints raised, risk assessed and managed by the site during the review period. These complaints were managed in accordance with site complaints procedures.

Compared with the previous review the number of complaints has:

- ☐ Decreased    ☐ Remained Unchanged    ☒ Increased

The number of complaints received has increased compared to previous period, however the previous period was the first review including FP manufactured at SBC and the increase is reflecting a delay between approval and batches on the market.

The number of complaints impacting on the site, together with trend analysis, is reviewed during the site Management Review process. This assures the site actively manages the capability to respond to complaints.

Based on this review of complaints:

- ☒ There is no evidence of a trend to indicate a quality or system issue.  
☐ A trend(s) indicating a quality or system issue has been identified.

### Recalls, Stock Recoveries, Field Alerts

#### Recalls

- ☒ No recalls of product released for distribution have been made during the period of the review.  
☐ Recalls of product released for distribution were undertaken during the period of the review.

#### Stock Recoveries

- ☒ There have been no stock recoveries undertaken on product released for distribution during the period of the review.  
☐ There have been stock recoveries undertaken on product released for distribution during the period of the review.

#### FARs / BPDRs

- ☒ There have been no FARs / BPDRs (FDA) or contact with National Competent Authorities via alerting processes during the period of the review.  
☐ There have been FARs / BPDRs (FDA) or contact with National Competent Authorities via alerting processes during the period of the review.

### Returned & Salvaged Goods

- ☒ There were no returned products or salvaged goods in the period of the review.  
☐ There were returned products or salvaged goods in the period of the review.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

**Quality Agreements**

The Standard Internal Quality Assurance Agreement (QAA) governs the responsibilities between AZ manufacturing / supply sites / functions within Operations. The Standard Marketing Company (MC) QAA serves as an Internal QAA between AZ manufacturing / supply sites / functions within Operations and AZ Marketing Companies. Reference SOP-0033724 version 10.

Based on this review of Contractual Agreements / Arrangements:

- ☒ All contractual agreements between the site and customers or suppliers are current and the service provided is aligned to the requirements established in the agreements.
- ☐ Not all contractual agreements between the site and customers or suppliers are current and are under development or revision.

**Qualification status of relevant Equipment and Utilities**

The qualification status of the equipment and critical utilities / systems with direct product impact were reviewed. All changes to equipment / facility / utilities are managed through the change management system with the appropriate qualification / validation activities performed.

The conclusion from this review is that the qualification status of relevant equipment and critical utilities / systems with direct impact on product quality has:

- ☒ Been maintained in a state of control and meets the requirements for the review period.
- ☐ Has not been fully maintained.



## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

**Other**Visual Examination of Reserve Samples

The Annual visual check of reserve samples was completed and inspection of reserve samples has confirmed that all batches delivered continue to meet the licensed specification.

Regulatory Inspections Completed

Five (5) regulatory inspections have been performed. No critical or major observations have been reported. For the regulatory inspections performed by MFDS, the outcome is pending and will be followed up during next product review.

Site Compliance Improvement Plan

A new quality event management system EQV has been implemented for deviation and complaint management (including documentation of investigations and CAPAs, follow-up and trending), as well as for Change Control management. This change was part of the Compliance plan for 2022.

EU Technical Justification of Sampling Review

Technical Justifications AST-0027763 and AST-0108050 have been assessed for update, and both of them have been withdrawn. As a result of that the MRA with US is in place, we have reduced importation testing and no longer performed within SBC.

In addition there are no other samples from third country that is analyzed within SBC.

Transportation Quality Events

Two (2) transportation quality events was reported for released batches. These quality event were managed in accordance with site transportation quality events procedures.

Shipping Validation Activities

Shipping validation activities for Fasenra PFS-SA bulk pack and APFS finish pack configurations at SBC are performed in accordance with shipping validation plan PLAN-0053219 and reported in shipping validation summary report REP-0183683. No changes to the packaging configurations or additional activities are reported between 14 Nov 2022 to 13 Nov 2023.

Process Validation Activities

One (1) process validation activity was performed and completed from during the report period.

**Previous Period Product Review**

The previous review identified no recommendations for improvement.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

## 2 Batches Reviewed, Approved and Rejected

The summary of reviewed batches are listed in **Error! Reference source not found..**

Table 2–1 Batches included in this report

Batches Reviewed	Number of Batches Previous Review	Number of Batches Current Review
Disposition Decisions	68	82
Batches Approved	68	82
Batches Fully Rejected	0	0
Batches Partially Rejected	1	0

**Batches Rejected During the Period** ☒ N/A

**Discussion / Comments** ☐ N/A

Reference [Appendix 1: Reference Numbers](#) for summary of reference numbers of reviewed batches and [Appendix 2: Batches Reviewed](#) for list of reviewed batches.

### Section 2 Conclusion

There were in total eightytwo (82) batches dispositioned during the review period. There were eightytwo (82) batches approved and zero (0) batches fully or partially rejected during the review period. The split between imported and manufactured batches that have been dispositioned are fortynine (49) imported FP batches and thirtythree (33) manufactured batches (19 FP and 14 Bulk Pack batches).

Compared with the previous review the number of batches rejected has:

☐ Decreased ☒ Remained Unchanged ☐ Increased

Since the previous period, it has been an increase in the number of released batches by 21% (from sixtyeight (68) previous period to eightytwo (82) in this period). The increase is attributable to increased number of batches thirtythree (33) manufactured at SBC compared to thirteen (13) batches previous period. The number of EU import batches fortynine (49) is lower than previous period fiftyfive (55).

Zero (0) batches were fully rejected compared to two (2) partially rejected intermediate batches (filled syringes) and one (1) partially rejected EU Import Finished Pack batch during the previous period.

Based on this review of batches reviewed, approved and rejected:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.  
☐ A trend indicating a quality or system issue has been identified.

## Product Review

**Product Name/Family**  
 Fasenra (benralizumab) 30 mg

**Period**  
 14 Nov 2022 to 13 Nov 2023

### 3 Reprocessed and Reworked Batches

The number of reprocessed batches are summarized in [Table 3–1](#) and presented in [Table 3–2](#). Reprocessing is performed on semi-finished Drug Product (DP) and the reviewed batches are listed in [Table 3–3](#).

**Table 3–1 Number of reprocessed and reworked batches**

Reprocessed and Reworked Batches	Previous Review	Current Review
Number of Reprocessed Batches	1	2
Total Number of semifinished DP Batches Reviewed	7	12
Percentage of Batches Reprocessed and Reworked	14 %	17 %

**Reprocessed and Reworked Batches During the Period** ☐ N/A

**Table 3–2 Reprocessed and reworked batches**

Batch No.	Reprocess/ Rework	Reason	Reference Number
MADL	Reprocess	Batch MADL was disrupted during filling due to technical issues.	QIMS #263229
MADT	Reprocess	Batch MADT was disrupted before start of filling due to failed decontamination cycles during start of batch.	QE-021180

**Table 3–3 Semi-finished DP batches**

Batch No.	Description	Number	UD code	UD Code Date
MADT	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	N/A <sup>1</sup>	N/A
MADT	BENRALIZUMAB INJ 30MG PFS 1ML FILLED RPS	110022997	A	2022-12-02
MAED	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-01-10
MAEH	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-02-06
MADL	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-02-15
MADL	BENRALIZUMAB INJ 30MG PFS 1ML FILLED RPS	110022997	A	2023-02-15
MAEM	BENRALIZUMAB INJ 30MG PFS 1ML FILLED 2K	110025330	A	2023-03-02
MAEV	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-04-20
MAFB	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-05-17
MAFC	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-06-08
MAFM	BENRALIZUMAB INJ 30MG PFS 1ML FILLED	100012001	A	2023-09-26
MAFY-B	BENRALIZUMAB INJ 30MG PFS 1ML FILLED 2K	110025330	A	2023-11-04

<sup>1</sup> Disrupted before start of filling, see [Table 3–2](#)

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

**Discussion / Comments** ☒ N/A

### Section 3 Conclusion

There were two (2) batches subject to reprocessing or rework during the review period. The reprocessing were performed on semi-finished DP. Compared to previous period the number of reprocessed DP batches are at the same level taking into account the increased number of batches produced, twelve (12) semi-finished DP batches compared to seven (7) batches during previous period.

Based on this review of batches reprocessed or reworked:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.
- ☐ A trend indicating a quality or system issue has been identified.

Reprocessing of final bulk is an established and regulatory approved process and no further actions are needed.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

### 4 Product Reviews from Previous Manufacturing Stage(s)

This section is not applicable in this report as an Integrated Summary Product Review, which considers all steps and sites involved in the Drug Substance and Drug Product manufacturing process, will be issued after the individual site reports are approved.

## Product Review

### Product Name/Family

Fasenra (benralizumab) 30 mg

### Period

14 Nov 2022 to 13 Nov 2023

## 5 Critical (Key) Starting and Packaging Materials

Adverse trends and release/reject results for starting and packaging materials are summarized below in [Table 5–1](#) for critical materials. The rejected batches are summarized in [Table 5–2](#).

Drug substance as well as excipients are released and sent from AstraZeneca LP Frederick Manufacturing Center (FMC), US, in accordance with the SBC supply chain map for Fasenra, FORM-0034032 (v6.0). These batches are included in the Integrated Summary Product Review.

**Table 5–1** Summary of critical material release results

Critical Starting or Packaging Material	Material Description	Key Quality Parameter	Release results routinely meet specification? Yes/No	If NO what follow-up actions needed	Comments
PS0000539 (SPEC-0123432)	PLUNGER STOPPER HYPAK 1 ML BD COLUMBUS	Certificate verification Identity verification Identity material Dimensional inspection Visual inspection Pharmacopeia testing for elastomeric components	Yes	N/A	Three (3) batches released and zero (0) batches rejected during review period. No trend
PS0000045 (SPEC-0125269)	SYRINGE HYPAK FOR BIOTECH SCF 1ML 29G BD	Certificate verification Identity verification Identity material Dimensional inspection Visual inspection Pharmacopeia testing for glass Arsenic, glass grain (test B), Appearance, sterility, bacterial endotoxin	Yes	N/A	Three (3) batches released and zero (0) batches rejected during review period. No trend
100011390 (SPEC-0124745)	PLUNGER ROD X100L ULTRASAFE BLUE	Identity verification Dimensional inspection Visual inspection	Yes	N/A	Zero (0) batch released or rejected during review period.
100011381 (SPEC-0126001)	NEEDLE GUARD X100L ULTRASAFE	Identity verification Dimensional inspection Visual inspection	Yes	N/A	One (1) batch released and zero (0) batches rejected during review period. No trend
100011386 (SPEC-0126002)	FINGER FLANGE X100L ULTRASAFE WHITE	Identity verification Dimensional inspection Visual inspection	Yes	N/A	Zero (0) batches released or rejected during review period.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

Critical Starting or Packaging Material	Material Description	Key Quality Parameter	Release results routinely meet specification?	If NO what follow-up actions needed	Comments
PS0000338 (SPEC-0045020)	INREDE FOR APFS SYRINGE 900968g	Identity verification Decoration verification Control of Certificate Visual inspection	YES	N/A	Four (4) batches released and zero (0) batches rejected during review period. No trend.
The part number is depended on the market, see appendix 3. (SPEC-0124733)	SYRINGE CARTON	Identity verification Decoration verification Visual inspection Control of certificate Visual inspection	YES	N/A	Seventeen (17) batches released and zero (0) batches rejected during the review period. No trend
The part number is depended on the market, see appendix 3. (SPEC-0124738)	LEAFLET 360x532 360x836	Identity verification Decoration verification Control of Certificate Visual inspection	YES	N/A	Nineteen (19) batches released and zero (0) batches rejected during review period. No trend.
The part number is depended on the market, see appendix 3. (SPEC-0124739)	SYRINGE LABEL	Identity verification Decoration verification Control of Certificate Visual inspection	YES	N/A	Six (6) batches released and zero (0) batches rejected during review period. No trend
The part number is depended on the market, see appendix 3. (SPEC-0124673)	SYRINGE BOOKLET 60p, 24p	Identity verification Decoration verification Function control Control of Certificate Visual inspection	YES	N/A	Fifteen (15) released during review period. One (1) batch was rejected <sup>2</sup> . No trend

<sup>2</sup> Rejected batch listed in [Table 5–2](#)

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

**Table 5–2** Batches Rejected During the Period ☐ N/A

Material	Batch Number	Reason	Reference
110029458 (Syringe booklet)	284691	Batch failed incoming quality inspection as some samples were discolored, scrape marks, dirt and oil drop. UD code R3 and batch is discarded.	Lab investigation QE-084171

**Active Substance Supply Chain Review**

For API and/or Drug Substance, a review of supply chain maps to assure all suppliers are identified and are legitimate was performed.

☐ Yes

☒ N/A; this product is not manufactured at this site.

**Discussion / Comments** ☐ N/A

All reviewed materials are listed in [Appendix 3: Starting and Packaging Material Batches Reviewed](#). All reviewed material are in accordance to the SBC supply chain map for Fasenra, FORM-0034032.

**Section 5 Conclusion**

The starting materials and packaging components have all been purchased in accordance with registered specifications.

Testing of these materials by both the supplier and AstraZeneca has:

- ☐ Confirmed that all batches delivered met the registered specification, there were no rejections of materials.
- ☒ Identified that not all batches delivered met the registered specification, there were rejections of materials.

A total of sixty-nine (69) batches were reviewed during the period 14 Nov 2022 until 13 Nov 2023. One (1) batch were rejected and the material was not released for commercial manufacturing. All batches reviewed during the review period are listed in Appendix 3 for Starting and Packaging Material Batches Reviewed.

Booklet batch 284691 article number 110029458 has been rejected due not meeting specification in incoming testing. Lab investigation QE-084171 was raised for this deviation which resulted in a complaint against supplier to determine root cause, see supplier deviation QE-086488.

During the review period, any issues identified with materials were managed as complaints or deviations, investigated, CAPA agreed and addressed, as applicable.

Based on this review of materials:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.
- ☐ A trend indicating a quality or system issue has been identified.



## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

### 6 Analytical Data

This section summarizes all registered physicochemical and microbiological tests for manufactured batches, and imported batches. AstraZeneca utilizes Continuous Process Verification (CPV) to monitor process performance. Analytical testing for manufactured batches as well as critical in-process controls at SBC are part of the CPV report REP-0239807; SBC, Fasenra 30 mg PFS-SA and APFS CPV Report 2022-Nov-14 to 2023-Nov-13. The CPV report for manufacturing of this product at this site was reviewed and found to be in a state of control.

Analytical testing is performed for imported FP batches of AI and APFS as well as on SBC manufactured DP batches PFS-SA and FP batches APFS.

No comparison of importation analytical results are performed. The batches are imported from US and in accordance with the Mutual Recognition Agreement (MRA), no parallel testing is performed.

A total of 76 batches were analyzed by SBC during this period, the batches are summarized in [Table 6–1](#). The batches excluded from review are listed in [Table 6–2](#).

**Table 6–1 Summary of analyzed batches**

Drug Product (DP) / Finished Pack (FP)	No of batches
Pre-filled syringe sub-assembly (PFS-SA)	11
Autoinjector (AI)	37
Accessorized pre-filled syringes (APFS)	28

**Table 6–2 Batches Excluded from Review** ☐ N/A

Batch Number	Reason for Exclusion
MAFB-B	Analytical testing performed on batch MAFB-A, see AST-0114701.
PL0309 TB0103 TJ0040	Item Code EU110020998-SE21 connected to a specification in GQCLIMS with only retention samples. No analytical testing performed at SBC on these batches.

## Product Review

**Product Name/Family**  
Fasenra (benralizumab) 30 mg

**Period**  
14 Nov 2022 to 13 Nov 2023

### 6.1 Drug Product (DP)

Release testing results for all DP batches with disposition for the review period are referenced in [Appendix 4: Analytical Data – CPV Report](#). A summary of the analytical data can be seen in [Table 6–3](#).

**Table 6–3 Summary Table of Analytical Data**

Test Description	Specification or Critical In-process Control Requirement	# OOS Results	Comments
Appearance - Clarity	Clear to opalescent (Opalescence ≤ EP Ref IV)	0	N/A
Appearance - Color	Colorless to slightly yellow (Color intensity ≤ Y5 EP Standard)	0	N/A
Appearance – Visible Particles	Free from or practically free from visible particles; May contain a few translucent or white to off-white particles	0	N/A
Sub-visible Particles	Does not exceed 6000 particles per container ≥ 10 µm and does not exceed 600 particles per container ≥ 25 µm	0	N/A
Total Protein	27.0 – 33.0 mg/mL	0	N/A
pH	5.5 – 6.5	0	N/A
Osmolality	240 – 360 mOsm/kg	0	N/A
Capillary Isoelectric Focusing (cIEF)	%Main peak ≥ 56% %Total acidic peaks ≤ 36% %Total basic peaks: report result (X%)	0	N/A
Reducing Gel Electrophoresis	Area %purity of heavy + light chain peaks ≥ 95.0% %Total impurities ≤ 5.0%	0	N/A
Non-Reducing Gel Electrophoresis	%Major product peak ≥ 94.0% %Total impurities ≤ 6.0%	0	N/A
Reduced CE-SDS	Area %purity of heavy + light chain peaks ≥ 94.3% %Total impurities ≤ 5.7%	0	N/A
Non-Reduced CE-SDS	%Major product peak ≥ 92.9% %Total impurities ≤ 7.1%	0	N/A
High Performance Size Exclusion Chromatography (HPSEC)	%Major product peak ≥ 97.0% %Aggregates ≤ 2.6% %Fragments ≤ 1.2%	0	N/A
Reporter Gene Bioassay	70 - 130% of Reference Standard activity	0	N/A
Sterility	No growth detected after 14 days	0	N/A
Polysorbate 20	0.004 – 0.008%	0	N/A
Endotoxin	≤ 0.50 EU/mg protein	0	N/A

## Product Review

**Product Name/Family**  
 Fasenra (benralizumab) 30 mg

**Period**  
 14 Nov 2022 to 13 Nov 2023

### 6.2 Finished Pack (FP)

Analytical testing on imported AI and APFS as well as on SBC manufactured APFS during the reporting period is discussed and data provided in this product review. Release testing results for all batches with disposition for the review period are referenced in [Appendix 4: Analytical Data – CPV Report](#). A summary of the analytical data can be seen in the [Table 6–4](#).

**Table 6–4 Summary Table of Analytical Data**

Test Description	Specification or Critical In-process Control Requirement	# OOS Results	Comments
<b>Accessorized pre-filled syringe (APFS)</b>			
Deliverable Volume	NLT 1.0 mL	0	N/A
Break Loose Force	Maximum single value NMT 25 N Median value NMT 20 N	0	N/A
Glide Force	Maximum single value NMT 25 N Median value NMT 20 N	0	N/A
Lateral Flow Identity	Positive for MEDI-563	0	N/A
<b>Autoinjector (AI)</b>			
Deliverable Volume	NLT 1.0 mL	0	N/A
Dose Actuation Force Minimum	NLT 3.0 N	0	N/A
Dose Actuation Force Maximum	NMT 10.0 N	0	N/A
Injection Time Minimum	NLT 2 Seconds	0	N/A
Injection Time Maximum	NMT 13 Seconds	0	N/A
Lateral Flow Identity	Positive for Benralizumab	0	N/A

## Product Review

**Product Name/Family**  
Fasenra (benralizumab) 30 mg

**Period**  
14 Nov 2022 to 13 Nov  
2023

There were one (1) OOS/OOT results registered during the review period. These are listed in the table [Table 6–5](#).

**Table 6–5 OOS/OOT results**

Record ID	Impacted Batches	Short Description	Classification
QE-084993	MAGG	<p><b>Title:</b> SBC, OOS Osmolality, Excipient Addition Buffer.- Deviation detected during manufacturing, QC analysis not stopped in time.</p> <p><b>Event description:</b> An out of specification (OOS) osmolality result was obtained when analysing Excipient Addition Buffer (EAB) lot name: MAGG, sample number 3938055. Result: 340 mOsm/kg, Specification (REP-0073708 v 5.0): 290-330 mOsm/kg.</p> <p><b>Root cause:</b> The root cause was identified as the buffer being of too high concentration, due to an error in the production of the buffer investigated as part of deviation QE-084289. The obtained OOS result was determined to be representative for the analysed sample, and thus representative of EAB lot MAGG.</p> <p><b>Final Investigation Conclusion:</b> Confirmed OOS.</p> <p><b>Corrections:</b> N/A. The batch was not processed to the next step since the buffer tank was discarded.</p>	Minor

**Table 6–6 Summary of OOS Results**

OOS Results	Previous Review	Current Review
Total Number	0	1

### Importation Analytical Results Comparison

Importation Analytical Results Comparison is not applicable since the batches are imported from US, a Mutual Recognition Agreement (MRA) is in place and no parallel testing is performed

**Discussion / Comments** ☒ N/A

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

### Section 6 Conclusion

This evaluation is based on a review of analytical data from DP batches manufactured at SBC and imported FP batches. A disposition decision was made for all batches meeting registered specification to release for distribution.

There were:

- ☐ No batches outside of registered specification (OOS) during the review period.
- ☒ Results outside of registered specification (OOS) during the review period.

One confirmed OOS (QE-084993) for Osmolality was registered for the Excipient Addition Buffer (EAB) lot MAGG during the review period. The deviation was detected during manufacturing (QE-084289) and the samples was sent to QC and analyzed before a decision to reject the batch was made. The buffer lot MAGG was not used for further processing.

Based on the review of OOS results:

- ☒ There is no evidence noted of a trend to indicate a quality or system issue.
- ☐ A trend(s) indicating a quality or system issue has been identified.

The risk based process metrics established at the site:

- ☒ Confirm the capability of the process for the finished product and critical in-process attributes, continues to operate in line with the requirements established during either initial validation or with Continued Process Verification.
- ☐ The risk based process metrics at the site indicated a concern with the capability of the process.

Real time trending tools were deployed to assure process capability during this time period. Trending signals were identified and actioned via the OOT investigations process (section 9.0).

Appropriate process metrics deployed as part of Continued Process Verification:

- ☒ Confirm the capability and stability of the process for the product (including critical in-process parameters / attributes) to assure the process operated under control.
- ☐ Are used to confirm the capability and stability of the process for the product (including critical in-process parameters / attributes) during this review period. The issues identified (poor capability or stability of the process or any trends) were managed as part of the CPV process and investigated at the time they arose with CAPA agreed.

# Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

## 7 Changes

### 7.1 Changes

There were fortysix (46) changes implemented, risk assessed and managed by the site within the scope of this PR. Changes with impact level Medium and High are included in the report, five (5) changes were classified as “High” and fortyone (41) changes classified as “Medium”.

This level represents an decrease in the number of changes compared with the previous review. The decrease of the number of changes is due to that previous period covered GMP readiness of production. A number of changes was implemented due to continuous improvements and this is expected to be continued.

The implemented changes are listed in [Appendix 5: Changes](#).

### 7.2 Marketing Authorization Variations

This section is not applicable. The marketing authorization variations will be covered in the ISPR.

### 7.3 Post-Marketing Commitments

This section is not applicable. The post-marketing commitments will be covered in the ISPR.

## Section 7 Conclusion

There were fortysix (46) changes implemented, risk assessed and managed by the site during the review period. These changes were managed in accordance with site change control procedures. Each record is individually reviewed by the impacted departments and assessed for the impact to product quality.

The impacts of these changes on the product was assessed through evaluation of compliance to registered specification and no adverse effects were observed.

The accumulation of minor / incremental changes has also been considered and there is no additional action needed.

The number of changes impacting on the site is assessed during the site Management Review process which assures that the capacity of the site to respond effectively to change is actively managed.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

### 8 Stability Data

Summary and review of stability studies including a summary of stability failures and any remedial actions.

#### 8.1 Stability Studies

Refer to REP-0402687, FASENRA (Benralizumab) Product Quality Review (PQR) Annual Stability Report for 2023 for a comprehensive analysis of Fasenra/benralizumab stability studies for DP. This report includes a listing of all studies, their purpose and status, and graphical analyses of data.

#### 8.2 Trends and Out of Spec Results

All stability data at the recommended conditions within the scope of this report met the applicable specifications. For the recommended condition, statistical analysis identified no confirmed OOT events for DP during the reporting period for stability results.

There were no OOS events within the reporting period for stability results.

#### Section 8 Conclusion

The Fasenra/benralizumab stability program is consistent with ICH guidelines (including Q1A and Q5C) and other applicable regulatory expectations. The completed stability studies of DP continue to support the shelf life claims in all current licenses.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### 9 Deviations

A review have been performed of critical and major deviations closed during the review period. The reviewed deviations are summarized in [Table 9–1](#) and listed in [Appendix 6: Deviations](#).

**Table 9–1 Summary of reviewed deviations**

Deviation Reports	Previous Review	Current Review
Total Number	21	9
Number of Critical Deviations	0	0
Number of Repeat Critical Deviations	0	0
Number of Major Deviations	21	9

**Discussion / Comments** ☒ N/A

#### Section 9 Conclusion

There were zero (0) critical and nine (9) major deviations raised, risk assessed and managed by the site during the review period. These deviations were managed in accordance with site deviation procedures.

Compared with the previous review the number of deviations has:

☒ Decreased    ☐ Remained Unchanged    ☐ Increased

Compared to previous review, there is a decrease of the total number of deviations.

The number of deviations impacting on the site, together with trend analysis, is assessed during the Site Management Review process. This assures the site actively manages the capability to respond to deviations.

Based on this review of deviations:

- ☒ There is no evidence of a trend to indicate a quality or system issue.  
☐ A trend(s) indicating a quality or system issue has been identified.

Review of the deviations indicates that systems and process demonstrate the continued control and consistency necessary to ensure product quality. No additional actions are required.



## Product Review

**Product Name/Family**  
 Fasenra (benralizumab) 30 mg

**Period**  
 14 Nov 2022 to 13 Nov 2023

### 10 Complaints (Product Quality)

A review have been performed of complaints investigated and closed during review period. The complaints are summarized in [Table 10–1](#) and confirmed or inconclusive complaints are listed in [Table 10–2](#). A complaint are considered confirmed if the root cause is found within AZ control and Inconclusive if the investigation shows that a root cause within AZ control cannot be ruled out.

**Table 10–1 Complaints**

Complaints	Previous Review	Current Review
Total Number	0	6
Complaint within AZ Control	0	1
Complaint Categories		
Device / Broken, malformed, damaged	0	3
Pack / Missing Pack Item	0	1
Device / Needle	0	1
Device / No medication dispensed	0	1

**Complaints During the Period** ☐ N/A

**Table 10–2 Confirmed and Inconclusive complaints**

Batch Number	Complaint Title	Receiving Date	Root Cause Within AZ control / Outside AZ control	Reference Number
MACY	The safety cap has already been pulled into the system. The syringe is still filled/ Fasenra pre-filled syringe 30mg/MACY	17 May 2023	<p>Inconclusive.</p> <p>The device must have been activated and the Finger Flange must have been detached after placement in the carton partition since it will not fit inside the carton partition in the activated state or missing the Finger Flange.</p> <p>Fasenra APFS are transported using a validated shipping process (REP-0183683) this in combination with the fact that the Finger Flange was detached from the device indicates that the device was prematurely activated after removal from the carton but before removal of the Rigid Needle Shield.</p> <p>The event is inconclusive and the investigation level warrants no further investigation.</p>	QE-057150

**Discussion / Comments** ☐ N/A

Conclusion for complaint QE-057150 was that the defect must have occurred after the device was packaged, but no definite conclusion if root cause is within or outside AZ control can be made.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

### Section 10 Conclusion

There were six (6) Product Quality Complaints raised, risk assessed and managed by the site during the review period. These complaints were managed in accordance with site complaints procedures.

Compared with the previous review the number of complaints has:

☐ Decreased    ☐ Remained Unchanged    ☒ Increased

The number of complaints received has increased compared to previous period, however the previous period was the first review including FP manufactured at SBC and the increase is reflecting a delay between approval and batches on the market.

The number of complaints impacting on the site, together with trend analysis, is reviewed during the site Management Review process. This assures the site actively manages the capability to respond to complaints.

Based on this review of complaints:

- ☒ There is no evidence of a trend to indicate a quality or system issue.
- ☐ A trend(s) indicating a quality or system issue has been identified.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

### 11 Recalls, Stock Recoveries, Field Alert Reports (FAR) / Biological Product Deviation Reports (BPDR)

The number of recalls, stock recoveries and FAR/BDPR within the scope of this PR are listed in Table 11–1.

Table 11–1 Summary of recalls, stock recoveries and FAR/BPDR

Record Type	Previous Review	Current Review
Recall	0	0
Stock Recovery	0	0
FAR / BPDR	0	0

**Recalls, Stock Recoveries, FARs, BPDRs** ☒ N/A

**Discussion / Comments** ☒ N/A

#### Section 11 Conclusion

##### Recalls

- ☒ No recalls of product released for distribution have been made during the period of the review.  
☐ Recalls of product released for distribution were undertaken during the period of the review.

##### Stock Recoveries

- ☒ There have been no stock recoveries undertaken on product released for distribution during the period of the review.  
☐ There have been stock recoveries undertaken on product released for distribution during the period of the review.

##### FARs / BPDRs

- ☒ There have been no FARs / BPDRs (FDA) or contact with National Competent Authorities via alerting processes during the period of the review.  
☐ There have been FARs / BPDRs (FDA) or contact with National Competent Authorities via alerting processes during the period of the review.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### 12 Returned and Salvaged Goods

The number of returned and salvaged goods within the scope of this PR are listed in [Table 12–1](#).

**Table 12–1 Summary of returned and salvaged goods**

Returned and Salvaged Goods	Previous Review	Current Review
Total Number of Returned Batches	0	0
Total Number of Returns Related to Product Quality Deficiency	0	0
Total Number of Salvaged Batches	0	0

All returns received and investigated during the PR period are listed below: ☒ N/A

Discussion / Comments ☒ N/A

#### Section 12 Conclusion

- ☒ There were no returned products or salvaged goods in the period of the review.  
☐ There were returned products or salvaged goods in the period of the review.

## Product Review

### Product Name/Family

Fasenra (benralizumab) 30 mg

### Period

14 Nov 2022 to 13 Nov 2023

## 13 Contractual Agreements / Arrangements

The Standard Internal Quality Assurance Agreement (QAA) governs the responsibilities between AZ manufacturing / supply sites / functions within Operations. The Standard Marketing Company (MC) QAA serves as an Internal QAA between AZ manufacturing / supply sites / functions within Operations and AZ Marketing Companies. Reference SOP-0033724 version 10.0.

Markets, sites and functions with separately signed QAAs are listed in [Table 13–1](#). During the review period, no signed agreements have been replaced with the Standard Internal Quality Assurance Agreement in SOP-0033724.

**Table 13–1 Current internal QAA**

Name of the Contractor / Partner	Reference Number	Comments/ Title
AstraZeneca BV The Netherlands Marketing Company Enter	AGR-0003302	QAA Bipartite Sweden Biomanufacturing Center (S) MC Netherlands (R)
AstraZeneca Nordic Baltic Marketing Company	AGR-0003300	QAA Bipartite Sweden Biomanufacturing Center (S) MC NoBa (R)
AstraZeneca GmbH Germany	AGR-0003299	QAA Bipartite Sweden Biomanufacturing Center (S) Market Germany (R)
AstraZeneca Prodtos Farmacêuticos Portugal Marketing Company	AGR-0003285	QAA Bipartite Sweden Biomanufacturing Center (S) MC Portugal (R)
AstraZeneca Pharma SRL Romania Marketing Company	AGR-0003283	QAA Bipartite Sweden Biomanufacturing Center (S) MC Romania (R)
AstraZeneca Thailand Ltd Marketing Company	AGR-0003274	QAA Bipartite Form Sweden Biomanufacturing Center (S) MC Thailand(R)
AstraZeneca AG Switzerland Marketing Company	AGR-0002460	QAA Bipartite Sweden Biomanufacturing Center (RS) MC Switzerland (R)
AstraZeneca EMEA Logistics	AGR-0003281	QAA Bipartite Sweden Biomanufacturing Center (S) EMEA Logistics (R)
AstraZeneca UK Ltd Liverpool	AGR-0004095	SBC (S) and Speke (R)
Global Logistics Quality (GLQ)	AGR-0006372	QAA Quality Assurance Agreement between AZ Operations, Sweden BioManufacturing Centre Site Quality and Global Logistics Quality
AstraZeneca AB, Sweden Operations	AGR-0002349	QAA Sweden Ops (S) Sweden BioManufacturing Center (R)
AstraZeneca Global External Sourcing	AGR-0002558	QAA GES (S) and Sweden Biomanufacturing Centre (R) DMS Only
AstraZeneca West Chester USA	AGR-0003557	QAA West Chester (S) Sweden Biomanufacturing Center (R)
AstraZeneca LP, Global Technical Operations, USA	AGR-0002419	QAA Biparte Global Technical Operations (S) Sweden Biomanufacturing Center (R)
AstraZeneca Israel, Ltd Marketing Company	AGR-0003280	QAA Exception Form Sweden Biomanufacturing Center (S) MC Israel (R)
AstraZeneca Österreich GmbH Marketing Company	AGR-0003279	QAA Exception Form Sweden Biomanufacturing Centre (S) MC Austria (R)
AstraZeneca France Marketing Company	AGR-0003289	QAA Bipartite Sweden Biomanufacturing Center (S) MC France (R)
AstraZeneca Global Supplier Quality	AGR-0006225	QAA ESLQ GSQ (S) and Sweden Biomaufacturing Centre (R) Product

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

---

**Discussion / Comments** ☒ N/A**Section 13 Conclusion**

The Standard Internal Quality Assurance Agreement (QAA) governs the responsibilities between AZ manufacturing / supply sites / functions within Operations. The Standard Marketing Company (MC) QAA serves as an Internal QAA between AZ manufacturing / supply sites / functions within Operations and AZ Marketing Companies. Reference SOP-0033724 version 10.

Based on this review of Contractual Agreements / Arrangements:

- ☒ All contractual agreements between the site and customers or suppliers are current and the service provided is aligned to the requirements established in the agreements.
- ☐ Not all contractual agreements between the site and customers or suppliers are current and are under development or revision.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

### 14 Qualification Status of Relevant Equipment and Utilities

The qualification status of the equipment and critical utilities / systems with direct product impact were reviewed.

Qualifications performed after initial qualification and included in the review are to verify requirements after improvements or software upgrades, to meet product security requirements or to be able to support an increased volume of manufacturing, testing and release of the product. Qualification of electronic batch records has been completed during the review period.

#### Discussion / Comments ☐ N/A

##### Equipment and Facilities

Equipment and facilities at the site having direct impact on product quality are subject to appropriate quality oversight described in the Site Validation Master Plan (PLAN-0112824 version 8.0), and Site Master File (SMF-0000102 version 11.0).

Calibration and maintenance are carried out in accordance with approved procedures.

Where requalification has been identified, this have been undertaken within the Product Review period.

Where deviations have occurred from the VMP or procedures, these have been managed by through the deviations process (see section 9).

Review of data from Complaints (see section 10), Process capability (see section 6) or relevant Utilities has not identified any trends caused by qualification of equipment.

##### Utilities

Direct Impact Utilities are described in the site master file, SMF-0000102.

##### Site Water Systems (Generation and Delivery)

There have not been any major changes to the water systems since initial installation and qualification.

All results during the review period from the microbiological and chemical analyses conform to specification requirements and complies with the EP, USP and JP requirements.

No adverse trends for microbiological or chemical data from WFI, pure steam or potable water were observed during the review period.

Physical testing (non-condensable gases, dryness and superheat) of Pure Steam (PS) complies in accordance with EN285.

Compressed air complies with EP and USP/NF.

No major or critical deviation occurred during the review period.

Review of the control procedures and records, combined with independent monitoring of quality by Quality Control, provides documented evidence that the systems produce water and compressed air of appropriate Pharmacopeial Quality, refer to REP-0403280, Trend report of utilities 2023.

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

---

The combination of these review activities provides assurance that the site water generation and distribution systems and the site compressed air system are operated in a state of control during the period of this review.

### HVAC & Environmental Monitoring

There have not been any major changes to the site HVAC system during the period of this review.

Review of control procedures and records, combined with independent environmental monitoring of HVAC air quality by Quality Control, provides documented evidence that the site HVAC systems maintains an appropriate environment for Pharmaceutical production, refer to REP-0210601 (version 1.0) Microbiological trend report Q1 2023, and REP-0215796 Microbiological trend report Q2 2023 (version 2.0) areas environmental monitoring and personnel monitoring.

The combination of these review activities provides assurance that the site HVAC system operated in a state of control during the period of this review.

### Compressed Gases System (Generation and Delivery)

There have not been any major changes to the compressed gas system during the period of this review.

No deviations relating to compressed gases has occurred during the review period.

Review of the control procedures and records, combined with independent monitoring of compressed gases by Quality Control, provides documented evidence that the site compressed gas system was maintained under control, refer to REP-0224146 (version 1.0) Performance Qualification Report of Compressed Air System 03/2023.

The combination of these review activities provides assurance that the site compressed gases system operated in a state of control during the period of this review.

### **Section 14 Conclusion**

The qualification status of the equipment and critical utilities / systems with direct product impact were reviewed. All changes to equipment / facility / utilities are managed through the change management system with the appropriate qualification / validation activities performed.

The conclusion from this review is that the qualification status of relevant equipment and critical utilities / systems with direct impact on product quality has:

- ☒ Been maintained in a state of control and meets the requirements for the review period.
- ☐ Has not been fully maintained.



## Product Review

### Product Name/Family

Fasenra (benralizumab) 30 mg

### Period

14 Nov 2022 to 13 Nov 2023

## 15 Other

### 15.1 Visual Examination of Reserve Samples

The Annual visual check of reserve samples was completed and inspection of reserve samples has confirmed that all batches delivered continue to meet the licensed specification.

### 15.2 Regulatory Inspections Completed

The following regulatory inspections listed in [Table 15–1](#) have been performed during the period covered by this report.

**Table 15–1 Regulatory inspections completed**

Scope of inspection	Authority/Country	Date	Outcome of inspection
GMP	MoH/Secretaría de Salud/COFEPRIS - Mexico	16 - 20 Jan 2023	No critical or major observations
GMP	MFDS - South Korea	11 - 19 Sep 2023	Pending
GMP	ANVISA - Brazil	9 - 13 Oct 2023	No critical or major observations
GMP	TITCK - Turkey	17 - 19 Oct 2023	No critical or major observations
GMP	MoH - Libya	8 Nov 2023	No critical or major observations

Five (5) regulatory inspections have been performed. No critical or major observations have been reported. For the regulatory inspections performed by MFDS, the outcome is pending and will be followed up during next product review.

### 15.3 Site Compliance Improvement Plan

A new quality event management system EQV has been implemented for deviation and complaint management (including documentation of investigations and CAPAs, follow-up and trending), as well as for Change Control management. This change was part of the Compliance plan for 2022.

### 15.4 EU Technical Justification of Sampling Review

Technical Justifications AST-0027763 and AST-0108050 have been assessed for update, and both of them have been withdrawn. As a result of that the MRA with US is in place, we have reduced importation testing and no longer performed within SBC.

In addition there are no other samples from third country that is analyzed within SBC.

### 15.5 Transportation Quality Events

Transportation quality events caused by SBC as a sending site are reported, [Table 15–2](#) and [Table 15–3](#). Transportation events raised by receiving sites send investigation task to SBC to access product impact. These transportation quality events are owned and reported by sending site and not part of this PR.

**Table 15–2 Transportations quality events**

Quality Events	Previous Review	Current Review
Total Number	0	2
Supply & Logistics	0	0
Temperature Excursions	0	2

## Product Review

Product Name/Family

Fasenra (benralizumab) 30 mg

Period

14 Nov 2022 to 13 Nov 2023

Quality Events During the Period ☐ N/A

Table 15–3 Quality events during period

Batch Number	Description	Date Detected / Reported	Root Cause	Reference Number
FZAB (MACX)	Astrazeneca AB to WestChester (WCH) - low alarm triggered. Alarm triggered for one Weblogger. Device recorded readings under 2C for 03:06 and has been documented.	14 Oct 2022	Not Determined	QE-020131
FZAL	AZAB TO WCH Low Alarm during Transit. One of the temperature monitors triggered the low alarm for 1 hour. Tabular data shows it at 2.00C for 40 minutes and 1.98C for 20 minutes.	28 Jun 2023	RCA of TE Driver of truck was misinformed about what temperature to set trailer at. They were told to set 35-45F, so temperature was set at 35F, which is below 2 degrees.	QE-066437

Two (2) transportation quality events was reported for released batches. These quality event were managed in accordance with site transportation quality events procedures.

### 15.6 Shipping Validation Activities

Shipping validation activities for Fasenra PFS-SA bulk pack and APFS finish pack configurations at SBC are performed in accordance with shipping validation plan PLAN-0053219 and reported in shipping validation summary report REP-0183683. No changes to the packaging configurations or additional activities are reported between 14 Nov 2022 to 13 Nov 2023.

### 15.7 Process Validation Activities

One (1) process validation activity was performed and completed during the review period. The process validation summary reports are summarized in [Table 15–4](#).

Table 15–4 Process validation activities

Validation report Number	Process Validation Report Title	Approval date
REP-0190061	SBC, Process Validation Summary Report, Fasenra 30 mg Dose Reprocessing Final Bulk version 3.0	2023-02-15

Product Review

Product Name/Family  
Fasenra (benralizumab) 30 mg

Period  
14 Nov 2022 to 13 Nov 2023

16 Revision History

Table 16–1 Revision History

Version	Description of Change
1.0	Initial version.

## Product Review

**Product Name/Family**  
Fasenra (benralizumab) 30 mg

**Period**  
14 Nov 2022 to 13 Nov 2023

### 17 Appendices

#### 17.1 Appendix 1: Reference Numbers

Table 17–1 Reference numbers of reviewed batches

Number	Description	Number of batches
110024592	FASENRA INJ 30MG PFS 1X1ML SBC FR	4
110024593	FASENRA INJ 30MG PFS 1X1ML SBC DE	4
110024594	FASENRA INJ 30MG PFS 1X1ML SBC ES	4
110024595	FASENRA INJ 30MG PFS 1X1ML SBC IT	4
110024600	FASENRA INJ 30MG PFS 1X1ML SBC AT	3
110021931	BENRALIZUMAB INJ 30MG PFS SBC BU US	13
110021932	BENRALIZUMAB INJ 30MG PFS SBC BU JP	1
100012122	FASENRA PEN INJ 30MG AI 1X1ML NL+	2
100012199	FASENRA PEN INJ 30MG AI 1X1ML GR+	3
100012202	FASENRA PEN INJ 30MG AI 1X1ML DE	3
100012204	FASENRA PEN INJ 30MG AI 1X1ML IT	3
100012455	FASENRA PEN INJ 30MG AI 1X1ML AT	2
100012456	FASENRA PEN INJ 30MG AI 1X1ML ES	3
100012747	FASENRA PEN INJ 30MG AI 1X1ML FR	2
100012898	FASENRA PEN INJ 30MG AI 1X1ML HU+	2
110020029	FASENRA PEN INJ 30MG AI 1X1ML IE+	2
110020161	FASENRA PEN INJ 30MG AI 1X1ML LT+	2
110020162	FASENRA PEN INJ 30MG/ML AI 1X1ML SE+	2
110020163	FASENRA PEN INJ 30MG/ML AI 1X1ML DK+	2
110020219	FASENRA PEN INJ 30MG AI 1X1ML PT	2
110020221	FASENRA PEN INJ 30MG AI 1X1ML BG+	2
110020883	FASENRA PEN HO INJ 30MG AI 1X1ML HR+	2
110020998	FASENRA PEN INJ 30MG AI 1X1ML SXB+	3
110023441	FASENRA PEN INJ 30MG AI 1X1ML ME	1
110024798	FASENRA PEN INJ 30MG AI 1X1ML RS	2
110025046	FASENRA INJ 30MG PFS 1X1ML DK+	1
110025048	FASENRA INJ 30MG PFS 1X1ML CY+	3
110025053	FASENRA INJ 30MG PFS 1X1ML SE+	1
110025054	FASENRA INJ 30MG PFS 1X1ML BE+	3
110025055	FASENRA INJ 30MG PFS 1X1ML HU+	1

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

### 17.2 Appendix 2: Batches Reviewed

**Table 17–2 SBC produced Finished Pack Batches**

Batch no	Product Description	Material no	UD code	UD Code Date	DP Batch
MACP	FASENRA INJ 30MG PFS 1X1ML SBC FR	110024592	A	2022-12-15	MACP
MACY	FASENRA INJ 30MG PFS 1X1ML SBC AT	110024600	A	2023-01-03	MACY
MACY	FASENRA INJ 30MG PFS 1X1ML SBC DE	110024593	A	2023-01-11	MACY
MACY	FASENRA INJ 30MG PFS 1X1ML SBC ES	110024594	A	2023-01-12	MACY
MADT	FASENRA INJ 30MG PFS 1X1ML SBC IT	110024595	A	2023-01-20	MADT
MAED	FASENRA INJ 30MG PFS 1X1ML SBC FR	110024592	A	2023-02-09	MAED
MAED	FASENRA INJ 30MG PFS 1X1ML SBC IT	110024595	A	2023-02-10	MAED
MADL	FASENRA INJ 30MG PFS 1X1ML SBC DE	110024593	A	2023-02-17	MADL-A
FZAF	FASENRA INJ 30MG PFS 1X1ML SBC DE	110024593	A	2023-05-03	MAEH
FZAG	FASENRA INJ 30MG PFS 1X1ML SBC ES	110024594	A	2023-05-03	MAEH
FZAH	FASENRA INJ 30MG PFS 1X1ML SBC IT	110024595	A	2023-05-03	MAEV
FZAD	FASENRA INJ 30MG PFS 1X1ML SBC AT	110024600	A	2023-05-03	MADT
FZAN	FASENRA INJ 30MG PFS 1X1ML SBC DE	110024593	A	2023-06-16	MAEV
FZAM	FASENRA INJ 30MG PFS 1X1ML SBC FR	110024592	A	2023-06-21	MAEV
FZAP	FASENRA INJ 30MG PFS 1X1ML SBC IT	110024595	A	2023-09-18	MAFB-B
FZAV	FASENRA INJ 30MG PFS 1X1ML SBC ES	110024594	A	2023-10-11	MAFC
MACY-A	FASENRA INJ 30MG PFS 1X1ML SBC ES	110024594	A	2023-10-13	MACY
FZAW	FASENRA INJ 30MG PFS 1X1ML SBC AT	110024600	A	2023-10-31	MAEH
FZAU	FASENRA INJ 30MG PFS 1X1ML SBC FR	110024592	A	2023-11-10	MAFC

## Product Review

**Product Name/Family**  
 Fasenra (benralizumab) 30 mg

**Period**  
 14 Nov 2022 to 13 Nov 2023

**Table 17–3 SBC Produced Bulk Pack Batches**

Batch no	Product Description	Material no	UD code	UD Code Date	DP Batch
MADT	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2022-12-02	MADT
MAED	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-01-10	MAED
MABR	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-01-26	MABR
MAEH	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-02-10	MAEH
MADL	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-02-15	MADL
FZAB	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-03-02	MAEM
FZAE	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-04-20	MAEV
FZAC	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-04-20	MAEV
FZAK	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-05-17	MAFB-A
FZAL	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-06-20	MAFC
FZAR	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-09-27	MAFM-A
FZAS	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-09-28	MAFM-A
FZAT	BENRALIZUMAB INJ 30MG PFS SBC BU JP	110021932	A	2023-10-02	MAFM-A
FZBB	BENRALIZUMAB INJ 30MG PFS SBC BU US	110021931	A	2023-11-06	MAFY

**Table 17–4 EU Import Batches**

Batch no	Material Description	Article no	UD Code Date	UD code
PL0236	FASENRA INJ 30MG PFS 1X1ML CY+	110025048	2022-11-24	A
PL0209	FASENRA PEN INJ 30MG AI 1X1ML PT	110020219	2022-11-28	A
PM0127	FASENRA PEN INJ 30MG AI 1X1ML RS	110024798	2022-11-29	A
PL0286	FASENRA PEN INJ 30MG/ML AI 1X1ML SE+	110020162	2022-12-08	A
PN0123	FASENRA PEN INJ 30MG AI 1X1ML ES	100012456	2023-01-30	A
PL0317	FASENRA PEN INJ 30MG AI 1X1ML DE	100012202	2023-01-30	A
PL0287	FASENRA PEN INJ 30MG AI 1X1ML FR	100012747	2023-01-30	A
PN0124	FASENRA PEN INJ 30MG/ML AI 1X1ML DK+	110020163	2023-01-30	A
PL0288	FASENRA PEN INJ 30MG AI 1X1ML NL+	100012122	2023-01-31	A
PM0204	FASENRA PEN INJ 30MG AI 1X1ML IE+	110020029	2023-01-31	A
PL0319	FASENRA PEN INJ 30MG AI 1X1ML LT+	110020161	2023-01-31	A
PM0205	FASENRA INJ 30MG PFS 1X1ML BE+	110025054	2023-02-14	A
PL0309	FASENRA PEN INJ 30MG AI 1X1ML SXB+	110020998	2023-02-24	A
PT0088	FASENRA PEN HO INJ 30MG AI 1X1ML HR+	110020883	2023-03-06	A

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

Batch no	Material Description	Article no	UD Code Date	UD code
PT0089	FASENRA PEN INJ 30MG AI 1X1ML AT	100012455	2023-03-07	A
TB0081	FASENRA INJ 30MG PFS 1X1ML HU+	110025055	2023-03-21	A
TB0083	FASENRA INJ 30MG PFS 1X1ML DK+	110025046	2023-03-28	A
TB0091	FASENRA INJ 30MG PFS 1X1ML SE+	110025053	2023-03-31	A
TA0164	FASENRA PEN INJ 30MG AI 1X1ML FR	100012747	2023-04-04	A
TB0089	FASENRA PEN INJ 30MG AI 1X1ML BG+	110020221	2023-04-20	A
TB0092	FASENRA INJ 30MG PFS 1X1ML CY+	110025048	2023-04-21	A
TB0096	FASENRA PEN HO INJ 30MG AI 1X1ML HR+	110020883	2023-04-25	A
PT0091	FASENRA PEN INJ 30MG AI 1X1ML GR+	100012199	2023-04-28	A
PT0161	FASENRA PEN INJ 30MG AI 1X1ML IT	100012204	2023-04-28	A
TB0098	FASENRA PEN INJ 30MG AI 1X1ML RS	110024798	2023-05-02	A
TB0097	FASENRA PEN INJ 30MG AI 1X1ML HU+	100012898	2023-05-23	A
TB0105	FASENRA INJ 30MG PFS 1X1ML BE+	110025054	2023-05-23	A
TB0094	FASENRA PEN INJ 30MG AI 1X1ML DE	100012202	2023-05-23	A
TB0101	FASENRA PEN INJ 30MG AI 1X1ML IT	100012204	2023-05-26	A
TF0046	FASENRA PEN INJ 30MG AI 1X1ML AT	100012455	2023-06-07	A
TB0103	FASENRA PEN INJ 30MG AI 1X1ML SXB+	110020998	2023-06-13	A
TB0111	FASENRA INJ 30MG PFS 1X1ML CY+	110025048	2023-06-15	A
TC0235	FASENRA PEN INJ 30MG AI 1X1ML GR+	100012199	2023-06-20	A
TB0109	FASENRA PEN INJ 30MG/ML AI 1X1ML SE+	110020162	2023-06-21	A
TB0104	FASENRA PEN INJ 30MG AI 1X1ML IE+	110020029	2023-06-21	A
TH0074	FASENRA PEN INJ 30MG AI 1X1ML ME	110023441	2023-07-18	A
TF0051	FASENRA PEN INJ 30MG AI 1X1ML BG+	110020221	2023-07-21	A
TB0102	FASENRA PEN INJ 30MG AI 1X1ML ES	100012456	2023-07-26	A
TF0055	FASENRA PEN INJ 30MG AI 1X1ML HU+	100012898	2023-08-15	A
TJ0038	FASENRA PEN INJ 30MG AI 1X1ML GR+	100012199	2023-09-05	A
TJ0031	FASENRA PEN INJ 30MG AI 1X1ML PT	110020219	2023-09-05	A
TH0081	FASENRA PEN INJ 30MG AI 1X1ML DE	100012202	2023-09-08	A
TF0053	FASENRA PEN INJ 30MG AI 1X1ML NL+	100012122	2023-09-13	A
TJ0046	FASENRA PEN INJ 30MG AI 1X1ML LT+	110020161	2023-09-21	A
TJ0045	FASENRA PEN INJ 30MG/ML AI 1X1ML DK+	110020163	2023-09-25	A
TJ0035	FASENRA PEN INJ 30MG AI 1X1ML IT	100012204	2023-09-26	A
TJ0040	FASENRA PEN INJ 30MG AI 1X1ML SXB+	110020998	2023-09-29	A
TJ0044	FASENRA PEN INJ 30MG AI 1X1ML ES	100012456	2023-10-06	A
TJ0033	FASENRA INJ 30MG PFS 1X1ML BE+	110025054	2023-10-12	A



## Product Review

**Product Name/Family**  
Fasenra (benralizumab) 30 mg

**Period**  
14 Nov 2022 to 13 Nov 2023

### 17.3 Appendix 3: Starting and Packaging Material Batches Reviewed

**Table 17–5 Starting and Packaging Material batches reviewed**

Batch Number	Material Number	Material Description
1325824	PS0000658	BIPACK FASENRA PFS 30MG AT
1369462	PS0000658	BIPACK FASENRA PFS 30MG AT
1327099	PS0000659	BIPACK FASENRA PFS 30MG DE
1359178	PS0000659	BIPACK FASENRA PFS 30MG DE
1354367	PS0000662	BIPACK FASENRA PFS 30MG ES
1392314	PS0000662	BIPACK FASENRA PFS 30MG ES
1326121	PS0000661	BIPACK FASENRA PFS 30MG FR
1333762	PS0000663	BIPACK FASENRA PFS 30MG IT
1376246	PS0000663	BIPACK FASENRA PFS 30MG IT
1349168	PS0000660	BIPACK FASENRA PFS 30MG XPC
284665	110028357	BOOKLET FASENRA PFS 30MG TW
284731	110029826	BOOKLET FASENRA PFS CH
284789	110029442	BOOKLET FASENRA PFS CZ+
284691 <sup>3</sup>	110029458	BOOKLET FASENRA PFS GR+
284717	110029441	BOOKLET FASENRA PFS NL+
1392700-1	110029417	CT FASENRA PFS 30MG 1X1ML CZ+
1393214-1	110029456	CT FASENRA PFS 30MG 1X1ML GR+
1392270-1	110029455	CT FASENRA PFS 30MG 1X1ML NL+
1392271-1	110029415	CT FASENRA PFS 30MG 1X1ML SE+
1397473-1	110028348	CT FASENRA PFS 30MG 1X1ML TW
471867	PS0000664	HÄFTE FASENRA PFS 30MG AT
480148	PS0000664	HÄFTE FASENRA PFS 30MG AT
473249	PS0000665	HÄFTE FASENRA PFS 30MG DE
285727	PS0000665	HÄFTE FASENRA PFS 30MG DE
477913	PS0000668	HÄFTE FASENRA PFS 30MG ES
284553	PS0000668	HÄFTE FASENRA PFS 30MG ES
471868	PS0000667	HÄFTE FASENRA PFS 30MG FR
284368	PS0000667	HÄFTE FASENRA PFS 30MG FR
474960	PS0000669	HÄFTE FASENRA PFS 30MG IT
477686	PS0000666	HÄFTE FASENRA PFS 30MG XPC
480147	PS0000666	HÄFTE FASENRA PFS 30MG XPC
1393020	110029817	LB FASENRA PFS 30MG 1ML CH
1398791	110029366	LB FASENRA PFS 30MG 1ML CZ+
1393024	110029367	LB FASENRA PFS 30MG 1ML GR+
1391636	110029729	LB FASENRA PFS 30MG 1ML NL+
1391632	110029739	LB FASENRA PFS 30MG 1ML SE+
1391502	110028349	LB FASENRA PFS 30MG 1X1ML TW
1391611	110028360	LFT FASENRA PFS 30MG TW
1391284	110030145	LFT FASENRA PFS AT
1392907	110029825	LFT FASENRA PFS CH
1392585	110029413	LFT FASENRA PFS CZ+
1396531	110030147	LFT FASENRA PFS DE
1391416	110030153	LFT FASENRA PFS FR
1394028	110029398	LFT FASENRA PFS GR+
1391615	110029410	LFT FASENRA PFS NL+
1391693	110029399	LFT FASENRA PFS SE+
1324119-1	PS0000651	VIKK FASENRA PFS 30MG 1X1ML AT
1357668-1	PS0000651	VIKK FASENRA PFS 30MG 1X1ML AT
1327104-1	PS0000652	VIKK FASENRA PFS 30MG 1X1ML DE

<sup>3</sup> Denotes batch that has UD code R3 and was discarded



## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

Batch Number	Material Number	Material Description
1366534-1	PS0000652	VIKK FASENRA PFS 30MG 1X1ML DE
1396517-1	PS0000652	VIKK FASENRA PFS 30MG 1X1ML DE
1354489-1	PS0000655	VIKK FASENRA PFS 30MG 1X1ML ES
1391292-1	PS0000655	VIKK FASENRA PFS 30MG 1X1ML ES
1326238-1	PS0000654	VIKK FASENRA PFS 30MG 1X1ML FR
1391302-1	PS0000654	VIKK FASENRA PFS 30MG 1X1ML FR
1343056-1	PS0000656	VIKK FASENRA PFS 30MG 1X1ML IT
1349485-1	PS0000653	VIKK FASENRA PFS 30MG 1X1ML XPC
1364187-1	PS0000653	VIKK FASENRA PFS 30MG 1X1ML XPC
2244986	PS0000045	SYRINGE HYPAK FOR BIOTECH SCF 1ML 29G BD
2273096	PS0000045	SYRINGE HYPAK FOR BIOTECH SCF 1ML 29G BD
0211084	100011381	NEEDLE GUARD X100L ULTRASAFE
2349681	PS0000539	PLUNGER STOPPER HYPAK 1 ML BD COLUMBUS
3045217	PS0000539	PLUNGER STOPPER HYPAK 1 ML BD COLUMBUS
3066566	PS0000539	PLUNGER STOPPER HYPAK 1 ML BD COLUMBUS
3089562	PS0000045	SYRINGE HYPAK FOR BIOTECH SCF 1ML 29G BD
1341289-1	PS0000338	INREDE FOR APFS SYRINGE 900968g
1362301-1	PS0000338	INREDE FOR APFS SYRINGE 900968g
1373630-1	PS0000338	INREDE FOR APFS SYRINGE 900968g
1399058-1	PS0000338	INREDE FOR APFS SYRINGE 900968g

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov  
2023

### 17.4 Appendix 4: Analytical Data – CPV Report

Table 17–6 References for analytical data and CPV

Document number	Title
REP-0239708	SBC, Analytical Data Report for Fasenra 30 mg/mL, 30 mg PFS-SA, Filled at SBC, 2022 to 2023
REP-0239719	SBC, Analytical Data Report for Fasenra 30 mg/mL, 30 mg APFS, 14/NOV/2022 to 13/NOV/2023
REP-0239722	SBC, Analytical Data Report for Fasenra 30 mg/mL, 30 mg AI, 14/NOV/2022 to 13/NOV/2023
REP-0239807	SBC, Fasenra 30 mg PFS-SA and APFS CPV Report 2022-Nov-14 to 2023-Nov-13

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

### 17.5 Appendix 5: Changes

**Table 17–7 Changes**

ID Number	Change Description	Change Category	Implementation Date
QE-010678	SBC, configuration of PSM Server, SESOWMETAPPD01, with EPCIS module.	Computerised systems, Packaging, Qualification/Validation	14 Nov 2022
QE-015619	SBC, Increased Operator authorization on Dividella Cartoner (SAP ID 10292176, B921)	Equipment/Instruments	16 Nov 2022
QE-001072	Implementation of Electronic Batch Records (EBR) in Dispensering, Thawing, Formulation and Filling lines in Sweden Biomanufacturing Center (SBC)	Computerised systems, Manufacturing, Process, Product review report, Qualification/Validation	18 Nov 2022
QE-000999	Implementation of PAS-X and Electronic Batch Records (EBR) within SBC	Computerised systems, Manufacturing, Process, Qualification/Validation	21 Nov 2022
QE-001061	Implementation of PAS-X in Sweden Biomanufacturing Center (SBC)	Computerised systems, Equipment/Instruments, Manufacturing, Product review report	21 Nov 2022
QE-002717	SBC, Installation of shelves and pallet racks in cold storage, 921 224, and qualification of the room.	Facility/Utility, Manufacturing	28 Nov 2022
QE-010448	SBC, Critical Materials Master Data Project	Computerised systems, Process	29 Nov 2022
QE-001073	Implementation of Electronic Batch Records (EBR) in Visual Inspection, bulk packing, assembly and packing lines in SBC	Computerised systems, Manufacturing, Process, Product review report, Qualification/Validation	02 Dec 2022
QE-001531	SBC, Introduction of Stopper from BD Columbus as Secondary Source	Packaging material, Supplier/Vendor/Contractor	5 Dec 2022
QE-011746	SBC, Process improvement for sample management in QC-lab.	Analytical, Process	21 Dec 2022
QE-004835	SBC, Introduction of alarm limits for endotoxin analysis	Analytical	01 Feb 2023
QE-028592	SBC, Introduction of SPS Medical Cleantex Sterilpase and Ultra Sterilrulle to SBC.	Packaging material, Supplier/Vendor/Contractor	03 Feb 2023
QE-028912	SBC, Introduction of STERIS Barrier Product Solutions, Sterilization bag, 40" x 58" drawstring steam indicator dot to SBC.	Packaging, Supplier/Vendor/Contractor	03 Feb 2023
QE-010683	Implementation of Electronic Batch Records (EBR) in vial and syringe filling lines in Sweden Biomanufacturing Center (SBC)	Computerised systems, Manufacturing, Process, Product review report, Qualification/Validation	21 Feb 2023
QE-016685	SBC, Replace manual calculations with calculations in GQCLIMS	Computerised systems	24 Feb 2023
QE-031118	Update Scada and PLC software with Audit trail Communication surveillance alarm. Also update for turning station and needle movement in Y-direction	Computerised systems	28 Feb 2023

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

ID Number	Change Description	Change Category	Implementation Date
QE-012126	SBC, Sterility Isolators and Material Transfer Chambers in QC Microbiology, VHP Cycle Qualification	Process	28 Feb 2023
QE-031118	Update Scada and PLC software with Audit trail Communication surveillance alarm. Also update for turning station and needle movement in Y-direction	Computerised systems	28 Feb 2023
QE-036577	SBC, Introduction of mobile manual visual inspection booths, B921	Equipment/Instruments, Qualification/Validation	28 Feb 2023
QE-016605	SBC, Implementation of SIC QE-004837 - Harmonization of gamma radiation dose range for plunger stoppers manufactured by BD in Le Pont de Claix.	Supplier/Vendor/Contractor	02 Mar 2023
QE-025946	SBC, withdrawal of old article numbers and specifications for filtration set OpticapXL from Merck	Packaging material, Supplier/Vendor/Contractor	02 Mar 2023
QE-013870	Change to the mfg autoclave SAP ID 10292037 load patterns, wrapping and drying parameters	Manufacturing	03 Mar 2023
QE-005309	SBC, Configuration of formats in Mettler PLM and script Copy2SAP in the PSM server	Computerised systems, Packaging	24 Mar 2023
QE-002885	SBC, Interventions for change of stopper transfer arm during ongoing syringe filling, SAP no 10290021	Equipment/Instruments, Manufacturing, Qualification/Validation	31 Mar 2023
QE-029126	SBC, TOR process update	Process	19 Apr 2023
QE-047461	SBC, configuration of new formats for the EU market with long prefixes in the PLM system	Computerised systems, Packaging, Qualification/Validation	21 Apr 2023
QE-011547	Capacity optimization and expansion of cold rooms within QC: 921-256, 921-257, 921-258, 921-120 and 921-122	Qualification/Validation	12 May 2023
QE-041255	Fasenra Reprocessing of final bulk documentation updates after completed process validation	Analytical, Manufacturing, Product	16 May 2023
QE-046137	SBC, Change of HVAC zero reference location	Facility/Utility	17 May 2023
QE-016992	SBC, Decontamination cycle aeration part 2 time extension alarm for syringe filling line SAP ID 10290021	Manufacturing	31 May 2023
QE-016992	SBC, Decontamination cycle aeration part 2 time extension alarm for syringe filling line SAP ID 10290021	Manufacturing	31 May 2023
QE-011539	SBC, Qualification of SoloVPE instrument	Qualification/Validation	02 Jun 2023
QE-016196	SBC, Simplified procedure for approval of personnel involved in aseptic filling	Manufacturing, Quality/Compliance	08 Jun 2023
QE-048060	SBC, PAS-X. Update of gMBR SBCVI001 Version 2.0	Computerised systems, Manufacturing, Qualification/Validation	16 Jun 2023
QE-023190	SBC, Update gMBR SBCTFP01 with pooling of two Drug Substance Lots for Fasenra and verify that pooling does not exceed allowed protein range	Computerised systems, Manufacturing, Product review report, Qualification/Validation	19 Jun 2023

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

ID Number	Change Description	Change Category	Implementation Date
QE-044094	SBC, Creating separate methods for solution preparation at QC	Analytical	22 Jun 2023
QE-044048	SBC, addition of SBC as test site for Imfinzi and Fasenra sterility release testing	Quality/Compliance	22 Jun 2023
QE-045343	SBC, Implementation of lightbox and luxmeter for QC Microbiology	Equipment/Instruments	03 Jul 2023
QE-011643	SBC, cease sterility testing of Imfinzi and Fasenra DP imported from an EU or MRA country	Analytical, Quality/Compliance	05 Jul 2023
QE-052299	SBC, Annex1 implementation	Quality/Compliance	25 Aug 2023
QE-051813	Change to the MFG autoclave SAP ID 10292037 syringe load patterns with additional items.	Manufacturing	01 Sep 2023
QE-056945	SBC, Establishment of Fasenra Bulk Supply to Maihara, Japan at Sweden Biomanufacturing Centre	Facility/Utility, Manufacturing, Packaging, Product	02 Oct 2023
QE-028176	SBC, Introduction of STERILE FILTRATION SET OPTICAPXL4-1/2 ID from Merck	Packaging material, Supplier/Vendor/Contractor	26 Oct 2023
QE-078042	SBC, Introducing supply chain matrix for evaluating the need of sterile verification before release of single use materials	Supplier/Vendor/Contractor	26 Oct 2023
QE-050166	SBC, Introduction of partition for packaging of 1ml APFS (Material Readiness)	Packaging material	27 Oct 2023
QE-076230	New quick coupling for gripper format part for robot arm at APFS Assembly Line	Equipment/Instruments	03 Nov 2023

## Product Review

**Product Name/Family**  
Fasenra (benralizumab) 30 mg

**Period**  
14 Nov 2022 to 13 Nov 2023

### 17.6 Appendix 6: Deviations

Table 17–8 Deviations

Deviation ID	Criticality Level	Product Impact	Short Description
QIMS #2363064	Major	Inconclusive within deviation, CAPA 263885 initiated for follow up on stability	<p>Title: Frozen benralizumab DS from FMC, thawed at receipt</p> <p>Event description: Shipment with temperature excursion (TE) caused DS batch LA2735S2 bag 3 and 4 to be partially thawed at time of arrival to SBC. TE is investigated in GCM #863898 by FMC.</p> <p>Root Cause: Damage during shipment caused by transport supplier.</p> <p>Corrections: Batch/es produced by aforementioned bags of DS batch to be put on stability.</p> <p>Supplier to contact AZ in case of deviations during transport.</p>
QIMS #263590	Major	No	<p>Title: Formulation, product in tap point</p> <p>Event description: Accumulation of fasenra is detected when sampling from the tap point for compressed air.</p> <p>Root Cause: Method are considered to be the root cause of the deviation.</p> <p>Corrections: The corrective actions are cleaning and correct marking of tap station. Update of work instruction and staff training</p>
QE-024696	Major	No	<p>Title: Control sign missing</p> <p>Event description: Uncertified operators had performed activities during batch performance without double-sign by certified operator.</p> <p>Root cause: The root cause is lack of certified personell. The root cause category is Work Management</p> <p>Corrections: Staff training performed by QA and line managers.</p>
QE-032894	Major	No	<p>Title: Missing review date and signature on analysis documentation.</p> <p>Event description: Reviewer date and signature was, on accident during sample archival, found to be missing from 2 separate data capture sheets and 3 different worksheets.</p> <p>Root cause: Human performance error due to personal circumstances, high work load and pressure of a performance focused work culture.</p> <p>Corrections: Improvements was introduced by CAPA-005155 which conducted update of the QC laboratory review SOP (SOP-0107989 v13.0) and sample receival SOP (SOP-0036616 v24.0)</p>
QE-034338	Major	No	<p>Title: Returned 1 discarded syringe on pallet</p> <p>Event description: During reconciliation one additional syringe for one of the pallets after performed visual inspection was noted.</p> <p>Root cause: Theroot cause is human error. The root cause category is Work Management</p> <p>Corrections: Update of work instruction with clarification of performing controls of tubs after visual inspection.</p>

## Product Review

**Product Name/Family**

Fasenra (benralizumab) 30 mg

**Period**

14 Nov 2022 to 13 Nov 2023

Deviation ID	Criticality Level	Product Impact	Short Description
QE-037211	Major	No	<p>Title: Missing documentation for thawing</p> <p>Event description: The batch documentation for thawing of batch MAEH was missing.</p> <p>Root cause: Method do not describe storage of batch documentation.</p> <p>Corrective action: Updated method for storage of batch documentation. For applicable batch related documents, copies were retrieved and reviewed.</p>
QE-046464	Major	No	<p>Title: pH-analysis for Benra PFS-SA 30 mg performed on wrong sample.</p> <p>Event description: Analyst has taken the wrong sample when executing pH analysis. The mistake was discovered during the review of the analysis. The sample analyzed was from the correct batch (MAEV) but was a non-randomized sample instead of a randomized.</p> <p>Root cause: Human handling errors and inadequate routines/instructions. The sample handling process described in SOP-0107976 was not followed.</p> <p>Corrections: Improvements was introduced by CAPA-006662. A detail card, with the aim of collecting the entire sample handling process in one, step by step, document was introduced. Update of SBC SOP for general operating procedures within QC laboratories (SOP-0107976) and update of the on-the-job-training (OJT) for SBC-QC-General entry requirements-Sample handling in Cornerstone.</p>
QE-065798	Major	No	<p>Title: Leakage benralizumab DS Frozen</p> <p>Event description: Leakage was detected at one of two bags thawed for batch MAFM.</p> <p>Root cause: Undetermined, but possible root cause Material</p> <p>Corrective action: Direct corrective actions were taken for handling the affected DS bag.</p>
QE-082115	Major	No	<p>Title:</p> <p>Event description: On two separate occasions, damaged packages have been discovered on the packaging line, first during sorting and the second time at the IPC control.</p> <p>Root cause: Material, variations from the supplier</p> <p>Corrections: The identified damaged packages have been removed.</p>

### Document Approvals

Business Approval	Kristian Carlborg Kristian.Carlborg@astrazeneca.com 09-Feb-2024 11:59:23 GMT+0000
Administrative Approval	Gisela Bengtsson Gisela.Bengtsson@astrazeneca.com 09-Feb-2024 12:17:50 GMT+0000
Business Approval	Linda Eidensten Linda.Eidensten@astrazeneca.com 09-Feb-2024 16:14:09 GMT+0000
Quality Approval	Camilla Johansson Camilla.Johansson@astrazeneca.com 10-Feb-2024 07:54:16 GMT+0000