

Drug Utilization Review Board



OKLAHOMA

Health Care Authority

**Wednesday,
March 8, 2023
4:00pm**

Oklahoma Health Care Authority (OHCA)
4345 N. Lincoln Blvd.
Oklahoma City, OK 73105

Viewing Access Only:

Please register for the webinar at:

https://zoom.us/webinar/register/WN_73z8ERX7Sv-KeQGP3GVqPg

After registering, you will receive a confirmation email containing information about joining the webinar.





The University of Oklahoma

Health Sciences Center

COLLEGE OF PHARMACY
PHARMACY MANAGEMENT CONSULTANTS

MEMORANDUM

TO: Drug Utilization Review (DUR) Board Members
FROM: Michyla Adams, Pharm.D.
SUBJECT: Packet Contents for DUR Board Meeting – March 8, 2023
DATE: March 1, 2023
NOTE: The DUR Board will meet at 4:00pm at the Oklahoma Health Care Authority (OHCA) at 4345 N. Lincoln Blvd. in Oklahoma City, Oklahoma.

There will be Zoom access to this meeting; however, Zoom access will be set up in view-only mode with no voting, speaking, video, or chat box privileges. Zoom access will allow for viewing of the presentation slides as well as audio of the presentations and discussion during the meeting; however, the DUR Board meeting will not be delayed or rescheduled due to any technical issues that may arise.

Viewing Access Only via Zoom:

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*Enclosed are the following items related to the March meeting.
Material is arranged in order of the agenda.*

Call to Order

Public Comment Forum

Action Item – Approval of DUR Board Meeting Minutes – Appendix A

Update on the Medication Coverage Authorization Unit/Spring 2023 Pipeline Update – Appendix B

Action Item – Vote to Prior Authorize Brimonidine 0.33% Topical Gel (Generic Mirvaso®), Vtama® (Tapinarof), and Zoryve™ (Roflumilast) and Update the Approval Criteria for Topical Acne, Psoriasis, and Rosacea Products – Appendix C

Action Item – Vote to Prior Authorize Tadliq® (Tadalafil Oral Suspension) and Tyvaso DPI® (Treprostinil Powder for Inhalation) and Update the Approval Criteria for the Pulmonary Hypertension Medications – Appendix D

Action Item – Vote to Prior Authorize Zonisade™ (Zonisamide Oral Suspension) and Ztalmy® (Ganaxolone) and Update the Approval Criteria for the Anticonvulsants – Appendix E

Action Item – Vote to Prior Authorize Rezlidhia™ (Olutasidenib) and Update the Approval Criteria for the Leukemia Medications – Appendix F

Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Jaypirca™ (Pirtobrutinib) and Lunsumio™ (Mosunetuzumab-axgb) – Appendix G

Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Rolvedon™ (Eflapegrastim-xnst) and Stimufend® (Pegfilgrastim-fpgk) – Appendix H

Annual Review of Growth Hormone Products and Voxzogo® (Vosoritide) – Appendix I

30-Day Notice to Prior Authorize Lamzede® (Velmanase Alfa-tycv) – Appendix J

Annual Review of Multiple Sclerosis (MS) Medications and 30-Day Notice to Prior Authorize Briumvi™ (Ublituximab-xiiy) and Tascenso ODT® [Fingolimod Orally Disintegrating Tablet (ODT)] – Appendix K

Annual Review of Short-Acting Beta₂ Agonists (SABAs) and 30-Day Notice to Prior Authorize Airsupra™ (Albuterol/Budesonide) – Appendix L

Annual Review of Urea Cycle Disorder (UCD) Medications and 30-Day Notice to Prior Authorize Olpruva™ (Sodium Phenylbutyrate Pellets for Oral Suspension) and Pheburane® (Sodium Phenylbutyrate Oral Pellets) – Appendix M

U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates – Appendix N

Future Business

Adjournment

Oklahoma Health Care Authority

Drug Utilization Review Board

(DUR Board)

Meeting – March 8, 2023 @ 4:00pm

at the

Oklahoma Health Care Authority (OHCA)

4345 N. Lincoln Blvd.

Oklahoma City, Oklahoma 73105

NOTE: ***The DUR Board will meet at 4:00pm at OHCA (see address above). There will be Zoom access to this meeting; however, Zoom access will be set up in view-only mode with no voting, speaking, video, or chat box privileges. Zoom access will allow for viewing of the presentation slides as well as audio of the presentations and discussion during the meeting; however, the DUR Board meeting will not be delayed or rescheduled due to any technical issues that may arise.***

AGENDA

Discussion and action on the following items:

Items to be presented by Dr. Muchmore, Chairman:

1. Call to Order

A. Roll Call – Dr. Wilcox

DUR Board Members:

Dr. Jennifer de los Angeles –	participating in person
Mr. Kenneth Foster –	participating in person
Dr. Megan Hanner –	participating in person
Dr. Lynn Mitchell –	participating in person
Dr. John Muchmore –	participating in person
Dr. Lee Muñoz –	participating in person
Dr. James Osborne –	participating in person

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After registering, you will receive a confirmation email containing information about joining the webinar.

Or join by phone:

Dial: +1-602-753-0140 or +1-669-219-2599

Webinar ID: 952 7560 1667

Passcode: 69395211

Public Comment for Meeting:

- Speakers who wish to sign up for public comment at the OHCA DUR Board meeting may do so in writing by visiting the DUR Board page on the OHCA website at www.oklahoma.gov/ohca/about/boards-and-committees/drug-utilization-review/dur-board and completing the [Speaker Registration Form](#). Completed Speaker Registration forms should be submitted to DURPublicComment@okhca.org. Forms must be received after the DUR Board agenda has been posted and no later than 24 hours before the meeting.
- The DUR Board meeting will allow public comment and time will be limited to 40 minutes total for all speakers during the meeting. Each speaker will be given 5 minutes to speak at the public hearing. If more than 8 speakers properly request to speak, time will be divided evenly.
- Only 1 speaker per manufacturer will be allowed.
- Any speakers who sign up for public comment must attend the DUR Board meeting in person at OHCA (see above address). Public comment through Zoom will not be allowed for the DUR Board meeting.

Items to be presented by Dr. Muchmore, Chairman:

2. Public Comment Forum

- A. Acknowledgement of Speakers for Public Comment

Items to be presented by Dr. Muchmore, Chairman:

3. Action Item – Approval of DUR Board Meeting Minutes – See Appendix A

- A. February 8, 2023 DUR Board Meeting Minutes
- B. February 8, 2023 DUR Board Recommendations Memorandum
- C. Correspondence

Items to be presented by Dr. Moss, Dr. Kottoor, Dr. Muchmore, Chairman:

4. Update on Medication Coverage Authorization Unit/Spring 2023 Pipeline Update – See Appendix B

- A. Pharmacy Helpdesk Activity for February 2023
- B. Medication Coverage Activity for February 2023
- C. Spring 2023 Pipeline Update

Items to be presented by Dr. Kottoor, Dr. Muchmore, Chairman:

5. Action Item – Vote to Prior Authorize Brimonidine 0.33% Topical Gel (Generic Mirvaso®), Vtama® (Tapinarof), and Zoryve™ (Roflumilast) and Update the Approval Criteria for Topical Acne, Psoriasis, and Rosacea Products – See Appendix C

- A. Market News and Updates
- B. Product Summaries
- C. College of Pharmacy Recommendations

Items to be presented by Dr. Wilson, Dr. Muchmore, Chairman:

6. Action Item – Vote to Prior Authorize Tadalafil® (Tadalafil Oral Suspension) and Tyvaso DPI® (Treprostinil Powder for Inhalation) and Update the Approval Criteria for the Pulmonary Hypertension Medications – See Appendix D

- A. Market News and Updates
- B. College of Pharmacy Recommendations

Items to be presented by Dr. O'Halloran, Dr. Muchmore, Chairman:

7. Action Item – Vote to Prior Authorize Zonisamide™ (Zonisamide Oral Suspension) and Ztalmy® (Ganaxolone) and Update the Approval Criteria for the Anticonvulsants – See Appendix E

- A. Market News and Updates
- B. Ztalmy® (Ganaxolone) Product Summary
- C. College of Pharmacy Recommendations

Items to be presented by Dr. Borders, Dr. Muchmore, Chairman:

8. Action Item – Vote to Prior Authorize Rezlidhia™ (Olutasidenib) and Update the Approval Criteria for the Leukemia Medications – See Appendix F

- A. Market News and Updates
- B. Rezlidhia™ (Olutasidenib) Product Summary
- C. College of Pharmacy Recommendations

Items to be presented by Dr. Borders, Dr. Muchmore, Chairman:

9. Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Jaypirca™ (Pirtobrutinib) and Lunsumio™ (Mosunetuzumab-axgb) – See Appendix G

- A. Current Prior Authorization Criteria
- B. Utilization of Lymphoma Medications
- C. Prior Authorization of Lymphoma Medications
- D. Market News and Updates
- E. Jaypirca™ (Pirtobrutinib) Product Summary
- F. Lunsumio™ (Mosunetuzumab-axgb) Product Summary
- G. College of Pharmacy Recommendations
- H. Utilization Details of Lymphoma Medications

Items to be presented by Dr. Moss, Dr. Muchmore, Chairman:

10. Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Rolvedon™ (Eflapegrastim-xnst) and Stimufend® (Pegfilgrastim-fpgk) – See Appendix H

- A. Current Prior Authorization Criteria
- B. Utilization of G-CSFs
- C. Prior Authorization of G-CSFs
- D. Market News and Updates

- E. Cost Comparison
- F. College of Pharmacy Recommendations
- G. Utilization Details of G-CSFs

Items to be presented by Dr. Wilson, Dr. Muchmore, Chairman:

11. Annual Review of Growth Hormone Products and Voxzogo® (Vosoritide) – See Appendix I

- A. Current Prior Authorization Criteria
- B. Utilization of Growth Hormone Products and Voxzogo® (Vosoritide)
- C. Prior Authorization of Growth Hormone Products and Voxzogo® (Vosoritide)
- D. Market News and Updates
- E. College of Pharmacy Recommendations
- F. Utilization Details of Growth Hormone Products and Voxzogo® (Vosoritide)

Items to be presented by Dr. Wilson, Dr. Muchmore, Chairman:

12. 30-Day Notice to Prior Authorize Lamzede® (Velmanase Alfa-tycv) – See Appendix J

- A. Introduction
- B. Lamzede® (Velmanase Alfa-tycv) Product Summary
- C. College of Pharmacy Recommendations

Items to be presented by Dr. O'Halloran, Dr. Muchmore, Chairman:

13. Annual Review of Multiple Sclerosis (MS) Medications and 30-Day Notice to Prior Authorize Briumvi™ (Ublituximab-xiiy), Tascenso ODT® [Fingolimod Orally Disintegrating Tablet (ODT)] – See Appendix K

- A. Current Prior Authorization Criteria
- B. Utilization of MS Medications
- C. Prior Authorization of MS Medications
- D. Market News and Updates
- E. Briumvi™ (Ublituximab-xiiy) Product Summary
- F. Cost Comparison: Fingolimod Products
- G. College of Pharmacy Recommendations
- H. Utilization Details of MS Medications

Items to be presented by Dr. Kottoor, Dr. Muchmore, Chairman:

14. Annual Review of Short-Acting Beta₂ Agonists (SABAs) and 30-Day Notice to Prior Authorize Airsupra™ (Albuterol/Budesonide) – See Appendix L

- A. Current Prior Authorization Criteria
- B. Utilization of SABAs
- C. Prior Authorization of SABAs
- D. Market News and Updates
- E. Airsupra™ (Albuterol/Budesonide) Product Summary
- F. College of Pharmacy Recommendations
- G. Utilization Details of SABAs

Items to be presented by Dr. Reynolds, Dr. Muchmore, Chairman:

15. Annual Review of Urea Cycle Disorder (UCD) Medications and 30-Day Notice to Prior Authorize Olpruva™ (Sodium Phenylbutyrate Pellets for Oral Suspension) and Pheburane® (Sodium Phenylbutyrate Oral Pellets) – See Appendix M

- A. Current Prior Authorization Criteria
- B. Utilization of UCD Medications
- C. Prior Authorization of UCD Medications
- D. Market News and Updates
- E. Cost Comparison: UCD Medications
- F. College of Pharmacy Recommendations
- G. Utilization Details of UCD Medications

Items to be presented by Dr. Moss, Dr. Muchmore, Chairman:

16. U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates – See Appendix N

Items to be presented by Dr. Adams, Dr. Muchmore, Chairman:

17. Future Business* (Upcoming Product and Class Reviews)

- A. Anti-Diabetic Medications
- B. Anti-Emetic Medications
- C. Lung Cancer Medications
- D. Systemic Antifungal Medications

*Future product and class reviews subject to change.

18. Adjournment

NOTE: An analysis of the atypical [Aged, Blind, and Disabled (ABD)] patient subgroup of the Oklahoma Medicaid population has been performed pertaining to all recommendations included in this DUR Board meeting packet to ensure fair and knowledgeable deliberation of the potential impact of the recommendations on this patient population.



**OKLAHOMA HEALTH CARE AUTHORITY
DRUG UTILIZATION REVIEW (DUR) BOARD MEETING
MINUTES OF MEETING FEBRUARY 8, 2023**

DUR BOARD MEMBERS:	PRESENT	ABSENT
Jennifer de los Angeles, Pharm.D., BCOP		X
Kenneth Foster, MHS, PA-C	X	
Megan A. Hanner, D.O.	X	
Lynn Mitchell, M.D.; Vice Chairwoman		X
John Muchmore, M.D.; Ph.D.; Chairman	X	
Lee Muñoz, D.Ph.		X
James Osborne, Pharm.D.	X	

COLLEGE OF PHARMACY STAFF:	PRESENT	ABSENT
Michyla Adams, Pharm.D.; DUR Manager	X	
Erin Ford, Pharm.D.; Clinical Pharmacist		X
Beth Galloway; Business Analyst	X	
Katrina Harris, Pharm.D.; Clinical Pharmacist		X
Robert Klatt, Pharm.D.; Clinical Pharmacist		X
Thara Kottoor, Pharm.D.; Pharmacy Resident	X	
Morgan Masterson, Pharm.D.; Clinical Pharmacist		X
Regan Moss, Pharm.D.; Clinical Pharmacist	X	
Brandy Nawaz, Pharm.D.; Clinical Pharmacist		X
Alicia O'Halloran, Pharm.D.; Clinical Pharmacist	X	
Wynn Phung, Pharm.D.; Clinical Pharmacist		X
Jo'Nel Reynolds, Pharm.D.; Clinical Pharmacist	X	
Grant H. Skrepnek, Ph.D.; Associate Professor		X
Ashley Teel, Pharm.D.; Clinical Pharmacist		X
Jacquelyn Travers, Pharm.D.; Practice Facilitating Pharmacist	X	
Devin Wilcox, D.Ph.; Pharmacy Director	X	
Justin Wilson, Pharm.D.; Clinical Pharmacist	X	
PA Oncology Pharmacists: Tad Autry Pharm.D., BCPS, BCOP		X
Allison Baxley, Pharm.D., BCOP		X
Emily Borders, Pharm.D., BCOP	X	
Graduate Students: Rykr Carpenter, Pharm.D.		X
Matthew Dickson, Pharm.D.		X
Victoria Jones, Pharm.D.		X
Michael Nguyen, Pharm.D.		X
Corby Thompson, Pharm.D.	X	
Visiting Pharmacy Student(s): N/A		

OKLAHOMA HEALTH CARE AUTHORITY STAFF:	PRESENT	ABSENT
Mark Brandenburg, M.D., MSC; Medical Director		X
Ellen Buettner; Chief of Staff		X
Kevin Corbett, C.P.A.; Chief Executive Officer		X
Terry Cothran, D.Ph.; Pharmacy Director	X	
Josh Holloway, J.D.; Deputy General Counsel	X	
Brandon Keppner; Chief Operating Officer		X

Traylor Rains; State Medicaid Director		X
Jill Ratterman, D.Ph.; Clinical Pharmacist		X
Paula Root, M.D.; Senior Medical Director, Interim Chief Medical Officer	X	
Shanna Simmons, Pharm.D.; Program Integrity Pharmacist	X	
Kara Smith, J.D.; General Counsel		X
Michelle Tahah, Pharm.D.; Clinical Pharmacist	X	
Toney Welborn, M.D., MPH, MS; Medical Director		X

OTHERS PRESENT:

Bryan Steffan, Boehringer	John Stancil, Artia Solutions
Dana Pask, Fennec Pharma	Marc Bagby, Lilly
Sean Hammond, Axsome	Waleed Al-Homond, Provention Bio
Jeff Odell, Provention Bio	Kevin Gallagher, Fennec Pharma
Fran Reis, Embecta	Marc Parker, Sunovion
Doug Pierce, Genentech	Melissa Abbott, Eisai
Justin Springfield, Gilead	Ed Eldridge, Gilead
Jason Smith, Gilead	Kristi Kemp, AbbVie
Kimberly Brackett, AbbVie	John King, AbbVie
Brent Parker, Merck	David Prather, Novo Nordisk
Nima Nabavi, Amgen	Frank Alvarado, Johnson & Johnson
Robert Greely, Biogen	Dennis Murphy, Axsome
Peter Barrio, Unither	Ron Abraham, Xcenda
Bettina Buob, Neurelis	Bob Rose, Axsome
Wendi Chandler	Christina Hartmann, Jazz Pharma
Robin Selsor, Aimimmune	Burl Beasley, OMES
Shelly Nickerson, Marinus Pharma	Gina Heinen, Novo Nordisk
Ron Frost, Astellas	Todd DeMarb, Fennec Pharma
David Miley, Teva	

PRESENT FOR PUBLIC COMMENT:

Sean Hammond, Axsome	Dana Pask, Fennec Pharma
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AGENDA ITEM NO. 1: CALL TO ORDER

1A: ROLL CALL

Dr. Muchmore called the meeting to order at 4:03 pm. Roll call by Dr. Wilcox did not initially establish the presence of a quorum; however, a quorum was established prior to any action items.

ACTION: NONE REQUIRED

AGENDA ITEM NO. 2: PUBLIC COMMENT FORUM

2A: AGENDA ITEM NO. 12 SEAN HAMMOND

2B: AGENDA ITEM NO. 15 DANA PASK

ACTION: NONE REQUIRED

AGENDA ITEM NO. 3: APPROVAL OF DUR BOARD MEETING MINUTES

3A: DECEMBER 14, 2022 DUR MINUTES

Materials included in agenda packet; presented by Dr. Muchmore
Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

AGENDA ITEM NO. 4: UPDATE ON MEDICATION COVERAGE AUTHORIZATION UNIT/USE OF GLUCAGON-LIKE PEPTIDE 1 (GLP-1) RECEPTOR AGONISTS AND SODIUM-GLUCOSE COTRANSPORTER-2 (SGLT-2) INHIBITORS WITH CARDIOVASCULAR (CV) BENEFIT IN MEMBERS WITH TYPE 2 DIABETES (T2D) AND HIGH CV RISK OR ESTABLISHED ATHEROSCLEROTIC CV DISEASE (ASCVD) MAILING UPDATE

4A: PHARMACY HELPDESK ACTIVITY FOR JANUARY 2023

4B: MEDICATION COVERAGE ACTIVITY FOR JANUARY 2023

4C: USE OF GLP-1 RECEPTOR AGONISTS AND SGLT-2 INHIBITORS WITH CV BENEFIT IN MEMBERS WITH T2D AND HIGH CV RISK OR ESTABLISHED ASCVD MAILING UPDATE

Materials included in agenda packet; presented by Dr. O'Halloran

ACTION: NONE REQUIRED

AGENDA ITEM NO. 5: NARROW THERAPEUTIC INDEX (NTI) LIST

5A: INTRODUCTION

5B: NTI LIST

5C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Kottoor

ACTION: NONE REQUIRED

AGENDA ITEM NO. 6: VOTE TO UPDATE THE APPROVAL CRITERIA FOR THE ANTIHYPERLIPIDEMICS

6A: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. O'Halloran

Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

AGENDA ITEM NO. 7: VOTE TO PRIOR AUTHORIZE RELYVRIO™ (SODIUM PHENYLBUTYRATE/TAURURSODIOL) AND UPDATE THE APPROVAL CRITERIA FOR THE AMYOTROPHIC LATERAL SCLEROSIS (ALS) MEDICATIONS

7A: MARKET NEWS AND UPDATES

7B: RELYVRIO™ (SODIUM PHENYLBUTYRATE/TAURURSODIOL) PRODUCT SUMMARY

7C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Wilson

Mr. Foster moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

AGENDA ITEM NO. 8: VOTE TO UPDATE THE APPROVAL CRITERIA FOR THE GONADOTROPIN-RELEASING HORMONE (GNRH) MEDICATIONS

8A: MARKET NEWS AND UPDATES

8B: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Wilson

Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

AGENDA ITEM NO. 9: VOTE TO PRIOR AUTHORIZE VYVGART® (EFGARTIGIMOD ALFA-FCAB) AND UPDATE THE APPROVAL CRITERIA FOR EMPAVELI® (PEGCETACOPLAN), ENSPRYNG® (SATRALIZUMAB-MWGE), SOLIRIS® (ECULIZUMAB), ULTOMIRIS® (RAVULIZUMAB-CWVZ), AND UPLIZNA® (INEBILIZUMAB-CDON)

9A: MARKET NEWS AND UPDATES

9B: VYVGART® (EFGARTIGIMOD ALFA-FCAB) PRODUCT SUMMARY

9C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Moss
Mr. Foster moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

**AGENDA ITEM NO. 10: VOTE TO PRIOR AUTHORIZE OMLONTI®
(OMIDENEPAG ISOPROPYL) AND UPDATE THE APPROVAL CRITERIA FOR THE
GLAUCOMA MEDICATIONS**

10A: MARKET NEWS AND UPDATES

10B: OMLONTI® (OMIDENEPAG ISOPROPYL) PRODUCT SUMMARY

10C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Moss
Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

**AGENDA ITEM NO. 11: VOTE TO PRIOR AUTHORIZE VABYSMO™
(FARICIMAB-SVOA) AND UPDATE THE APPROVAL CRITERIA FOR THE
OPHTHALMIC VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) INHIBITOR
MEDICATIONS**

11A: MARKET NEWS AND UPDATES

11B: VABYSMO™ (FARICIMAB-SVOA) PRODUCT SUMMARY

11C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Kottoor
Mr. Foster moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

**AGENDA ITEM NO. 12: VOTE TO PRIOR AUTHORIZE AUVELITY™
(DEXTROMETHORPHAN/BUPROPION) AND VENLAFAXINE 112.5MG EXTENDED-
RELEASE (ER) TABLET**

12A: MARKET NEWS AND UPDATES

12B: AUVELITY™ (DEXTROMETHORPHAN/BUPROPION) PRODUCT SUMMARY

12C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Kottoor
Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

**AGENDA ITEM NO. 13: VOTE TO PRIOR AUTHORIZE KIMMTRAK®
(TEBENTAFUSP-TEBN) AND OPDUALAG™ (NIVOLUMAB/RELATLIMAB-RMBW)
AND UPDATE THE APPROVAL CRITERIA FOR THE SKIN CANCER MEDICATIONS**

13A: MARKET NEWS AND UPDATES

13B: KIMMTRAK® (TABENTAFUSP-TEBN) PRODUCT SUMMARY

13C: OPDUALAG™ (NIVOLUMAB/RELATLIMAB-RMBW) PRODUCT SUMMARY

13D: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Borders
Mr. Foster moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

**AGENDA ITEM NO. 14: VOTE TO PRIOR AUTHORIZE LYTGOBI®
(FUTIBATINIB) AND UPDATE THE APPROVAL CRITERIA FOR THE
GASTROINTESTINAL (GI) CANCER MEDICATIONS**

14A: MARKET NEWS AND UPDATES

14B: LYTGOBI® (FUTIBATINIB) PRODUCT SUMMARY

14C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Borders

Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

AGENDA ITEM NO. 15: VOTE TO PRIOR AUTHORIZE PEDMARK® (SODIUM THIOSULFATE) AND VIJOICE® (ALPELISIB)

15A: MARKET NEWS AND UPDATES

15B: PRODUCT SUMMARIES

15C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Borders

Mr. Foster moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

AGENDA ITEM NO. 16: VOTE TO PRIOR AUTHORIZE HYFTOR™ (SIROLIMUS TOPICAL GEL)

16A: MARKET NEWS AND UPDATES

16B: HYFTOR™ (SIROLIMUS TOPICAL GEL) PRODUCT SUMMARY

16C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Borders

Dr. Hanner moved to approve; seconded by Mr. Foster

ACTION: MOTION CARRIED

AGENDA ITEM NO. 17: ANNUAL REVIEW OF ANTI-MIGRAINE MEDICATIONS

17A: CURRENT PRIOR AUTHORIZATION CRITERIA

17B: UTILIZATION OF ANTI-MIGRAINE MEDICATIONS

17C: PRIOR AUTHORIZATION OF ANTI-MIGRAINE MEDICATIONS

17D: MARKET NEWS AND UPDATES

17E: COLLEGE OF PHARMACY RECOMMENDATIONS

17F: UTILIZATION DETAILS OF ANTI-MIGRAINE MEDICATIONS

Materials included in agenda packet; presented by Dr. Moss

Mr. Foster moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

AGENDA ITEM NO. 18: ANNUAL REVIEW OF LEUKEMIA MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE REZLIDHIA™ (OLUTASIDENIB)

18A: CURRENT PRIOR AUTHORIZATION CRITERIA

18B: UTILIZATION OF LEUKEMIA MEDICATIONS

18C: PRIOR AUTHORIZATION OF LEUKEMIA MEDICATIONS

18D: MARKET NEWS AND UPDATES

18E: REZLIDHIA™ (OLUTASIDENIB) PRODUCT SUMMARY

18F: COLLEGE OF PHARMACY RECOMMENDATIONS

18G: UTILIZATION DETAILS OF LEUKEMIA MEDICATIONS

Materials included in agenda packet; presented by Dr. Borders

ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN MARCH

AGENDA ITEM NO. 19: ANNUAL REVIEW OF ANTICONVULSANTS AND 30-DAY NOTICE TO PRIOR AUTHORIZE ZONISADE™ (ZONISAMIDE ORAL SUSPENSION) AND ZTALMY® (GANAXOLONE)

19A: CURRENT PRIOR AUTHORIZATION CRITERIA

19B: UTILIZATION OF ANTICONVULSANTS

19C: PRIOR AUTHORIZATION OF ANTICONVULSANTS

19D: MARKET NEWS AND UPDATES

19E: ZTALMY® (GANALOXONE) PRODUCT SUMMARY

19F: COLLEGE OF PHARMACY RECOMMENDATIONS

19G: UTILIZATION DETAILS OF ANTICONVULSANTS

Materials included in agenda packet; presented by Dr. O'Halloran

ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN MARCH

AGENDA ITEM NO. 20: ANNUAL REVIEW OF PULMONARY HYPERTENSION MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE TADLIQ® (TADALAFIL ORAL SUSPENSION) AND TYVASO DPI® (TREPROSTINIL POWDER FOR INHALATION)

20A: CURRENT PRIOR AUTHORIZATION CRITERIA

20B: UTILIZATION OF PULMONARY HYPERTENSION MEDICATIONS

20C: PRIOR AUTHORIZATION OF PULMONARY HYPERTENSION MEDICATIONS

20D: MARKET NEWS AND UPDATES

20E: COLLEGE OF PHARMACY RECOMMENDATIONS

20F: UTILIZATION DETAILS OF PULMONARY HYPERTENSION MEDICATIONS

Materials included in agenda packet; presented by Dr. Wilson

ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN MARCH

AGENDA ITEM NO. 21: ANNUAL REVIEW OF DOJOLVI® (TRiheptanoin)

21A: CURRENT PRIOR AUTHORIZATION CRITERIA

21B: UTILIZATION OF DOJOLVI® (TRiheptanoin)

21C: PRIOR AUTHORIZATION OF DOJOLVI® (TRiheptanoin)

21D: MARKET NEWS AND UPDATES

21E: COLLEGE OF PHARMACY RECOMMENDATIONS

21F: UTILIZATION DETAILS OF DOJOLVI® (TRiheptanoin)

Materials included in agenda packet; presented by Dr. Wilson

ACTION: NONE REQUIRED

AGENDA ITEM NO. 22: ANNUAL REVIEW OF TOPICAL ACNE, PSORIASIS, AND ROSACEA PRODUCTS AND 30-DAY NOTICE TO PRIOR AUTHORIZE BRIMONIDINE 0.33% TOPICAL GEL (GENERIC MIRVASO®), VTAMA® (TAPINAROF), AND ZORYVE™ (ROFLUMILAST)

22A: CURRENT PRIOR AUTHORIZATION CRITERIA

22B: UTILIZATION OF TOPICAL ACNE, PSORIASIS, AND ROSACEA PRODUCTS

22C: PRIOR AUTHORIZATION OF TOPICAL ACNE, PSORIASIS, AND ROSACEA PRODUCTS

22D: MARKET NEWS AND UPDATES

22E: PRODUCT SUMMARIES

22F: COLLEGE OF PHARMACY RECOMMENDATIONS

22G: UTILIZATION DETAILS OF TOPICAL ACNE, PSORIASIS, AND ROSACEA PRODUCTS

Materials included in agenda packet; presented by Dr. Kottoor

ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN MARCH

AGENDA ITEM NO. 23: U.S. FOOD AND DRUG ADMINISTRATION (FDA) AND DRUG ENFORCEMENT ADMINISTRATION (DEA) UPDATES

Materials included in agenda packet; presented by Dr. O'Halloran

ACTION: NONE REQUIRED

AGENDA ITEM NO. 24: FUTURE BUSINESS* (UPCOMING PRODUCT AND CLASS REVIEWS)

24A: GRANULOCYTE COLONY-STIMULATING FACTORS (G-CSFS) AND VOXZOGO® (VOSORITIDE)

24B: GROWTH HORMONE PRODUCTS

24C: LYMPHOMA MEDICATIONS

24D: MULTIPLE SCLEROSIS (MS) MEDICATIONS

*Future product and class reviews subject to change.

Materials included in agenda packet; presented by Dr. Adams

ACTION: NONE REQUIRED

AGENDA ITEM NO. 25: ADJOURNMENT

The meeting was adjourned at 5:56 pm.



The University of Oklahoma

Health Sciences Center

COLLEGE OF PHARMACY
PHARMACY MANAGEMENT CONSULTANTS

Memorandum

Date: February 9, 2023

To: Terry Cothran, D.Ph.
Pharmacy Director
Oklahoma Health Care Authority

From: Michyla Adams, Pharm.D.
Drug Utilization Review (DUR) Manager
Pharmacy Management Consultants

Subject: DUR Board Recommendations from Meeting on February 8, 2023

Recommendation 1: Use of Glucagon-Like Peptide-1 (GLP-1) Agonists or Sodium-Glucose Co-Transporter-2 (SGLT-2) Inhibitors with Cardiovascular (CV) Benefit in Members with Type 2 Diabetes (T2D) and High CV Risk or Established Atherosclerotic CV Disease (ASCVD) Mailing Update

NO ACTION REQUIRED.

Recommendation 2: SoonerCare Narrow Therapeutic Index (NTI) Drug List

NO ACTION REQUIRED.

Recommendation 3: Vote to Update the Approval Criteria for the Antihyperlipidemics

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to the Juxtapid® (lomitapide) approval criteria to be consistent with the other antihyperlipidemic medications with similar indications (changes noted in red):

Juxtapid® (Lomitapide) Approval Criteria:

1. An FDA approved diagnosis of homozygous familial hypercholesterolemia (HoFH) defined by the presence of at least 1 of the following criteria:

- a. Documented functional mutation(s) in both low-density lipoprotein (LDL) receptor alleles or alleles known to affect LDL receptor functionality via genetic testing; or
- b. Untreated LDL >500mg/dL and triglycerides <300mg/dL and at least 1 of the following:
 - i. Documented evidence of definite HeFH in both parents ~~Documentation that both parents have untreated total cholesterol >250mg/dL~~; or
 - ii. Presence of tendinous/cutaneous xanthoma prior to 10 years of age; and
2. Documented trial of high dose statin therapy (LDL reduction capability equivalent to rosuvastatin 40mg) or maximally tolerated statin therapy at least 12 weeks in duration; and
3. Members with statin intolerance must meet 1 of the following:
 - a. Creatine kinase (CK) labs verifying rhabdomyolysis; or
 - b. An FDA labeled contraindication to all statins; or
 - c. Documented intolerance to at least 2 different statins at lower doses (dosing, dates, duration of treatment, and reason for discontinuation must be provided); or
 - d. Documented intolerance to at least 2 different statins at intermittent dosing (dosing, dates, duration of treatment, and reason for discontinuation must be provided); and
4. Documented trial of a ~~proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor (e.g., Praluent®, Repatha®)~~ ~~Repatha® (evolocumab)~~ at least 12 weeks in duration; and
5. Member requires additional lowering of LDL-C (baseline, current, and goal LDL-C levels must be provided); and
6. Prescriber must be certified with Juxtapid® Risk Evaluation and Mitigation Strategy (REMS) program.

Additionally, the College of Pharmacy recommends the following changes to the antihyperlipidemics approval criteria based on net costs (changes shown in red):

Welchol® (Colesevelam) Chewable Bar and Welchol® (Colesevelam) Packets for Oral Suspension Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason (beyond convenience) why the member cannot use the oral tablet ~~other~~ formulations of colesevelam, ~~including oral tablets and packets for oral suspension~~, which ~~is are~~ available without prior authorization, must be provided; and
- ~~3.—A quantity limit of 30 chewable bars per 30 days will apply.~~
4. The following quantity limits will apply:
 - a. 30 chewable bars per 30 days; and
 - b. 30 packets for oral suspension per 30 days.

Recommendation 4: Vote to Prior Authorize Relyvrio™ (Sodium Phenylbutyrate/Taurursodiol) and Update the Approval Criteria for the Amyotrophic Lateral Sclerosis (ALS) Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Relyvrio™ (sodium phenylbutyrate/taurursodiol) with the following criteria (shown in red):

Relyvrio™ (Sodium Phenylbutyrate/Taurursodiol) Approval Criteria:

1. An FDA approved diagnosis of amyotrophic lateral sclerosis (ALS); and
2. Member must be 18 years of age or older; and
3. Disease duration of 18 months or less (for initial approval); or
 - a. A prior authorization request with patient-specific information may be submitted for consideration of Relyvrio™ for members with disease duration >18 months, including but not limited to disease progression, specific symptoms related to the disease, activities of daily living currently affected by the disease, or prognosis; and
4. Must be prescribed by a neurologist or other specialist with expertise in the treatment of ALS (or an advanced care practitioner with a supervising physician who is a neurologist or other specialist with expertise in the treatment of ALS); and
5. Approvals will be for the duration of 6 months. For each subsequent approval, the prescriber must document the member is responding to the medication, as indicated by a slower progression in symptoms and/or slower decline in quality of life compared to the typical ALS disease progression; and
6. A quantity limit of 56 packets per 28 days will apply.

Additionally, the College of Pharmacy recommends the prior authorization of Radicava ORS® (edaravone oral suspension) with criteria similar to Radicava® (edaravone) (changes noted in red):

Radicava® (Edaravone) and Radicava ORS® (Edaravone Oral Suspension) Approval Criteria:

1. An FDA approved diagnosis of amyotrophic lateral sclerosis (ALS); and
2. Member must have been evaluated by a physician specializing in the treatment of ALS within the last 3 months; and
3. Disease duration of 2 years or less (for initial approval); or
 - a. A prior authorization request with patient-specific information may be submitted for consideration of edaravone for members with disease duration >2 years, including but not limited to disease progression, specific symptoms related to the disease, activities of daily living currently affected by the disease, or prognosis; and

4. Approvals will be for the duration of 6 months. For each subsequent approval, the prescriber must document that the member is responding to the medication, as indicated by a slower progression in symptoms and/or slower decline in quality of life compared to the typical ALS disease progression.

Recommendation 5: Vote to Update the Approval Criteria for the Gonadotropin-Releasing Hormone (GnRH) Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends updating the current Myfembree[®] approval criteria based on the new FDA approved indication for endometriosis pain with the following changes and additions (shown in red):

Myfembree[®] (Relugolix/Estradiol/Norethindrone) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
 - a. Heavy menstrual bleeding associated with uterine leiomyomas (fibroids) in premenopausal women; or
 - b. Moderate-to-severe pain associated with endometriosis in premenopausal women; and
2. Member must be 18 years of age or older; and
3. Member must not have any contraindications to therapy including:
 - a. Osteoporosis; and
 - b. Pregnancy; and
 - i. Female members must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
 - ii. Female members of reproductive potential must be willing to use effective non-hormonal contraception during treatment and for at least 1 week after discontinuing treatment; and
 - c. Hepatic impairment or disease; and
 - d. Undiagnosed abnormal uterine bleeding; and
 - e. High risk of arterial, venous thrombotic, or thromboembolic disease, including uncontrolled hypertension; and
 - f. Current or history of breast cancer or other hormonally-sensitive malignancies; and
 - g. Known hypersensitivity to ingredients in Myfembree[®]; and
4. Must be prescribed by, or in consultation with, an obstetrician/gynecologist or a specialist with expertise in the treatment of uterine leiomyomas (fibroids) or endometriosis; and
5. A failed trial at least 1 month in duration with nonsteroidal anti-inflammatory drugs (NSAIDs) or a patient-specific, clinically significant reason why the member cannot use NSAIDs; and
6. A failed trial at least 3 months in duration of hormonal contraceptives or a patient-specific, clinically significant reason why the member cannot use hormonal contraceptives; and
7. A quantity limit of 28 tablets per 28 days will apply; and

8. Lifetime approval duration will be limited to a maximum of 24 months. For members previously approved for Oriahnn[®] or Orilissa[®], a combined cumulative maximum treatment duration of 24 months will apply.

Recommendation 6: Vote to Prior Authorize Vyvgart[®] (Efgartigimod Alfa-fcab) and Update the Approval Criteria for Empaveli[®] (Pegcetacoplan), Enspryng[®] (Satralizumab-mwge), Soliris[®] (Eculizumab), Ultomiris[®] (Ravulizumab-cwvz), and Uplizna[®] (Inebilizumab-cdon)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Vyvgart[®] (efgartigimod alfa-fcab) with the following criteria (shown in red):

Vyvgart[®] (Efgartigimod Alfa-fcab) Approval Criteria:

1. An FDA approved diagnosis of generalized myasthenia gravis (gMG); and
2. Member must be 18 years of age or older; and
3. Member must have a positive serologic test for anti-acetylcholine receptor (anti-AChR) antibodies; and
4. Member must have a Myasthenia Gravis Foundation of America (MGFA) Clinical Classification class II to IV; and
5. Member must have a MG-Activities of Daily Living (MG-ADL) total score ≥ 5 ; and
6. Member must be on a stable dose of either an acetylcholinesterase (AChE) inhibitor or immunosuppressive therapy (IST); and
7. Vyvgart[®] must be prescribed by, or in consultation with, a neurologist or a specialist with expertise in the treatment of gMG; and
8. Initial approvals will be for the duration of 6 months, at which time an updated MG-ADL score must be provided. Continued authorization requires improvement in the MG-ADL score from baseline. Subsequent approvals will be for the duration of 1 year.

Next, the College of Pharmacy recommends the addition of prior authorization criteria for Ultomiris[®] for a diagnosis of gMG based on the new FDA approved indication (shown in red):

Ultomiris[®] (Ravulizumab-cwvz) Approval Criteria [Generalized Myasthenia Gravis (gMG) Diagnosis]:

1. An FDA approved diagnosis of gMG; and
2. Member must be 18 years of age or older; and
3. Member must have a positive serologic test for anti-acetylcholine receptor (anti-AChR) antibodies; and
4. Member must have a Myasthenia Gravis Foundation of America (MGFA) Clinical Classification class II to IV; and
5. Member must have a MG-Activities of Daily Living (MG-ADL) total score ≥ 6 ; and

6. Member must be on a stable dose of either an acetylcholinesterase (AChE) inhibitor or immunosuppressive therapy (IST); and
7. Ultomiris® must be prescribed by, or in consultation with, a neurologist or a specialist with expertise in the treatment of gMG; and
8. Prescriber must verify member does not have unresolved *Neisseria meningitidis* infection; and
9. Prescriber must verify member is currently vaccinated against *Neisseria meningitidis*, unless the risks of delaying Ultomiris® treatment outweigh the risks of developing a meningococcal infection; and
10. Initial approvals will be for the duration of 6 months, at which time an updated MG-ADL score must be provided. Continued authorization requires improvement in the MG-ADL score from baseline. Subsequent approvals will be for the duration of 1 year.

Additionally, the College of Pharmacy recommends updating the current prior authorization criteria for the following medications to be consistent with clinical practice (changes shown in red):

Empaveli® (Pegcetacoplan) Approval Criteria [Paroxysmal Nocturnal Hemoglobinuria (PNH) Diagnosis]:

1. An FDA approved diagnosis of PNH; and
2. ~~Must have an established diagnosis of PNH via international classification of disease (ICD) coding in member's medical claims history; and~~
3. Member must be 18 years of age or older; and
4. Empaveli® must be prescribed by, or in consultation with, a gastroenterologist, hematologist, geneticist, or a specialist with expertise in the treatment of PNH; and
5. For member self-administration or caregiver administration, the prescriber must verify the member or caregiver has been trained by a health care provider on proper administration and storage of Empaveli®; and
6. Prescriber and pharmacy must be enrolled in the Empaveli® Risk Evaluation and Mitigation Strategy (REMS) program and maintain enrollment throughout therapy; and
7. For members switching from Soliris® to Empaveli®, prescriber must verify the member will continue the current dose of Soliris® for 4 weeks before switching to Empaveli® as monotherapy; and
8. For members switching from Ultomiris® to Empaveli®, prescriber must verify that Empaveli® will be initiated no more than 4 weeks after the last dose of Ultomiris®.

Enspryng® (Satralizumab-mwge) Approval Criteria:

1. An FDA approved diagnosis of neuromyelitis optica spectrum disorder (NMOSD) in adult members who are anti-aquaporin-4 (AQP4) antibody positive; and
2. Member must be 18 years of age or older; and

3. Member must have experienced at least 1 acute NMOSD attack in the prior 12 months; and
4. Member must have an Expanded Disability Severity Scale (EDSS) score ≤ 6.5 ; and
5. Prescriber must verify hepatitis B virus (HBV) and tuberculosis (TB) screening are negative before the first dose; and
6. Approvals will not be granted for members with active HBV infection or active or untreated latent TB; and
7. Enspryng[®] must be prescribed by, or in consultation with, a neurologist, ophthalmologist, or a specialist with expertise in the treatment of NMOSD; and
8. Prescriber must verify liver function tests have been assessed prior to initiation of treatment with Enspryng[®] and levels are acceptable to prescriber; and
9. Prescriber must agree to counsel the member to monitor for clinically significant active infection(s) prior to each dose (for active infections, the dose should be delayed until the infection resolves); and
10. Prescriber must agree to monitor neutrophil counts 4 to 8 weeks after initiation of therapy and thereafter as clinically appropriate; and
11. Prescriber must verify member has not received any vaccinations within 4 weeks prior to initiation of therapy; and
12. Member and/or caregiver must be trained by a health care professional on subcutaneous administration and storage of Enspryng[®]; and
13. A quantity limit override for the loading dose will be approved upon meeting the Enspryng[®] approval criteria. A quantity limit of 1 syringe per 28 days will apply for the maintenance dose, according to the package labeling; and
14. Initial approvals will be for the duration of 6 months. Reauthorization may be granted if the prescriber documents the member is responding well to treatment.

Soliris[®] (Eculizumab) Approval Criteria [Atypical Hemolytic Uremic Syndrome (aHUS) Diagnosis]:

1. An FDA approved diagnosis of aHUS; and
- ~~2. Member must have an established diagnosis of aHUS or PNH via international classification of disease (ICD) coding in member's medical claims history; and~~
- ~~3. For members younger than 18 years of age, approval can be granted with a documented diagnosis of aHUS; and~~
4. Soliris[®] must be prescribed by, or in consultation with, a gastroenterologist, geneticist, hematologist, nephrologist, or a specialist with expertise in the treatment of aHUS.

Soliris[®] (Eculizumab) Approval Criteria [Paroxysmal Nocturnal Hemoglobinuria (PNH) Diagnosis]:

1. An FDA approved diagnosis of PNH; and

- ~~2. Member must have an established diagnosis of aHUS or PNH via international classification of disease (ICD) coding in member's medical claims history; and~~
3. Member must be 18 years of age or older; and
4. Soliris® must be prescribed by, or in consultation with, a gastroenterologist, geneticist, hematologist, or a specialist with expertise in the treatment of PNH.

Soliris® (Eculizumab) Approval Criteria [Generalized Myasthenia Gravis (gMG) Diagnosis]:

1. An FDA approved diagnosis of gMG; and
2. Member must have a positive serologic test for anti-acetylcholine receptor (anti-AChR) antibodies; and
3. Member must have a Myasthenia Gravis Foundation of America (MGFA) Clinical Classification class II to IV; and
4. Member must have a MG-Activities of Daily Living (MG-ADL) total score ≥ 6 ; and
5. Member must meet 1 of the following:
 - a. Failed treatment over 1 year or more with 2 or more immunosuppressive therapies (ISTs) either in combination or as monotherapy; or
 - b. Failed at least 1 IST and required chronic plasmapheresis or plasma exchange (PE) or intravenous immunoglobulin (IVIg); and
6. Soliris® must be prescribed by, or in consultation with, a neurologist or a specialist with expertise in the treatment of gMG; and
7. Initial approvals will be for the duration of 6 months at which time an updated MG-ADL score must be provided. Continued authorization requires improvement in the MG-ADL score from baseline. Subsequent approvals will be for the duration of 1 year.

Soliris® (Eculizumab) Approval Criteria [Neuromyelitis Optica Spectrum Disorder (NMOSD) Diagnosis]:

1. An FDA approved diagnosis of NMOSD in adult members who are anti-aquaporin-4 (AQP4) antibody positive; and
2. Member must be 18 years of age or older; and
3. Member must have a history of at least 2 NMOSD attacks in last 12 months or 3 attacks in the last 24 months, with at least 1 attack in the past 12 months; and
4. Member must have an Expanded Disability Severity Scale (EDSS) score ≤ 7 ; and
5. Soliris® must be prescribed by, or in consultation with, a neurologist, ophthalmologist, or a specialist with expertise in the treatment of NMOSD; and
6. Initial approvals will be for the duration of 6 months. Reauthorization may be granted if the prescriber documents the member is responding well to treatment.

Ultomiris® (Ravulizumab-cwvz) Approval Criteria [Atypical Hemolytic Uremic Syndrome (aHUS) Diagnosis]:

1. ~~Member must have a documented~~ An FDA approved diagnosis of aHUS; and
2. Ultomiris® must be prescribed by, or in consultation with, a gastroenterologist, geneticist, hematologist, nephrologist, or a specialist with expertise in the treatment of aHUS.

Ultomiris® (Ravulizumab-cwvz) Approval Criteria [Paroxysmal Nocturnal Hemoglobinuria (PNH) Diagnosis]:

1. ~~Member must have an established~~ An FDA approved diagnosis of PNH via international classification of disease (ICD) coding in member's medical claims history; and
2. Member must be 18 years of age or older; and
3. Ultomiris® must be prescribed by, or in consultation with, a gastroenterologist, geneticist, hematologist, or a specialist with expertise in the treatment of PNH.

Uplizna® (Inebilizumab-cdon) Approval Criteria:

1. An FDA approved diagnosis of neuromyelitis optica spectrum disorder (NMOSD) in adult members who are anti-aquaporin-4 (AQP4) antibody positive; and
2. Member must be 18 years of age or older; and
3. Member must have experienced at least 1 acute NMOSD attack in the prior 12 months, or at least 2 attacks in the prior 24 months, requiring rescue therapy; and
4. Member must have an Expanded Disability Severity Scale (EDSS) score ≤ 8 ; and
5. Uplizna® must be prescribed by, or in consultation with, a neurologist, ophthalmologist, or a specialist with expertise in the treatment of NMOSD; and
6. Prescriber must verify hepatitis B virus (HBV) and tuberculosis (TB) screening are negative before the first dose; and
7. Approvals will not be granted for members with active HBV infection or active or untreated latent TB; and
8. Prescriber must agree to monitor member for clinically significant active infection(s) prior to each dose (for active infections, the dose should be delayed until the infection resolves); and
9. Prescriber must verify testing for quantitative serum immunoglobulins has been performed before the first dose and levels are acceptable to prescriber; and
10. Prescriber must agree to monitor the level of serum immunoglobulins during and after discontinuation of treatment with Uplizna® until B-cell repletion; and
11. The infusion must be administered under the supervision of a health care professional with access to appropriate medical support to

- manage potential severe reactions, and the member must be observed for at least 1 hour after the completion of each infusion; and
12. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of treatment; and
 13. Female members of reproductive potential must use contraception while receiving Uplizna[®] and for 6 months after the last infusion; and
 14. Prescriber must verify member has not received any vaccinations within 4 weeks prior to initiation of therapy; and
 15. A quantity limit override for the loading dose will be approved upon meeting the Uplizna[®] approval criteria. A quantity limit of 30mL per 180 days will apply for the maintenance dose; and
 16. Initial approvals will be for the duration of 6 months. Reauthorization may be granted if the prescriber documents the member is responding well to treatment.

Recommendation 7: Vote to Prior Authorize Omlonti[®] (Omidenepag Isopropyl) and Update the Approval Criteria for the Glaucoma Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to the current Glaucoma Medications Product Based Prior Authorization (PBPA) category based on the new FDA approval and net costs (changes shown in red):

1. Adding Omlonti[®] (omidenepag isopropyl 0.002%) to the Special PA Tier; and
2. Making Combigan[®] (brimonidine/timolol 0.2%/0.5%) brand preferred; and
3. Moving pilocarpine (Isopto[®] Carpine 1%, 2%, 4%) from Tier-2 to Tier-1.

Glaucoma Medications*		
Tier-1	Tier-2	Special PA
Alpha-2 Adrenergic Agonists		
brimonidine (Alphagan® 0.2%)	apraclonidine (Iopidine® 0.5%, 1%)	brimonidine (Alphagan-P® 0.15%)
brimonidine (Alphagan® P 0.1%)		
brimonidine/timolol (Combigan® 0.2%/0.5%) – Brand Preferred		
brinzolamide/brimonidine (Simbrinza® 0.2%/1%)		
Beta-Blockers		
brimonidine/timolol (Combigan® 0.2%/0.5%) – Brand Preferred	betaxolol (Betoptic® 0.5%, Betoptic-S® 0.25%)	timolol maleate (Istalol® 0.5%)
carteolol (Ocupress® 1%)	dorzolamide/timolol (Cosopt® PF 2%/0.5%)	timolol maleate (Timoptic® in Ocudose® 0.25%, 0.5%)
dorzolamide/timolol (Cosopt® 22.3/6.8mg/mL)	timolol (Betimol® 0.25%, 0.5%)	
levobunolol (Betagan® 0.25%, 0.5%)	timolol maleate (Timoptic-XE® 0.25%, 0.5%)	
timolol maleate (Timoptic® 0.25%, 0.5%)		
Carbonic Anhydrase Inhibitors		
acetazolamide (Diamox® 500mg caps; 125mg, 250mg tabs)*	dorzolamide/timolol (Cosopt® PF 2%/0.5%)	methazolamide (Neptazane® 25mg, 50mg tabs)*
brinzolamide (Azopt® 1%) – Brand Preferred		
brinzolamide/brimonidine (Simbrinza® 0.2%/1%)		
dorzolamide (Trusopt® 2%)		
dorzolamide/timolol (Cosopt® 22.3/6.8mg/mL)		
Cholinergic Agonists/Cholinesterase Inhibitors		
echothiophate iodide (Phospholine Iodide® 0.125%)	pilocarpine (Isopto® Carpine 1%, 2%, 4%)	
pilocarpine (Isopto® Carpine 1%, 2%, 4%)		
Prostaglandin Analogs		
bimatoprost (Lumigan® 0.01%)	bimatoprost (Lumigan® 0.03%)	latanoprost (Xelpros™ 0.005%)

Glaucoma Medications*		
Tier-1	Tier-2	Special PA
latanoprost (Xalatan® 0.005%)		latanoprostene bunod (Vyzulta® 0.024%)
netarsudil/latanoprost (Rocklatan®)		omidenepeg isopropyl (Omlonti® 0.002%)
tafluprost (Zioptan® 0.0015%)		
travoprost (Travatan-Z® 0.004%) – Brand Preferred		
Rho Kinase Inhibitors		
netarsudil (Rhopressa® 0.02%)		
netarsudil/latanoprost (Rocklatan®)		

*Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

*Indicates available oral medications.

Please note: Combination products are included in both applicable pharmaceutical classes; therefore, combination products are listed twice in the tier chart.

caps = capsules; PA = prior authorization; tabs = tablets

Glaucoma Medications Special Prior Authorization (PA) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why a special formulation is needed over a Tier-1 or Tier-2 medication must be provided; or
3. Approvals may be granted if there is a documented adverse effect, drug interaction, or contraindication to all Tier-1 and Tier-2 medications; or
4. Approvals may be granted if there is a unique FDA approved indication not covered by all Tier-1 and Tier-2 medications; and
5. Member must have had a comprehensive, dilated eye exam within the last 365-day period as recommended by the National Institutes of Health; and
6. Approvals will be for the duration of 1 year.

Recommendation 8: Vote to Prior Authorize Vabysmo™ (Faricimab-svoa) and Update the Approval Criteria for the Ophthalmic Vascular Endothelial Growth Factor (VEGF) Inhibitor Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Vabysmo™ (faricimab-svoa) with the following criteria (shown in red):

Vabysmo™ (Faricimab-svoa Intravitreal Injection) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:

- a. Neovascular (wet) age-related macular degeneration (AMD); or
 - b. Diabetic macular edema (DME); and
2. Member must be 18 years of age or older; and
3. Member must not have ocular or periocular infections or active intraocular inflammation; and
4. Vabysmo™ must be prescribed and administered by an ophthalmologist or a physician experienced in vitreoretinal injections; and
5. Prescriber must verify the member will be monitored for endophthalmitis, retinal detachment, increase in intraocular pressure, and arterial thromboembolic events, and
6. Female members of reproductive potential must have a negative pregnancy test prior to initiation of therapy and must agree to use effective contraception during treatment and for 3 months after the final dose of Vabysmo™; and
7. A patient-specific, clinically significant reason why the member cannot use vascular endothelial growth factor (VEGF) inhibitor injection products (appropriate to the disease state) available without prior authorization [i.e., Beovu® (brolocizumab-dbl), Byooviz™ (ranibizumab-nuna), Cimerli™ (ranibizumab-eqrn), Eylea® (aflibercept)] must be provided; and
8. A quantity limit of 0.05mL per 28 days will apply.

Additionally, the College of Pharmacy recommends updating the ranibizumab approval criteria based on the FDA approval of Cimerli™ and the low net cost of the biosimilar products relative to Lucentis® (changes shown in red):

Lucentis® (Ranibizumab Intravitreal Injection) Byooviz™ (Ranibizumab-nuna Intravitreal Injection) Approval Criteria:

1. An FDA approved diagnosis ~~of 1 of the following:~~
 - ~~a. Neovascular (wet) age-related macular degeneration (AMD); or~~
 - ~~b. Macular edema following retinal vein occlusion (RVO); or~~
 - ~~c. Myopic choroidal neovascularization (mCNV); and~~
2. A patient-specific, clinically significant reason why the member cannot use ~~Lucentis® (ranibizumab intravitreal injection) Byooviz™ (ranibizumab-nuna intravitreal injection) or Cimerli™ (ranibizumab-eqrn intravitreal injection)~~ must be provided. Biosimilars and/or reference products are preferred based on the lowest net cost product(s) and may be moved to either preferred or non-preferred if the net cost changes in comparison to the reference product and/or other available biosimilar products.

Lastly, the College of Pharmacy recommends updating the Susvimo™ (ranibizumab intravitreal implant) approval criteria based on the FDA approval of Cimerli™ and approval criteria changes for the ranibizumab injection products (changes shown in red):

Susvimo™ (Ranibizumab Intravitreal Implant) Approval Criteria:

1. An FDA approved diagnosis of neovascular (wet) age-related macular degeneration (AMD) in adults; and
2. Member must have previously responded to ≥2 intravitreal injections of a vascular endothelial growth factor (VEGF) inhibitor; and
3. Member must not have ocular or periocular infections or active intraocular inflammation; and
4. Susvimo™ must be prescribed and administered by an ophthalmologist or a physician experienced in vitreoretinal surgery; and
5. Prescriber must verify the member will be monitored for endophthalmitis, rhegmatogenous retinal detachment, implant dislocation, vitreous hemorrhage, conjunctival erosion, conjunctival retraction, and conjunctival blebs; and
6. A patient-specific, clinically significant reason why the member cannot use ~~Lucentis® (ranibizumab intravitreal injection)~~ or other VEGF inhibitor injection products (appropriate to disease state) **available without prior authorization [i.e., Beovu® (brolucizumab-dbl), Byooviz™ (ranibizumab-nuna), Cimerli™ (ranibizumab-eqrn), Eylea® (aflibercept)]** must be provided; and
7. A quantity limit of one 100mg/0.1mL single-dose vial per 180 days will apply.

Recommendation 9: Vote to Prior Authorize Auvelity™ (Dextromethorphan/Bupropion) and Venlafaxine 112.5mg Extended-Release (ER) Tablet

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to the Antidepressant Medications Product Based Prior Authorization (PBPA) category (changes noted in red in the following PBPA Tier charts and criteria):

1. Prior authorization of Auvelity™ (dextromethorphan/bupropion) and placement in the Special PA Tier (changes based on discussion at the December DUR Board meeting are shown in red); and
2. Prior authorization of venlafaxine 112.5mg ER tablet and placement in the Special PA Tier.

Antidepressants*			
Tier-1	Tier-2	Tier-3	Special PA
Selective Serotonin Reuptake Inhibitors (SSRIs)			
citalopram (Celexa®)			citalopram 30mg caps
escitalopram (Lexapro®)			citalopram 20mg/10mL soln (UDC)

Antidepressants*			
Tier-1	Tier-2	Tier-3	Special PA
fluoxetine caps (Prozac®)			escitalopram 10mg/10mL soln (UDC)
fluvoxamine (Luvox®)			fluoxetine 20mg/5mL soln (UDC)
paroxetine (Paxil®)			fluoxetine tabs
sertraline (Zoloft®)			fluoxetine DR (Prozac® Weekly™)
			fluvoxamine CR (Luvox CR®)
			paroxetine CR (Paxil CR®)
			paroxetine (Pexeva®)
			sertraline 150mg & 200mg
Dual-Acting Antidepressants			
bupropion (Wellbutrin®, Wellbutrin SR®, XL®)	desvenlafaxine (Pristiq®)	desvenlafaxine (Khedezla®)	bupropion ER (Aplenzin®)
duloxetine (Cymbalta®)		levomilnacipran (Fetzima®)	bupropion ER (Forfivo XL®)
mirtazapine (Remeron®, Remeron SolTab®)		nefazodone (Serzone®)	duloxetine (Drizalma Sprinkle™)
trazodone 50mg, 100mg, & 150mg tabs (Desyrel®)		vilazodone (Viibryd®)	duloxetine 40mg (Irenka™)
venlafaxine (Effexor®, Effexor XR® caps)			trazodone 300mg tabs (Desyrel®)
			venlafaxine 112.5mg ER tabs
			venlafaxine ER tabs (Effexor XR® tabs)
Monoamine Oxidase Inhibitors (MAOIs)			
		phenelzine (Nardil®)	isocarboxazid (Marplan®)
		selegiline (Emsam®)	
		tranylcypromine (Parnate®)	
Unique Mechanisms of Action			
		vortioxetine (Trintellix®)	dextromethorphan/bupropion (Auvelity™)

Antidepressants*			
Tier-1	Tier-2	Tier-3	Special PA
			esketamine nasal spray (Spravato®)

*Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC). caps = capsules; CR = controlled-release; DR = delayed-release; ER = extended-release; PA = prior authorization; soln = solution; tabs = tablets; UDC = unit dose cups

Antidepressants Special Prior Authorization (PA) Approval Criteria:

1. Use of any Special PA medication will require a patient-specific, clinically significant reason why the member cannot use other available generic Tier-1 medications; or
2. A petition may be submitted for consideration whenever a unique patient-specific situation exists; and
3. Tier structure rules still apply.

4. **Auvelity™ (Dextromethorphan/Bupropion) Approval Criteria:**

- a. An FDA approved diagnosis of major depressive disorder; and
- b. Member must be 18 years of age or older; and
- c. Prescriber must agree that member's blood pressure will be assessed prior to treatment initiation and monitored periodically during treatment; and
- d. Prescriber must agree to screen members for history of bipolar disorder, mania, or hypomania; and
- e. Member must not be taking any other medications containing bupropion or dextromethorphan; and
- f. Member must not have any contraindications to therapy (i.e., seizure disorder; current or prior diagnosis of bulimia or anorexia nervosa; abrupt discontinuation of alcohol, benzodiazepines, barbiturates, and antiepileptic drugs; concomitant use of a monoamine-oxidase inhibitor (MAOI) or within 14 days of discontinuing an MAOI; known hypersensitivity to bupropion, dextromethorphan, or other components of Auvelity™); and
- g. Member must not have severe hepatic or renal impairment; and
- h. The maximum approvable dose is 1 tablet once daily if the member has moderate renal impairment, is taking a strong CYP2D6 inhibitor (e.g., paroxetine, fluoxetine, quinidine, **bupropion**), or is a known poor CYP2D6 metabolizer; and
- i. Prescribers must verify that female members are not currently pregnant and will use effective contraception while receiving treatment with Auvelity™; and
- j. **Member must have a documented, recent (within 6 months) trial with 2 Tier-1 medications (Tier 1 selection must include bupropion as 1 of the 2 trials), 1 Tier-2 medication, and 1 Tier-3 medication at least 4 weeks in duration each and titrated to recommended dosing, that did not provide an adequate response; or**

- k. Prior stabilization on the requested medication documented within the last 100 days. A history of success on the requested medication will also be considered with adequate documentation; and
 - l. A quantity limit of 60 tablets per 30 days will apply.
5. **Citalopram Capsule Approval Criteria:**
- a. An FDA approved diagnosis of major depressive disorder (MDD) in adults; and
 - b. Member must have initiated treatment with citalopram tablets for dose titration up to the 30mg dose; and
 - c. A patient-specific, clinically significant reason why the member cannot use citalopram tablets, which are available without a prior authorization, in place of the capsule formulation must be provided; and
 - d. Citalopram capsules will not be approved for members 60 years of age or older; and
 - e. A quantity limit of 30 capsules per 30 days will apply.
6. **Citalopram 20mg/10mL Solution, Escitalopram 10mg/10mL Solution, and Fluoxetine 20mg/5mL Solution Unit Dose Cup (UDC) Approval Criteria:**
- a. An FDA approved indication; and
 - b. A patient-specific, clinically significant reason why the member cannot use the bulk medication must be provided.
7. **Desyrel® (Trazodone 300mg Tablet) Approval Criteria:**
- a. A patient-specific, clinically significant reason why the member cannot use other available generic Tier-1 products including 2 trazodone 150mg tablets or 3 trazodone 100mg tablets to achieve a 300mg dose must be provided.
8. **Drizalma Sprinkle™ (Duloxetine Capsule) Approval Criteria [Diabetic Peripheral Neuropathic Pain/Chronic Musculoskeletal Pain Diagnosis]:**
- a. An FDA approved diagnosis of diabetic peripheral neuropathy or chronic musculoskeletal pain; and
 - b. A patient-specific, clinically significant reason why the member cannot use generic duloxetine 20mg, 30mg, or 60mg capsules, which are available without prior authorization, in place of Drizalma Sprinkle™ must be provided; and
 - c. A quantity limit of 30 capsules per 30 days will apply.
9. **Fluoxetine Tablet Approval Criteria:**
- a. Fluoxetine capsules are available without a prior authorization. The tablet formulation will require prior authorization and a patient-specific, clinically significant reason why the tablet formulation is required in place of the capsule formulation.
10. **Irenka™ (Duloxetine 40mg Capsule) Approval Criteria [Diabetic Peripheral Neuropathic Pain/Chronic Musculoskeletal Pain Diagnosis]:**

- a. An FDA approved diagnosis of diabetic peripheral neuropathy or chronic musculoskeletal pain; and
- b. A patient-specific, clinically significant reason why the member cannot use 2 duloxetine 20mg capsules in place of Irenka™ 40mg capsules must be provided; and
- c. A quantity limit of 30 capsules per 30 days will apply; and

11. Marplan® (Isocarboxazid) Approval Criteria:

- a. A patient-specific, clinically significant reason why the member cannot use any of the Tier-3 monoamine oxidase inhibitors (MAOIs) or other cost-effective, lower tiered alternatives in place of Marplan® must be provided.

12. Sertraline Capsule Approval Criteria:

- a. An FDA approved diagnosis of major depressive disorder (MDD) in adults or obsessive-compulsive disorder (OCD) in adults and pediatric members 6 years of age and older; and
- b. Member must have initiated treatment with sertraline tablets for dose titration up to the 150mg or 200mg dose; and
- c. A patient-specific, clinically significant reason why the member cannot use sertraline tablets, which are available without a prior authorization, in place of the capsule formulation must be provided; and
- d. A quantity limit of 30 capsules per 30 days will apply.

13. Venlafaxine 112.5mg Extended-Release (ER) Tablet Approval Criteria:

- a. An FDA approved diagnosis of major depressive disorder (MDD) or generalized anxiety disorder (GAD); and
- b. Member must be 18 years of age or older; and
- c. Member must have received at least 75mg of venlafaxine ER capsules for at least 4 days; and
- d. A patient-specific, clinically significant reason why the member cannot use venlafaxine ER capsules must be provided; and
- e. A quantity limit of 30 tablets per 30 days will apply.

Recommendation 10: Vote to Prior Authorize Kimmtrak® (Tebentafusp-tebn) and Opdualag™ (Nivolumab/Relatlimab-rmbw) and Update the Approval Criteria for the Skin Cancer Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Kimmtrak® (tebentafusp-tebn) and Opdualag™ (nivolumab/relatlimab-rmbw) with the following criteria (shown in red):

Kimmtrak® (Tebentafusp-tebn) Approval Criteria [Uveal Melanoma Diagnosis]:

- 1. Diagnosis of unresectable or metastatic uveal melanoma; and
- 2. Positive expression of HLA-A*02:01 genotype.

Opdualag™ (Nivolumab/Relatlimab-rmbw) Approval Criteria [Unresectable or Metastatic Melanoma Diagnosis]:

1. Diagnosis of unresectable or metastatic melanoma; and
2. Member must be 12 years of age or older; and
3. As first-line therapy; and
4. Member has not previously failed programmed death 1 (PD-1) inhibitors [e.g., Keytruda® (pembrolizumab), Opdivo® (nivolumab)].

The College of Pharmacy also recommends updating the approval criteria for Keytruda® (pembrolizumab), Libtayo® (cemiplimab-rwlc), Mekinist® (trametinib), and Tafinlar® (dabrafenib) based on recent FDA approvals (updates shown in red):

Keytruda® (Pembrolizumab) Approval Criteria [Melanoma Diagnosis]:

1. Member meets 1 of the following:
 - a. ~~Adjuvant treatment of members with melanoma with involvement of lymph node(s) following complete resection; or~~
 - b. ~~Adjuvant treatment of adult and pediatric members 12 years or older with stage 2B, 2C, or 3 melanoma following complete resection; or~~
 - c. Diagnosis of unresectable or metastatic melanoma; and
2. Used as a single-agent; and
3. Member meets 1 of the following:
 - a. Used as first-line therapy; or
 - b. Used as second-line therapy or subsequent therapy for disease progression if not previously used; and
4. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Opdivo (nivolumab)]; and
5. For adjuvant treatment of melanoma, approvals will be for a maximum duration of 1 year.

Libtayo® (Cemiplimab-rwlc) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of advanced, unresectable, or metastatic NSCLC; and
2. ~~Used in the first-line setting; and~~
3. No epidermal growth factor receptor (EGFR), anaplastic lymphoma kinase (ALK), or ROS1 mutations; ~~and~~
4. ~~Used in 1 of the following settings:~~
 - a. ~~Used as a single agent; and~~
 - i. High programmed death ligand 1 (PD-L1) expression [tumor proportion score (TPS) ≥50%]; ~~or~~
 - b. ~~Used in combination with platinum-based chemotherapy; and~~
 - i. ~~No requirement for PD-L1 expression.~~

Mekinist® (Trametinib) Approval Criteria [Solid Tumor Diagnosis]:

1. ~~Diagnosis of metastatic solid tumor; and~~
2. ~~BRAF V600E mutation; and~~

3. Member has progressed on prior therapies with no satisfactory alternative treatment options; and
4. Used in combination with dabrafenib.

Tafinlar® (Dabrafenib) Approval Criteria [Solid Tumor Diagnosis]:

1. Diagnosis of metastatic solid tumor; and
2. *BRAF* V600E mutation; and
3. Member has progressed on prior therapies with no satisfactory alternative treatment options; and
4. Used in combination with trametinib.

Recommendation 11: Vote to Prior Authorize Lytgobi® (Futibatinib) and Update the Approval Criteria for the Gastrointestinal (GI) Cancer Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Lytgobi® (futibatinib) with the following criteria (shown in red):

Lytgobi® (Futibatinib) Approval Criteria [Intrahepatic Cholangiocarcinoma Diagnosis]:

1. Diagnosis of unresectable, locally advanced, or metastatic intrahepatic cholangiocarcinoma; and
2. Member was previously treated with at least 1 prior therapy; and
3. Tumor is positive for fibroblast growth factor receptor 2 (FGFR2) gene fusion or rearrangement.

The College of Pharmacy also recommends updating the approval criteria for Pemazyre® (pemigatinib) based on recent FDA approval (updates shown in red):

Pemazyre® (Pemigatinib) Approval Criteria [Myeloid/Lymphoid Neoplasms (MLNs) Diagnosis]:

1. Diagnosis of relapsed or refractory MLNs; and
2. Disease is positive for a fibroblast growth factor receptor 1 (FGFR1) rearrangement.

Recommendation 12: Vote to Prior Authorize Pedmark® (Sodium Thiosulfate) and Vioice® (Alpelisib)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Pedmark® (sodium thiosulfate) and Vioice® (alpelisib) with the following criteria (shown in red):

Pedmark® (Sodium Thiosulfate) Approval Criteria [Reduction in Ototoxicity Risk Associated with Cisplatin for Solid Tumor Diagnosis]:

1. Pediatric members 1 month to 18 years of age with a diagnosis of localized, non-metastatic solid tumor; and
2. An FDA approved indication to reduce the risk of ototoxicity associated with cisplatin; and
 - a. Member's cisplatin regimen must be provided (i.e., frequency of chemotherapy cycles, number of treatment days per cycle, number of chemotherapy cycles remaining); and
3. Pedmark® will be administered as follows:
 - a. Starting 6 hours after completion of cisplatin infusion; or
 - b. For multi-day cisplatin regimens, Pedmark® will be administered 6 hours after each cisplatin infusion but at least 10 hours before the next cisplatin infusion; and
4. Member has a baseline serum sodium <145mmol/L.

Vijoice® (Alpelisib) Approval Criteria [PIK3CA-Related Overgrowth Spectrum (PROS) Diagnosis]:

1. Adult and pediatric members 2 years of age and older; and
2. Documented PIK3CA gene mutation; and
3. Severe or life-threatening clinical manifestations of PROS.

Recommendation 13: Vote to Prior Authorize Hyftor™ (Sirolimus Topical Gel)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Hyftor™ (sirolimus topical gel) with the following criteria (shown in red):

Hyftor™ (Sirolimus Topical Gel) Approval Criteria [Facial Angiofibromas Associated with Tuberous Sclerosis Complex (TSC) Diagnosis]:

1. Documented diagnosis of TSC; and
2. Member has facial angiofibromas that are at least 2mm in diameter with redness in each; and
3. Member must be 6 to 20 years of age; or
 - a. For members older than 20 years of age, a clinical exception may apply for medical issues caused by facial angiofibromas (specific documentation of clinically significant medical issues must be provided; Hyftor™ is not covered for cosmetic use); and
4. Initial approvals will be for a duration of 12 weeks, as the need for continuing Hyftor™ should be reevaluated if symptoms do not improve within 12 weeks of treatment. Reauthorization may be granted if the prescriber documents the member is responding well to treatment and documents the anticipated duration of treatment.

Recommendation 14: Annual Review of Anti-Migraine Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to the current Anti-Migraine Medications Product Based Prior Authorization (PBPA) category based on net costs (changes shown in red):

1. Removing the brand preferred status for eletriptan tablet (Relpax®); and
2. Moving brand name Zomig® nasal spray to Tier-1 and making it brand preferred; and
3. Moving generic zolmitriptan nasal spray to the Special PA Tier.

Anti-Migraine Medications			
Tier-1	Tier-2	Tier-3	Special PA
eletriptan tablet (Relpax®) – Brand Preferred	naratriptan tablet (Amerge®)	almotriptan tablet (Axert®)	dihydroergotamine injection (D.H.E. 45®) – Brand Preferred
rizatriptan tablet, ODT (Maxalt®, Maxalt MLT®)	zolmitriptan tablet, ODT (Zomig®, Zomig-ZMT®)	frovatriptan tablet (Frova®)	dihydroergotamine nasal spray (Migranal®) – Brand Preferred
sumatriptan tablet (Imitrex®)	zolmitriptan nasal spray (Zomig® nasal spray)		dihydroergotamine nasal spray (Trudhesa®)
sumatriptan/naproxen tablet (Treximet®)			eletriptan tablet (generic Relpax®)
zolmitriptan nasal spray (Zomig® nasal spray) – Brand Preferred			ergotamine sublingual tablet (Ergomar®)
			lasmiditan tablet (Reyvow®)
			rimegepant ODT (Nurtec® ODT)
			sumatriptan injection (Imitrex®)
			sumatriptan injection (Zembrace® SymTouch®)
			sumatriptan nasal powder (Onzetra® Xsail®)
			sumatriptan nasal spray (Imitrex®)
			sumatriptan nasal spray (Tosymra®)

Anti-Migraine Medications			
Tier-1	Tier-2	Tier-3	Special PA
			zolmitriptan nasal spray (generic Zomig® nasal spray)
			ubrogepant tablet (Ubrelvy®)

*Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).
ODT = orally disintegrating tablet; PA = prior authorization

Anti-Migraine Medications Special Prior Authorization Approval Criteria:

1. Use of brand D.H.E. 45® (dihydroergotamine injection) or brand Migranal® (dihydroergotamine nasal spray) will require a patient-specific, clinically significant reason why the member cannot use lower-tiered triptan medications. Brand formulation is preferred for D.H.E. 45® and Migranal®; use of the generic formulations will require a patient-specific, clinically significant reason why the member cannot use the brand formulation and lower-tiered triptan medications.
2. Use of Trudhesa® (dihydroergotamine nasal spray) will require a patient-specific, clinically significant reason why the member cannot use the brand formulation of D.H.E. 45®, Migranal®, and lower-tiered triptan medications.
3. ~~Use of generic eletriptan will require a patient-specific, clinically significant reason why the member cannot use the brand formulation of Relpax® (brand formulation is preferred).~~
4. Use of Ergomar® (ergotamine sublingual tablets) will require a patient-specific, clinically significant reason why the member cannot use lower-tiered triptan medications; and
 - a. Member must not have any of the contraindications for use of Ergomar® (e.g., coadministration with a potent CYP3A4 inhibitor, women who are or may become pregnant, peripheral vascular disease, coronary heart disease, hypertension, impaired hepatic or renal function, sepsis, hypersensitivity to any of the components); and
 - b. A quantity limit of 20 tablets per 28 days will apply.
5. Use of Reyvow® (lasmiditan) or Ubrelvy® (ubrogepant) will require a patient-specific, clinically significant reason why the member cannot use triptan medications and Nurtec® ODT (rimegepant); and
 - a. Reyvow® and Ubrelvy® will not be approved for concurrent use with a prophylactic calcitonin gene-related peptide (CGRP) inhibitor.
6. Nurtec® ODT (rimegepant) Approval Criteria [Migraine Diagnosis (Acute Treatment)]+:
 - a. Member must have failed therapy with at least 2* triptan medications or a patient-specific, clinically significant reason why a triptan is not appropriate for the member must be provided; and

- b. Nurtec® ODT will not be approved for concurrent use with a prophylactic CGRP inhibitor; and
- c. A quantity limit of 8 ODTs per 30 days will apply.

*The manufacturer of Nurtec® ODT has currently provided a supplemental rebate to require a trial with 2 triptan medications and to be the preferred CGRP product for acute treatment over Reyvow® and Ubrelvy®; however, Nurtec® ODT will follow the same criteria as Reyvow® and Ubrelvy® if the manufacturer chooses not to participate in supplemental rebates.

+Nurtec® ODT approval criteria for the preventive treatment of episodic migraines can be found with the Qulipta™ and Vyepti® approval criteria.

- 7. Use of any non-oral sumatriptan formulation will require a patient-specific, clinically significant reason why the member cannot use the oral tablet formulation and lower-tiered triptan medications.
- 8. Use of Zembrace® SymTouch® (sumatriptan injection) or Tosymra® (sumatriptan nasal spray) will require a patient-specific, clinically significant reason why the member cannot use all available generic formulations of sumatriptan (tablets, nasal spray, and injection) and lower-tiered triptan medications.
- 9. Use of generic zolmitriptan nasal spray will require a patient-specific, clinically significant reason why the member cannot use the brand formulation of Zomig® nasal spray (brand formulation is preferred) and lower-tiered triptan medications.

Recommendation 15: Annual Review of Leukemia Medications and 30-Day Notice to Prior Authorize Rezlidhia™ (Olutasidenib)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN MARCH 2023.

Recommendation 16: Annual Review of Anticonvulsants and 30-Day Notice to Prior Authorize Zonisade™ (Zonisamide Oral Suspension) and Ztalmy® (Ganaxolone)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN MARCH 2023.

Recommendation 17: Annual Review of Pulmonary Hypertension Medications and 30-Day Notice to Prior Authorize Tadliq® (Tadalafil Oral Suspension) and Tyvaso DPI® (Treprostinil Powder for Inhalation)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN MARCH 2023.

Recommendation 18: Annual Review of Dojolvi® (Triheptanoin)

NO ACTION REQUIRED.

Recommendation 19: Annual Review of Topical Acne, Psoriasis, and Rosacea Products and 30-Day Notice to Prior Authorize Brimonidine 0.33% Topical Gel (Generic Mirvaso®), Vtama® (Tapinarof), and Zoryve™ (Roflumilast)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN MARCH 2023.

Recommendation 20: U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates

NO ACTION REQUIRED.

Recommendation 21: Future Business

NO ACTION REQUIRED.



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February 23, 2023

To Soonercare DUR Board,

I am writing on behalf of the providers at OU Health Physicians Dermatology Clinic in regards to the recommendation by the OU College of Pharmacy that the Tazorac[®] Approval Criteria be updated to only allow tazarotene 0.1% cream without a prior authorization. We disagree with this recommendation as we do not want to prescribe tazarotene 0.1% products in retinoid naïve patients due to its adverse effect profile.

Common adverse effects with tazarotene include desquamation, erythema, burning, skin irritation, exacerbation of psoriasis, skin pain, and pruritis¹. These adverse effects can lead to discontinuation of therapy, in fact patients discard the 0.1% cream after one use so Soonercare is just wasting money on those claims. Using lower concentrations of tazarotene such as the 0.05% cream or gel or the 0.045% lotion reduces the risk for adverse effects and can reduce the rate of discontinuation of an otherwise effective therapy for acne and psoriasis^{2,3}.

Additionally, one Phase 2 clinical trial showed similar efficacy rates for the tazarotene 0.05% gel and the 0.1% gel for reduction from baseline in plaque elevation and scaling after 12 weeks and 24 weeks of treatment⁴. Another showed better efficacy with tazarotene 0.05% gel than the 0.1% gel at 6 weeks of treatment⁵. A study for treatment of acne showed similar efficacy rates between the two concentrations at 8 weeks of treatment². Therefore, starting with the lower dose will not necessarily delay improvement of symptoms and some patients may only require the lower strength. Thus, the Tazorac[®] gel prescribing info recommends that for the treatment of Psoriasis, start with the 0.05% gel and increase to 0.1% **IF** tolerated **AND** medically indicated⁴. Adding this restriction would be hindering us from following the manufacturer's dosing in FDA approved labeling.

What is the reason for wanting to place restrictions on the lower, safer concentration? If it is based on the Pharmacy Claims data for Fiscal Year 2022, that year ended a few months prior to the approval of the generic tazarotene 0.05% gel and none of the other 0.05% products were actually available on the market for there to be legitimate claims. Hence, the claims data is not a good representation of how many patients would be prescribed tazarotene 0.05% products if they were actually available. In fact, our clinic has previously requested Soonercare extend coverage to the NDCs of tazarotene 0.05% cream that are actually available on the market (see DUR Board Packet June 2022) as that is our tazarotene concentration of choice for retinoid naïve patients, many of whom are pediatric patients that will not be compliant with products that burn and irritate their skin.

If cost is the issue, consider that if patients can't tolerate the tazarotene 0.1% then they will move on to other treatments for psoriasis and acne, some of which may be more expensive, creating more claims to pay for. Or consider covering lower cost generic tretinoin products. There are several manufacturers participating in the CMS Drug Rebate Program.

If these restrictions are placed, it will just lead to more PA requests as we will continue to request the tazarotene 0.05% gel and that just creates more work for both clinics and the COP Pharmacy Management Consults PA department and delays treatment initiation for patients.

Please let me know if you have any questions my contact information is below.

Thank you for your time.

Anisha Varghese, Pharm.D., BCPS
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Supplemental information

Adverse Reactions ¹

The following adverse drug reactions and incidences are derived from product labeling unless otherwise specified. Percentage of incidence varies with formulation and/or strength.

>10%: Dermatologic: Desquamation (0.1% cream 40%; foam 6%), erythema (0.1% cream 34%; foam 6%), burning sensation of skin (26%), xeroderma (7% to 16%), skin irritation (10% to 14%), exacerbation of psoriasis, skin pain

1% to 10%:

Cardiovascular: Peripheral edema

Dermatologic: Pruritus (0.1% cream 10%; foam 1%), contact dermatitis (8%), stinging of the skin (3%), skin rash (≤3%), cheilitis (1%), dermatitis (1%), skin photosensitivity (1%), eczema, skin discoloration, skin fissure

Endocrine & metabolic: Hypertriglyceridemia

Local: Application site pain (1%), local hemorrhage

Ophthalmic: Ocular irritation (including edema, irritation, and inflammation of the eye or eyelid; 4%)

Frequency not defined: Hypersensitivity: Hypersensitivity reaction, local hypersensitivity reaction

<1%, postmarketing, and/or case reports: Application site edema, exfoliation of skin, impetigo, pain, skin blister

Table 1. Plaque Elevation, Scaling, and Erythema in Two Controlled Clinical Trials for Psoriasis ⁴

		TAZORAC® 0.05% Gel				TAZORAC® 0.1% Gel				Vehicle Gel			
		Trunk/Arm/Leg Lesions		Knee/Elbow Lesions		Trunk/Arm/Leg Lesions		Knee/Elbow Lesions		Trunk/Arm/Leg Lesions		Knee/Elbow Lesions	
		N=108	N=111	N=108	N=111	N=108	N=112	N=108	N=112	N=108	N=113	N=108	N=113
Plaque Elevation	B*	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.6	2.4	2.6	2.6	2.6
	C-12*	-1.4	-1.3	-1.3	-1.1	-1.4	-1.4	-1.5	-1.3	-0.8	-0.7	-0.7	-0.6
	C-24*	-1.2	-1.1	-1.1	-1.1	-1.1	-1.4	-1.0	-1.0	-0.9	-0.7	-0.7	-0.6
Scaling	B*	2.4	2.5	2.5	2.6	2.4	2.6	2.5	2.7	2.4	2.6	2.5	2.7
	C-12*	-1.1	-1.1	-1.1	-0.9	-1.3	-1.3	-1.2	-1.2	-0.7	-0.7	-0.6	-0.6
	C-24*	-0.9	-0.8	-0.8	-0.8	-1.0	-1.0	-0.8	-0.8	-0.8	-0.7	-0.7	-0.6
Erythema	B*	2.4	2.7	2.2	2.5	2.4	2.8	2.3	2.5	2.3	2.7	2.2	2.5
	C-12*	-1.0	-0.8	-0.9	-0.8	-1.0	-1.1	-1.0	-0.8	-0.6	-0.5	-0.5	-0.5
	C-24*	-1.1	-0.7	-0.7	-0.7	-0.9	-0.9	-0.8	-0.8	-0.7	-0.5	-0.6	-0.5

Plaque elevation, scaling, and erythema scored on a 0-4 scale with 0=none, 1=mild, 2=moderate, 3=severe and 4=very severe.

B*=Mean Baseline Severity: C-12*=Mean Change from Baseline at end of 12 weeks of therapy:

C-24*=Mean Change from Baseline at week 24 (12 weeks after the end of therapy).

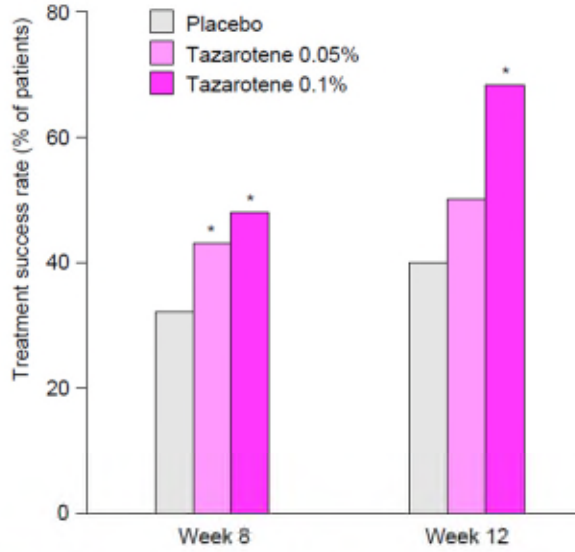
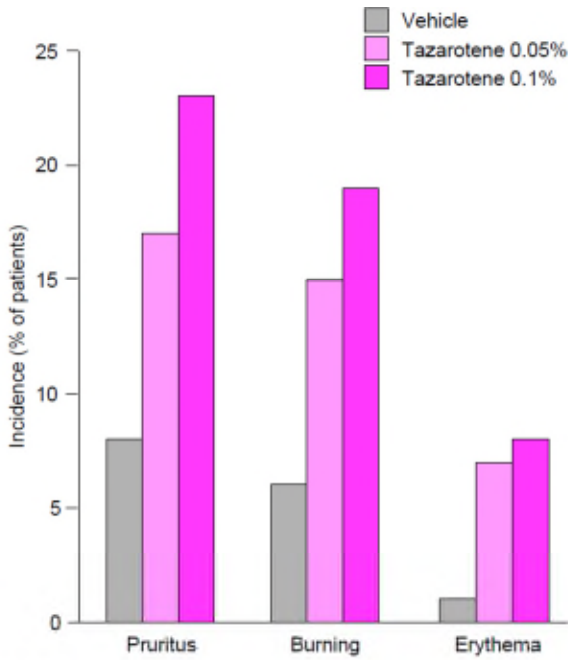


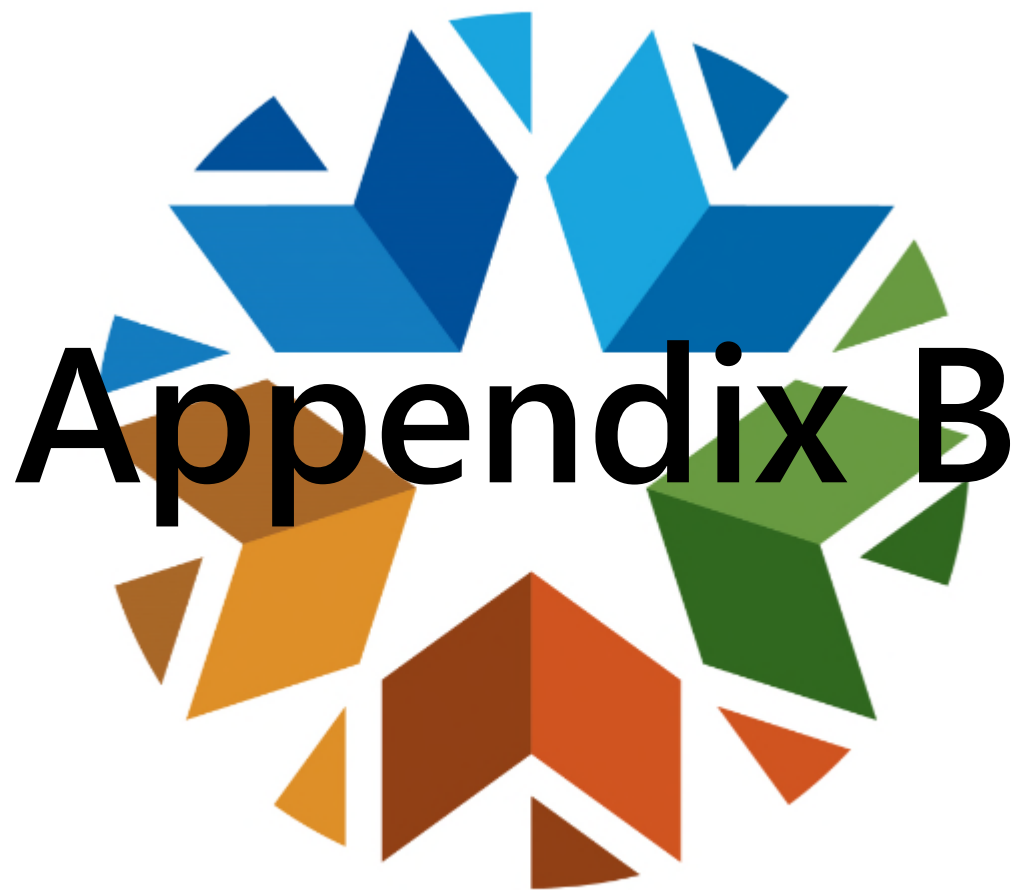
Fig. 3. Local irritation associated with topical tazarotene treatment for psoriasis.^[20] Incidence of local irritation in 324 patients with stable plaque psoriasis involving <20% of total body surface who were treated with tazarotene 0.05% or 0.1% gel or vehicle once daily for 12 weeks.

Fig. 2. Efficacy of tazarotene in facial acne vulgaris.^[20] Treatment success rates after 8 and 12 weeks of once-daily treatment with tazarotene 0.05% or 0.1% or placebo gel in 375 evaluable patients. Treatment success was defined as a good, excellent or complete clearing response. * p < 0.05 vs placebo.

Adverse Events Reported in 1% or More of Subjects		
	ARAZLO LOTION 0.045% (N=779)	VEHICLE (N=791)
PAIN	5%	<1%
DRYNESS	4%	<1%
EXFOLIATION	2%	0%
ERYTHEMA	2%	0%
PRURITUS	1%	0%

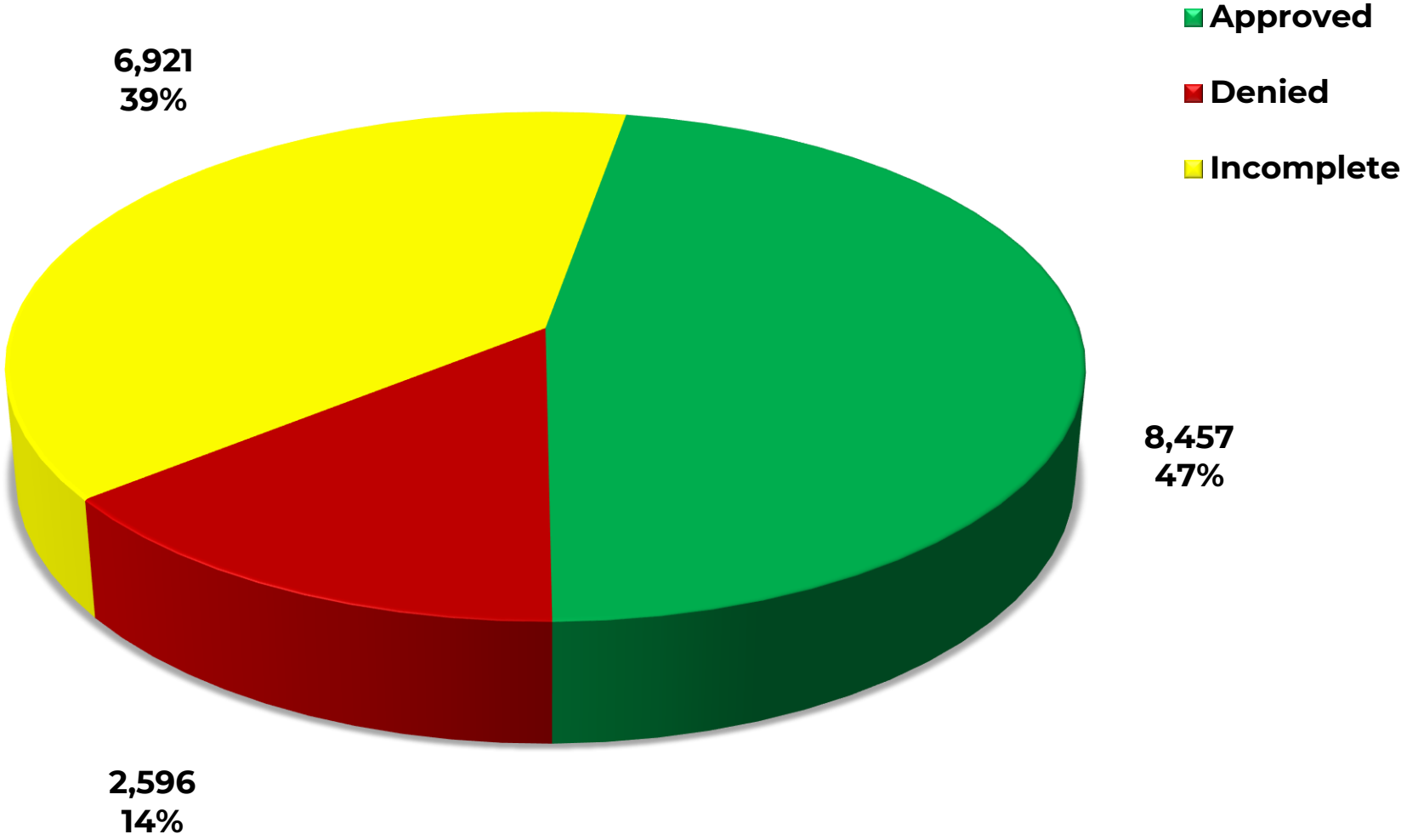
References:

1. Tazarotene. In: Lexicomp Online, Lexi-Drugs Online. Waltham, MA: UpToDate, Inc.; Update January 24, 2023. Accessed February 23, 2023
2. Foster, R H, R N Brogden, and P. Benfield. "Tazarotene." *Drugs*. 55.5 (1995): 705-11; Discussion 712. Web.
3. <https://www.arazlo.com/hcp/safety/>
4. Tazorac gel (tazarotene) [product monograph]. Madison, NJ: Allergan USA Inc; April 2018.



Appendix B

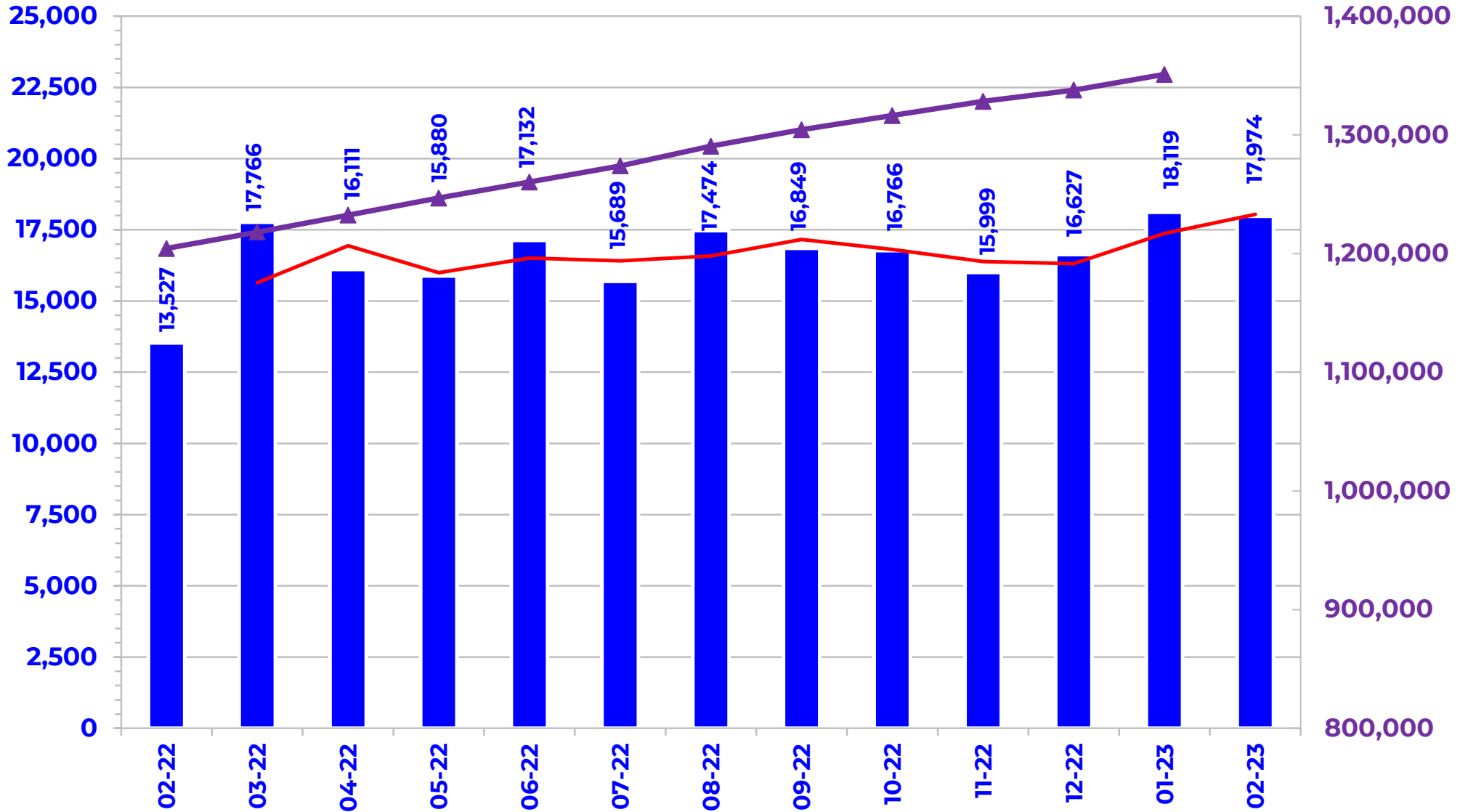
PRIOR AUTHORIZATION (PA) ACTIVITY REPORT: FEBRUARY 2023



PA totals include approved/denied/incomplete/overrides

PRIOR AUTHORIZATION (PA) REPORT: FEBRUARY 2022 – FEBRUARY 2023

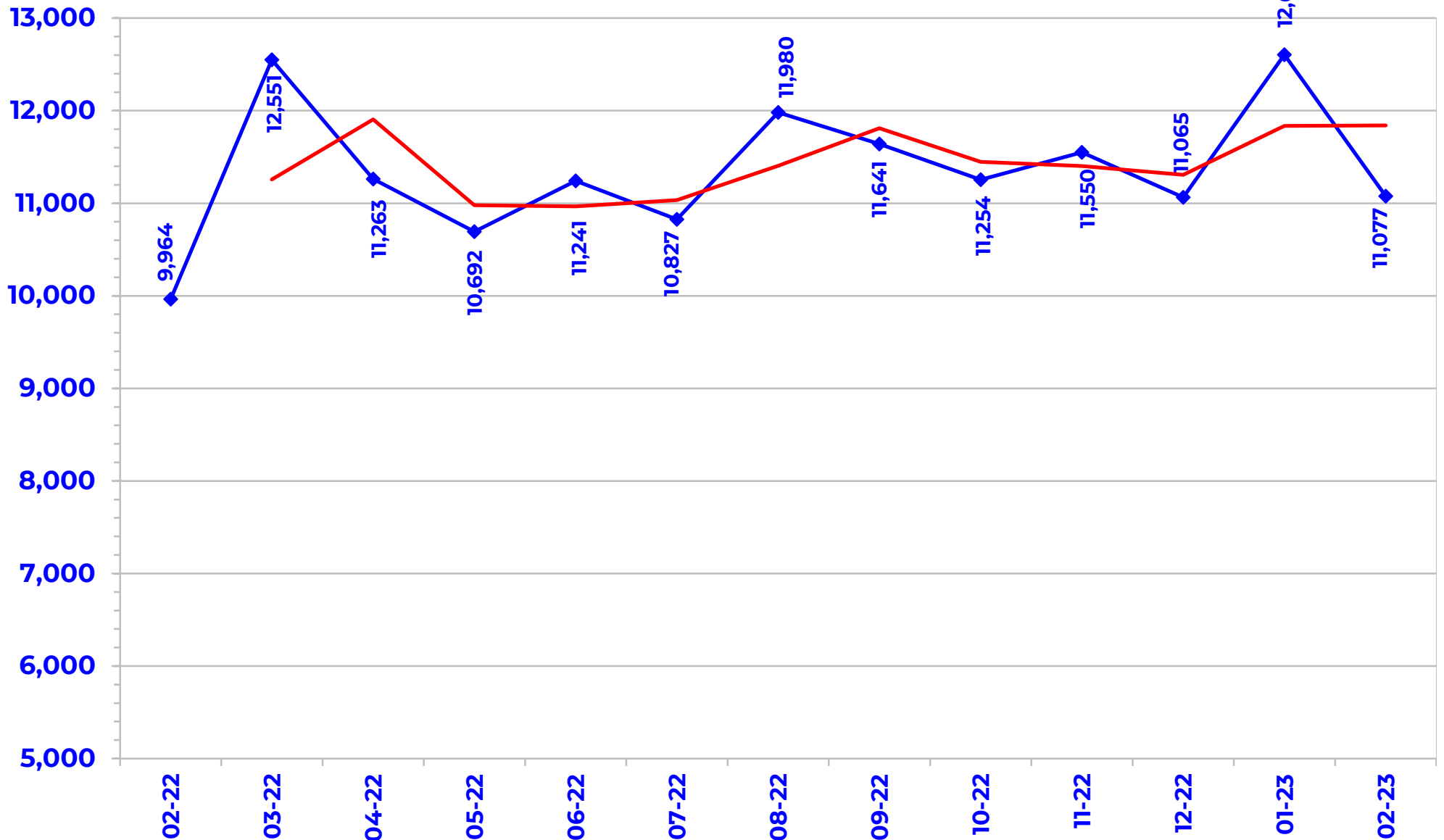
■ Total PAs
 ▲ Total Enrollment
 — Trend



PA totals include approved/denied/incomplete/overrides

CALL VOLUME MONTHLY REPORT: FEBRUARY 2022 – FEBRUARY 2023

◆ Total Calls — Trend



Prior Authorization Activity

2/1/2023 Through 2/28/2023

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Advair/Symbicort/Dulera	158	60	9	89	354
Analgesic - NonNarcotic	26	2	4	20	107
Analgesic, Narcotic	388	182	39	167	141
Angiotensin Receptor Antagonist	15	2	3	10	359
Antiasthma	96	33	18	45	238
Antibiotic	64	22	12	30	113
Anticonvulsant	264	120	22	122	326
Antidepressant	399	98	54	247	315
Antidiabetic	2,444	793	657	994	356
Antifungal	10	1	3	6	6
Antigout	18	8	0	10	358
Antihistamine	61	15	22	24	350
Antimalarial Agent	150	124	3	23	358
Antimigraine	638	108	209	321	240
Antineoplastic	312	228	10	74	168
Antiobesity	49	2	34	13	237
Antiparasitic	34	12	5	17	10
Antiparkinsons	19	4	6	9	361
Antiulcers	78	7	15	56	126
Anxiolytic	38	5	2	31	267
Atypical Antipsychotics	626	298	55	273	345
Benign Prostatic Hypertrophy	11	0	6	5	0
Biologics	404	238	42	124	308
Bladder Control	138	17	44	77	325
Blood Thinners	850	544	14	292	341
Botox	97	53	29	15	359
Buprenorphine Medications	126	69	9	48	92
Calcium Channel Blockers	28	7	2	19	288
Cardiovascular	232	116	23	93	344
Chronic Obstructive Pulmonary Disease	354	79	76	199	345
Constipation/Diarrhea Medications	277	57	80	140	224
Contraceptive	53	17	7	29	323
Corticosteroid	13	1	3	9	84
Dermatological	547	192	147	208	202
Diabetic Supplies	1,072	425	182	465	271
Diuretic	13	9	0	4	288
Endocrine & Metabolic Drugs	96	50	8	38	208
Erythropoietin Stimulating Agents	27	17	2	8	129

* Includes any therapeutic category with less than 10 prior authorizations for the month.

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Estrogen Derivative	15	2	4	9	360
Fibric Acid Derivatives	17	1	2	14	359
Fibromyalgia	13	2	3	8	359
Fish Oils	28	6	7	15	358
Gastrointestinal Agents	215	55	43	117	212
Genitourinary Agents	15	3	3	9	360
Glaucoma	24	6	1	17	267
Growth Hormones	111	87	11	13	148
Hematopoietic Agents	38	14	13	11	191
Hepatitis C	34	20	2	12	10
Insomnia	165	14	41	110	234
Insulin	282	102	25	155	340
Miscellaneous Antibiotics	60	15	7	38	42
Multiple Sclerosis	74	38	7	29	268
Muscle Relaxant	70	11	12	47	113
Nasal Allergy	44	2	11	31	84
Neurological Agents	223	66	44	113	236
Neuromuscular Agents	19	10	2	7	280
NSAIDs	63	5	14	44	267
Ocular Allergy	19	4	4	11	45
Ophthalmic	21	0	7	14	0
Ophthalmic Anti-infectives	36	11	1	24	17
Ophthalmic Corticosteroid	21	9	0	12	172
Osteoporosis	40	11	6	23	326
Other*	374	120	43	211	272
Otic Antibiotic	24	2	3	19	14
Pediculicide	14	4	0	10	21
Respiratory Agents	52	31	3	18	295
Statins	77	17	21	39	214
Stimulant	2,437	1,701	98	638	347
Synagis	53	10	37	6	10
Testosterone	202	51	53	98	336
Thyroid	32	8	8	16	349
Topical Antifungal	47	9	6	32	124
Topical Corticosteroids	43	2	17	24	106
Vitamin	160	37	92	31	112
Pharmacotherapy	49	43	1	5	298
Emergency PAs	0	0	0	0	
Total	15,436	6,544	2,508	6,384	

* Includes any therapeutic category with less than 10 prior authorizations for the month.

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Overrides					
Brand	88	63	2	23	128
Compound	4	3	0	1	31
Diabetic Supplies	5	4	0	1	126
Dosage Change	445	408	2	35	14
High Dose	5	2	0	3	16
IHS-Brand	3	2	0	1	360
Ingredient Duplication	9	6	0	3	14
Lost/Broken Rx	107	101	1	5	17
MAT Override	312	264	7	41	77
NDC vs Age	317	240	23	54	271
NDC vs Sex	7	7	0	0	162
Nursing Home Issue	52	48	2	2	22
Opioid MME Limit	116	32	7	77	102
Opioid Quantity	46	29	1	16	167
Other	71	59	6	6	30
Prescriber Temp Unlock	1	1	0	0	7
Quantity vs Days Supply	850	562	37	251	250
STBS/STBSM	13	11	0	2	128
Step Therapy Exception	11	9	0	2	319
Stolen	13	10	0	3	31
Third Brand Request	63	52	0	11	21
Overrides Total	2,538	1,913	88	537	
Total Regular PAs + Overrides	17,974	8,457	2,596	6,921	

Denial Reasons

Unable to verify required trials.	5,949
Does not meet established criteria.	2,615
Lack required information to process request.	957

Other PA Activity

Duplicate Requests	1,975
Letters	41,046
No Process	1
Changes to Existing PAs	1,439
Helpdesk Initiated Prior Authorizations	1,254
PAs Missing Information	2,045

* Includes any therapeutic category with less than 10 prior authorizations for the month.

Spring 2023 Pipeline Update

Oklahoma Health Care Authority
March 2023

Introduction

The following report is a pipeline review compiled by the University of Oklahoma College of Pharmacy: Pharmacy Management Consultants. Information in this report is focused on medications not yet approved by the U.S. Food and Drug Administration (FDA). The pipeline report is not an all-inclusive list, and medications expected to be highly utilized or have a particular impact in the SoonerCare population have been included for review. Pipeline data is collected from a variety of sources and is subject to change; dates listed are projections and all data presented are for informational purposes only. Costs listed in the following report do not reflect rebated prices or net costs.

SER-109^{1,2,3}

Anticipated Indication(s): Prevention of recurrent *Clostridioides difficile*-associated diarrhea/infection (CDI)

Clinical Studies: In October 2022, the FDA accepted a Biologics License Application (BLA) for the investigational oral microbiome therapeutic, SER-109, for the prevention of recurrent CDI. SER-109 consists of highly purified Firmicutes spores, which normally live in a healthy microbiome. The SER-109 manufacturing purification process is designed to remove unwanted microbes, therefore reducing the risk of pathogen transmission beyond donor screening alone. SER-109 is designed to reduce the recurrence of CDI by modulating the disrupted microbiome to a state that resists *C. difficile* colonization growth. This is supported by the results of 2 Phase 3 clinical studies. ECOSPOR III was a multicenter, randomized, placebo-controlled study that enrolled 182 patients with recurrent CDI. The study showed that SER-109 led to less frequent CDI recurrence than placebo in analyses stratified according to age [relative risk (RR): 0.24; 95% confidence interval (CI): 0.07, 0.78 for patients younger than 65 years of age; RR: 0.36; 95% CI: 0.18, 0.72 for patients 65 years of age and older] and antibiotic received (RR: 0.41; 95% CI: 0.22, 0.79 with vancomycin; RR: 0.09; 95% CI: 0.01, 0.63 with fidaxomicin). Most adverse events were mild to moderate and were gastrointestinal (GI) in nature, with similar numbers in the 2 groups. ECOSPOR IV was an open-label extension study of ECOSPOR III. The study duration was 27 weeks, including an 8-week primary efficacy period and an 18-week follow-up period. This study showed that the safety profile was well tolerated and there was a 91%

sustained clinical response at 8 weeks in the overall population, and at 24 weeks post-treatment, 86% of patients treated with SER-109 experienced sustained clinical response.

Place in Therapy: *C. difficile* is a bacterium that causes diarrhea and colitis. CDI typically occurs during or shortly after a course of antibiotic therapy. Oral vancomycin or fidaxomicin are strongly recommended for the treatment of initial and recurrent CDI episodes in adults. Fecal microbiota transplantation is strongly recommended in patients who experience multiple recurrence. SER-109 alters the disrupted microbiome of the GI tract to resist the growth of *C. difficile*. If approved, SER-109 will be the first oral microbiome therapy approved in the United States to prevent recurrent CDI. Rebyota®, a rectally-administered live microbiota preparation, was FDA approved for the prevention of recurrent CDI in November 2022.

Projected FDA Decision: April 2023

SoonerCare Impact: During calendar year 2022, there were 530 paid pharmacy claims for oral vancomycin or fidaxomicin for 406 unique members which resulted in a total cost of \$417,642.97 and an average cost of \$788.01 per claim. These costs do not reflect rebated costs or net costs.

Trofinetide⁴

Anticipated Indication(s): Rett syndrome

Clinical Studies: In September 2022, Acadia Pharmaceuticals announced that the FDA accepted a New Drug Application (NDA) for trofinetide for the treatment of Rett syndrome. This is supported by the results of a Phase 3, 12-week, double-blind, randomized, placebo-controlled study, the Lavender study, evaluating the efficacy and safety of trofinetide versus placebo in 187 girls and young women 5 to 20 years of age with Rett syndrome. The study demonstrated a statistically significant improvement over placebo on the co-primary endpoints, the Rett Syndrome Behavior Questionnaire (RSBQ) total score change from baseline to 12 weeks (P=0.0175; effect size=0.37) and the Clinical Global Impression-Improvement (CGI-I) scale score (P=0.0030; effect size=0.47). RSBQ is a caregiver assessment of the core symptoms of Rett syndrome and CGI-I is a global physician assessment of worsening or improving of Rett syndrome.

Place in Therapy: Rett syndrome is a rare progressive neurodevelopmental disorder that includes a period of normal development followed by significant developmental regression with loss of language, hand function skills, and impaired gait, that is seen almost exclusively in females. Currently, there is no cure for Rett syndrome. Therapy focuses on management of symptoms and support of physical functioning. Trofinetide is a synthetic

analog of the amino-terminal tripeptide of insulin-like growth factor-1 (IGF-1) that has the potential to stimulate synaptic maturation and overcome the synaptic and neuronal immaturities that are observed with Rett syndrome. This may lead to reduced neuroinflammation and support of synaptic function. If approved, trofinetide will be the first medication available for the treatment of Rett syndrome.

Projected FDA Decision: March 2023

SoonerCare Impact: During calendar year 2022, there were 42 unique, non-dual eligible members with a reported diagnosis of Rett syndrome.

Delandistrogene Moxeparvovec^{5,6}

Anticipated Indication(s): Duchenne muscular dystrophy (DMD) in ambulant patients

Clinical Studies: In September 2022, Sarepta Therapeutics submitted a BLA to the FDA for the approval of an investigational gene therapy, delandistrogene moxeparvovec to treat ambulant patients with DMD. An analysis from 3 Phase 1 and 2 studies (ENDEAVOR, SRP-9001-101, and SRP-9001-102) included data from >80 boys with DMD who were 3 to 7 years of age. The analysis reported positive results across multiple time points, including 1, 2, and 4 years after treatment with a consistent safety profile. Key findings in the ENDEAVOR study were based on the North Star Ambulatory Assessment (NSAA) 52 weeks after treatment compared to a propensity-score weighted external control. In the ENDEAVOR study (N=20, ages 4 to 7 years), patients treated with delandistrogene moxeparvovec demonstrated a 3.8-point improvement (unadjusted means) and a 3.2-point improvement [least squares mean (LSM)] on the NSAA one year after treatment when compared to a propensity-score weighted external control (P=0.0001). At 1 year, using unadjusted means, NSAA total scores in the patients treated with delandistrogene moxeparvovec improved 4 points (from 22.1 to 26.1), and patients in the external control group improved 0.2 points (from 21.9 to 22.1). In long-term results from the SRP-9001-101 study, after 4 years, patients treated with delandistrogene moxeparvovec (N=4, ages 4-7 years at time of treatment) had a positive mean 7.0-point difference on total NSAA scores compared to baseline. These patients are now on average older than 9 years of age, an age where rapid declines in function would be expected. When compared to a propensity-weighted external control, total NSAA scores for the patients treated with delandistrogene moxeparvovec were 9.9 points (unadjusted means) and 9.4 points (LSM) greater (P=0.0125). Currently, a Phase 3 EMBARK study is evaluating the safety and efficacy of delandistrogene moxeparvovec in 125 ambulatory boys 4 to 7 years of age with DMD, with results expected in late 2023.

Place in Therapy: DMD is a rare X-linked neuromuscular disorder characterized by progressive muscle degeneration and weakness. Historically, select corticosteroids (e.g., prednisone) have been used to treat DMD. Emflaza® (deflazacort) is the only corticosteroid FDA approved for this use. Corticosteroids may be used in combination with disease-modifying antisense oligonucleotides (e.g., casimersen, eteplirsen, golodirsen, viltolarsen), which target exon skipping gene alterations to produce functional dystrophin protein. If approved, delandistrogene moxeparvovec will be the first gene transfer therapy indicated to treat boys affected by DMD.

Projected FDA Decision: May 2023

SoonerCare Impact: During calendar year 2022, there were 115 paid pharmacy claims for Emflaza® and exon skipping therapies for 10 unique members, which accounted for a total cost of \$9,106,639.42 and an average cost per claim of \$79,188.17. These costs do not reflect rebated costs or net costs.

Pipeline Table^{7,8}

Medication Name*	Manufacturer	Therapeutic Use	Route of Admin	Approval Status	Anticipated FDA Response
Tixagevimab/ Cilgavimab	AstraZeneca	COVID-19	IM	BLA	03/2023
Trofinetide	Acadia	Rett syndrome	PO	NDA; Fst Trk; OD	03/2023
Efgartigimod/ Hyaluronidase	Argenx	Myasthenia gravis	SC	BLA; OD	03/2023
Biafungin	Melinta	Candidemia/ invasive candidiasis	IV	NDA; Fst Trk; OD	03/2023
Rezafungin	Cidara	Candidemia/ Invasive candidiasis	IV	BLA; Brk Thru; OD	03/2023
Leniolisib	Pharming/ Novartis	Activated P13K- delta syndrome	PO	NDA; OD	03/2023
Valoctocogene Roxaparvovec	Biomarin	Hemophilia A (severe)	IV	BLA; Brk Thru; OD	03/2023
Anthrax Vaccine, Adsorbed	Emergent	Anthrax infection	IM	BLA; Fst Trk	04/2023
Bimekizumab	UCB	PSO	SC	BLA	04/2023
Ritlecitinib	Pfizer	Alopecia areata	PO	NDA; Brk Thru	04/2023
Rozanolixizumab	UCB	Myasthenia gravis	SC	BLA; OD	04/2023
Rizatriptan Film	Gensco	Migraine	Buccal	NDA	04/2023

Medication Name*	Manufacturer	Therapeutic Use	Route of Admin	Approval Status	Anticipated FDA Response
Tofersen	Biogen	ALS (superoxide dismutase 1)	IT	NDA; OD	04/2023
SER-109	Seres	<i>Clostridioides difficile</i> associated diarrhea prevention of recurrence	PO	BLA; BRK Thru; OD	04/2023
Aripiprazole 2-Month	H. Lundbeck	Bipolar disorder; schizophrenia	IM	NDA	04/2023
Palopegteriparatide	Ascendis	Hypoparathyroidism	SC	NDA; OD	04/2023
RSV Pre-Fusion Protein Vaccine	Pfizer	RSV prevention (ages ≥60 years)	INJ	BLA; Brk Thru; Fst Trk	05/2023
Omidubicel	Gamida Cell	HSCT (allogenic)	IV	BLA; Brk Thru; Fst Trk	05/2023
RSV Pre-Fusion Protein Vaccine, Adjuvanted	GlaxoSmithKline	RSV prevention (ages ≥60 years)	IM	BLA; Fst Trk	05/2023
Phenylephrine/ Tropicamide (2.5%/1%)	Eyenovia	Mydriasis	OPH	NDA	05/2023
Beremagene Geperpavec	Krystal	Epidermolysis bullosa (dystrophic)	Topical	BLA; Fst Trk; OD	05/2023
Dengue Tetravalent Vaccine, Live, Attenuated	Takeda	Dengue fever prevention (age 4-60 years)	SC	BLA; Fst Trk	05/2023
Nalmefene	Opiant	Opioid overdose	IN	NDA; Fst Trk	05/2023
Buprenorphine ER (Weekly, Monthly Dosing)	Braeburn	Opioid Use Disorder	SC	NDA; Fst Trk	05/2023
Nirmatrelvir/Ritonavir (Paxlovid)	Pfizer	COVID-19	PO	NDA	05/2023
Delandistrogene Moxeparvovec	Sarepta/ Genentech	DMD (ambulatory patients)	IV	BLA; Fst Trk; OD	05/2023
Durlobactam/ Sulbactam	Innoviva	<i>Acinetobacter baumannii</i> infection	IV	NDA; Fst Trk	05/2023
Foscarbidopa/ Foslevodopa	AbbVie	PD motor fluctuations	SC	NDA	05/2023
Sotagliflozin	Lexicon	HF in patients with or without T2DM	PO	NDA	05/2023
Landiolol	Eagle	Supraventricular tachycardia	IV	NDA	06/2023
Cyclosporine A	Novaliq	DED	OPH	NDA	06/2023

Medication Name*	Manufacturer	Therapeutic Use	Route of Admin	Approval Status	Anticipated FDA Response
Momelotinib	GlaxoSmithKline	Myelofibrosis	PO	NDA; Fst Trk; OD	06/2023
Olorofim	F2G	Fungal infections (invasive)	PO	NDA; Brk Thru; OD	06/2023
Perfluorohexyloctane	Bausch Health	DED associated with Meibomian gland dysfunction	OPH	NDA	06/2023
Carbidopa/Levodopa ER	Amneal	PD	PO	NDA	06/2023
Nirsevimab	AstraZeneca	RSV prevention	IM	BLA; Brk Thru; Fst Trk	07/2023
Sofpironium	Botanix	Axillary hyperhidrosis	Topical	NDA	07/2023
Eplontersen	Ionis/AstraZeneca	Transthyretin amyloid polyneuropathy	SC	NDA; OD	07/2023
Etrasimod	Pfizer	UC	PO	NDA; OD	07/2023
Ustekinumab	Alvotech	PSO; PsA; CD; UC	SC	BLA	07/2023
Brimonidine Tartrate 0.35%	Visiox	Glaucoma/ocular HTN	OPH	NDA	08/2023
Lebrikizumab	Eli Lilly	Atopic dermatitis	SC	BLA; Fst Trk	09/2023
Lotilaner	Tarsus	Demodex blepharitis	OPH	NDA	09/2023
Infliximab SC	Celltrion	IBS	SC	BLA	10/2023
Zilucoplan	UCB	Myasthenia gravis	SC	NDA; OD	10/2023
Phentolamine 0.7%	Ocuphire	Pharmacologically induced mydriasis reversal	OPH	NDA	10/2023
Vamorolone	Santhera	DMD	PO	NDA; Fst Trk; OD	10/2023
Zuranolone	Sage	MDD; post-partum depression	PO	NDA; Brk Thru; Fst Trk	12/2023
Aprocitentan	Janssen	Resistant HTN	PO	NDA	12/2023
Avacincaptad Pegol	Iveric Bio	Dry AMD-related geographic atrophy	IVR	NDA; Brk Thru; Fst Trk	12/2023
Chikungunya Vaccine Monovalent	Valneva	Chikungunya prevention	IM	BLA; Brk Thru; Fst Trk	12/2023
Berdazimer	Novan	Molluscum contagiosum	Topical	NDA	01/2024
Pilocarpine 0.4%	Orasis	Presbyopia	OPH	NDA	01/2024

*Most biosimilars and oncology medications are excluded from the table. Medications known to have received a Complete Response Letter (CRL) from the FDA that have not resubmitted were also excluded. ALS = amyotrophic lateral sclerosis; AMD = age-related macular degeneration; BLA = Biologic License Application; Brk Thru = breakthrough; CD = Crohn's disease; DED = dry eye disease; DMD = Duchenne muscular dystrophy; Fst Trk = fast track; HF = heart failure; HSCT = hematopoietic stem cell transplantation; HTN = hypertension; IBS = irritable bowel syndrome; IM = intramuscular; IN = intranasal; INJ = injection, IT = intrathecal; IV = intravenous; IVR = intravitreal; MDD = major depressive disorder; NDA = New Drug Application; OD = orphan drug; OPH = ophthalmic; PD = Parkinson's disease; PO = by mouth; PsA = psoriatic arthritis; PSO = plaque psoriasis; RSV = respiratory syncytial virus; SC = subcutaneous; T2DM = type 2 diabetes mellitus; UC = ulcerative colitis

¹ Seres Therapeutics. Seres Therapeutics Announces FDA Acceptance of Biologic License Application for Investigational Microbiome Therapeutic SER-109 for Recurrent *C. Difficile* Infection for Priority Review. Available online at: <https://ir.serestherapeutics.com/news-releases/news-release-details/seres-therapeutics-announces-fda-acceptance-biologics-license>. Issued 10/26/2022. Last accessed 02/22/2023.

² Feuerstadt P, Louie T, Lashner B, et al. SER-109, an Oral Microbiome Therapy for Recurrent *Clostridioides difficile* Infection. *N Engl J Med* 2022; 386:220-9. doi: 10.1056/NEJMoa2106516.

³ Infectious Disease Society of America. Clinical Practice Guidelines by the Infectious Diseases Society of America and Society of Healthcare Epidemiology of America: 2021 Focused Updated Guidelines on Management of *Clostridioides difficile* Infection in Adults. Available online at: <https://academic.oup.com/cid/article/73/5/e1029/6298219?login=true>. Issued 06/14/2021. Last accessed 03/01/2023.

⁴ Acadia Pharmaceuticals, Inc. Acadia Pharmaceuticals Announces Trofinetide New Drug Application for the Treatment of Rett Syndrome has been Accepted for Filing and Review by U.S. FDA. Available online at: <https://acadia.com/media/news-releases/acadia-pharmaceuticals-announces-trofinetide-new-drug-application-for-the-treatment-of-rett-syndrome-has-been-accepted-for-filing-and-review-by-u-s-fda/>. Issued 09/12/2022. Last accessed 02/22/2023.

⁵ Sarepta Therapeutics, Inc. Sarepta Therapeutics Submits Biologics License Application for SRP-9001 for the Treatment of Ambulant Patients with Duchenne Muscular Dystrophy. Available online at: <https://investorrelations.sarepta.com/news-releases/news-release-details/sarepta-therapeutics-submits-biologics-license-application-srp>. Issued 09/29/2022. Last accessed 02/22/2023.

⁶ Sarepta Therapeutics, Inc. Sarepta Therapeutics' Investigational Gene Therapy SRP-9001 for Duchenne Muscular Dystrophy Demonstrates Significant Functional Improvements Across Multiples Studies. Available online at: <https://investorrelations.sarepta.com/news-releases/news-release-details/sarepta-therapeutics-investigational-gene-therapy-srp-9001>. Issued 07/06/2022. Last accessed 02/22/2023.

⁷ MagellanRx Management. *MRx Pipeline*. Available online at: https://issuu.com/magellanrx/docs/mrx_pipeline_jan_2023_final?fr=sZTAyNzU3MDO4Mjg. Issued 01/2023. Last accessed 02/22/2023.

⁸ OptumRx. RxOutlook® 4th Quarter 2022. Available online at: https://professionals.optumrx.com/content/dam/optum3/professional-optumrx/news/outlook/RxOutlook_Q4_FINAL.pdf. Issued 11/21/2022. Last accessed 02/22/2023.



Appendix C

Vote to Prior Authorize Brimonidine 0.33% Topical Gel (Generic Mirvaso®), Vtama® (Tapinarof), and Zoryve™ (Roflumilast) and Update the Approval Criteria for the Topical Acne, Psoriasis, and Rosacea Products

Oklahoma Health Care Authority
March 2023

Market News and Updates^{1,2,3,4}

New U.S. Food and Drug Administration (FDA) Approval(s):

- **May 2022:** The FDA approved Vtama® (tapinarof) 1% cream for the topical treatment of plaque psoriasis in adults. Vtama® is an aryl hydrocarbon receptor (AhR) agonist and is the first and only FDA approved steroid-free topical medication in its class.
- **July 2022:** The FDA approved Zoryve™ (roflumilast) 0.3% cream for the treatment of plaque psoriasis, including intertriginous areas, in patients 12 years of age or older. This is the first and only topical phosphodiesterase-4 (PDE-4) inhibitor approved for the treatment of plaque psoriasis. Zoryve™ provides rapid clearance of psoriasis plaques and reduces itch in all affected areas of the body.
- **September 2022:** The FDA approved Cosette Pharmaceuticals' Abbreviated New Drug Application (ANDA) for the first generic versions of Tazorac® (tazarotene 0.05% and 0.1% gel). Tazarotene gel is indicated for the treatment of plaque psoriasis and acne vulgaris.

News:

- **January 2023:** Padagis Israel launched a generic version of Galderma's Mirvaso® (brimonidine 0.33% gel). Mirvaso® was FDA approved in 2013 as the first topical agent for the treatment of facial erythema of rosacea in adults 18 years of age or older.

Brimonidine 0.33% Topical Gel Product Summary⁵

Indication(s): Brimonidine is an alpha-adrenergic agonist indicated for the topical treatment of persistent (non-transient) facial erythema of rosacea in adults 18 years of age or older.

How Supplied: 0.33% gel containing 5mg of brimonidine tartrate per gram

Dosing and Administration:

- A pea-sized amount should be applied once daily to each of the 5 areas of the face (forehead, chin, nose, and each cheek) avoiding the eyes and lips.

- Hands should be washed immediately after applying brimonidine gel.
- Brimonidine gel is for topical use only and is not for oral, ophthalmic, or intravaginal use.

Mechanism of Action: Brimonidine is a selective alpha-2 adrenergic agonist. Topical application of brimonidine topical gel may reduce erythema through direct vasoconstriction.

Contraindication(s): Known hypersensitivity to any component of brimonidine topical gel

Warnings and Precautions:

- Potentialiation of Vascular Insufficiency: Brimonidine topical gel should be used with caution in patients with depression, cerebral or coronary insufficiency, Raynaud's phenomenon, orthostatic hypotension, thrombangiitis obliterans, scleroderma, or Sjögren's syndrome.
- Severe Cardiovascular Disease: Alpha-2 adrenergic agonists can lower blood pressure. Brimonidine topical gel should be used with caution in patients with severe, unstable, or uncontrolled cardiovascular disease.
- Serious Adverse Reactions Following Ingestion of Brimonidine Topical Gel: Two young children of participants in a clinical study experienced serious adverse reactions following accidental ingestion of brimonidine topical gel. Adverse reactions experienced by 1 or both children included lethargy, respiratory distress with apneic episodes (requiring intubation), sinus bradycardia, confusion, psychomotor hyperactivity, and diaphoresis. Both children were hospitalized overnight and discharged the following day without sequelae. Brimonidine topical gel should be kept out of the reach of children.
- Systemic Adverse Reactions of Alpha-2 Adrenergic Agonists: Post marketing cases of bradycardia, hypotension (including orthostatic hypotension), and dizziness have been reported. Some cases required hospitalization. Some cases involved application of brimonidine topical gel in unapproved dosing regimens and for unapproved indications, including the application of brimonidine topical gel following laser procedures. Applying brimonidine topical gel to irritated skin or open wounds should be avoided.
- Local Vasomotor Adverse Reactions:
 - Erythema: Some patients in the clinical studies discontinued use of brimonidine topical gel because of erythema and some reported a rebound phenomenon, where erythema was reported to return worse compared to the severity at baseline. Erythema appeared to resolve after discontinuation of brimonidine topical gel.
 - Flushing: Some patients in the clinical studies discontinued use of brimonidine topical gel because of flushing. Intermittent flushing occurred in some patients treated with brimonidine topical gel in

the clinical studies. The onset of flushing relative to application of brimonidine topical gel varied, ranging from approximately 30 minutes to several hours.

- Pallor and Excessive Whitening: From postmarketing reports, some patients have experienced pallor or excessive whitening at or outside the application site following treatment with brimonidine topical gel.
- Hypersensitivity: Allergic contact dermatitis was reported in the clinical studies for brimonidine topical gel. Postmarketing reports of adverse events with the use of brimonidine topical gel include angioedema, throat tightening, tongue swelling, and urticaria. Appropriate therapy should be instituted and brimonidine should be discontinued if clinically significant hypersensitivity reaction occurs.

Safety:

- Pregnancy: There are no adequate and well-controlled studies of brimonidine topical gel in pregnant women. In animal studies, brimonidine crossed the placenta and entered fetal circulation to a limited extent. Brimonidine topical gel should be used during pregnancy only if the potential benefits justify the potential risk to the fetus.
- Lactation: It is not known whether brimonidine is excreted in human milk, although in animal studies, brimonidine has been shown to be excreted in breast milk. Because of the potential for serious adverse reactions from brimonidine topical gel in nursing infants, a decision should be made whether to discontinue nursing or to discontinue the drug, considering the importance of the drug to the mother.
- Pediatrics: The safety and effectiveness of brimonidine topical gel have not been established in pediatric patients. Brimonidine topical gel should be kept out of reach of children. Serious adverse reactions were experienced by 2 children of a patient in a clinical study who accidentally ingested brimonidine topical gel.
- Geriatrics: In clinical studies with brimonidine topical gel, there were 105 patients 65 years of age and older. No overall differences in safety or effectiveness were observed between patients 65 years of age and older and younger adult patients.

Adverse Reactions:

- The most common adverse reactions (incidence $\geq 1\%$) in patients treated with brimonidine topical gel include erythema, flushing, skin burning sensation, contact dermatitis, dermatitis, warm skin, paresthesia, acne, pain of skin, blurred vision, and nasal congestion.

Efficacy:

- Brimonidine topical gel was evaluated for the treatment of moderate-to-severe, persistent (non-transient) facial erythema of rosacea in 2 randomized, double-blind, vehicle-controlled clinical studies, which were identical in design. A total of 553 patients 18 years of age and older were treated once daily for 4 weeks with either brimonidine topical gel or vehicle. Baseline disease severity was graded using a 5-point Clinical Erythema Assessment (CEA) scale and a 5-point Patient Self-Assessment (PSA) scale, on which patients scored either “moderate” or “severe” on both scales. The primary efficacy endpoint in both studies was 2-grade composite success, defined as the proportion of patients with a 2-grade improvement on both CEA and PSA measured at hours 3, 6, 9, and 12 on day 29. In study 1, 23% of patients treated with brimonidine topical gel showed a clinical improvement at hour 12 compared to 9% treated with vehicle. In study 2, 22% compared to 10% showed improvement at hour 12 on day 29.

Cost: The Wholesale Acquisition Cost (WAC) of brimonidine 0.33% topical gel is \$17.35 per gram which results in a cost of \$520.50 per 30 gram tube.

Vtama® (Tapinarof 1% Cream) Product Summary⁶

Indication(s): Tapinarof is an AhR agonist indicated for the topical treatment of plaque psoriasis in adults.

How Supplied: 1% topical cream containing 10mg of tapinarof per gram

Dosing and Administration:

- A thin layer should be applied to affected areas once daily.
- Vtama® cream is not for oral, ophthalmic, or intravaginal use.

Mechanism of Action: The specific mechanism by which Vtama® cream exerts its therapeutic action in plaque psoriasis is unknown.

Contraindication(s): None

Safety:

- Pregnancy: The available data of Vtama® cream use in pregnant women is insufficient to evaluate for a drug-associated risk of major birth defects, miscarriage, or other adverse maternal or fetal outcomes.
- Lactation: No data is available regarding the presence of tapinarof in human milk, the effects of tapinarof on the breastfed infant, or on milk production. Tapinarof was detected in rat offspring following subcutaneous administration to pregnant female rats which suggests the tapinarof was transferred into the milk of lactating rates. When a drug is present in animal milk, it is likely that the drug will be present in human milk.

- Pediatrics: Safety and efficacy of Vtama[®] cream have not been established in pediatric patients with plaque psoriasis younger than 18 years of age.
- Geriatrics: Of the 683 patients exposed to Vtama[®] cream in the PSOARING 1 or PSOARING 2 clinical studies, 99 (14.5%) were 65 years of age and older, including 8 (1.2%) patients who were 75 years of age and older. No overall differences in efficacy, safety, or tolerability were observed between elderly patients and younger adult patients in clinical studies.

Adverse Reactions:

- The most common adverse reactions (incidence $\geq 1\%$) in patients treated with Vtama[®] cream were folliculitis, nasopharyngitis, contact dermatitis, headache, pruritus, and influenza.
- Two of the patients using Vtama[®] cream developed urticaria, and the adverse reactions that led to treatment discontinuation in $>1\%$ of the patients who received Vtama[®] were contact dermatitis (2.9%) and folliculitis (2.8%) in PSOARING 1 and 2.
- In addition to the adverse reactions reported in PSOARING 1 and PSOARING 2 clinical studies, urticaria (1.0%) and drug eruption (0.7%) were also reported in PSOARING 3.

Efficacy:

- PSOARING 1 and PSOARING 2: Two randomized, double-blind, multicenter, vehicle-controlled clinical studies treated 1,025 adult patients with plaque psoriasis with Vtama[®] cream or vehicle cream applied once daily to any lesion regardless of anatomic location for up to 12 weeks. Baseline disease severity was determined using the 5-point Physician's Global Assessment (PGA), with 82% of patients having moderate disease. The extent of disease involvement assessed by mean body surface area (BSA), excluding the scalp, palms, and soles, was 8%. Patients were included if they had a BSA involvement of $\geq 3\%$ and $\leq 20\%$. The primary efficacy endpoint in both studies was the proportion of patients who achieved treatment success, which was defined as a PGA score of clear (0) or almost clear (1) and at least a 2-grade improvement from baseline. Patients treated with Vtama[®] demonstrated statistically significant improvement versus vehicle in PGA score with 36% vs. 6% [95% confidence interval (CI): 2.9, 11.6; $P < 0.001$] of patients in PSOARING 1 and 40% vs. 6% (95% CI: 3.3, 11.4; $P < 0.001$) of patients in PSOARING 2 achieving treatment success.
- PSOARING 3: This was an open-label safety study in which 763 patients were treated for up to an additional 40 weeks after completing PSOARING 1 or PSOARING 2. Over 40% of patients in this study

achieved complete disease clearance at least once during the study period.

Zoryve™ (Roflumilast 0.3% Cream) Product Summary⁷

Indication(s): Zoryve™ is a PDE-4 inhibitor indicated for topical treatment of plaque psoriasis, including intertriginous areas, in patients 12 years of age and older.

How Supplied: 0.3% cream containing 3mg of roflumilast per gram

Dosing and Administration:

- Zoryve™ should be applied once daily to affected areas.
- Zoryve™ is for topical use only and is not for ophthalmic, oral, or intravaginal use

Mechanism of Action: Roflumilast inhibits PDE-4 activity and this leads to accumulation of intracellular cyclic adenosine monophosphate (AMP). The specific mechanism by which roflumilast exerts its therapeutic action is not well defined.

Contraindication(s):

- Moderate-to-severe hepatic impairment (Child-Pugh B or C)

Safety:

- Pregnancy: There are no clinical studies of oral or topical roflumilast in pregnant women. In animal reproduction studies, roflumilast administered orally to pregnant rats and rabbits during the period of organogenesis produced no fetal structural abnormalities at doses up to 8 and 9 times the maximum recommended human dose.
- Lactation: There is no information regarding the presence of Zoryve™ in human milk, the effects on the breast fed infant, or the effects on milk production. Roflumilast and/or its metabolites are excreted into the milk of lactating rats. When a drug is present in animal milk, it is likely that the drug will present in human milk.
- Pediatrics: The safety and effectiveness of Zoryve™ have been established in pediatric patients 12 years of age and older for the treatment of plaque psoriasis. Use of Zoryve™ in this age group is supported by data from (2) 8-week vehicle-controlled safety and efficacy studies which included 14 adolescent patients 12 to 17 years of age, of whom 8 received Zoryve™. Eighteen adolescent patients were treated with Zoryve™ in open-label studies of 2- and 24-weeks duration. The safety and effectiveness of Zoryve™ have not been established in pediatric patients younger than 12 years of age.
- Geriatrics: Of the 881 patients with psoriasis exposed to Zoryve™ or vehicle for up to 8 weeks in 2 controlled clinical studies, 106 were 65

years of age or older. No overall differences in safety or effectiveness were observed between these patients and younger patients.

- **Hepatic Impairment:** Oral roflumilast 250mcg once daily for 14 days was studied in patients with hepatic impairment. The area under the curve (AUC) and maximum serum concentration (C_{max}) values of roflumilast and roflumilast N-oxide were increased in patients with moderate (Child-Pugh B) hepatic impairment. Zoryve™ is contraindicated in patients with moderate-to-severe hepatic impairment (Child-Pugh B or C).

Adverse Reactions: The most common adverse reactions (reported in ≥1% of patients) were diarrhea, headache, insomnia, application site pain, upper respiratory tract infections, and urinary tract infections.

Efficacy:

- **DERMIS-1 and DERMIS-2:** Two multicenter, randomized, double-blind, vehicle-controlled studies enrolled a total of 881 patients with mild-to-severe plaque psoriasis and an affected BSA of 2-20%. Patients were randomized 2:1 to receive Zoryve™ or vehicle applied once daily for 8 weeks. The primary endpoint was the proportion of patients who achieved IGA treatment success at week 8. Success was defined as a score of clear (0) or almost clear (1), plus a 2-grade improvement from baseline. In DERMIS-1, 41.5% of patients treated with Zoryve™ compared to 5.8% of patients treated with vehicle had IGA success. In DERMIS-2, 36.7% versus 7.1% of patients treated with Zoryve™ and vehicle, respectively, achieved IGA success. Secondary endpoints included the proportion of patients who achieved intertriginous IGA (I-IGA) success at week 8 and Worst Itch-Numeric Rating Score (WI-NRS) success at weeks 2, 4, and 8. WI-NRS success was defined as reduction of at least 4 points from baseline in patients with a baseline WI-NRS score of at least 4. In patients treated with Zoryve™ compared to vehicle, 72% vs. 14% in DERMIS-1 and 68% vs. 17% in DERMIS-2 at week 8 (P<0.0001) showed an improvement in I-IGA score. The majority of patients with a WI-NRS score of 4 or higher at baseline achieved a ≥4 point reduction in itch at week 8 with Zoryve™ compared to placebo [67% vs. 26% in DERMIS-1 and 69% vs. 33% in DERMIS-2 (P<0.0001)].

Cost Comparison: Topical Plaque Psoriasis Medications

Product	Cost Per Gram	Cost Per Tube
Vtama® (tapinarof 1% cream)*	\$21.31	\$1,278.60
Zoryve™ (roflumilast 0.3% cream)*	\$13.75	\$825.00
Sorilux® (calcipotriene 0.005% foam)*	\$17.73	\$1,063.80
Duobrii® (halobetasol propionate/tazarotene 0.01%/0.045% lotion)+	\$9.71	\$971.00
tazarotene 0.1% cream (generic)±	\$1.90	\$57.00
tazarotene 0.1% gel (generic)±	\$13.99	\$419.70
tazarotene 0.05% gel(generic)±	\$13.17	\$395.10

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

*Vtama®, Zoryve™, and Sorilux® cost is based on a 60 gram tube

+Duobrii® cost is based on a 100 gram tube

±Tazarotene 0.1% cream, 0.1% gel, and 0.05% gel cost is based on a 30 gram tube.

Recommendations

The College of Pharmacy recommends the prior authorization of brimonidine 0.33% topical gel, Vtama®, and Zoryve™ with the following criteria (shown in red):

Brimonidine 0.33% Topical Gel (Generic Mirvaso®) Approval Criteria:

1. An FDA approved diagnosis of persistent (non-transient) facial erythema of rosacea; and
2. Member must be 18 to 20 years of age; and
3. A patient-specific, clinically significant reason why the member cannot utilize clindamycin topical solution (generic), metronidazole topical gel and cream 0.75%, erythromycin topical 2% solution, oral isotretinoin medications, or other generically available preferred oral or topical antibiotic products must be provided; and
4. Must be prescribed by, or in consultation with, a dermatologist (or an advanced care practitioner with a supervising physician who is a dermatologist); and
5. Brand name Mirvaso® is not a covered product; and
6. A quantity limit of 30 grams per 30 days will apply.

Vtama® (Tapinarof 1% Cream) Approval Criteria:

1. An FDA approved diagnosis of plaque psoriasis; and
2. Member must be 18 years of age or older; and
3. Member must have a body surface area (BSA) involvement of $\leq 20\%$; and
4. Must be prescribed by, or in consultation with, a dermatologist (or an advanced care practitioner with a supervising physician who is a dermatologist); and
5. Member must have documented trials within the last 6 months for a minimum of 2 weeks that resulted in failure with at least 2 of the

following therapies (or have a contraindication or documented intolerance):

- a. An ultra-high to high potency topical corticosteroid (TCS); or
 - b. A generic topical calcipotriene product; or
 - c. A topical tazarotene product; and
6. Initial approvals will be for the duration of 1 month. Reauthorization may be granted if the prescriber documents the member is responding well to treatment; and
 7. A quantity limit of 60 grams per 30 days will apply.

Zoryve™ (Roflumilast 0.3% Cream) Approval Criteria:

1. An FDA approved diagnosis of plaque psoriasis; and
2. Member must be 12 years of age or older; and
3. Member must have a body surface area (BSA) involvement of ≤20%; and
4. Member must not have moderate-to-severe hepatic impairment (Child-Pugh B or C); and
5. Must be prescribed by, or in consultation with, a dermatologist (or an advanced care practitioner with a supervising physician who is a dermatologist); and
6. Member must have documented trials within the last 6 months for a minimum of 2 weeks that resulted in failure with at least 2 of the following therapies (or have a contraindication or documented intolerance):
 - a. An ultra-high to high potency topical corticosteroid (TCS); or
 - b. A generic topical calcipotriene product; or
 - c. A topical tazarotene product; and
7. Initial approvals will be for the duration of 1 month. Reauthorization may be granted if the prescriber documents the member is responding well to treatment; and
8. A quantity limit of 60 grams per 30 days will apply.

Additionally, the College of Pharmacy recommends updating the approval criteria for Amzeeq® (minocycline 4% topical foam) and Tazorac® (tazarotene cream and gel) based on the new tazarotene generic approvals and product availability (changes shown in red):

Amzeeq® (Minocycline 4% Topical Foam) Approval Criteria:

1. An FDA approved diagnosis of inflammatory lesions of non-nodular, moderate-to-severe acne vulgaris; and
2. Member must be 9 years of age or older; and
3. Amzeeq® will not be covered for members older than 20 years of age; and
4. A patient-specific, clinically significant reason why the member cannot use erythromycin 2% topical solution, clindamycin 1% topical solution, benzoyl peroxide, ~~brand name Tazorac®~~; preferred tazarotene

formulations, oral isotretinoin medications, and other generically available preferred oral or topical antibiotic products must be provided; and

5. A quantity limit of 30 grams per 30 days will apply.

Tazorac® (Tazarotene Cream and Gel) Approval Criteria:

1. An FDA approved diagnosis of acne vulgaris or plaque psoriasis; and
2. Female members must not be pregnant and must be willing to use an effective method of contraception during treatment; and
3. For the diagnosis of acne vulgaris, the following must be met:
 - a. Member must be 20 years of age or younger; and
 - b. ~~Tazorac® 0.1% cream, Tazorac® 0.05% gel, Tazorac® 0.1% gel, and tazarotene 0.1% cream~~ will not require prior authorization for members 20 years of age or younger; and
4. ~~Tazarotene 0.05% gel and tazarotene 0.1% gel will require a patient specific, clinically significant reason why the member cannot use tazarotene 0.1% cream, which is available without prior authorization for members 20 years of age and younger; and~~
5. A quantity limit of 100 grams per 30 days will apply.

¹ Galderma. Galderma Receives FDA Approval of Mirvaso®. Available online at: <https://www.galderma.com/news/galderma-receives-fda-approval-mirvasor>. Issued 08/26/2013. Last accessed 02/21/2023.

² Dermavant Sciences. FDA Approves Dermavant's Vtama® (Tapinarof) Cream 1%, for the Treatment of Plaque Psoriasis in Adults: First Topical Novel Chemical Entity Launched for Psoriasis in the U.S. in 25 Years. *GlobeNewswire*. Available online at: <https://www.globenewswire.com/news-release/2022/05/24/2449068/34323/en/FDA-Approves-Dermavant-s-VTAMA-tapinarof-cream-1-for-the-Treatment-of-Plaque-Psoriasis-in-Adults-First-Topical-Novel-Chemical-Entity-Launched-for-Psoriasis-in-the-U-S-in-25-Years.html>. Issued 05/24/2022. Last accessed 02/21/2023.

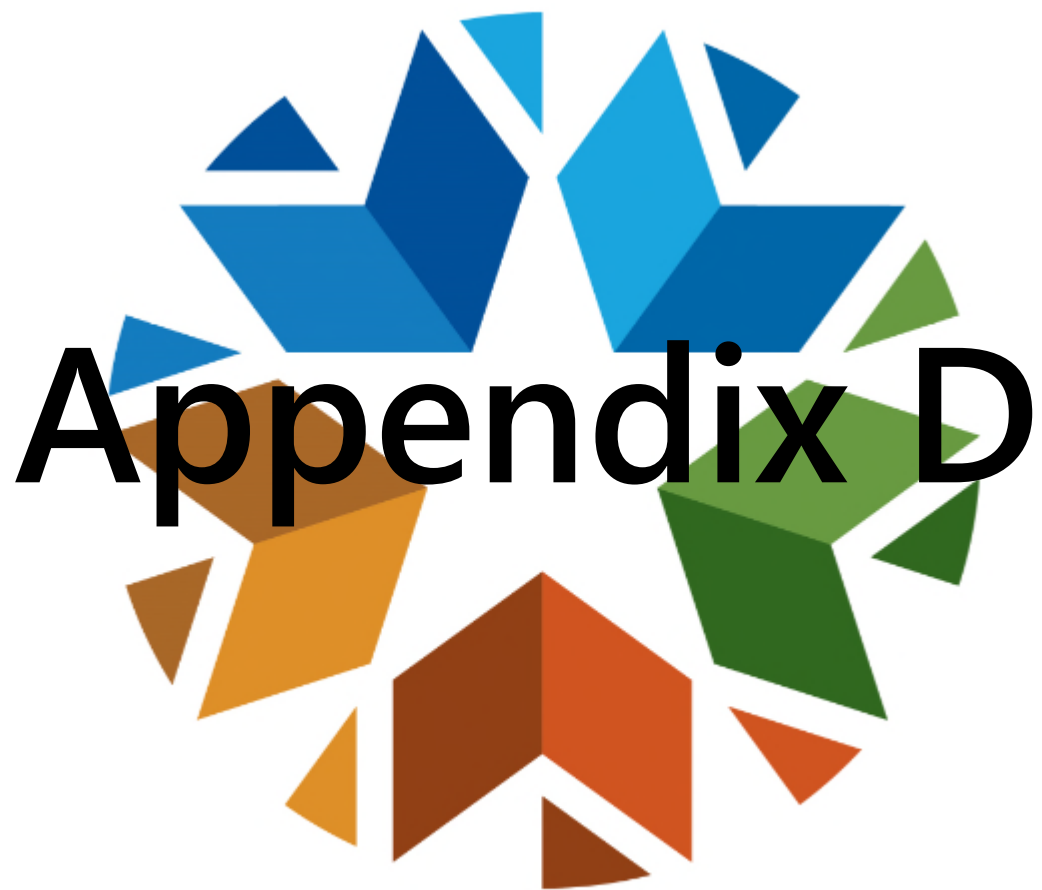
³ Cosette Pharmaceuticals. Cosette Pharmaceuticals Announces the Approval and Launch of First Generic Versions of Tazorac® (Tazarotene) Gel 0.05% and 0.1%, with 180 days Competitive Generic Therapy (CGT) Exclusivity. Available online at: <https://www.businesswire.com/news/home/20220920005512/en/Cosette-Pharmaceuticals-Announces-the-Approval-and-Launch-of-First-Generic-Versions-of-TAZORAC%C2%AE-tazarotene-gel-0.05-and-0.1-with-180-days-Competitive-Generic-Therapy-CGT-exclusivity>. Issued 09/20/2022. Last accessed 02/21/2023.

⁴ Optum Rx. New Generic Approvals. Available online at: https://professionals.optumrx.com/content/dam/optumrx/professional-optumrx/news/rxnews/new-generics/newgenerics_mirvaso_2023-0110.pdf. Issued 01/2023. Last accessed 02/21/2023.

⁵ Brimonidine Gel Prescribing Information. Padagis Israel Pharmaceuticals. Available online at: <https://dailymed.nlm.nih.gov/dailymed/getFile.cfm?setid=c899b329-cc5e-4443-8e94-451314de47c9&type=pdf>. Last revised 06/2022. Last accessed 02/21/2023.

⁶ Vtama® (Tapinarof) Prescribing Information. Dermavant. Available online at: <https://www.vtama.com/PI/>. Last revised 05/2022. Last accessed 02/21/2023.

⁷ Zoryve™ (Roflumilast) Prescribing Information. Available online at: <https://www.arcutis.com/wp-content/uploads/USPI-roflumilast-cream-FDAapproved-VI-29Jul2022.pdf>. Last revised 07/2022. Last accessed 02/21/2023.



Appendix D

Vote to Prior Authorize Tadliq® (Tadalafil Oral Suspension) and Tyvaso DPI® (Treprostinil Powder for Inhalation) and Update the Approval Criteria for the Pulmonary Hypertension Medications

Oklahoma Health Care Authority
March 2023

Market News and Updates^{1,2,3,4,5}

New U.S. Food and Drug Administration (FDA) Approval(s):

- **May 2022:** The FDA approved Tyvaso DPI® (treprostinil powder for inhalation), a prostacyclin mimetic, for the treatment of pulmonary arterial hypertension (PAH) and pulmonary hypertension associated with interstitial lung disease (PH-ILD) to improve exercise ability. Tyvaso DPI® contains a new formulation of treprostinil and is available as single-dose cartridges containing dry powder for inhalation in 16mcg, 32mcg, 48mcg, and 64mcg strengths. The FDA previously approved Tyvaso® (treprostinil) inhalation solution for the treatment of PAH in 2009 and for the treatment of PH-ILD in 2021. Tyvaso DPI® is administered as 4 separate treatment sessions (approximately 4 hours apart) every day during waking hours. The recommended initial dose is 16mcg per treatment session, and the dosage should be increased in 16mcg increments at 1- to 2-week intervals, as tolerated, up to a target maintenance dose of 48mcg to 64mcg per treatment session, 4 times daily. The FDA approval of Tyvaso DPI® was based on safety and efficacy data from patients treated with Tyvaso® inhalation solution and supported by an additional open-label study in 51 patients with PAH who were receiving stable doses of Tyvaso® inhalation solution and were transitioned to Tyvaso DPI®. The study demonstrated the safety and tolerability of the new dry powder formulation of treprostinil, with comparable systemic exposure between the 2 formulations. The Wholesale Acquisition Cost (WAC) of Tyvaso DPI® is \$186.66 per cartridge for either the 48mcg or 64mcg cartridge, resulting in an estimated cost of \$20,905.92 per 28 days and \$271,776.96 per year based on the recommended target maintenance dose of 48mcg or 64mcg administered 4 times daily.
- **June 2022:** The FDA approved Tadliq® (tadalafil oral suspension), a phosphodiesterase-5 (PDE-5) inhibitor, for the treatment of PAH to improve exercise ability. Tadliq® is the only FDA approved liquid formulation of tadalafil and is available in a 20mg/5mL peppermint flavored oral suspension in 150mL bottles. The recommended dose is

40mg (10mL) once daily. The WAC of Tadliq® is \$12.63 per milliliter, resulting in an estimated cost of \$3,789 per 30 days and \$45,468 per year based on the recommended dose of 40mg (10mL) once daily.

Recommendations

The College of Pharmacy recommends the prior authorization of Tadliq® (tadalafil oral suspension) and Tyvaso DPI® (treprostinil) with the following criteria (shown in red):

Tadliq® (Tadalafil Oral Suspension) Approval Criteria:

1. An FDA approved diagnosis of pulmonary arterial hypertension; and
2. Medical supervision by a pulmonary specialist or cardiologist; and
3. A patient-specific, clinically significant reason why the member cannot use generic sildenafil oral suspension must be provided; and
4. An age restriction will apply. Members 7 years of age and older must have a patient-specific, clinically significant reason why the member cannot use generic tadalafil 20mg oral tablets, even when the tablets are crushed; and
5. A quantity limit of 300mL per 30 days (2 bottles) will apply.

Tyvaso DPI® (Treprostinil Powder for Inhalation) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
 - a. Pulmonary arterial hypertension (PAH); or
 - b. Pulmonary hypertension associated with interstitial lung disease (PH-ILD); and
 - i. Diagnosis of PH-ILD must be confirmed by right-sided heart catheterization; and
2. Medical supervision by a pulmonary specialist or cardiologist; and
3. For a diagnosis of PAH:
 - a. Member must have previous failed trials of at least 1 of each of the following categories:
 - i. Revatio® (sildenafil) or Adcirca® (tadalafil); and
 - ii. Letairis® (ambrisentan) or Tracleer® (bosentan); and
 - b. A patient-specific, clinically significant reason why Tyvaso® (treprostinil inhalation solution) and Remodulin® (treprostinil injection), which are available without a prior authorization, are not appropriate for the member must be provided; and
4. For a diagnosis of PH-ILD, a patient-specific, clinically significant reason why Tyvaso® (treprostinil inhalation solution), which is available without a prior authorization, is not appropriate for the member must be provided.

Additionally, the College of Pharmacy recommends updating the approval criteria for Orenitram® (treprostinil) to be more consistent with FDA approved dosing and clinical practice (changes shown in red):

Orenitram® (Treprostinil) Approval Criteria:

1. An FDA approved diagnosis of pulmonary arterial hypertension; and
2. Member must have previous failed trials of at least 1 medication in each of the following categories:
 - a. Adcirca® (tadalafil) or Revatio® (sildenafil); and
 - b. Letairis® (ambrisentan) or Tracleer® (bosentan); and
3. Medical supervision by a pulmonary specialist or cardiologist; and
4. A quantity limit of ~~90~~ 180 tablets per 30 days will apply.

Lastly, the College of Pharmacy recommends removing the approval criteria for generic ambrisentan, based on net costs (changes shown in red):

~~Generic Ambrisentan (Letairis®) Approval Criteria:~~

- ~~1. A patient specific, clinically significant reason the member cannot use the brand formulation must be provided.~~

¹ United Therapeutics Corporation. United Therapeutics Announces FDA Approval of Tyvaso DPI®. Available online at: <https://ir.unither.com/news/press-releases/press-release-details/2022/United-Therapeutics-Announces-FDA-Approval-of-Tyvaso-DPI/default.aspx>. Issued 05/24/2022. Last accessed 02/10/2023.

² Tyvaso DPI® (Treprostinil) Prescribing Information. United Therapeutics Corporation. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/214324s000lbl.pdf. Last revised 05/2022. Last accessed 02/10/2023.

³ Spikes LA, Bajwa AA, Burger CD, et al. BREEZE: Open-Label Clinical Study to Evaluate the Safety and Tolerability of Treprostinil Inhalation Powder as Tyvaso DPI® in Patients with Pulmonary Arterial Hypertension. *Pulm Circ* 2022; 12(2):e12063.

⁴ Tadliq® (Tadalafil) Prescribing Information. CMP Pharma, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/214522s000lbl.pdf. Last revised 06/2022. Last accessed 02/10/2023.

⁵ CMP Pharma, Inc. CMP Pharma, Inc Announces that Tadliq®, the First and Only FDA-approved Liquid Suspension of Tadalafil, is Now Available. Available online at: <https://www.prnewswire.com/news-releases/cmp-pharma-inc-announces-that-tadliq-the-first-and-only-fda-approved-liquid-suspension-of-tadalafil-is-now-available-301656771.html>. Issued 10/24/2022. Last accessed 02/10/2023.



Vote to Prior Authorize Zonisade™ (Zonisamide Oral Suspension) and Ztalmy® (Ganaxolone) and Update the Approval Criteria for the Anticonvulsants

Oklahoma Health Care Authority
March 2023

Market News and Updates^{1,2,3,4,5,6}

New U.S. Food and Drug Administration (FDA) Approval(s):

- **March 2022:** The FDA approved a new indication for Fintepla® (fenfluramine) oral solution for the treatment of seizures associated with Lennox-Gastaut syndrome (LGS) in patients 2 years of age and older. Fintepla® was previously approved in June 2020 for the treatment of seizures associated with Dravet syndrome in patients 2 years of age and older. Additionally, the FDA granted Fintepla® pediatric exclusivity. Fintepla® demonstrated efficacy in the most difficult to treat seizure types, including drop seizures, which cause a person to suddenly lose muscle tone, become limp, and fall to the ground, with a high likelihood of injury. Fintepla® has a mechanism of action different from and complementary to current anticonvulsants, and it can be used with no disruptions to current anticonvulsant regimens. The FDA approval was supported by safety and efficacy data from a global, randomized, placebo-controlled Phase 3 clinical trial in 263 patients with LGS (2 to 35 years of age), which demonstrated that Fintepla® at a dose of 0.7mg/kg/day significantly reduced monthly drop seizure frequency by a median of 23.7% from baseline compared to 8.7% for the placebo group (P=0.0037). Nearly a fourth of those patients on Fintepla® 0.7mg/kg/day experienced a ≥50% reduction in drop seizure frequency per 28 days (18% with ≥50% to <75% reduction and 6% with ≥75% reduction). The common adverse reactions that occurred in patients treated with Fintepla® (incidence ≥10% and more than placebo) were diarrhea, decreased appetite, fatigue, somnolence, and vomiting. The Fintepla® safety database includes long-term cardiovascular safety data for patients treated for up to 3 years for Dravet syndrome and LGS. Fintepla® is available through a restricted distribution program, called the Fintepla® Risk Evaluation and Mitigation Strategy (REMS) program.
- **March 2022:** The FDA approved Ztalmy® (ganaxolone) to treat seizures associated with cyclin-dependent kinase-like 5 (CDKL5) deficiency disorder (CDD) in patients 2 years of age and older. This is the first treatment for seizures associated with CDD and the first treatment specifically for CDD. CDD is a rare developmental epileptic

encephalopathy caused by CDKL5 gene mutations. The CDKL5 gene is responsible for making proteins that are important for normal brain functioning and development. Patients with CDD typically have infantile-onset epilepsy that responds poorly to currently available treatments. Other symptoms include hypotonia, severe developmental and cognitive delays with little or no speech production, fine and gross motor impairment (including the inability to walk for most patients), cortical visual impairment, behavioral abnormalities, and sleep and digestive difficulties. Although rare, the incidence of CDD is believed to be between 1 in 40,000-60,000 live births, making it 1 of the most common genetic forms of epilepsy.

- **July 2022:** The FDA approved Zonisade™ (zonisamide oral suspension) 100mg/5mL for the adjunctive treatment of partial seizures in adults and pediatric patients 16 years of age and older with epilepsy. Zonisade™ is the first and only zonisamide oral liquid formulation to be approved by the FDA. The efficacy of Zonisade™ is based upon a bioavailability trial comparing Zonisade™ oral suspension to zonisamide capsules in healthy subjects. The efficacy and tolerability of zonisamide have been previously established in 3 double-blind, placebo-controlled, multicenter clinical trials. Zonisade™ should be administered once or twice daily. Efficacy and safety of Zonisade™ in patients younger than 16 years of age have not been established.
- **September 2022:** The FDA approved an age expansion for Diacomit® (stiripentol) for the treatment of seizures associated with Dravet syndrome in patients 6 months of age and older who weigh ≥ 7 kg and are taking clobazam. Diacomit® first received FDA approval in 2018 for the same indication in children 2 years of age and older. Diacomit® is now the only FDA-approved medication specifically indicated for seizures associated with Dravet syndrome in children as young as 6 months of age; however, there is no clinical data to support the use of Diacomit® as monotherapy in Dravet syndrome. Stiripentol is an effective treatment for seizures that are often resistant to other anticonvulsants. In the 2 original clinical trials, patients were randomized to receive either Diacomit® or placebo added to their treatment regimen with clobazam and valproate, and Diacomit® reduced generalized clonic or tonic-clonic seizures by a median of 84% compared with 5.8% on placebo after 2 months. The effectiveness of Diacomit® for the treatment of seizures associated with Dravet syndrome in patients 6 months of age to younger than 3 years of age was extrapolated from the demonstration of effectiveness in patients 3 years to younger than 18 years of age in the original Diacomit® clinical trials. Additional pharmacokinetic and safety data in patients 6 months of age to younger than 3 years of age also contributed to the age expansion. The safety and effectiveness of Diacomit® have not been

established in pediatric patients younger than 6 months of age or who weigh <7kg.

Ztalmy® (Ganaxolone) Product Summary^{7,8}

Indication(s): Ztalmy® is a neuroactive steroid gamma-aminobutyric acid (GABA) A receptor positive modulator indicated for the treatment of seizures associated with CDD in patients 2 years of age and older.

How Supplied: 50mg/mL oral suspension

Dosing and Administration:

- Ztalmy® should be administered orally 3 times daily with food and should be titrated gradually according to the recommended titration schedule based on body weight.
 - Patients weighing ≤28kg:
 - Starting dosage: 6mg/kg 3 times daily
 - Maximum dosage: 21mg/kg 3 times daily
 - Patients weighing >28kg:
 - Starting dose: 150mg 3 times daily
 - Maximum dosage: 600mg 3 times daily
 - Refer to the *Prescribing Information* for the complete recommended titration schedule.
- Dosages should be increased based on tolerability and no more frequently than every 7 days.

Safety:

- Somnolence and Sedation: Ztalmy® can cause somnolence and sedation. In clinical trials, the incidence of somnolence and sedation was 44% in patients treated with Ztalmy®, compared with 24% in patients receiving placebo. Somnolence and sedation appeared early during treatment and were generally dose-related. Other central nervous system (CNS) depressants, including opioids, antidepressants, and alcohol, could potentiate somnolence and sedation in patients receiving Ztalmy®. Patients should be monitored for somnolence and sedation and advised not to drive or operate machinery until they have gained sufficient experience on Ztalmy®.
- Suicidal Behavior and Ideation: Antiepileptic drugs (AEDs), including Ztalmy®, increase the risk of suicidal thoughts or behavior in patients taking these drugs for any indication. Patients treated with an AED for any indication should be monitored for the emergence or worsening of depression, suicidal thoughts or behavior, or any unusual changes in mood or behavior. The risk of suicidal thoughts or behaviors should be balanced with the risk of untreated illness for anyone being prescribed Ztalmy®.

- Withdrawal of AEDs: Ztalmy® should be withdrawn gradually because of the risk of increased seizure frequency and status epilepticus. If withdrawal is needed because of a serious adverse event, rapid discontinuation can be considered.
- Drug Interactions: Cytochrome P450 inducers will decrease ganaxolone exposure. It is recommended to avoid concomitant use with strong or moderate CYP3A4 inducers. If use of a CYP3A4 inducer is unavoidable, a dosage increase of Ztalmy® should be considered but should not exceed the maximum recommended dosage.

Mechanism of Action: The precise mechanism by which ganaxolone exerts its therapeutic effects in the treatment of seizures associated with CDD is unknown, but its anticonvulsant effects are thought to result from positive allosteric modulation of the GABA A receptor in the CNS.

Contraindication(s): None

Adverse Reactions: The most common adverse reactions in patients treated with Ztalmy® (incidence of ≥5% and at least twice the rate of placebo) were somnolence, pyrexia, salivary hypersecretion, and seasonal allergy.

Efficacy: The effectiveness of Ztalmy® was established in a single, double-blind, randomized, placebo-controlled trial in patients 2 to 19 years of age. A total of 101 patients (N=50 for Ztalmy®; N=51 for placebo) were enrolled and had molecular confirmation of a pathogenic or likely pathogenic mutation in the CDKL5 gene, seizures inadequately controlled by at least 2 previous treatment regimens, and a minimum of 16 major motor seizures (i.e., bilateral tonic, generalized tonic-clonic, bilateral clonic, atonic, focal to bilateral tonic-clonic) per 28 days during a retrospective 2-month period prior to screening. Patients were randomized in a 1:1 ratio to receive either Ztalmy® or placebo. Following a 21-day titration period, patients in the Ztalmy® arm weighing ≤28kg received a maintenance dosage of 21mg/kg 3 times daily (with a maximum daily dose of 1,800mg) while patients in the Ztalmy® arm weighing >28kg received a maintenance dosage of 600mg 3 times daily. Ninety-six percent of patients were taking between 1 to 4 concomitant AEDs. The most frequently used concomitant AEDs (in at least 20% of patients) were valproate (42%), levetiracetam (32%), clobazam (29%), and vigabatrin (24%).

- Primary Endpoint: The primary efficacy endpoint was the percent change in the 28-day frequency of major motor seizures (defined similarly as in the 2-month period prior to screening) from a 6-week prospective baseline phase during the 17-week double-blind phase.
- Results: Patients treated with Ztalmy® showed a median 30.7% reduction in 28-day major motor seizure frequency, compared to a median 6.9% reduction for those receiving placebo, achieving the trial's primary endpoint (P=0.0036). In the Marigold open-label extension trial,

patients treated with Ztalmy® for at least 12 months (N=48) experienced a median 49.6% reduction in major motor seizure frequency.

Cost: The Wholesale Acquisition Cost (WAC) of Ztalmy® is \$22.05 per mL or \$2,425.50 per 110mL bottle. This leads to an annual cost of \$291,060 for the maximum dose of 600mg 3 times daily.

Recommendations

The College of Pharmacy recommends the prior authorization of Ztalmy® (ganaxolone) and Zonisade™ (zonisamide oral suspension) with the following criteria (shown in red):

Ztalmy® (Ganaxolone) Approval Criteria:

1. An FDA approved diagnosis of seizures associated with cyclin-dependent kinase-like 5 (CDKL5) deficiency disorder (CDD); and
 - a. Diagnosis must be confirmed by genetic testing identifying a mutation in the CDKL5 gene that is pathogenic or likely pathogenic; and
2. Member must be 2 years of age or older; and
3. The initial prescription must be written by, or in consultation with, a neurologist; and
4. Member must have failed at least 2 other anticonvulsants; and
5. Members currently stable on Ztalmy® and who have a CDD diagnosis confirmed by genetic testing will be approved for continuation of therapy; and
6. The member's recent weight (kg), taken within the last 3 weeks, must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
7. Initial approvals will be for the duration of 3 months. For continuation, the prescriber must include information regarding improved response/effectiveness of the medication; and
8. Subsequent approvals will be for the duration of 1 year; and
9. A quantity limit of 1,100mL per 30 days will apply.

Zonisade™ (Zonisamide Oral Suspension) Approval Criteria:

1. An FDA approved indication of adjunctive treatment of partial-onset seizures; and
2. A patient-specific, clinically significant reason why the member cannot use zonisamide capsules must be provided; and
3. A quantity limit of 900mL per 30 days will apply.

Additionally, the College of Pharmacy recommends updating the Fintepla® (fenfluramine) approval criteria based on the new FDA approved indication (changes shown in red):

Fintepla® (Fenfluramine) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
 - a. Dravet syndrome; or
 - b. Lennox-Gastaut syndrome (LGS); and
2. Member must be 2 years of age or older; and
3. Initial prescription must be written by, or in consultation with, a neurologist; and
4. Member must not be taking monoamine oxidase inhibitors within 14 days of administration of Fintepla®; and
5. Prescriber must verify the member's blood pressure will be monitored; and
6. Member must not be actively suicidal or have uncontrolled depression and prescriber must verify member will be monitored for depression prior to starting Fintepla therapy and throughout treatment; and
7. For a diagnosis of Dravet syndrome, the member must have failed or be inadequately controlled with at least 2 other anticonvulsants; and
8. For a diagnosis of LGS, the member must have failed or be inadequately controlled with at least 3 other anticonvulsants; and
9. Pharmacy and provider must be certified in the Fintepla® Risk Evaluation and Mitigation Strategy (REMS) program; and
10. Member must be enrolled in the Fintepla REMS program; and
11. The member's recent weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
12. Prescriber must verify that dose titration and maximum maintenance dose will be followed according to package labeling based on member weight and concomitant medications; and
13. Initial approvals will be for the duration of 3 months. For continuation, the prescriber must include information regarding improved response/effectiveness of the medication; and
14. A quantity limit of 360mL per 30 days will apply.

The College of Pharmacy also recommends updating the Diacomit® (stiripentol) approval criteria based on the new FDA approved age expansion (changes shown in red):

Diacomit® (Stiripentol) Approval Criteria:

1. An FDA approved indication of adjunctive treatment of seizures associated with Dravet syndrome ~~in members 2 years of age and older;~~ and
2. Member must be 6 months of age or older and weigh ≥ 7 kg; and
3. Initial prescription must be written by, or in consultation with, a neurologist; and

4. Member must have failed or be inadequately controlled with clobazam and valproate; and
5. Member must take clobazam and valproate concomitantly with Diacomit® or a reason why concomitant clobazam and valproate are not appropriate for the member must be provided; and
6. Members currently stable on Diacomit® and who have a seizure diagnosis will be approved for continuation of therapy; and
7. The member's recent weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
8. For Diacomit® powder for oral suspension, an age restriction of 12 years and younger will apply. Members older than 12 years of age will require a patient-specific, clinically significant reason why the member cannot take the oral capsule formulation; and
9. Initial approvals will be for the duration of 3 months. For continuation, the prescriber must include information regarding improved response/effectiveness of the medication.

Finally, the College of Pharmacy recommends updating the Banzel® (rufinamide) and Trokendi XR® [topiramate extended-release (ER)] approval criteria based on net costs (changes shown in red):

Banzel® (Rufinamide) Approval Criteria:

1. An FDA approved indication of adjunctive treatment of seizures associated with Lennox-Gastaut syndrome (LGS); and
2. Initial prescription must be written by a neurologist; and
3. Member must have failed therapy with at least 3 other anticonvulsants; and
4. Authorization of generic rufinamide (in place of brand Banzel®) will require a patient-specific, clinically significant reason why the member cannot use the brand formulation (brand formulation is preferred); and
5. Members currently stable on Banzel® (rufinamide) and who have a seizure diagnosis will be approved for continuation of therapy.

Trokendi XR® [Topiramate Extended-Release (ER)] Approval Criteria:

1. An FDA approved indication of 1 of the following:
 - a. Treatment of partial-onset or primary generalized tonic-clonic (PGTC) seizures; or
 - b. Adjunctive treatment of seizures associated with Lennox-Gastaut syndrome (LGS); or
 - c. Prophylaxis of migraine headaches; and
2. A patient-specific, clinically significant reason why the member cannot use the short-acting formulation, Topamax® (topiramate), must be provided; and

- ~~3. A patient specific, clinically significant reason why the member cannot use Qudexy® XR (topiramate ER) must be provided; and~~
4. Members currently stable on Trokendi XR® (topiramate ER) and who have a seizure diagnosis will be approved for continuation of therapy; and
5. A quantity limit of 30 capsules per 30 days will apply on the lower strength capsules (25mg, 50mg, and 100mg) and 60 capsules per 30 days on the higher strength capsules (200mg).

¹ UCB, Inc. Fintepla® (Fenfluramine) Oral Solution Now FDA Approved for Treatment of Seizures Associated with Lennox-Gastaut Syndrome (LGS). *PR Newswire*. Available online at: <https://www.prnewswire.com/news-releases/fintepla-fenfluramine-oral-solution-now-fda-approved-for-treatment-of-seizures-associated-with-lennox-gastaut-syndrome-lgs-301511407.html>. Issued 03/28/2022. Last accessed 02/15/2023.

² Fintepla® (Fenfluramine) Prescribing Information. Zogenix, Inc. Available online at: https://www.ucb.com/sites/default/files/2022-08/Fintepla_prescribing_information_USA.pdf. Last revised 06/2022. Last accessed 02/15/2023.

³ U.S. Food and Drug Administration (FDA). FDA Approves Drug for Treatment of Seizures Associated with Rare Disease in Patients Two Years of Age and Older. Available online at: <https://www.fda.gov/drugs/news-events-human-drugs/fda-approves-drug-treatment-seizures-associated-rare-disease-patients-two-years-age-and-older>. Issued 03/18/2022. Last accessed 02/15/2023.

⁴ Azurity Pharmaceuticals, Inc. Azurity Pharmaceuticals, Inc. Announces FDA Approval of Zonisade™ (Zonisamide Oral Suspension). Available online at: <https://azurity.com/azurity-pharmaceuticals-inc-announces-fda-approval-of-zonisade-zonisamide-oral-suspension/>. Issued 07/18/2022. Last accessed 02/15/2023.

⁵ Biocodex, Inc. Antiseizure Drug Diacomit® Now Approved for Children as Young as 6 Months. *PR Newswire*. Available online at: <https://www.prnewswire.com/news-releases/antiseizure-drug-diacomit-now-approved-for-children-as-young-as-6-months-301628988.html>. Issued 09/21/2022. Last accessed 02/15/2023.

⁶ Diacomit® (Stiripentol) Prescribing Information. Biocodex, Inc. Available online at: https://www.diacomit.com/wp-content/uploads/2022/10/DIACOMIT_US_PI_2022.pdf. Last revised 07/2022. Last accessed 02/15/2023.

⁷ Ztalmy® (Ganaxolone) Prescribing Information. Marinus Pharmaceuticals. Available online at: <https://marinuspharma.com/wp-content/uploads/2022/03/prescribing-information.pdf>. Last revised 11/2022. Last accessed 02/15/2023.

⁸ Marinus Pharmaceuticals. Marinus Pharmaceuticals Announces FDA Approval of Ztalmy® (Ganaxolone) for CDKL5 Deficiency Disorder. Available online at: <https://ir.marinuspharma.com/news/news-details/2022/Marinus-Pharmaceuticals-Announces-FDA-Approval-of-ZTALMY-ganaxolone-for-CDKL5-Deficiency-Disorder/default.aspx>. Issued 03/18/2022. Last accessed 02/15/2023.



Vote to Prior Authorize Rezlidhia™ (Olutasidenib) and Update the Approval Criteria for the Leukemia Medications

Oklahoma Health Care Authority
March 2023

Market News and Updates^{1,2,3,4,5}

U.S. Food and Drug Administration (FDA) Approval(s) and Indication(s):

- **May 2022:** The FDA granted accelerated approval to Kymriah® (tisagenlecleucel) for a new indication for the treatment of adults with relapsed or refractory follicular lymphoma (FL) after 2 or more lines of systemic therapy.
- **May 2022:** The FDA approved a new indication for Tibsovo® (ivosidenib) in combination with azacitidine for the treatment of newly diagnosed acute myeloid leukemia (AML) with a susceptible isocitrate dehydrogenase-1 (IDH1) mutation as detected by an FDA-approved test in adults 75 years of age or older who have comorbidities that preclude the use of intensive induction chemotherapy.
- **August 2022:** The FDA approved a new indication for Imbruvica® (ibrutinib) for the treatment of pediatric patients 1 year of age or older with chronic graft-versus-host disease (cGVHD) after failure of 1 or more lines of systemic therapy. Additionally, the FDA approved a new oral suspension formulation of ibrutinib for this indication. Imbruvica® was previously available as oral tablets and oral capsules.
- **December 2022:** The FDA approved Rezlidhia™ (olutasidenib) for the treatment of adults with relapsed or refractory AML who have a susceptible IDH1 mutation as detected by an FDA-approved test.

News:

- **February 2022:** Gilead, the manufacturer of Zydelig® (idelalisib), requested the FDA to withdraw the previous accelerated approvals for both FL and small lymphocytic lymphoma (SLL), citing the evolving treatment landscape for FL and SLL and challenges enrolling patients into the required confirmatory study for those indications. Zydelig® remains FDA approved for the treatment of relapsed chronic lymphocytic leukemia (CLL) and will continue to be available in the United States for that indication.

Rezlidhia™ (Olutasidenib) Product Summary⁶

- **Therapeutic Class:** IDH1 inhibitor
- **Indication(s):** Treatment of adults with relapsed or refractory AML with a susceptible IDH1 mutation as detected by an FDA approved test
- **How Supplied:** 150mg oral capsules
- **Dose:**
 - 150mg twice daily
- **Cost:** The Wholesale Acquisition Cost (WAC) is \$536.67 per capsule, resulting in monthly cost of \$32,200.20 based on the recommended dosing of 1 capsule twice daily.

Recommendations

The College of Pharmacy recommends the prior authorization of Rezlidhia™ (olutasidenib) with the following criteria (shown in red):

Rezlidhia™ (Olutasidenib) Approval Criteria [Acute Myeloid Leukemia (AML) Diagnosis]:

1. Relapsed/refractory AML; and
 - a. As a single agent; and
 - b. Isocitrate dehydrogenase-1 (IDH1) mutation.

Additionally, the College of Pharmacy recommends updating the approval criteria for Imbruvica® (ibrutinib), Kymriah® (tisagenlecleucel), and Tibsovo® (ivosidenib) based on recent FDA approvals and to be consistent with the other chimeric antigen receptor (CAR) T-cell therapies (changes shown in red):

Imbruvica® (Ibrutinib) Approval Criteria [Chronic Graft-Versus-Host Disease (cGVHD) Diagnosis]:

1. Failure of 1 or more lines of therapy; and
2. Member must be 1 year of age or older; and
3. For members younger than 12 years of age:
 - a. The member's current body surface area (BSA) must be provided; and
 - b. Requests for use of the 70mg capsule formulation will require a patient-specific, clinically significant reason why the member cannot use the 70mg/mL oral suspension formulation.

Kymriah® (Tisagenlecleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Large B-cell lymphoma [including diffuse large B-cell lymphoma (DLBCL), high grade B-cell lymphoma, and DLBCL arising from follicular lymphoma (FL)] or FL; and
2. Relapsed/refractory disease; and
3. Member must be 18 years of age or older; and

4. Member must not have primary central nervous system lymphoma; and
5. Member must have had ≥ 2 lines of therapy; and
6. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells, must be trained in the management of cytokine release syndrome (CRS) and neurologic toxicities, and must comply with the Kymriah[®] Risk Evaluation and Mitigation Strategy (REMS) requirements; and
7. Approvals will be for 1 dose per member per lifetime.

Tibsovo[®] (Ivosidenib) Approval Criteria [Acute Myeloid Leukemia (AML) Diagnosis]:

1. Newly diagnosed AML; and
 - a. Member meets 1 of the following:
 - i. Member is 75 years of age or older; or
 - ii. If the member is younger than 75 years of age, must be unable to tolerate intensive induction chemotherapy; and
 - b. As a single agent or in combination with azacitidine; and
 - c. Isocitrate dehydrogenase-1 (IDH1) mutation; or
2. Relapsed/refractory AML; and
 - a. As a single agent; and
 - b. IDH1 mutation.

Lastly, the College of Pharmacy recommends the removal of the Zydelig[®] (idelalisib) approval criteria for the FL and SLL indications based on the FDA withdrawal of the previous accelerated approvals for those indications (changes shown in red):

Zydelig[®] (Idelalisib) Approval Criteria [Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL) Diagnosis]:

1. Relapsed/refractory disease; and
2. In combination with rituximab or rituximab/bendamustine; or
3. As a single agent.

Zydelig[®] (Idelalisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. ~~Grade 1 to 2 FL; and~~
2. ~~As second line or subsequent therapy for refractory or progressive disease; and~~
3. ~~Refractory to both alkylator and rituximab therapy.~~

¹ U.S. Food and Drug Administration (FDA). FDA Approves Tisagenlecleucel for Relapsed or Refractory Follicular Lymphoma. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-tisagenlecleucel-relapsed-or-refractory-follicular-lymphoma>. Issued 05/27/2022. Last accessed 02/10/2023.

² U.S. FDA. FDA Approves Ivosidenib in Combination with Azacitidine for Newly Diagnosed Acute Myeloid Leukemia. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-ivosidenib-combination-azacitidine-newly-diagnosed-acute-myeloid-leukemia>. Issued 05/25/2022. Last accessed 02/10/2023.

³ U.S. FDA. FDA Approves Ibrutinib for Pediatric Patients with Chronic Graft Versus Host Disease, Including a New Oral Suspension. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-ibrutinib-pediatric-patients-chronic-graft-versus-host-disease-including-new-oral>. Issued 08/24/2022. Last accessed 02/10/2023.

⁴ U.S. FDA. FDA Approves Olutasidenib for Relapsed or Refractory Acute Myeloid Leukemia with a Susceptible IDH1 Mutation. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-olutasidenib-relapsed-or-refractory-acute-myeloid-leukemia-susceptible-idh1-mutation>. Issued 12/01/2022. Last accessed 02/10/2023.

⁵ Gilead. Gilead Statement on Zydelig® U.S. Indication for Follicular Lymphoma and Small Lymphocytic Leukemia. Available online at: <https://www.gilead.com/news-and-press/company-statements/gilead-statement-on-zydelig-us-indication-for-follicular-lymphoma-and-small-lymphocytic-leukemia>. Issued 01/14/2022. Last accessed 02/10/2023.

⁶ Rezlidhia™ (Oltasidenib) Prescribing Information. Forma Therapeutics, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/215814s000lbl.pdf. Last revised 12/2022. Last accessed 02/10/2023.



Appendix G

Calendar Year 2022 Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Jaypirca™ (Pirtobrutinib) and Lunsumio™ (Mosunetuzumab-axgb)

Oklahoma Health Care Authority
March 2023

Current Prior Authorization Criteria

Utilization data for Arzerra® (ofatumumab), Asparlas® (calaspargase pegol-mknl), Erwinase® (crisantaspase), Erwinaze® (asparaginase *Erwinia chrysanthemi*), Gazyva® (obinutuzumab), Imbruvica® (ibrutinib), Kymriah® (tisagenlecleucel), Oncaspar® (pegaspargase), Rylaze® [asparaginase *Erwinia chrysanthemi* (recombinant)-rywn], Venclexta® (venetoclax), and Zydelig® (idelalisib) and approval criteria for indications other than lymphoma can be found in the February 2023 Drug Utilization Review (DUR) Board packet. These medications are reviewed annually with the leukemia medications. Utilization data for Keytruda® (pembrolizumab) and Opdivo® (nivolumab) and approval criteria for indications other than lymphoma can be found in the December 2022 DUR Board packet. These medications are reviewed annually with the skin cancer medications. Utilization data for Xalkori® (crizotinib) and approval criteria for indications other than lymphoma can be found in the May 2022 DUR Board packet. Xalkori® (crizotinib) is reviewed annually with the lung cancer medications. Utilization data for Xpovio® (selinexor) and approval criteria for indications other than lymphoma can be found in the November 2022 DUR Board packet. Xpovio® (selinexor) is reviewed annually with the multiple myeloma medications.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Adult T-Cell Leukemia/Lymphoma Diagnosis]:

1. CD30+ disease; and
2. Member meets 1 of the following:
 - a. In combination with cyclophosphamide, doxorubicin, and prednisone (CHP) in nonresponders to first-line therapy for chronic/smoldering subtype; or
 - b. In combination with CHP for first-line therapy for acute or lymphoma subtype; or
 - c. In combination with CHP for continued treatment in responders to first-line therapy for acute or lymphoma subtype; or
 - d. In members who have received ≥1 line of therapy as a single agent.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Anaplastic Large Cell Lymphoma (ALCL), Primary Cutaneous Diagnosis]:

1. As a single agent in members with multifocal lesions or regional nodes either as primary treatment or in relapsed/refractory disease; or
2. In combination with cyclophosphamide, doxorubicin, and prednisone (CHP) for primary treatment or relapsed/refractory disease with regional nodes.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Anaplastic Large Cell Lymphoma (ALCL), Systemic Diagnosis]:

1. In previously untreated disease in combination with cyclophosphamide, doxorubicin, and prednisone (CHP); or
2. In members who have received ≥ 1 line of therapy as a single agent.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Classical Hodgkin Lymphoma (cHL) Diagnosis]:

1. In previously untreated stage III or IV disease in combination with doxorubicin, vinblastine, and dacarbazine; or
2. In relapsed/refractory disease after failure of ≥ 2 multi-agent chemotherapy regimens in non-autologous stem cell transplant (SCT) candidates or after failure of autologous SCT as a single agent; or
3. In relapsed/refractory disease if not previously used in combination with multi-agent chemotherapy; or
4. Consolidation following autologous SCT in members at high risk of relapse or progression.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Diffuse Large B-Cell Lymphoma (DLBCL) or High Grade Lymphoma Diagnosis]:

1. As a single agent; and
2. CD30+ disease; and
3. DLBCL relapsed/refractory disease in non-autologous stem cell transplant (SCT) candidates; or
4. In members who have transformed to DLBCL from follicular lymphoma or marginal zone lymphoma and received ≥ 2 lines of therapy for indolent or transformed disease.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Peripheral T-Cell Lymphoma (PTCL) Diagnosis]:

1. Treatment of previously untreated CD30+ disease in combination with cyclophosphamide, doxorubicin, and prednisone (CHP); or
2. In members who have received ≥ 1 line of therapy as a single agent.

Adcetris® (Brentuximab Vedotin) Approval Criteria [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

1. As a single agent as primary treatment or in relapsed/refractory disease.

Adcetris® (Brentuximab Vedotin) Approval Criteria [T-Cell Lymphoma, Extranodal NK/T-Cell Lymphoma, Nasal Type Diagnosis]:

1. CD30+ disease; and
2. As a single agent; and
3. Relapsed/refractory disease following additional therapy with an alternate combination chemotherapy regimen not previously used.

Aliqopa® (Copanlisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Diagnosis of relapsed/refractory FL; and
2. Member must have failed at least 2 prior systemic therapies.

Arzerra® (Ofatumumab) Approval Criteria [Waldenström's Macroglobulinemia (WM)/Lymphoplasmacytic Lymphoma Diagnosis]:

1. Previously treated disease that does not respond to primary therapy or for progressive or relapsed disease; and
2. Member is rituximab-intolerant; and
3. As a single agent or combination therapy.

Asparlas® (Calaspargase Pegol-mknl) and Oncaspar® (Pegaspargase) Approval Criteria [Extranodal NK/T-Cell Lymphoma Diagnosis]:

1. For Asparlas®, a patient-specific, clinically significant reason why the member cannot use Oncaspar® (pegaspargase) must be provided; and
2. For Asparlas®, member must be 1 month to 21 years of age; and
3. Diagnosis of NK/T-Cell lymphoma; and
4. Member has nasal disease; and
 - a. Used as induction therapy; or
 - b. Used as additional therapy in members with a positive biopsy following a partial or no response to induction therapy.

Beleodaq® (Belinostat) Approval Criteria [Adult T-Cell Leukemia/Lymphoma Diagnosis]:

1. As a single agent in relapsed/refractory disease.

Beleodaq® (Belinostat) Approval Criteria [Anaplastic Large Cell Lymphoma (ALCL), Primary Cutaneous Diagnosis]:

1. As a single agent for primary treatment or relapsed refractory with multifocal lesions, or cutaneous ALCL with regional nodes.

Beleodaq® (Belinostat) Approval Criteria [Peripheral T-Cell Lymphoma (PTCL) Diagnosis]:

1. As a single agent in relapsed/refractory disease.

Beleodaq® (Belinostat) Approval Criteria [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

1. Primary treatment in stage IV non Sézary or visceral disease (solid organ) with or without radiation therapy for local control; or
2. Primary treatment for large cell transformation with generalized cutaneous or extracutaneous lesions with or without skin-directed therapy; or
3. As a single agent (with or without skin-directed therapy) in relapsed/refractory disease.

Beleodaq® (Belinostat) Approval Criteria [T-Cell Lymphoma, Extranodal NK/T-Cell Lymphoma, Nasal Type Diagnosis]:

1. As a single agent; and
2. Relapsed/refractory disease following additional therapy with an alternate combination chemotherapy regimen not previously used.

Breyanzi® (Lisocabtagene Maraleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of large B-cell lymphoma; and
2. Relapsed or refractory disease; and
3. Member must have received at least 2 lines of systemic therapy; and
4. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements; and
5. A patient-specific, clinically significant reason why Yescarta® (axicabtagene) or Kymriah® (tisagenlecleucel) is not appropriate for the member must be provided.

Brukinsa® (Zanubrutinib) Approval Criteria [Mantle Cell Lymphoma (MCL) Diagnosis]:

1. Diagnosis of MCL in adult members; and
2. Member must have received at least 1 prior therapy.

Brukinsa® (Zanubrutinib) Approval Criteria [Marginal Zone Lymphoma (MZL) Diagnosis]:

1. Diagnosis of MZL in adult members; and
2. Member must have received at least 1 prior anti-CD20 monoclonal antibody-based therapy.

Brukinsa® (Zanubrutinib) Approval Criteria [Waldenström's Macroglobulinemia Diagnosis]:

1. Diagnosis of Waldenström's macroglobulinemia in adult members; and
2. Used as primary or subsequent therapy.

Calquence® (Acalabrutinib) Approval Criteria [Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL) Diagnosis]:

1. As a single agent.

Calquence® (Acalabrutinib) Approval Criteria [Mantle Cell Lymphoma (MCL) Diagnosis]:

1. As a single agent.

Copiktra® (Duvelisib) Approval Criteria [Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL) Diagnosis]:

1. Relapsed/refractory CLL or SLL; and
2. Progression of disease following 2 or more lines of systemic therapy; and
3. As a single agent.

Copiktra® (Duvelisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Relapsed/refractory FL; and
2. Progression of disease following 2 or more lines of systemic therapy; and
3. As a single agent.

Erwinase® (Crisantaspase), Erwinaze® (Asparaginase *Erwinia Chrysanthemi*), and Rylaze® [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn] Approval Criteria [Acute Lymphoblastic Leukemia (ALL) or Lymphoblastic Lymphoma Diagnosis]:

1. Diagnosis of ALL or lymphoblastic lymphoma; and
2. Used as a component of multi-agent chemotherapy; and
3. Member has a documented hypersensitivity to *Escherichia coli*-derived asparaginase.

Folotyn® (Pralatrexate) Approval Criteria [Adult T-Cell Leukemia/Lymphoma Diagnosis]:

1. As a single agent in relapsed/refractory disease.

Folotyn® (Pralatrexate) Approval Criteria [Anaplastic Large Cell Lymphoma (ALCL), Primary Cutaneous Diagnosis]:

1. As a single agent in members with multifocal lesions or regional nodes either as primary treatment or in relapsed/refractory disease.

Folotyn® (Pralatrexate) Approval Criteria [Peripheral T-Cell Lymphoma (PTCL) Diagnosis]:

1. As a single agent in relapsed/refractory disease.

Folotyn® (Pralatrexate) Approval Criteria [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

1. As a single agent as primary treatment or in relapsed/refractory disease.

Folotyn® (Pralatrexate) Approval Criteria [T-Cell Lymphoma, Extranodal NK/T-Cell Lymphoma, Nasal Type Diagnosis]:

1. As a single agent; and
2. Relapsed/refractory disease following additional therapy with an alternate combination chemotherapy regimen not previously used.

Gazyva® (Obinutuzumab) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Grade 1 or 2 members with stage I (≥ 7 cm), contiguous stage II (≥ 7 cm), noncontiguous stage II, stage III, or stage IV members (first, second, or subsequent therapy); and
2. In combination with CHOP (cyclophosphamide, doxorubicin, vincristine, and prednisone), CVP (cyclophosphamide, vincristine, and prednisone), or bendamustine; and
3. When used for maintenance therapy, a total of 12 doses will be approved.

Gazyva® (Obinutuzumab) Approval Criteria [Gastric or Nongastric Mucosa-Associated Lymphoid Tissue (MALT) Lymphoma, Nodal or Splenic Marginal Zone Lymphoma (MZL) Diagnosis]:

1. As second-line or subsequent therapy in combination with bendamustine; or
2. Maintenance therapy as second-line consolidation or extended dosing in rituximab-refractory members treated with obinutuzumab and bendamustine for a total of 12 doses.

Imbruvica® (Ibrutinib) Approval Criteria [Diffuse Large B-Cell Lymphoma (DLBCL) Diagnosis or Acquired Immunodeficiency Syndrome (AIDS)-Related B-Cell Lymphoma Diagnosis]:

1. Diagnosis of non-germinal center DLBCL; and
2. As second-line or subsequent therapy; and
3. Member is not a candidate for high-dose therapy.

Imbruvica® (Ibrutinib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Diagnosis of grade 1 or 2 FL; and
2. As subsequent therapy (third-line or greater) for histologic transformation to non-germinal center diffuse large B-cell lymphoma (DLBCL).

Imbruvica® (Ibrutinib) Approval Criteria [Gastric or Nongastric Mucosa-Associated Lymphoid Tissue (MALT) Lymphoma, Nodal or Splenic Marginal Zone Lymphoma (MZL) Diagnosis]:

1. As second-line or subsequent therapy for refractory or progressive disease.

Imbruvica® (Ibrutinib) Approval Criteria [Histologic Transformation of Marginal Zone Lymphoma (MZL) to Diffuse Large B-Cell Lymphoma (DLBCL) Diagnosis]:

1. As third-line or greater therapy for members who have transformed to non-germinal center DLBCL.

Imbruvica® (Ibrutinib) Approval Criteria [Mantle Cell Lymphoma (MCL) Diagnosis]:

1. As second-line or subsequent therapy; and
2. As a single agent or in combination with rituximab or lenalidomide/rituximab.

Imbruvica® (Ibrutinib) Approval Criteria [Post-Transplant Lymphoproliferative Disorders Diagnosis]:

1. As second-line or subsequent therapy in members with partial response, persistent, or progressive disease; and
2. Non-germinal center B-cell type.

Imbruvica® (Ibrutinib) Approval Criteria [Waldenström's Macroglobulinemia (WM)/Lymphoplasmacytic Lymphoma Diagnosis]:

1. As first-line or subsequent therapy; and
2. As a single agent or in combination with rituximab.

Istodax® (Romidepsin) and Romidepsin 27.5mg/5.5mL Vial Approval Criteria [Anaplastic Large Cell Lymphoma (ALCL), Primary Cutaneous Diagnosis]:

1. As a single agent in members with multifocal lesions or regional nodes either as primary treatment or in relapsed/refractory disease.

Istodax® (Romidepsin) and Romidepsin 27.5mg/5.5mL Vial Approval Criteria [Peripheral T-Cell Lymphoma (PTCL) Diagnosis]:

1. As a single agent in relapsed/refractory disease.

Istodax® (Romidepsin) and Romidepsin 27.5mg/5.5mL Vial Approval Criteria [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

1. As a single agent as primary treatment or in relapsed/refractory disease.

Istodax® (Romidepsin) and Romidepsin 27.5mg/5.5mL Vial Approval Criteria [T-Cell Lymphoma, Extranodal NK/T-Cell Lymphoma, Nasal Type Diagnosis]:

1. As a single agent; and
2. Relapsed/refractory disease following additional therapy with an alternate combination chemotherapy regimen not previously used.

Keytruda® (Pembrolizumab) Approval Criteria [Classical Hodgkin Lymphoma (cHL) Diagnosis]:

1. Member has not previously failed other PD-1 inhibitors [i.e., Opdivo® (nivolumab)]; and
2. For adult members:
 - a. Diagnosis of relapsed or refractory cHL; and
 - i. As a single agent; or
 - ii. Exception: lymphocyte-predominant Hodgkin lymphoma; or
 - iii. Second-line or subsequent systemic therapy in combination with gemcitabine, vinorelbine, and liposomal doxorubicin; or
3. For pediatric members:
 - a. As a single agent; and
 - b. Diagnosis of refractory cHL; or
 - c. Relapsed disease after ≥ 2 therapies.

Keytruda® (Pembrolizumab) Approval Criteria [Primary Mediastinal Large B-cell Lymphoma (PMBCL) Diagnosis]:

1. Diagnosis of PMBCL in adult or pediatric members; and
2. Member must have refractory disease or pembrolizumab must be used in members who have relapsed after 2 or more prior lines of therapy; and
3. Authorizations will not be granted for members who require urgent cytoreduction; and
4. Member has not previously failed other PD-1 inhibitors [e.g., Opdivo® (nivolumab)].

Kymriah® (Tisagenlecleucel) Approval Criteria [Lymphoma Diagnosis]*:

1. Diagnosis of large B-cell lymphoma [including diffuse large B-cell lymphoma (DLBCL), high grade B-cell lymphoma, and DLBCL arising from follicular lymphoma (FL)] or FL; and
2. Relapsed/refractory disease; and
3. Member must be 18 years of age or older; and
4. Member must not have primary central nervous system lymphoma; and
5. Member must have had ≥ 2 lines of therapy; and
6. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells, must be trained in the management of cytokine release syndrome (CRS) and neurologic toxicities, and must

comply with the Kymriah® Risk Evaluation and Mitigation Strategy (REMS) requirements; and

7. Approvals will be for 1 dose per member per lifetime.

*The above updated approval criteria for Kymriah® (tisagenlecleucel) for lymphoma is currently pending a vote by the DUR Board at the March 2023 DUR Board meeting; please refer to the vote report [Vote to Prior Authorize Rezlidhia™ (Olutasidenib) and Update the Approval Criteria for the Leukemia Medications] in the March 2023 DUR Board packet for additional information.

Monjuvi® (Tafasitamab-cxix) Approval Criteria [Diffuse Large B-Cell Lymphoma (DLBCL) Diagnosis]:

1. Diagnosis of DLBCL in adults; and
2. Relapsed or refractory disease; and
3. Used in combination with lenalidomide.

Opdivo® (Nivolumab) Approval Criteria [Classical Hodgkin Lymphoma (cHL) Diagnosis]:

1. Diagnosis of relapsed or refractory cHL; and
 - a. Exception: lymphocyte-predominant HL
2. Nivolumab must be used as a single-agent; and
3. Member has not previously failed other PD-1 inhibitors [e.g., Keytruda® (pembrolizumab)].

Polivy™ (Polatuzumab Vedotin-piiq) Approval Criteria [Diffuse Large B-Cell Lymphoma (DLBCL) or High Grade Lymphoma Diagnosis]:

1. Relapsed/refractory DLBCL or high grade B-cell lymphoma after at least 2 prior therapies; and
2. Used in combination with bendamustine and rituximab; and
3. Member is not a candidate for transplant.

Poteligeo® (Mogamulizumab-kpkc) Approval Criteria [Adult T-Cell Leukemia/Lymphoma Diagnosis]:

1. As a single-agent in relapsed/refractory disease.

Poteligeo® (Mogamulizumab-kpkc) Approval Criteria [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

1. As a single-agent as primary treatment or in relapsed/refractory disease.

Tazverik® (Tazemetostat) Approval Criteria [Epithelioid Sarcoma Diagnosis]:

1. Diagnosis of metastatic or locally advanced epithelioid sarcoma; and
2. Member is not eligible for complete resection; and
3. Member must be 16 years of age or older.

Tazverik® (Tazemetostat) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Treatment of adult members with relapsed/refractory disease; and
2. *EZH2* mutation detected; and
3. Member must have received 2 lines of therapy or as subsequent therapy with no satisfactory alternative treatment options.

Tecartus® (Brexucabtagene Autoleucel) Approval Criteria [Acute Lymphoblastic Leukemia (ALL) Diagnosis]:

1. Diagnosis of acute lymphoblastic leukemia (ALL); and
2. Relapsed or refractory disease; and
3. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements.

Tecartus® (Brexucabtagene Autoleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of mantle cell lymphoma; and
2. Relapsed or refractory disease; and
3. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements.

Ukoniq® (Umbralisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Diagnosis of FL; and
2. Relapsed or refractory disease; and
3. Member must have received at least 3 prior lines of systemic therapy.

Ukoniq® (Umbralisib) Approval Criteria [Marginal Zone Lymphoma (MZL) Diagnosis]:

1. Diagnosis of MZL; and
2. Relapsed or refractory disease; and
3. Member must have received at least 1 prior anti-CD20-based regimen.

Venclexta® (Venetoclax) Approval Criteria [Mantle Cell Lymphoma (MCL) Diagnosis]:

1. As second-line or subsequent therapy; and
2. As a single agent.

Xalkori® (Crizotinib) Approval Criteria [Anaplastic Large Cell Lymphoma (ALCL) Diagnosis]:

1. Members 1 to 21 years of age:

- a. Diagnosis of systemic ALCL that is anaplastic lymphoma kinase (ALK)-positive; and
 - b. Relapsed or refractory disease; or
2. Members older than 21 years of age:
 - a. Diagnosis of systemic ALCL that is ALK-positive; and
 - b. Second-line or initial palliative intent therapy and subsequent therapy.

Xpovio® (Selinexor) Approval Criteria [Diffuse Large B-Cell Lymphoma (DLBCL) Diagnosis]:

1. Diagnosis of relapsed/refractory DLBCL, not otherwise specified, including DLBCL arising from follicular lymphoma; and
2. Member has received ≥ 2 prior lines of systemic therapy.

Yescarta® (Axicabtagene Ciloleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of large B-cell lymphoma [including diffuse large B cell lymphoma (DLBCL), high grade B-cell lymphoma, and DLBCL arising from follicular lymphoma (FL)] or FL; and
2. Member must be 18 years of age or older; and
3. Relapsed or refractory disease used in 1 of the following settings:
 - a. After 2 or more lines of therapy; or
 - b. After 1 line of therapy, if member is refractory to first-line chemotherapy or relapses within 12 months of first-line chemotherapy; and
4. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements; and
5. For large B-cell lymphoma (including DLBCL, high grade B-cell lymphoma, and DLBCL arising from FL), member must not have primary central nervous system lymphoma.

Zevalin® (Ibritumomab Tiuxetan) Approval Criteria [Follicular Lymphoma (FL) (Grade 1-2) Diagnosis]:

1. As a single agent; and
2. Relapsed/refractory disease.

Zevalin® (Ibritumomab Tiuxetan) Approval Criteria [Follicular Lymphoma (FL) or Marginal Zone Lymphoma (MZL) Transformed to Diffuse Large B-Cell Lymphoma (DLBCL) Diagnosis]:

1. As a single agent; and
2. Member meets 1 of the following:

- a. Minimal or no chemotherapy prior to histologic transformation to DLBCL (FISH for MYC and BCL2 and/or BCL6 must show no translocation) and have partial response, no response, or progressive disease after chemoimmunotherapy; or
- b. Member must have received ≥ 2 prior therapies of chemoimmunotherapy for indolent or transformed disease.

Zolinza® (Vorinostat) Approval Criteria [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

1. As a single agent as primary treatment or in relapsed/refractory disease.

Zydelig® (Idelalisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Diagnosis of grade 1 to 2 FL; and
2. As second-line or subsequent therapy for refractory or progressive disease; and
3. Refractory to both alkylator and rituximab therapy.

Zydelig® (Idelalisib) Approval Criteria [Gastric or Nongastric Mucosa-Associated Lymphoid Tissue (MALT) Lymphoma, Nodal or Splenic Marginal Zone Lymphoma (MZL) Diagnosis]:

1. As second-line or subsequent therapy for refractory or progressive disease; and
2. Refractory to both alkylator and rituximab therapy.

Zynlonta® (Loncastuximab Tesirine-Ipyl) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of diffuse large B-cell lymphoma (DLBCL) not otherwise specified, or DLBCL arising from low grade lymphoma, or high-grade B-cell lymphoma; and
2. Relapsed or refractory disease after 2 or more lines of systemic therapy; and
3. If previous CD19-directed therapy was used, patient must have a biopsy that shows CD19 protein expression after completion of the CD19-directed therapy; and
4. A patient-specific, clinically significant reason why tafasitamab in combination with lenalidomide is not appropriate for the member must be provided.

Utilization of Lymphoma Medications: Calendar Year 2022

The following utilization data includes medications indicated for lymphoma; however, the data does not differentiate between lymphoma and other diagnoses, for which use may be appropriate.

Calendar Year Comparison: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/Claim	Cost/Day	Total Units	Total Days
2021	2	7	\$84,443.87	\$12,063.41	\$402.11	360	210
2022	8	41	\$578,568.09	\$14,111.42	\$479.74	2,412	1,206
% Change	300.00%	485.70%	585.20%	17.00%	19.30%	570.00%	474.30%
Change	6	34	\$494,124.22	\$2,048.01	\$77.63	2,052	996

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

Calendar Year Comparison: Medical Claims

Calendar Year	*Total Members	*Total Claims	Total Cost	Cost/Claim	Claims/Member
2021	15	75	\$1,357,213.22	\$18,096.18	5
2022	30	159	\$3,772,486.99	\$23,726.33	5.3
% Change	100.00%	112.00%	177.96%	31.11%	6.00%
Change	15	84	\$2,415,273.77	\$5,630.16	0.3

Costs do not reflect rebated prices or net costs.

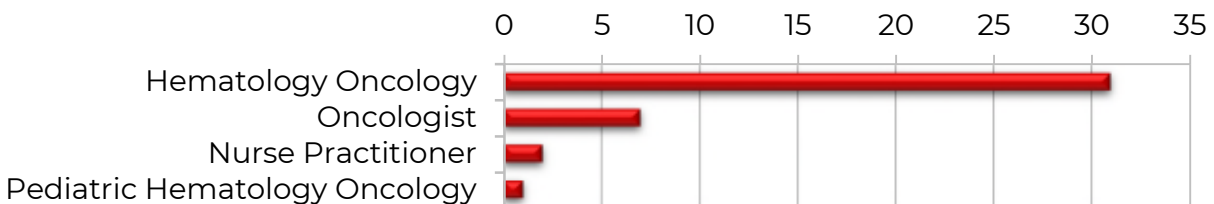
*Total number of unduplicated utilizing members.

*Total number of unduplicated claims.

Demographics of Members Utilizing Lymphoma Medications: Pharmacy Claims

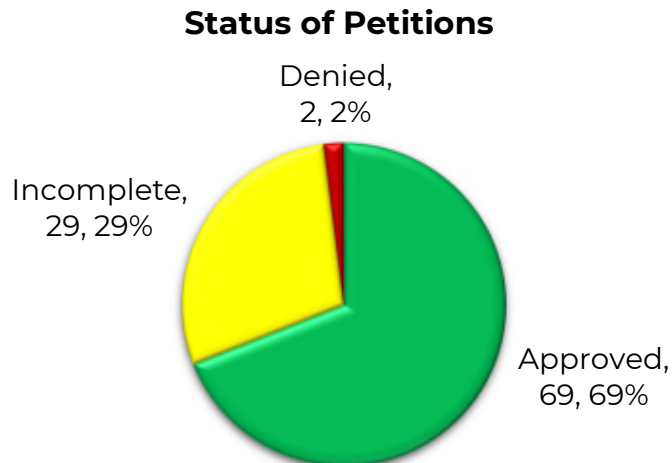
- Due to the limited number of members utilizing lymphoma medications during calendar year 2022, detailed demographic information could not be provided.

Top Prescriber Specialties of Lymphoma Medications by Number of Claims: Pharmacy Claims



Prior Authorization of Lymphoma Medications

There were 100 prior authorization requests submitted for lymphoma medications during calendar year 2022. The following chart shows the status of the submitted petitions for calendar year 2022.



Market News and Updates^{1,2,3,4,5,6,7,8,9,10,11}

Anticipated Patent Expiration(s):

- Folotyn[®] (pralatrexate): May 2025
- Beleodaq[®] (belinostat): October 2027
- Zolinza[®] (vorinostat): March 2028
- Aliqopa[®] (copanlisib): March 2032
- Copiktra[®] (duvelisib): May 2032
- Ukoniq[®] (umbralisib): May 2035
- Tazverik[®] (tazemetostat): December 2035
- Calquence[®] (acalabrutinib): July 2036
- Jaypirca[™] (pirtobrutinib): December 2036
- Brukinsa[®] (zanubrutinib): August 2037

New U.S. Food and Drug Administration (FDA) Approval(s):

- **June 2022:** The FDA approved a new indication for Breyanzi[®] (lisocabtagene maraleucel) for adults with large B-cell lymphoma (LBCL) who have refractory disease to first-line chemoimmunotherapy or relapse within 12 months of first-line chemoimmunotherapy; or refractory disease to first-line chemoimmunotherapy or relapse after first-line chemoimmunotherapy and are not eligible for hematopoietic stem cell transplantation (HSCT) due to comorbidities or age. Breyanzi[®] is not indicated for the treatment of patients with primary central nervous system lymphoma.
- **August 2022:** The FDA approved a new tablet formulation of Calquence[®] (acalabrutinib) for the same indications as the previous

capsule formulation. The tablets can be co-administered with proton pump inhibitors (PPIs), antacids, and histamine 2 (H2)-receptor antagonists. The previous capsule formulation required separation from antacids or H2-receptor antagonists by at least 2 hours and was not recommended to be co-administered with PPIs.

- **November 2022:** The FDA approved a new indication for Adcetris® (brentuximab vedotin) in combination with doxorubicin, vincristine, etoposide, prednisone, and cyclophosphamide for pediatric patients 2 years of age and older with previously untreated high risk classical Hodgkin lymphoma (cHL). This is the first pediatric approval for Adcetris®.
- **December 2022:** The FDA granted accelerated approval to Lunsumio™ (mosunetuzumab-axgb), a bispecific CD20-directed CD3 T-cell engager, for adults with relapsed or refractory follicular lymphoma (FL) after 2 or more lines of systemic therapy.
- **January 2023:** The FDA approved a new indication for Brukinsa® (zanubrutinib) for chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL).
- **January 2023:** The FDA granted accelerated approval to Jaypirca™ (pirtobrutinib) for relapsed or refractory mantle cell lymphoma (MCL) after at least 2 lines of systemic therapy, including a Bruton's tyrosine kinase (BTK) inhibitor.

News:

- **December 2021:** Secura Bio, the manufacturer of Copiktra® (duvelisib), announced the voluntary withdrawal of the previous accelerated approval for relapsed or refractory FL, citing the current treatment landscape for FL and the logistics, cost, and timing of the post-marketing requirements for the FL indication. The withdrawal decision was not based on any changes in the efficacy or safety of Copiktra®. Copiktra® remains FDA approved for the treatment of adults with relapsed or refractory CLL or SLL after at least 2 prior therapies.
- **June 2022:** The FDA announced its previous accelerated approvals for Ukoniq® (umbralisib) for FL and marginal zone lymphoma (MZL) have been withdrawn due to safety concerns. In February 2022, a Drug Safety Communication was issued stating the FDA was investigating a possible increased risk of death with Ukoniq®, and enrollment into the ongoing clinical trials with Ukoniq® had been suspended while the safety data was reviewed. Following this, additional findings from the Phase 3 UNITY-CLL clinical trial in patients with CLL continued to show a possible increased risk of death in patients receiving Ukoniq®, and the FDA determined the risk of treatment with Ukoniq® outweighed its benefits. As a result, TG Therapeutics, the manufacturer of Ukoniq®, has

voluntarily withdrawn the medication from the market for its FL and MZL indications.

Guideline Update(s):

- **November 2022:** The National Comprehensive Cancer Network (NCCN) guidelines were updated to include brentuximab in combination with nivolumab as an option for second-line and subsequent therapy for patients with relapsed or refractory cHL. In a Phase 1/2 study of 91 patients with relapsed or refractory cHL, the combination of nivolumab with brentuximab resulted in an objective response rate (ORR) of 85% [with 67% achieving a complete response (CR)]. At a median follow-up of 34 months, the 3-year progression-free survival (PFS) and overall survival (OS) rates were 77% and 93%, respectively. The NCCN guidelines also recommend brentuximab in combination with bendamustine in this setting.

Jaypirca™ (Pirtobrutinib) Product Summary¹²

- **Therapeutic Class:** Kinase inhibitor
- **Indication(s):** Treatment of adult patients with relapsed or refractory MCL after at least 2 lines of systemic therapy, including a BTK inhibitor
- **How Supplied:** 50mg and 100mg oral tablets
- **Dose:**
 - Recommended dose is 200mg [(2) 100mg tablets] once daily
 - Dose reduction to 100mg or 50mg once daily is recommended for specific adverse reactions, severe renal impairment, or certain drug interactions
- **Cost:** The Wholesale Acquisition Cost (WAC) is \$350 per 100mg tablet, resulting in a monthly cost of \$21,000 and a yearly cost of \$252,000 based on the recommended dose of 200mg once daily.

Lunsumio™ (Mosunetuzumab-axgb) Product Summary¹³

- **Therapeutic Class:** Bispecific CD20-directed CD3 T-cell engager
- **Indication(s):** Treatment of adult patients with relapsed or refractory FL after 2 or more lines of systemic therapy
- **How Supplied:** 1mg/mL solution in 1mL and 30mL single-dose vials (SDVs)
- **Dosing and Administration:**
 - Administered in 21-day treatment cycles by intravenous (IV) infusion
 - Cycle 1: 1mg on day 1, 2mg on day 8, and 60mg on day 15
 - Cycle 2: 60mg on day 1
 - Cycle 3 (and subsequent cycles): 30mg on day 1

- **Cost:** The WAC is \$594.06 per milliliter, resulting in a cost of \$37,425.78 for the first cycle, \$35,643.60 for the second cycle, and \$17,821.80 for the third and subsequent cycles based on recommended dosing. This results in an estimated cost of \$340,396.38 for the first year of treatment.

Recommendations

The College of Pharmacy recommends the prior authorization of Jaypirca™ (pirtobrutinib) and Lunsumio™ (mosunetuzumab-axgb) with the following criteria (shown in red):

Jaypirca™ (Pirtobrutinib) Approval Criteria [Mantle Cell Lymphoma (MCL) Diagnosis]:

1. Diagnosis of MCL; and
2. Relapsed or refractory disease after ≥ 2 lines of systemic therapy; and
3. Previous treatment must have included a Bruton's tyrosine kinase (BTK) inhibitor (e.g., acalabrutinib, ibrutinib, zanubrutinib).

Lunsumio™ (Mosunetuzumab-axgb) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Diagnosis of FL; and
2. Relapsed or refractory disease after ≥ 2 lines of systemic therapy.

Additionally, the College of Pharmacy recommends updating the Adcetris® (brentuximab vedotin), Breyanzi® (lisocabtagene maraleucel), Brukinsa® (zanubrutinib), Tecartus® (brexucabtagene autoleucel), and Yescarta® (axicabtagene ciloleucel) criteria based on the recent FDA approvals, NCCN guideline recommendations, and to be consistent with the other chimeric antigen receptor (CAR) T-cell therapies (new criteria and changes shown in red):

Adcetris® (Brentuximab Vedotin) Approval Criteria [Classical Hodgkin Lymphoma (cHL) Diagnosis]:

1. For members 18 years of age or older:
 - a. In previously untreated Stage III or IV disease in combination with doxorubicin, vinblastine, and dacarbazine; or
 - b. In relapsed/refractory disease after failure of ≥ 2 multi-agent chemotherapy regimens in non-autologous stem cell transplant (SCT) candidates or after failure of autologous SCT as a single-agent; or
 - c. In relapsed/refractory disease if not previously used in combination with nivolumab, bendamustine, or multi-agent chemotherapy; or
 - d. Consolidation following autologous SCT in members at high risk of relapse or progression; or

2. For members 2 to 21 years of age:
 - a. Diagnosis of previously untreated cHL; and
 - b. Stage IIB with bulky disease, Stage IIIB, or Stage IV per Ann Arbor staging system; and
 - c. Used in combination with doxorubicin, vincristine, etoposide, prednisone, and cyclophosphamide (AVE-PC); and
 - d. Maximum of (5) 21-day cycles will be approved.

Breyanzi® (Lisocabtagene Maraleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of large B-cell lymphoma; and
 - a. One of the following:
 - i. Refractory disease to frontline chemoimmunotherapy; or
 - ii. Relapse within 12 months of frontline chemoimmunotherapy; or
 - iii. Relapse within 12 months of frontline chemoimmunotherapy and member is not eligible for hematopoietic stem cell transplantation (HSCT) due to comorbidity or age; or
 - iv. Relapsed or refractory disease after 2 or more lines of systemic therapy; and
- ~~2. Relapsed or refractory disease; and~~
- ~~3. Member must have received at least 2 lines of systemic therapy; and~~
4. Member does not have primary central nervous system (CNS) lymphoma; and
5. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements; and
6. A patient-specific, clinically significant reason why Kymriah® (tisagenlecleucel) or Yescarta® (axicabtagene ciloleucel) is not appropriate for the member must be provided; and
7. Approvals will be for 1 dose per member per lifetime.

Brukinsa® (Zanubrutinib) Approval Criteria [Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (CLL/SLL) Diagnosis]:

1. Diagnosis of CLL/SLL.

Tecartus® (Brexucabtagene Autoleucel) Approval Criteria [Acute Lymphoblastic Leukemia (ALL) Diagnosis]:

1. Diagnosis of acute lymphoblastic leukemia (ALL); and
2. Relapsed or refractory disease; and
3. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply

with the Risk Evaluation and Mitigation Strategy (REMS) requirements;
and

4. Approvals will be for 1 dose per member per lifetime.

Tecartus® (Brexucabtagene Autoleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of mantle cell lymphoma; and
2. Relapsed or refractory disease; and
3. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements;
and
4. Approvals will be for 1 dose per member per lifetime.

Yescarta® (Axicabtagene Ciloleucel) Approval Criteria [Lymphoma Diagnosis]:

1. Diagnosis of large B-cell lymphoma [including diffuse large B cell lymphoma (DLBCL), high grade B-cell lymphoma, and DLBCL arising from follicular lymphoma (FL)] or FL; and
2. Member must be 18 years of age or older; and
3. Relapsed or refractory disease used in 1 of the following settings:
 - a. After 2 or more lines of therapy; or
 - b. After 1 line of therapy, if member is refractory to first-line chemotherapy or relapses within 12 months of first-line chemotherapy; and
4. Health care facilities must be on the certified list to administer chimeric antigen receptor (CAR) T-cells and must be trained in the management of cytokine release syndrome (CRS), neurologic toxicities, and comply with the Risk Evaluation and Mitigation Strategy (REMS) requirements;
and
5. For large B-cell lymphoma (including DLBCL, high grade B-cell lymphoma, and DLBCL arising from FL), member must not have primary central nervous system lymphoma; and
6. Approvals will be for 1 dose per member per lifetime.

Lastly, the College of Pharmacy recommends the removal of criteria for Copiktra® (duvelisib) for FL and the removal of criteria for Ukoniq® (umbralisib) for FL and MZL based on the FDA withdrawal of the accelerated approvals for these indications (changes shown in red):

Copiktra® (Duvelisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

1. Relapsed/refractory FL; and

- 2.—Progression of disease following 2 or more lines of systemic therapy; and
- 3.—As a single agent.

Ukoniq® (Umbralisib) Approval Criteria [Follicular Lymphoma (FL) Diagnosis]:

- 1.—Diagnosis of FL; and
- 2.—Relapsed or refractory disease; and
- 3.—Member must have received at least 3 prior lines of systemic therapy.

Ukoniq® (Umbralisib) Approval Criteria [Marginal Zone Lymphoma (MZL) Diagnosis]:

- 1.—Diagnosis of MZL; and
- 2.—Relapsed or refractory disease; and
- 3.—Member must have received at least 1 prior anti-CD20 based regimen.

Utilization Details of Lymphoma Medications: Calendar Year 2022

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
ACALABRUTINIB PRODUCTS						
CALQUENCE CAP 100MG	35	7	\$502,575.79	\$14,359.31	5	86.87%
CALQUENCE TAB 100MG	5	2	\$72,478.65	\$14,495.73	2.5	12.53%
SUBTOTAL	40	9	\$575,054.44	\$14,376.36	4.44	99.39%
VORINOSTAT PRODUCTS						
ZOLINZA CAP 100MG	1	1	\$3,513.65	\$3,513.65	1	0.61%
SUBTOTAL	1	1	\$3,513.65	\$3,513.65	1	0.61%
TOTAL	41	8*	\$578,568.09	\$14,111.42	5.13	100%

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

CAP = capsule; TAB = tablet

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS*	TOTAL MEMBERS*	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER
BRENTUXIMAB VEDOTIN J9042	155	27	\$3,424,997.93	\$22,096.76	5.74
POLATUZUMAB VEDOTIN-PIIQ J9309	3	2	\$40,658.06	\$13,552.69	1.5
BREXUCABTAGENE AUTOLEUCEL Q2053	1	1	\$306,831.00	\$306,831.00	1
TOTAL	159	30	\$3,772,486.99	\$23,726.33	5.3

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

*Total number of unduplicated claims.

¹ U.S. Food and Drug Administration (FDA). Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations. Available online at: <https://www.accessdata.fda.gov/scripts/cder/ob/index.cfm>. Last revised 02/2023. Last accessed 02/10/2023.

² U.S. FDA. FDA Approves Lisocabtagene Maraleucel for Second-Line Treatment of Large B-Cell Lymphoma. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-lisocabtagene-maraleucel-second-line-treatment-large-b-cell-lymphoma>. Issued 06/24/2022. Last accessed 02/10/2023.

³ AstraZeneca. Calquence® Tablet Formulation Approved in the US Across Current Indications. Available online at: <https://www.astrazeneca.com/media-centre/press-releases/2022/calquence-tablet-formulation-approved-in-the-us-across-current-indications.html>. Issued 08/05/2022. Last accessed 02/10/2023.

⁴ U.S. FDA. FDA Approves Brentuximab Vedotin in Combination with Chemotherapy for Pediatric Patients with Classical Hodgkin Lymphoma. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-brentuximab-vedotin-combination-chemotherapy-pediatric-patients-classical-hodgkin>. Issued 11/10/2022. Last accessed 02/10/2023.

⁵ U.S. FDA. FDA Grants Accelerated Approval to Mosunetuzumab-axgb for Relapsed or Refractory Follicular Lymphoma. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-grants-accelerated-approval-mosunetuzumab-axgb-relapsed-or-refractory-follicular-lymphoma>. Issued 12/22/2022. Last accessed 02/10/2023.

⁶ U.S. FDA. FDA Approves Zanubrutinib for Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-zanubrutinib-chronic-lymphocytic-leukemia-or-small-lymphocytic-lymphoma>. Issued 01/19/2023. Last accessed 02/10/2023.

⁷ U.S. FDA. FDA Grants Accelerated Approval to Pirtobrutinib for Relapsed or Refractory Mantle Cell Lymphoma. Available online at: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-grants-accelerated-approval-pirtobrutinib-relapsed-or-refractory-mantle-cell-lymphoma>. Issued 01/27/2023. Last accessed 02/10/2023.

⁸ Secura Bio, Inc. Secura Bio Announces Copiktra® (Duvelisib) Strategic Focus on T-cell Lymphoma and Voluntary U.S. Withdrawal of the Relapsed or Refractory Follicular Lymphoma Indication. Available online at: <https://www.prnewswire.com/news-releases/secura-bio-announces-copiktra-duvelisib-strategic-focus-on-t-cell-lymphoma-and-voluntary-us-withdrawal-of-the-relapsed-or-refractory-follicular-lymphoma-indication-301436834.html>. Issued 12/03/2021. Last accessed 02/10/2023.

⁹ U.S. FDA. FDA Approval of Lymphoma Medicine Ukoniq® (Umbraisib) is Withdrawn due to Safety Concerns. Available online at: <https://www.fda.gov/drugs/drug-safety-and-availability/fda-approval-lymphoma-medicine-ukoniq-umbralisib-withdrawn-due-safety-concerns>. Issued 06/01/2022. Last accessed 02/10/2023.

¹⁰ National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (Hodgkin Lymphoma). Available online at: https://www.nccn.org/professionals/physician_gls/pdf/hodgkins.pdf. Last revised 11/08/2022. Last accessed 02/15/2023.

¹¹ Advani RH, Moskowitz AJ, Bartlett NL, et al. Brentuximab Vedotin in Combination with Nivolumab in Relapsed or Refractory Hodgkin Lymphoma: 3-Year Study Results. *Blood* 2021; 138(6):427-438.

¹² Jaypirca™ (Pirtobrutinib) Prescribing Information. Eli Lilly and Company. Available online at: <https://pi.lilly.com/us/jaypirca-uspi.pdf?s=pi>. Last revised 01/2023. Last accessed 02/10/2023.

¹³ Lunsumio™ (Mosunetuzumab-axgb) Prescribing Information. Genentech, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/761263s000lbl.pdf. Last revised 12/2022. Last accessed 02/10/2023.



Calendar Year 2022 Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Rolvedon™ (Eflapegrastim-xnst) and Stimufend® (Pegfilgrastim-fpgk)

Oklahoma Health Care Authority
March 2023

Current Prior Authorization Criteria

Nivestym® (Filgrastim-aafi) and Releuko® (Filgrastim-ayow) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use Granix® (tbo-filgrastim), Neupogen® (filgrastim), or Zarxio® (filgrastim-sndz) must be provided. Biosimilars and/or reference products are preferred based on the lowest net cost product(s) and may be moved to either preferred or non-preferred if the net cost changes in comparison to the reference product and/or other available biosimilar products.

Fulphila® (Pegfilgrastim-jmdb), Neulasta® (Pegfilgrastim), and Udenyca® (Pegfilgrastim-cbqv) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use Granix® (tbo-filgrastim), Neupogen® (filgrastim), Nyvepria™ (pegfilgrastim-apgf), Zarxio® (filgrastim-sndz), or Ziextenzo® (pegfilgrastim-bmez) must be provided. Biosimilars and/or reference products are preferred based on the lowest net cost product(s) and may be moved to either preferred or non-preferred if the net cost changes in comparison to the reference product and/or other available biosimilar products.

Utilization of G-CSFs: Calendar Year 2022

Comparison of Calendar Years: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/Claim	Cost/Day	Total Units	Total Days
2021	71	262	\$928,189.29	\$3,542.71	\$225.56	1,394	4,115
2022	88	277	\$740,475.10	\$2,673.20	\$203.82	1,252	3,633
% Change	23.9%	5.7%	-20.2%	-24.50%	-9.6%	-10.2%	-11.7%
Change	17	15	-\$187,714.19	-\$869.51	-\$21.74	-142	-482

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

Comparison of Calendar Years: Medical Claims

Calendar Year	*Total Members	*Total Claims	Total Cost	Cost/Claim	Claims/Member
2021	313	1,097	\$2,565,825.15	\$2,338.95	3.50
2022	428	1,534	\$2,799,782.19	\$1,825.15	3.58
% Change	36.74%	39.84%	9.12%	-21.97%	2.29%
Change	115	437	\$233,957.04	-\$513.80	0.08

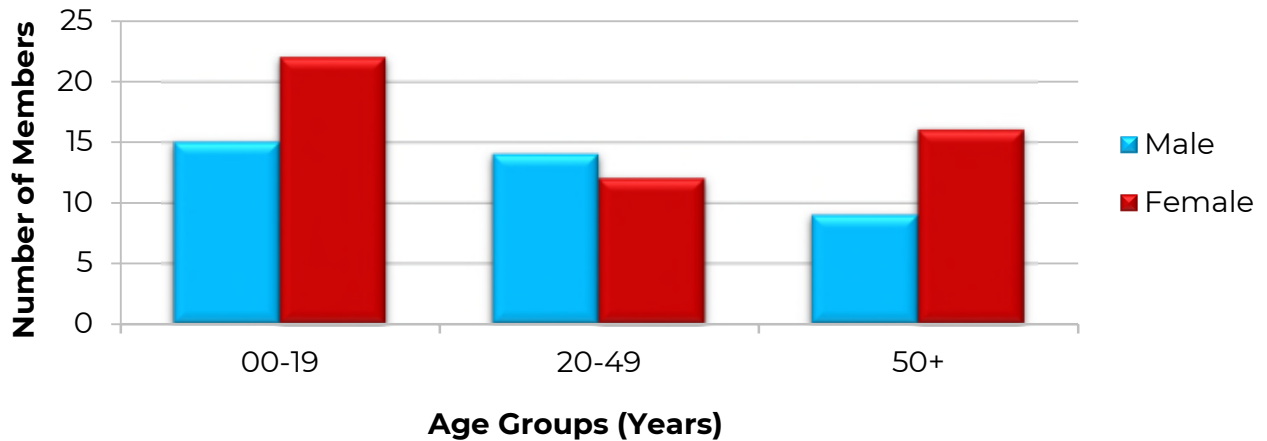
Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

*Total number of unduplicated claims.

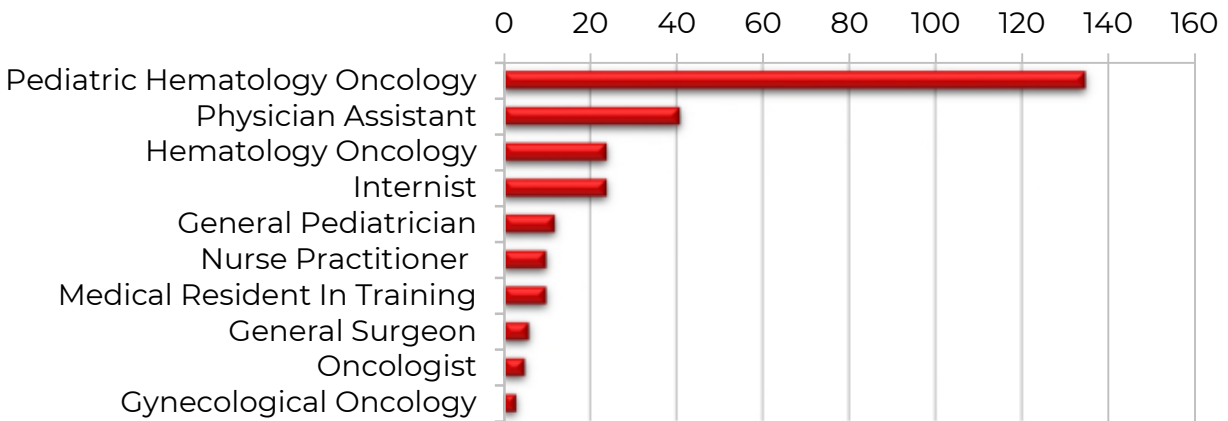
- Aggregate drug rebates collected during fiscal year 2022 (07/01/2021 to 06/30/2022) for the G-CSF medications totaled \$503,027.40.[^] Rebates are collected after reimbursement for the medication and are not reflected in this report. Please note, fiscal year 2022 aggregate drug rebate totals have been included in this report for informational purposes only, as the rebates for calendar year 2022 are still being collected at this time. The costs included in this report do not reflect net costs.

Demographics of Members Utilizing G-CSFs: Pharmacy Claims



[^] Important considerations: Aggregate drug rebates are based on the date the claim is paid rather than the date dispensed. Claims data are based on the date dispensed.

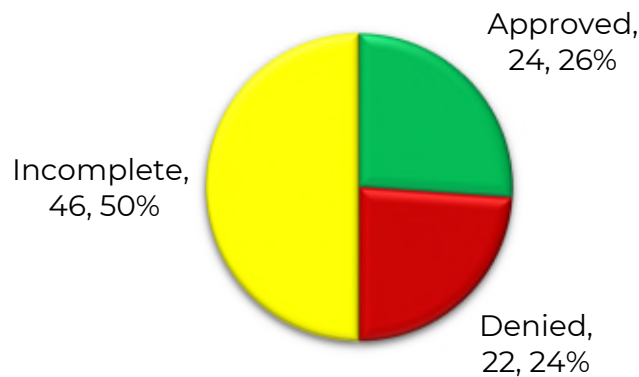
Top Prescriber Specialties of G-CSFs by Number of Claims: Pharmacy Claims



Prior Authorization of G-CSFs

There were 92 prior authorization requests submitted for G-CSFs during calendar year 2022. The following chart shows the status of the submitted petitions for calendar year 2022.

Status of Petitions



Market News and Updates^{1,2,3,4,5,6,7}

New U.S. Food and Drug Administration (FDA) Approval(s):

- **May 2022:** The FDA approved Fylnetra[®] (pegfilgrastim-pbbk) as a biosimilar to Neulasta[®] (pegfilgrastim) to treat chemotherapy-induced neutropenia (CIN).
- **September 2022:** The FDA approved Stimufend[®] (pegfilgrastim-fpgk) as a biosimilar to Neulasta[®] (pegfilgrastim) to treat CIN.
- **September 2022:** The FDA approved Rolvedon[™] (eflapegrastim-xnst) injection to treat CIN. Eflapegrastim-xnst is a long-acting G-CSF with a novel formulation, which consists of a recombinant human G-CSF

analog conjugated to a human aglycosylated IgG4 Fc fragment with a short polyethylene glycol linker. Eflapegrastim-xnst has an extended drug half-life due to its size as well as increased uptake in the bone marrow, presumably due to the interaction of the Fc fragment with Fc receptors on the surface of endothelial cells. The Biologics License Application (BLA) for eflapegrastim-xnst was supported by data from 2 identically designed Phase 3, randomized, open-label, noninferiority clinical studies, ADVANCE and RECOVER, which evaluated the safety and efficacy of eflapegrastim-xnst in 643 early-stage breast cancer patients for the management of neutropenia due to myelosuppressive chemotherapy compared to pegfilgrastim. In both studies, patients were randomly assigned to fixed-dose eflapegrastim-xnst (13.2mg containing 3.6mg G-CSF) or pegfilgrastim (containing 6mg G-CSF), both administered on day 2, 24 hours after the end of chemotherapy. In both studies, eflapegrastim-xnst demonstrated the pre-specified hypothesis of non-inferiority in mean duration of severe neutropenia and a similar safety profile to pegfilgrastim, despite the lower G-CSF dose with eflapegrastim-xnst. Eflapegrastim-xnst also demonstrated non-inferiority to pegfilgrastim in the mean duration of severe neutropenia across all 4 cycles (all noninferiority $P < 0.0001$) in both trials.

Pipeline:

- **Udenyca® On-Body Injector (OBI):** Udenyca® (pegfilgrastim-cbqv) administered via a proprietary OBI device was studied in a randomized, open label, crossover study assessing the pharmacokinetic (PK) and pharmacodynamic (PD) bioequivalence of Udenyca® (pegfilgrastim-cbqv) administered via OBI device compared to the currently marketed Udenyca® (pegfilgrastim-cbqv) pre-filled syringe (PFS). The study met all PK bioequivalence primary endpoints. An FDA-approval of Udenyca® (pegfilgrastim-cbqv) OBI would offer providers a highly desired alternative to the originator's on-body pegfilgrastim delivery system and eliminate the need for patients to return to a hospital or other clinical setting the day after chemotherapy to receive Udenyca® (pegfilgrastim-cbqv) PFS.

Cost Comparison

Product	Cost Per Syringe
Neulasta® (pegfilgrastim) injection 6mg/0.6mL	\$5,868.42
Rolvedon™ (eflapegrastim-xnst) injection 13.2mg/0.6mL	\$4,500.00
Stimufend® (pegfilgrastim-fpgk) injection 6mg/0.6mL	\$4,175.00
Fulphila® (pegfilgrastim-jmdb) injection 6mg/0.6mL	\$4,175.00
Udenyca® (pegfilgrastim-cbqv) injection 6mg/0.6mL	\$4,175.00
Nyvepria™ (pegfilgrastim-apgf) injection 6mg/0.6mL	\$3,925.00
Fylnetra® (pegfilgrastim-pbbk) injection 6mg/0.6mL	\$2,500.00
Ziextenzo® (pegfilgrastim-bmez) injection 6mg/0.6mL	\$1,079.30

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

Recommendations

The College of Pharmacy recommends adding Fylnetra® (pegfilgrastim-pbbk) to the preferred products for the pegfilgrastim products and recommends the prior authorization of Nyvepria™ (pegfilgrastim-apgf), Rolvedon™ (eflapegrastim-xnst), and Stimufend® (pegfilgrastim-fpgk) based on net costs (new criteria and changes shown in red):

Fulphila® (Pegfilgrastim-jmdb), Neulasta® (Pegfilgrastim), Nyvepria™ (Pegfilgrastim-apgf), Stimufend® (Pegfilgrastim-fpgk), and Udenyca® (Pegfilgrastim-cbqv) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use Fylnetra® (pegfilgrastim-pbbk), Granix® (tbo-filgrastim), Neupogen® (filgrastim), ~~Nyvepria™ (pegfilgrastim-apgf)~~, Zarxio® (filgrastim-sndz), or Ziextenzo® (pegfilgrastim-bmez) must be provided. Biosimilars and/or reference products are preferred based on the lowest net cost product(s) and may be moved to either preferred or non-preferred if the net cost changes in comparison to the reference product and/or other available biosimilar products.

Rolvedon™ (Eflapegrastim-xnst) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use Fylnetra® (pegfilgrastim-pbbk), Granix® (tbo-filgrastim), Neupogen® (filgrastim), Zarxio® (filgrastim-sndz), or Ziextenzo® (pegfilgrastim-bmez) must be provided.

Utilization Details of G-CSFs: Calendar Year 2022

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
FILGRASTIM PRODUCTS						
GRANIX INJ 480MCG/0.8ML PFS	48	7	\$25,643.95	\$534.25	6.86	3.46%
NEUPOGEN INJ 300MCG/1ML	46	8	\$153,848.53	\$3,344.53	5.75	20.78%
NEUPOGEN INJ 480MCG/0.8ML PFS	29	22	\$136,995.08	\$4,723.97	1.32	18.50%
NEUPOGEN INJ 300MCG/0.5ML PFS	17	13	\$37,012.77	\$2,177.22	1.31	5.00%
ZARXIO INJ 300MCG/0.5ML PFS	14	2	\$30,444.54	\$2,174.61	7	4.11%
GRANIX INJ 300MCG/0.5ML PFS	6	5	\$4,764.26	\$794.04	1.2	0.64%
ZARXIO INJ 480MCG/0.8ML PFS	4	4	\$3,543.83	\$885.96	1	0.48%
NEUPOGEN INJ 480MCG/1.6ML	1	1	\$8,894.41	\$8,894.41	1	1.20%
GRANIX INJ 480MCG/1.6ML	1	1	\$5,685.01	\$5,685.01	1	0.77%
SUBTOTAL	166	63	\$406,832.38	\$2,450.80	2.63	54.94%
PEGFILGRASTIM PRODUCTS						
ZIEXTENZO INJ 6MG/0.6ML PFS	86	28	\$177,414.48	\$2,062.93	3.07	23.96%
NEULASTA INJ 6MG/0.6ML PFS	25	10	\$156,228.24	\$6,249.13	2.5	21.10%
SUBTOTAL	111	38	\$333,642.72	\$3,005.79	2.92	45.06%
TOTAL	277	88*	\$740,475.10	\$2,673.20	3.15	100%

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

INJ = injection; PFS = prefilled syringe

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER
PEGFILGRASTIM PRODUCTS					
PEGFILGRASTIM INJ (J2506)	854	257	\$1,701,047.41	\$1,991.86	3.32
PEGFILGRASTIM-BMEZ INJ (Q5120)	556	173	\$1,062,697.85	\$1,911.33	3.21
PEGFILGRASTIM-CBQV INJ (Q5111)	1	1	\$2,425.20	\$2,425.20	1
SUBTOTAL	1,411	431	\$2,766,170.46	\$1,960.43	3.27
FILGRASTIM PRODUCTS					
TBO-FILGRASTIM INJ (J1447)	65	25	\$11,277.33	\$173.50	2.6
FILGRASTIM INJ (J1442)	41	14	\$19,944.00	\$486.44	2.93
FILGRASTIM-SNDZ INJ (Q5101)	18	6	\$2,390.40	\$132.40	3
SUBTOTAL	124	45	\$33,611.73	\$271.06	2.76
TOTAL	1,534*	428*	\$2,799,782.19	\$1,825.15	3.58

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated claims.

*Total number of unduplicated utilizing members.

INJ = injection

¹ Amneal Pharmaceuticals, Inc. Amneal Achieves Third U.S. Biosimilar Approval with Fylnetra[®] (Pegfilgrastim-pbbk). *Business Wire*. Available online at: <https://www.businesswire.com/news/home/20220527005044/en/Amneal-Achieves-Third-U.S.-Biosimilar-Approval-with-FYLNETRA>. Issued 05/27/2022. Last accessed 02/13/2023.

² Fresenius Kabi. Fresenius Kabi Receives U.S. FDA Approval for Biosimilar Stimufend[®]. *Business Wire*. Available online at: <https://www.businesswire.com/news/home/20220906005876/en/Fresenius-Kabi-Receives-U.S.-FDA-Approval-for-Biosimilar-Stimufend>. Issued 09/06/2022. Last accessed 02/13/2023.

³ Spectrum Pharmaceuticals. Spectrum Pharmaceuticals Receives FDA Approval for Rolvedon[™]. *Business Wire*. Available online at: <https://www.businesswire.com/news/home/20220909005522/en/Spectrum-Pharmaceuticals-Receives-FDA-Approval-for-ROLVEDON>. Issued 09/09/2022. Last accessed 02/13/2023.

⁴ Cobb P, Moon Y, Mezei K, et al. A Comparison of Eflapegrastim to Pegfilgrastim in the Management of Chemotherapy-induced Neutropenia in Patients with Early-Stage Breast Cancer Undergoing Cytotoxic Chemotherapy (RECOVER): A Phase 3 Study. *Cancer Medicine* 2020; 9:6234–6243. doi: 10.1002/cam4.3227.

⁵ Schwartzberg L, Bhat G, Peguero J, et al. Eflapegrastim, a Long-Acting Granulocyte-Colony Stimulating Factor for the Management of Chemotherapy-Induced Neutropenia: Results of a Phase III Trial. *Oncologist* 2020; 25(8):e1233-e1241. doi: 10.1634/theoncologist.2020-0105.

⁶ Rolvedon[™] (Eflapegrastim-xnst) Prescribing Information. Spectrum Pharmaceuticals, Inc. Available online at: <https://www.rolvedon.com/pdf/rolvedon-prescribing-information.pdf>. Last revised 09/2022. Last accessed 03/01/2023.

⁷ Coherus Biosciences, Inc. Coherus Announces Positive Results of Udenyca[®] On-Body Injector Clinical Trial. Available online at: <https://investors.coherus.com/news-releases/news-release-details/coherus-announces-positive-results-udenycar-body-injector>. Issued 10/05/2021. Last accessed 02/13/2023.



Calendar Year 2022 Annual Review of Growth Hormone Products and Voxzogo® (Vosoritide)

Oklahoma Health Care Authority
March 2023

Current Prior Authorization Criteria

Growth Hormone Products	
Tier-1*	Tier-2
Genotropin ® (somatropin) (Pfizer) - Cartridge, MiniQuick	Humatrope ® (somatropin) (Eli Lilly) - Vial, Cartridge Kit
	Norditropin ® (somatropin) (Novo Nordisk) - FlexPro® Pen
	Nutropin ® and Nutropin AQ ® (somatropin) (Genentech) - Vial, Pen Cartridge, NuSpin®
	Omnitrope ® (somatropin) (Sandoz) - Vial, Cartridge
	Saizen ® (somatropin) (EMD Serono) - Vial, click.easy®
	* Serostim ® (somatropin) (EMD Serono) - Vial
	* Skytrofa ® (lonapegsomatropin-tcgd) (Ascendis) - Cartridge
	* Sogroya ® (somapacitan-beco) (Novo Nordisk) - Pen
	Zomacton ® and Zoma-Jet ® (somatropin) (Ferring) - Vial, Injection Device
	* Zorbtive ® (somatropin) (EMD Serono) - Vial

Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

*Supplementally rebated product(s)

*Additional approval criteria applies.

Growth Hormone Covered Indications (*prior to epiphyseal closure*):*

1. Growth hormone deficiency (GHD) of 1 of the following types:
 - a. Classic GHD as determined by childhood GH stimulation tests; or
 - b. Panhypopituitarism; or
 - c. Hypoglycemia with evidence for GHD; or
 - d. Neurosecretory dysfunction; or
 - e. Other evidence for GHD submitted for panel review and decision;

or
2. Short stature associated with Prader-Willi Syndrome; or
3. Short stature associated with Noonan Syndrome; or
4. Short stature associated with chronic renal insufficiency (pre-transplantation); or

5. Growth failure in children born small for gestational age (SGA) who fail to manifest catch-up growth by 2 years of age; or
6. Idiopathic short stature (ISS) in children with height ≥ 2.25 SD below the mean for age and gender and who are unlikely to catch up in height; or
7. Turner syndrome or 45X, 46XY mosaicism; or
8. Short-stature homeobox-containing gene (SHOX) deficiency with genetic evidence for SHOX deficiency.

*Please refer to the complete prior authorization criteria for each indication, listed below.

Growth Hormone Tier-2 Approval Criteria:

1. Documented allergic reaction to non-active components of all available Tier-1 products; or
2. A clinical exception applies to members with a diagnosis of acquired immunodeficiency syndrome (AIDS) wasting syndrome, in which case Serostim® can be used, regardless of its current Tier status; or
3. A clinical exception applies to members with a diagnosis of short bowel syndrome (SBS), in which case Zorbitive® can be used, regardless of its current Tier status.

Discontinuation of Therapy or Transition to Adult Therapy Criteria:

1. Failure to show improvement in height percentile on growth chart after 1 year of treatment; or
2. Growth velocity < 2.5 cm/year unless associated with another growth-limiting and treatable medical condition (i.e., hypothyroidism); or
3. Epiphyseal closure; or
4. Covered height has been reached:
 - a. 152.4cm (60 inches) for girls; or
 - b. 165.1cm (65 inches) for boys; or
 - c. The covered height does not apply for members with a diagnosis of growth hormone deficiency (GHD) or panhypopituitarism; or
5. Inadequate compliance; or
6. Significant adverse effects.

Growth Hormone Dosing (*doses must be individualized and titrated*):

1. Children: 22 to 100mcg/kg/day according to current pediatric guidelines; or
2. Adults:
 - a. Initial Dosing: 0.1 to 0.5mg per day – Doses should be evaluated and titrated at 1- to 2-month intervals targeting an insulin-like growth factor 1 (IGF-1) level within the age-adjusted reference range provided by the laboratory utilized [IGF-1 standard deviation score (SDS) between -2 and +2]. In general, younger patients may require higher doses than older patients. The following **initial** doses are

suggested by the current American Association of Clinical Endocrinologists/American College of Endocrinology (AAACE/ACE) guidelines, but these doses should be titrated based on IGF-1 levels:

- i. Age <30 years: 0.4 to 0.5mg per day (may be higher for patients transitioning from pediatric treatment); or
 - ii. Age 30-60 years: 0.2 to 0.3mg per day; or
 - iii. Age >60 years: 0.1 to 0.2mg per day; and
- b. Transition Dosing: In patients transitioning from pediatric to adult dosing, resuming GH doses at 50% of the dose last used in childhood is suggested, as they tend to be more tolerant of higher doses.

Growth Hormone Deficiency (GHD) Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years of age or older (unless hypoglycemia is present); and
 - b. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
 - c. Member must meet at least 1 of the following:
 - i. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; or
 - ii. Member must have evidence of delayed bone age (undefined delay); and
 - d. Member must have open epiphyses; and
 - e. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and
 - f. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available; and
 - g. There must be no contributing medical conditions (e.g., cystic fibrosis, malnutrition, psychosocial deprivation); and
 - h. Member must have suboptimal response of ≤ 10 ng/mL on 2 of the following provocative growth hormone stimulation tests, using the highest level per date of testing. (Stimulation tests are always required for approval unless hypoglycemia is observed, in which case a random low glucose level and low growth hormone level would be acceptable):
 - i. Propranolol with exercise; or
 - ii. Levodopa; or
 - iii. Insulin hypoglycemia test; or
 - iv. Arginine HCl infusion; or
 - v. Clonidine; or

- vi. Glucagon (Not approved for use in children); or
 - i. If hypoglycemia is present and member is growth hormone deficient: request may be approved for 6 months (other criteria above is not applicable). If the member has hypoglycemia, a low glucose level must be submitted along with additional evidence of GHD such as:
 - i. Low insulin-like growth factor 1 (IGF-1), random growth hormone level, or suboptimal growth hormone stimulation tests; or
 - ii. MRI evidence of congenital anomaly which includes pituitary damage or absence; or
 - iii. Other pituitary hormones also being replaced (e.g., thyroid, cortisol, etc.).
- 2. Approval Length: 6 months if criteria met, compliant, and not needing to transition to adult dosing.
- 3. Dosing:
 - a. Pediatric Dosing: FDA approved dosing varies by product. See the “Growth Hormone Dosing” section above for current guideline-based dosing considerations; or
 - b. Adult Dosing: Members with this diagnosis may transition to adult dosing (see “Growth Hormone Dosing” section above for recommendations for adult and transition dosing) after 1 or both of the following:
 - i. Epiphyseal closure; or
 - ii. GV <2.5cm/year; and
 - iii. If either of the above have occurred and the member has not yet transitioned to adult dosing, may be approved short term (3 months) to allow time for transition to adult dosing.
- 4. Continuation Approval:
 - a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. GV should not be <2.5cm/year if not on adult dosing; and
 - e. For members on adult dosing, recent IGF-1 level and standard deviation score (SDS) should be submitted and SDS should be between -2 and +2.

Idiopathic Short Stature Approval Criteria:

- 1. Initial Approval:
 - a. Member must be 8 years of age or older; and
 - b. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and

- c. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; and
 - d. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and
 - e. Member must have evidence of delayed bone age (undefined delay) and open epiphyses; and
 - f. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available.
2. Approval Length: 6 months if criteria met and compliant. No adult dosing will be approved for this indication. Once epiphyses are closed, covered height has been met, or GV is <2.5cm/year, therapy should be discontinued.
 3. Dosing:
 - a. Pediatric Dosing: FDA approved dosing varies by product. See the "Growth Hormone Dosing" section above for current guideline-based dosing considerations. Treatment may continue until 1 of the following:
 - i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year; and
 - b. Adult Dosing: No proven benefit to continuing growth hormone treatment in adulthood.
 4. Continuation Approval:
 - a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. Epiphyses are open; and
 - e. GV should not be <2.5cm/year.

Neurosecretory Dysfunction Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years of age or older; and
 - b. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
 - c. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; and
 - d. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and

- e. Member must have evidence of delayed bone age and open epiphyses; and
 - f. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available; and
 - g. Member's serum insulin-like growth factor 1 (IGF-1) must be below the mean for member's age; and
 - i. Note: Children with profoundly low GV, who are at risk for growth hormone deficiency due to CNS radiation or other organic causes, termed neurosecretory dysfunction, may demonstrate "normal" responses to provocative tests, often for several years, but often benefit from growth hormone therapy.
 - h. Growth hormone stimulation testing is required; however, growth hormone levels may be normal.
2. Approval Length: 6 months if criteria met, compliant, and not needing to transition to adult dosing.
3. Dosing:
- a. Pediatric Dosing: FDA approved dosing varies by product. See the "Growth Hormone Dosing" section above for current guideline-based dosing considerations; or
 - b. Adult Dosing: Members with this diagnosis may transition to adult dosing (see "Growth Hormone Dosing" section above for recommendations for adult and transition dosing) after 1 of the following:
 - i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year; and
 - iv. If any of the above have occurred and the member has not yet transitioned to adult dosing, may be approved short term (3 months) to allow time for transition to adult dosing.
4. Continuation Approval:
- a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. GV should not be <2.5cm/year if not on adult dosing; and
 - e. For members on adult dosing, recent IGF-1 level and standard deviation score (SDS) should be submitted and SDS should be between -2 and +2.

Panhypopituitarism Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years of age or older (unless hypoglycemia is present); and
 - b. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
 - c. Member must meet at least 1 of the following:
 - i. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; or
 - ii. Member must have evidence of delayed bone age (undefined delay); and
 - d. Member must have open epiphyses; and
 - e. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and
 - i. For members with secondary panhypopituitarism due to tumor, trauma, or surgery 12 months post trauma or surgery, approval may be granted if no evidence of tumor recurrence and growth has not restarted. The member must still meet all the other criteria; however, authorization would not require height ≥ 2.25 SD below the mean in these circumstances; and
 - f. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available; and
 - g. Member must have a history of pituitary or hypothalamic injury due to tumor, trauma, surgery, documented whole brain radiation, irradiation, hemorrhage or infarction, or a congenital anomaly; and
 - i. Deficiency in ≥ 3 pituitary hormones and insulin-like growth factor 1 (IGF-1) ≥ 2.5 SD below the mean for member's age; or
 - ii. No deficiency, or deficiency in < 3 pituitary hormones, and IGF-1 < 50 th percentile and subnormal response of 10ng/mL or less on at least 2 provocative growth hormone stimulation tests, using the highest level per date of testing. (Stimulation tests are always required for approval unless hypoglycemia is observed, in which case a random low glucose level and low growth hormone level would be acceptable); or
 - h. If member has MRI evidence of pituitary stalk agenesis, empty sella, or ectopic posterior pituitary "bright spot", member is exempt from height requirement (*criteria letter e listed above*); and

- i. If they lack the hormones testosterone, luteinizing hormone (LH), or follicle-stimulating hormone (FSH) then an MRI is not required; or
 - i. If hypoglycemia is present and member is growth hormone deficient: request may be approved for 6 months (other criteria above is not applicable). If the member has hypoglycemia, a low glucose level must be submitted along with additional evidence of GHD such as:
 - i. Low IGF-1, random growth hormone level, or suboptimal growth hormone stimulation tests; or
 - ii. MRI evidence of congenital anomaly which includes pituitary damage or absence; or
 - iii. Other pituitary hormones also being replaced (e.g., thyroid, cortisol).
2. Approval Length: 6 months if criteria met, compliant, and not needing to transition to adult dosing.
3. Dosing:
 - a. Pediatric Dosing: FDA approved dosing varies by product. See the “Growth Hormone Dosing” section above for current guideline-based dosing considerations; or
 - b. Adult Dosing: Members with this diagnosis may transition to adult dosing (see “Growth Hormone Dosing” section above for recommendations for adult and transition dosing) after 1 or both of the following:
 - i. Epiphyseal closure; or
 - ii. GV <2.5cm/year; and
 - iii. If either of the above have occurred and the member has not yet transitioned to adult dosing, may be approved short term (3 months) to allow time for transition to adult dosing.
4. Continuation Approval:
 - a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. GV should not be <2.5cm/year if not on adult dosing; and
 - e. For members on adult dosing, recent IGF-1 level and standard deviation score (SDS) should be submitted and SDS should be between -2 and +2.

Short Stature Associated with Chronic Renal Insufficiency (Pre-Transplantation) Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years of age or older; and

- b. Member's estimated creatinine clearance (CrCl) must be <50mL/min; and
 - c. Member must not be post-kidney transplant; and
 - d. Growth hormone therapy must be prescribed by an endocrinologist or pediatric nephrologist (or an advanced care practitioner with a supervising physician who is an endocrinologist or pediatric nephrologist); and
 - e. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available; and
 - f. Members meeting the above criteria are exempt from height requirements.
2. Approval Length: 6 months if criteria met and compliant. No adult dosing will be approved for this indication. Once epiphyses are closed, covered height has been met, or growth velocity (GV) is <2.5cm/year, therapy should be discontinued.
3. Dosing:
 - a. Pediatric Dosing: Standard dosing applies for members receiving pediatric dosing (0.05mg/kg/day). Treatment may continue until 1 of the following:
 - i. Renal transplantation; or
 - ii. Epiphyseal closure; or
 - iii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iv. GV <2.5cm/year; and
 - b. Adult Dosing: No proven benefit to continuing growth hormone treatment in adulthood.
4. Continuation Approval:
 - a. Member is still pre-transplant; and
 - b. Medications and dosing should be appropriate; and
 - c. Member should have had a recent office visit with new information regarding heights; and
 - d. Member should be compliant; and
 - e. Epiphyses are open; and
 - f. GV should not be <2.5cm/year.

Short Stature Associated with Noonan Syndrome Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years or older; and
 - b. Member must have a chromosome analysis confirming the diagnosis of Noonan Syndrome; and

- c. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist).
- 2. Approval Length: 6 months if criteria met and compliant. No adult dosing will be approved for this indication. Once epiphyses are closed, covered height has been met, or growth velocity (GV) is <2.5cm/year, therapy should be discontinued.
- 3. Dosing:
 - a. Pediatric Dosing: Standard dosing applies for members receiving pediatric dosing (up to 0.066mg/kg/day). Treatment should continue until 1 of the following:
 - i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year.
 - b. Adult Dosing: No proven benefit to continuing growth hormone treatment in adulthood.
- 4. Continuation Approval:
 - a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. Epiphyses should be open; and
 - e. GV should not be <2.5cm/year.

Short Stature Associated with Prader-Willi Syndrome (PWS) Approval Criteria:

- 1. Initial Approval:
 - a. Member must be 2 years of age or older; and
 - b. Member must have a chromosome analysis confirming the diagnosis of PWS; and
 - c. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
 - d. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; and
 - e. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and
 - f. Member must have evidence of delayed bone age (undefined delay) and open epiphyses; and
 - g. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available.

2. Approval Length: 6 months if criteria met, compliant, and not needing to transition to adult dosing.
3. Dosing:
 - a. Pediatric Dosing: 0.24mg/kg/week. Treatment should continue until 1 of the following:
 - i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year; and
 - b. Adult Dosing: After attainment of adult height, adults with PWS may be considered for adult dosing if evidence is submitted documenting adult growth hormone deficiency [e.g., low insulin-like growth factor 1 (IGF-1) level and GH stimulation testing].
4. Continuation Approval:
 - a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. GV should not be <2.5cm/year; and
 - e. For members on adult dosing, recent IGF-1 level and standard deviation score (SDS) should be submitted and SDS should be between -2 and +2.

Short Stature Associated with Short Stature Homeobox-Containing Gene (SHOX) Deficiency Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years or older; and
 - b. Member must have a chromosome analysis confirming the diagnosis of SHOX deficiency; and
 - c. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
 - d. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; and
 - e. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and
 - f. Member must have evidence of delayed bone age (undefined delay) and open epiphyses; and
 - g. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required; and
 - ii. Parental heights are not always available; and
 - h. Member must have a normal endocrine screen; and

- i. Member must have no evidence of growth hormone deficiency or insensitivity, tumor activity, diabetes mellitus, history of impaired glucose tolerance, or other serious illness known to interfere with growth.
2. Approval Length: 6 months if criteria met and compliant. No adult dosing will be approved for this indication. Once epiphyses are closed, covered height has been met, or GV is <2.5cm/year, therapy should be discontinued.
3. Dosing:
 - a. Pediatric Dosing: Standard dosing applies for members receiving pediatric dosing (up to 0.05mg/kg/day). Treatment should continue until 1 of the following:
 - i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year; and
 - b. Adult Dosing: No proven benefit to continuing growth hormone treatment in adulthood.
4. Continuation Approval:
 - a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. Epiphyses should be open; and
 - e. GV should not be <2.5cm/year.

Short Stature Associated with Turner Syndrome or 45X, 46XY Mosaicism Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years of age or older; and
 - b. Member must have a chromosome analysis confirming the diagnosis of Turner Syndrome in females or 45X 46XY mosaicism in males; and
 - c. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist).
2. Approval Length: 6 months if criteria met and compliant. No adult dosing will be approved for this indication. Once epiphyses are closed, covered height has been met, or growth velocity (GV) is <2.5cm/year, therapy should be discontinued.
3. Dosing:
 - a. Pediatric Dosing: FDA approved dosing varies by product. See the "Growth Hormone Dosing" section above for current guideline-

based dosing considerations. Treatment should continue until 1 of the following:

- i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year; and
- b. Adult Dosing: No proven benefit to continuing growth hormone treatment in adulthood.
4. Continuation Approval:
- a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. Epiphyses should be open; and
 - e. GV should not be <2.5cm/year.

Small for Gestational Age (SGA) Approval Criteria:

1. Initial Approval:
 - a. Member must be 2 years or age or older; and
 - b. Documentation of birth weight <2,500 grams at gestational age of more than 37 weeks or birth weight or length below the 3rd percentile for gestational age; and
 - c. Growth hormone therapy must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
 - d. Member's growth velocity (GV) must be <10% on a GV curve for gender and age; and
 - e. Member's height must be ≥ 2.25 standard deviations (SD) below the mean for age and gender; and
 - f. Member must have evidence of delayed bone age (undefined delay) and open epiphyses; and
 - g. Member's growth chart and parental heights must be provided; and
 - i. If the form is completed, a growth chart is not required
 - ii. Parental heights are not always available.
2. Approval Length: 6 months if criteria met and compliant. No adult dosing will be approved for this indication. Once epiphyses are closed, covered height has been met, or GV is <2.5cm/year, therapy should be discontinued.
3. Dosing:
 - a. Pediatric Dosing: FDA approved dosing varies by product. See the "Growth Hormone Dosing" section above for current guideline-based dosing considerations. Treatment should continue until 1 of the following:

- i. Epiphyseal closure; or
 - ii. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
 - iii. GV <2.5cm/year; and
 - b. Adult Dosing: No proven benefit to continuing growth hormone treatment in adulthood.
4. Continuation Approval:
- a. Medications and dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and
 - c. Member should be compliant; and
 - d. Epiphyses should be open; and
 - e. GV should not be <2.5cm/year.

Insulin-Like Growth Factor-1 (IGF-1) Analog Medications: Increlex® and Iplex™ [Mecasermin (rDNA Origin) Injection] Approval Criteria:

1. Therapy initiated by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
2. Diagnosis of primary IGF-1 deficiency with all of the following:
 - a. Height >3 standard deviations (SD) below the mean; and
 - b. Basal IGF-1 >3 SD below the mean; and
 - c. Normal or elevated growth hormone (GH); and
3. Documentation of mutation in GH receptor (GHR) or mutation in post-GHR signaling pathway or IGF-1 gene defects (Laron Syndrome); and
4. IGF-1 analog medications will not be approved for use in secondary IGF-1 deficiencies related to GH deficiency, malnutrition, hypothyroidism, or chronic steroid therapy.

Serostim® (Somatropin) Approval Criteria:

1. Initial Approval:
 - a. An FDA approved diagnosis of human immunodeficiency virus (HIV)-associated wasting; and
 - b. Member must be receiving optimal antiretroviral treatment; and
 - c. Member must have an unintentional weight loss of >10% if baseline pre-morbid weight was <120% of ideal body weight (IBW) or unintentional weight loss of >20% if baseline pre-morbid weight was >120% of IBW; and
 - d. Member must not have a reversible cause of weight loss such as infection, gastrointestinal (GI) bleed/obstruction, or malnutrition; and
 - e. Member is receiving aggressive nutritional intake or supplementation; and

- f. Member must not have an active malignancy (except localized Kaposi's sarcoma); and
 - g. Member has failed a trial of megestrol acetate and/or dronabinol; and
 - h. Male members must have been evaluated for testosterone deficiency and treated as needed; and
 - i. Approvals will be for 4 weeks initially and a quantity limit of 28 vials per 28 days will apply.
2. Continuation Approval:
 - a. At 4 weeks, member must be evaluated for response to therapy (weight gain), side effects, and compliance. If member's response and compliance are appropriate, another 4 weeks of therapy will be approved; and
 - b. Subsequent follow up evaluations will be required every 4 weeks to assess response and compliance. The member may receive another 4 weeks of therapy for a maximum of 12 weeks continuous therapy.
 3. Discontinuation Criteria:
 - a. Completion of the FDA approved 12 week duration of therapy; or
 - b. Treatment failure measured by no weight gain despite 8 weeks of therapy, or continued/resumed weight loss at any time following 8 weeks of therapy when other potential causes have resolved or ruled out; or
 - c. Member noncompliance; or
 - d. Adverse effects that are refractory to dose reduction; or
 - e. New or progressive Kaposi's Sarcoma; or
 - f. Member weight exceeds 110% of pre-morbid weight.

Skytrofa® (Lonapegsomatropin-tcgd) Approval Criteria:

1. Member must have a confirmed diagnosis of growth hormone deficiency (GHD) or panhypopituitarism meeting the initial growth hormone approval criteria (listed under "Initial Approval") for the member's specific diagnosis; and
2. Member's weight must be ≥ 11.5 kg; and
3. A patient-specific, clinically significant reason (beyond convenience) why the member cannot use all Tier-1 product(s) must be provided; and
4. Prescriber must verify the member has been counseled on proper administration and storage of Skytrofa®; and
5. Initial approvals will be for the 0.24mg/kg weekly dose, using the specific dose recommended in the package labeling; and
6. Initial approvals will be for the duration of 6 months. For additional approval consideration:
 - a. Dosing should be appropriate; and
 - b. Member should have had a recent office visit with new information regarding heights provided; and

- c. Member should be compliant; and
 - d. Growth velocity should not be <2.5cm/year; and
 - e. Prescriber must verify member still has open epiphyses; and
7. Skytrofa® will not be approved following epiphyseal closure. Skytrofa® is contraindicated in children with closed epiphyses.

Sogroya® (Somatropin) Approval Criteria:

1. Member must have a confirmed diagnosis of adult growth hormone deficiency (GHD) confirmed by 1 of the following:
 - a. Insulin tolerance test (ITT) or glucagon test with a peak growth hormone (GH) response <3ng/mL; or
 - b. ≥3 pituitary hormone deficiencies and insulin like growth factor-1 (IGF-1) standard deviation score (SDS) <-2.0; and
2. Member must be 18 years of age or older; and
3. Sogroya® must be prescribed by an endocrinologist (or an advanced care practitioner with a supervising physician who is an endocrinologist); and
4. Member's baseline IGF-1 level and SDS must be provided; and
5. A patient-specific, clinically significant reason (beyond convenience) why the member cannot use all Tier-1 product(s) must be provided; and
6. Prescriber must verify the member does not have active malignancy or active proliferative or severe non-proliferative diabetic retinopathy; and
7. Prescriber must verify the member has been counseled on proper administration and storage of Sogroya®; and
8. Approval quantity will be based on the FDA approved dosing in accordance with the package labeling; and
9. Initial approvals will be for the duration of 6 months. For additional approval consideration, compliance will be evaluated and the prescriber must verify the member is responding well to treatment as demonstrated by a reduction in truncal fat percentage or normalization of IGF-1 level (IGF-1 SDS of -0.5 to 1.75); and
10. A maximum approved dose of 8mg per week will apply.

Voxzogo® (Vosoritide) Approval Criteria:

1. Member must have an FDA approved indication of achondroplasia; and
 - a. Diagnosis must be confirmed by genetic testing identifying a pathogenic mutation in the *FGFR3* gene; and
2. Member must be 5 years of age or older; and
3. Prescriber must verify member has open epiphyses; and
4. The member's baseline height and growth velocity (GV) must be provided; and
5. Voxzogo® must be prescribed by a geneticist, endocrinologist, or other specialist with expertise in the treatment of achondroplasia; and

6. Member's recent weight (taken within the past 3 weeks) must be provided in order to ensure appropriate dosing in accordance with the package labeling; and
7. Prescriber must verify the member or member's caregiver has been counseled on proper administration and storage of Voxzogo[®], including the need for adequate food and fluid intake prior to each dose; and
8. A quantity limit of 30 vials per 30 days will apply; and
9. Initial and subsequent approvals will be for the duration of 6 months.
For additional approval consideration:
 - a. Member's current height must be provided and must demonstrate an improvement in GV from baseline; and
 - b. Member's recent weight must be provided and dosing must be appropriate; and
 - c. Member should be compliant; and
 - d. Prescriber must verify member still has open epiphyses; and
10. Voxzogo[®] will not be approved following epiphyseal closure.

Zorbtive[®] (Somatropin) Approval Criteria:

1. An FDA approved diagnosis of short bowel syndrome (SBS); and
2. Documentation of specialized nutritional support (may consist of a high carbohydrate, low-fat diet, adjusted for individual patient requirements and preferences; nutritional supplements may be added according to the discretion of the treating physician); and
3. Must be used in conjunction with optimal management of SBS (may include dietary adjustments, enteral feedings, parenteral nutrition, fluids, and micronutrient supplements as needed); and
4. Member must be under the care of a gastroenterologist (or an advanced care practitioner with a supervising physician who is a gastroenterologist); and
5. Dose does not exceed 8mg/day; and
6. Approvals will be for 4 weeks of treatment.

**Utilization of Growth Hormone Products and Voxzogo[®] (Vosoritide):
Calendar Year 2022**

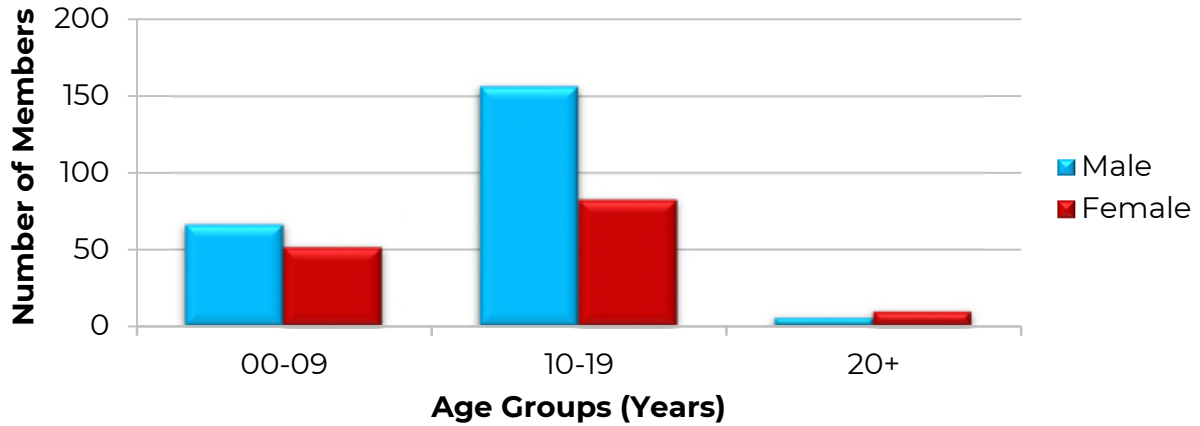
Comparison of Calendar Years

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/Claim	Cost/Day	Total Units	Total Days
2021	358	3,222	\$13,546,167.25	\$4,204.27	\$146.28	39,448	92,603
2022	369	3,573	\$16,437,750.95	\$4,600.55	\$159.77	50,051	102,887
% Change	3.10%	10.90%	21.30%	9.40%	9.20%	26.90%	11.10%
Change	11	351	\$2,891,583.70	\$396.28	\$13.49	10,603	10,284

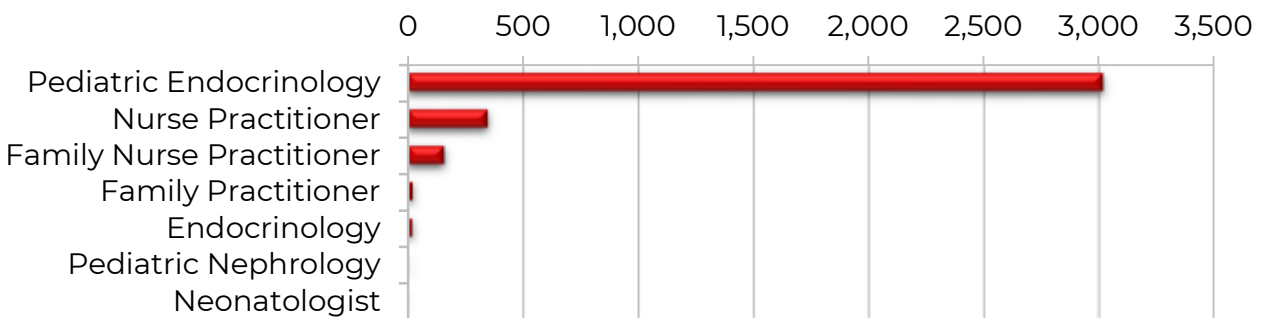
Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

Demographics of Members Utilizing Growth Hormone Products and Voxzogo® (Vosoritide)

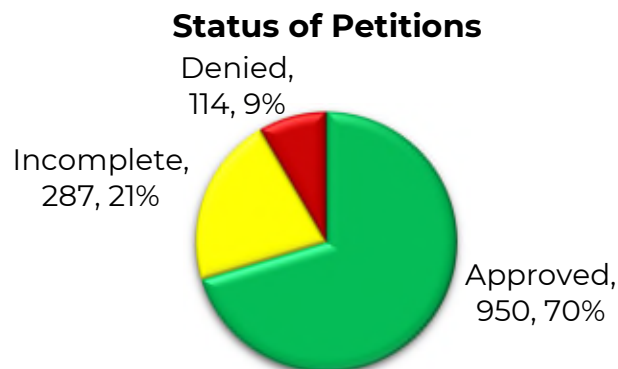


Top Prescriber Specialties of Growth Hormone Products and Voxzogo® (Vosoritide) by Number of Claims



Prior Authorization of Growth Hormone Products and Voxzogo® (Vosoritide)

There were 1,351 prior authorization requests submitted for 412 unique members for growth hormone products and Voxzogo® (vosoritide) during calendar year 2022. The following chart shows the status of the submitted petitions for calendar year 2022.



Market News and Updates^{1,2,3,4}

Anticipated Patent Expiration(s):

- Voxzogo® (vosoritide): August 2036

Pipeline:

- **Lonapegsomatropin:** Ascendis is evaluating the use of lonapegsomatropin for 2 additional new indications. The Phase 3 foresiGHt study is ongoing in adult patients with growth hormone deficiency (GHD). In January 2023, Ascendis announced recruitment into the foresiGHt study has been completed, and topline results are expected in the fourth quarter of 2023. Additionally, Ascendis plans to complete enrollment into the Phase 2 InsiGHtS study in patients with Turner Syndrome in the third quarter of 2023. Lonapegsomatropin was previously FDA approved in August 2021 for the treatment of pediatric patients 1 year of age and older with GHD and is marketed under the brand name Skytrofa®.
- **Somapacitan:** Novo Nordisk is evaluating the use of somapacitan for a new indication for the treatment of pediatric patients with GHD. In November 2022, the results of the Phase 3 REAL 4 study were published which demonstrated the non-inferiority of weekly somapacitan injections compared to daily somatropin injections after 52 weeks of treatment in pediatric patients with GHD. Novo Nordisk has submitted for FDA approval of somapacitan for the treatment of pediatric GHD and a decision is expected in the first half of 2023. Somapacitan was previously FDA approved in August 2020 for the treatment of adult patients with GHD under the brand name Sogroya®.

Recommendations

The College of Pharmacy does not recommend any changes to the growth hormone products Product Based Prior Authorization (PBPA) category or the current Voxzogo® (vosoritide) prior authorization criteria at this time.

Utilization Details of Growth Hormone Products and Voxzogo® (Vosoritide): Calendar Year 2022

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/CLAIM	CLAIMS/MEMBER	% COST
TIER-1 GROWTH HORMONE (GH) PRODUCTS						
GENOTROPIN INJ 12MG	929	104	\$6,074,040.00	\$6,538.26	8.93	36.95%
GENOTROPIN INJ 5MG	877	105	\$2,919,347.59	\$3,328.79	8.35	17.76%
GENOTROPIN INJ 1.4MG	251	31	\$1,459,485.79	\$5,814.68	8.1	8.88%
GENOTROPIN INJ 0.6MG	211	31	\$529,032.07	\$2,507.26	6.81	3.22%
GENOTROPIN INJ 1MG	172	25	\$713,931.32	\$4,150.76	6.88	4.34%
GENOTROPIN INJ 1.2MG	170	27	\$830,793.70	\$4,887.02	6.3	5.05%

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
GENOTROPIN INJ 0.4MG	151	22	\$251,824.08	\$1,667.71	6.86	1.53%
GENOTROPIN INJ 0.8MG	142	23	\$476,444.21	\$3,355.24	6.17	2.90%
GENOTROPIN INJ 2MG	112	12	\$953,376.48	\$8,512.29	9.33	5.80%
GENOTROPIN INJ 1.6MG	107	19	\$717,226.89	\$6,703.06	5.63	4.36%
GENOTROPIN INJ 0.2MG	97	12	\$80,804.63	\$833.04	8.08	0.49%
GENOTROPIN INJ 1.8MG	72	12	\$555,513.22	\$7,715.46	6	3.38%
TIER-1 GH SUBTOTAL	3,291	423	\$15,561,819.98	\$4,728.60	7.78	94.67%
TIER-2 GH PRODUCTS*						
NORDITROPIN INJ 5MG/1.5ML	104	12	\$160,453.21	\$1,542.82	8.67	0.98%
NORDITROPIN INJ 10MG/1.5ML	80	13	\$166,532.79	\$2,081.66	6.15	1.01%
NORDITROPIN INJ 15MG/1.5ML	42	6	\$207,928.63	\$4,950.68	7	1.26%
NUTROPIN AQ INJ NUSPIN 5MG/2ML	15	2	\$7,017.31	\$467.82	7.5	0.04%
NORDITROPIN INJ 30MG/3ML	11	2	\$82,374.32	\$7,488.57	5.5	0.50%
NUTROPIN AQ INJ 20MG/2ML	8	2	\$6,706.16	\$838.27	4	0.04%
OMNITROPE INJ 10MG/1.5ML	6	1	\$3,526.43	\$587.74	6	0.02%
HUMATROPE INJ 12MG	3	1	\$10,669.35	\$3,556.45	3	0.06%
SKYTROFA INJ 5.2MG	3	1	\$13,668.63	\$4,556.21	3	0.08%
TIER-2 GH SUBTOTAL	272	40	\$658,876.83	\$2,422.34	6.8	4.01%
GH SUBTOTAL	3,563	367*	\$16,220,696.81	\$4,552.54	9.71	98.68%
VOSORITIDE PRODUCTS						
VOXZOGO INJ 0.56MG	10	2	\$217,054.14	\$21,705.41	5	1.32%
VOSORITIDE SUBTOTAL	10	2	\$217,054.14	\$21,705.41	5	1.32%
TOTAL	3,573	369*	\$16,437,750.95	\$4,600.55	9.68	100%

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

*Claims for Tier-2 products largely consist of claims for which SoonerCare is not the primary payer; therefore, the reimbursed amount included in the above data is not a true reflection of the cost of the medication for SoonerCare.

INJ = injection

¹ U.S. Food and Drug Administration (FDA). Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations. Available online at: <https://www.accessdata.fda.gov/scripts/cder/ob/index.cfm>. Last revised 02/2023. Last accessed 02/03/2023.

² Ascendis Pharma. Ascendis Pharma Provides Update on Vision 3x3 Strategic Roadmap at 41st Annual J.P. Morgan Healthcare Conference. Available online at: <https://investors.ascendispharma.com/news-releases/news-release-details/ascendis-pharma-provides-update-vision-3x3-strategic-roadmap-0>. Issued 01/08/2023. Last accessed 02/13/2023.

³ Miller BS, Blair JC, Rasmussen MH, et al. Weekly Somapacitan is Effective and Well Tolerated in Children with GH Deficiency: The Randomized Phase 3 REAL 4 Trial. *J Clin Endocrinol Metab* 2022; 107(12):3378-3388.

⁴ Novo Nordisk. Investor Presentation – Full Year 2022. Available online at: <https://www.novonordisk.com/content/dam/nncorp/global/en/investors/pdfs/financial-results/2022/Q4-2022-investor-presentation.pdf>. Issued 02/01/2023. Last accessed 02/13/2023.



30-Day Notice to Prior Authorize Lamzede® (Velmanase Alfa-tycv)

Oklahoma Health Care Authority
March 2023

Introduction^{1,2,3,4}

Alpha-mannosidosis is a rare, genetic, lysosomal storage disorder characterized by a deficiency of alpha-mannosidase, an enzyme responsible for catalyzing the degradation of mannose-containing oligosaccharides and glycoproteins. Alpha-mannosidosis is caused by mutations in the *MAN2B1* gene and is inherited in an autosomal recessive manner. In patients with alpha-mannosidosis, low levels or inactivity of the alpha-mannosidase enzyme cause a toxic accumulation of mannose-containing oligosaccharides in cells, leading to damage in various tissues and organs throughout the body. The symptoms and severity of alpha-mannosidosis vary greatly between patients, but symptoms frequently include distinctive coarse facial features, skeletal abnormalities, hearing loss, frequent infections, developmental delay, intellectual disability, and ataxia. Some patients also experience psychiatric symptoms, hepatosplenomegaly, cataracts, or other ocular changes.

Patients with alpha-mannosidosis can typically be categorized as having 1 of 3 primary subtypes of the disorder, including a mild form (Type 1) that is slowly progressive and typically presents after 10 years of age, a moderate form (Type 2) that is also slowly progressive but presents before 10 years of age with the presence of skeletal abnormalities or myopathy, or a severe form (Type 3) characterized by prenatal loss or early death from progressive central nervous system (CNS) involvement or infection. Most patients with alpha-mannosidosis fall into the moderate subtype, with some patients surviving into their fifties. Alpha-mannosidosis is estimated to occur in 1 in 500,000 to 1 in 1,000,000 people in the general population, with fewer than 5,000 patients estimated in the United States. It appears to affect men and women equally and has been described in patients from all parts of the world.

Alpha-mannosidosis can be diagnosed by identification of a deficiency of the lysosomal alpha-mannosidase enzyme in leukocytes or other nucleated cells. Patients with alpha-mannosidosis have alpha-mannosidase activity that is 5%-10% of the normal activity. The diagnosis can also be confirmed by molecular genetic testing identifying biallelic pathogenic variants in the *MAN2B1* gene.

Historically, management of alpha-mannosidosis has been symptom-based and supportive and has included the early use of antibiotics for bacterial infections, treatment of osteoporosis or osteopenia as necessary, and the use of prophylactic vaccinations. In February 2023, the U.S. Food and Drug Administration (FDA) approved Lamzede® (velmanase alfa-tycv) for the treatment of non-CNS manifestations of alpha-mannosidosis in adult and pediatric patients. Lamzede® is the first and only enzyme replacement therapy FDA approved for this indication.

Lamzede® (Velmanase Alfa-tycv) Product Summary⁵

Indication(s): Lamzede® is a recombinant human lysosomal alpha-mannosidase indicated for treatment of non-CNS manifestations of alpha-mannosidosis in adult and pediatric patients.

How Supplied: 10mg lyophilized powder in a single-dose vial (SDV) for reconstitution

Dosing and Administration:

- The recommended dose is 1mg/kg (actual body weight) administered once weekly as an intravenous (IV) infusion.
- Prior to initiating treatment, pregnancy status should be verified, and females of reproductive potential should not be pregnant.
- Pretreatment with antihistamines, antipyretics, and/or corticosteroids should be considered.
- Refer to the full *Prescribing Information* for recommended dosage and administration modifications due to hypersensitivity and/or infusion-related reactions.

Boxed Warning: Hypersensitivity Reactions Including Anaphylaxis

- Patients treated with Lamzede® have experienced hypersensitivity reactions, including anaphylaxis. Appropriate medical support measures, including cardiopulmonary resuscitation equipment, should be readily available during Lamzede® administration.
- If a severe hypersensitivity reaction occurs, Lamzede® should be discontinued immediately and appropriate medical treatment should be initiated.
- In patients with severe hypersensitivity reaction, a desensitization procedure to Lamzede® may be considered.

Mechanism of Action: Deficiency of alpha-mannosidase causes an intra-lysosomal accumulation of mannose-rich oligosaccharides in various tissues. Lamzede® provides an exogenous source of alpha-mannosidase which can be transported into lysosomes where it is thought to exert enzyme activity.

Contraindication(s): None

Safety:

- Hypersensitivity Reactions Including Anaphylaxis: Hypersensitivity reactions, including anaphylaxis, have been reported in patients treated with Lamzede®. Out of 38 patients treated in clinical trials with Lamzede®, 19 patients (50%) experienced hypersensitivity reactions, of which 2 patients (5%) experienced anaphylaxis and an additional 3 patients (8%) experienced severe hypersensitivity reactions requiring medical treatment. Pretreatment with antihistamines, antipyretics, and/or corticosteroids should be considered prior to Lamzede® administration. If a severe hypersensitivity reaction occurs, Lamzede® should be immediately discontinued and appropriate medical treatment should be initiated. The risks and benefits of re-administering Lamzede® should be considered following severe hypersensitivity reactions.
- Infusion-Associated Reactions (IARs): The most frequent (>10%) IARs that occurred in clinical trials with Lamzede® were pyrexia, chills, erythema, vomiting, cough, urticaria, rash, and conjunctivitis. Antihistamines, antipyretics, and/or corticosteroids may be given prior to Lamzede® administration to reduce the risk of IARs; however, IARs may still occur in patients after receiving pretreatment. If severe IARs occur, Lamzede® should be immediately discontinued and appropriate medical treatment should be initiated. The risks and benefits should be considered of re-administering Lamzede® following severe IARs.
- Pregnancy: Based on animal data, Lamzede® may cause embryo-fetal harm when administered to a pregnant female. There are no human data on the use of Lamzede® in pregnant females to evaluate for a drug associated risk of major birth defects, miscarriage, or other adverse maternal or fetal outcomes. The decision to continue or discontinue Lamzede® during pregnancy should consider the female's need for Lamzede®, the potential drug-related risks to the fetus, and the potential adverse outcomes from untreated maternal disease. The pregnancy status of females of reproductive potential should be verified prior to initiating Lamzede® treatment. Females of reproductive potential should be advised to use effective contraception during treatment and for 2 weeks after the last dose if Lamzede® is discontinued.
- Lactation: There are no data available on the presence of velmanase alfa-tycv or its metabolite in human or animal milk, the effects on the breastfed infant, or the effects on milk production.
- Females and Males of Reproductive Potential: The pregnancy status of females of reproductive potential should be verified prior to initiating Lamzede® treatment. Females of reproductive potential should be

advised to use effective contraception during treatment and for 2 weeks after the last dose if Lamzede® is discontinued.

- Geriatric Use: Alpha-mannosidosis is largely a disease of pediatric and young adult patients. Clinical trials of Lamzede® did not include patients 65 years of age and older.

Adverse Reactions:

- Trial 1: In patients 6 years of age or older, the adverse reactions that occurred in ≥2 patients treated with Lamzede® were nasopharyngitis, pyrexia, headache, arthralgia, acute tonsillitis, urinary tract infection, eye pruritus, gastroenteritis, hypersensitivity, influenza, syncope, toothache, back pain, and ear infection.
- Trial 2: In patients younger than 6 years of age, the adverse reactions that occurred in ≥2 patients treated with Lamzede® were cough, otitis media, rhinitis, conjunctivitis, fall, ligament sprain, oropharyngeal pain, face swelling, and upper respiratory tract infection.

Efficacy: The efficacy of Lamzede® for the treatment of alpha-mannosidosis was assessed in Trial 1 and Trial 2.

- **Trial 1** was a Phase 3 multicenter, randomized, double-blinded, placebo-controlled clinical trial in adult and pediatric patients with alpha-mannosidosis. The trial included a total of 25 patients, of which 13 were adult patients (18 to 35 years of age) and 12 were pediatric patients (6 to younger than 18 years of age). Patients received either Lamzede® (N=15) or placebo (N=10) by IV infusion at a dose of 1mg/kg once weekly for 52 weeks of treatment.
 - Inclusion Criteria: The included patients had a diagnosis of alpha-mannosidosis confirmed by alpha-mannosidase enzyme activity <11% of normal.
 - Efficacy Endpoints: The endpoints assessed for efficacy at 12 months included change from baseline in 3-minute stair climbing test (3MSCT) measured in steps per minute, 6-minute walking test (6MWT) measured in meters, the percent of predicted forced vital capacity (FCV), and serum oligosaccharide concentrations.
 - Results: After 12 months of treatment, patients treated with Lamzede® experienced significantly greater reductions in serum oligosaccharide concentrations compared to patients who received placebo. The relative change from baseline in serum oligosaccharide concentrations was -75.8% in the Lamzede® group and -20.3% in the placebo group [treatment difference: -55.6%; 95% confidence interval (CI): -69.3%, -41.9%]. Results for the other clinical endpoints were numerically in favor of treatment with Lamzede®. The relative change from baseline in the 3MSCT was 0.5% in the Lamzede® group and -3.6% in the placebo group (treatment

difference: 3.4%; 95% CI: -9.5%, 16.3%). The relative change from baseline in the 6MWT was 1.2% in the Lamzede® group and -0.8% in the placebo group (treatment difference: 1.6%; 95% CI: -7.2%, 10.4%). The relative change from baseline in the percent of predicted FVC was 11.4% in the Lamzede® group and 1.9% in the placebo group (treatment difference: 7.4%; 95% CI: -5.7%, 20.5%).

- **Trial 2** was a single-arm clinical trial conducted in 5 pediatric patients younger than 6 years of age (range: 3.7 to 5.9 years) with alpha-mannosidosis. All patients received Lamzede® 1mg/kg by IV infusion once weekly. The duration of treatment was 24 months for 4 patients and 40 months for 1 patient. The trial results demonstrated a mean reduction of 65.8% in serum oligosaccharides from baseline at 24 months.

Cost: The Wholesale Acquisition Cost (WAC) of Lamzede® is \$4,000 per 10mg SDV. This results in an estimated cost of \$112,000 per 28 days and \$1,456,000 per year based on the recommended dose of 1mg/kg once weekly for an adult member weighing 70kg.

Recommendations

The College of Pharmacy recommends the prior authorization of Lamzede® (velmanase alfa-tycv) with the following criteria (shown in red):

Lamzede® (Velmanase Alfa-tycv) Approval Criteria:

1. An FDA approved diagnosis of alpha-mannosidosis confirmed by:
 - a. Documented lab results verifying alpha-mannosidase activity <11% of normal; or
 - b. Molecular genetic testing confirming biallelic pathogenic variants in the *MAN2B1* gene; and
2. Member's recent weight (kg) taken within the last 3 weeks must be provided to ensure accurate weight-based dosing; and
3. Female members of reproductive potential must have a negative pregnancy test prior to initiation and must agree to use effective contraception during treatment and for 2 weeks after the final dose of Lamzede®; and
4. Lamzede® must be administered in a health care setting by a health care provider with appropriate equipment and personnel to manage anaphylaxis. Approvals will not be granted for self-administration; and
 - a. Lamzede® must be shipped via cold chain supply to the health care setting where the member is scheduled to receive treatment; and
5. Lamzede® must be prescribed by, or in consultation with, a specialist with expertise in the treatment of lysosomal storage disorders; and

6. Initial approvals will be for the duration of 6 months. Further approval may be granted if the prescriber documents the member is responding well to treatment.

¹ National Organization for Rare Disorders (NORD). Alpha-Mannosidosis. Available online at: <https://rarediseases.org/rare-diseases/alpha-mannosidosis/>. Last revised 08/13/2018. Last accessed 02/24/2023.

² Malm D, Nilssen O. Alpha-Mannosidosis. *GeneReviews*[®]. Available online at: <https://www.ncbi.nlm.nih.gov/books/NBK1396/>. Last revised 07/18/2019. Last accessed 02/24/2023.

³ Genetic and Rare Diseases (GARD) Information Center. Alpha-Mannosidosis. Available online at: <https://rarediseases.info.nih.gov/diseases/6968/alpha-mannosidosis>. Last revised 02/2023. Last accessed 02/24/2023.

⁴ Chiesi Global Rare Diseases. Chiesi Global Rare Diseases Announces FDA Approval of Lamzede[®] (Velmanase Alfa-tycv) for Alpha-Mannosidosis. Available online at: <https://www.prnewswire.com/news-releases/chiesi-global-rare-diseases-announces-fda-approval-of-lamzedevelmanase-alfa-tycv-for-alpha-mannosidosis-301749440.html>. Issued 02/16/2023. Last accessed 02/24/2023.

⁵ Lamzede[®] (Velmanase alfa-tycv) Prescribing Information. Chiesi USA, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/761278s000lbl.pdf. Last revised 02/2023. Last accessed 02/24/2023.



Calendar Year 2022 Annual Review of Multiple Sclerosis (MS) Medications and 30-Day Notice to Prior Authorize Briumvi™ (Ublituximab-xiiy) and Tascenso ODT® [Fingolimod Orally Disintegrating Tablet (ODT)]

Oklahoma Health Care Authority
March 2023

Current Prior Authorization Criteria

The current prior authorization criteria for the MS medications can be found in the *Recommendations* section at the end of this report.

Utilization of MS Medications: Calendar Year 2022

Comparison of Calendar Years: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/Claim	Cost/Day	Total Units	Total Days
2021	166	1,096	\$7,470,429.01	\$6,816.08	\$225.30	38,193	33,157
2022	210	1,438	\$10,408,197.87	\$7,237.97	\$240.36	51,884	43,302
% Change	26.5%	31.2%	39.3%	6.2%	6.7%	35.8%	30.6%
Change	44	342	\$2,937,768.86	\$421.89	\$15.06	13,691	10,145

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

- Aggregate drug rebates collected during fiscal year 2022 (07/01/2021 to 06/30/2022) for MS medications totaled \$7,782,875.04.[^] Rebates are collected after reimbursement for the medication and are not reflected in this report. Please note, fiscal year 2022 aggregate drug rebate totals have been included in this report for informational purposes only, as the rebates for calendar year 2022 are still being collected at this time. The costs included in this report do not reflect net costs.

[^] Important considerations: Aggregate drug rebates are based on the date the claim is paid rather than the date dispensed. Claims data are based on the date dispensed.

Comparison of Calendar Years: Medical Claims

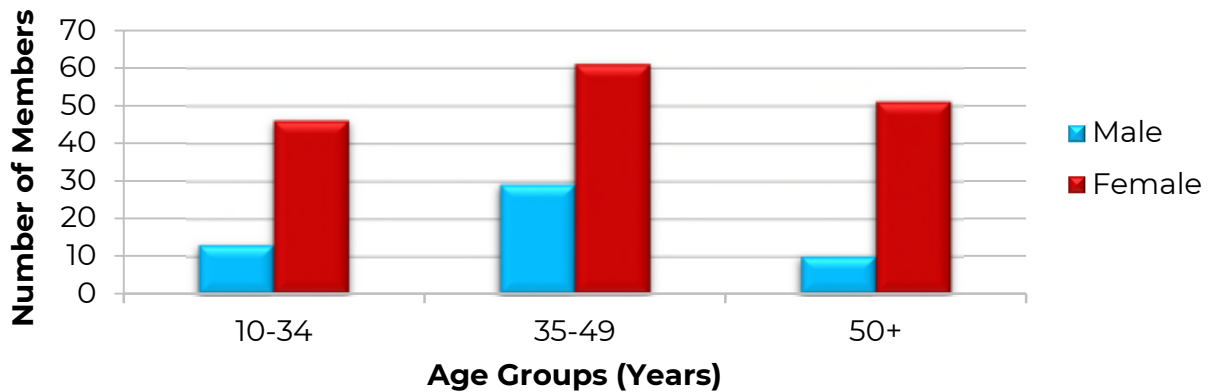
Calendar Year	*Total Members	*Total Claims	Total Cost	Cost/Claim	Claims/Member
2021	74	221	\$3,377,644.09	\$15,283.46	2.99
2022	100	313	\$5,183,944.50	\$16,562.12	3.13
% Change	35.14%	41.63%	53.48%	8.37%	4.68%
Change	26	92	\$1,806,300.41	\$1,278.66	0.14

Costs do not reflect rebated prices or net costs.

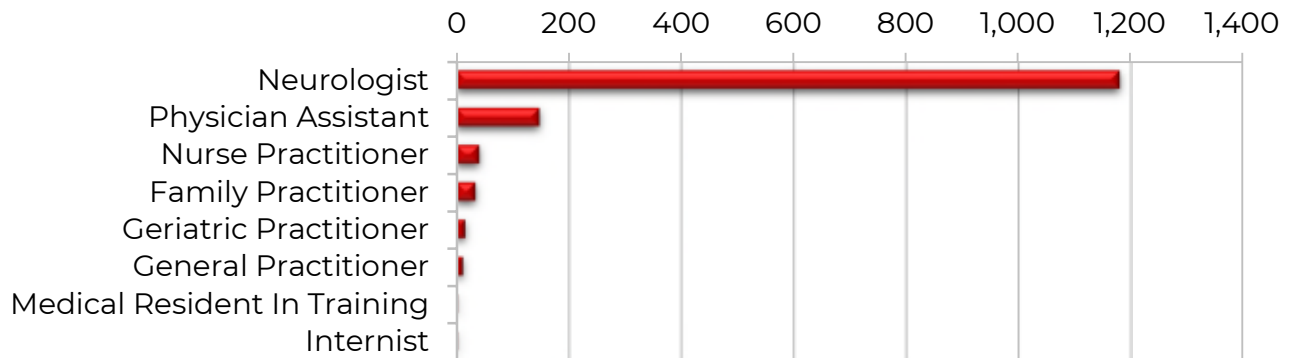
*Total number of unduplicated utilizing members.

*Total number of unduplicated claims.

Demographics of Members Utilizing MS Medications: Pharmacy Claims



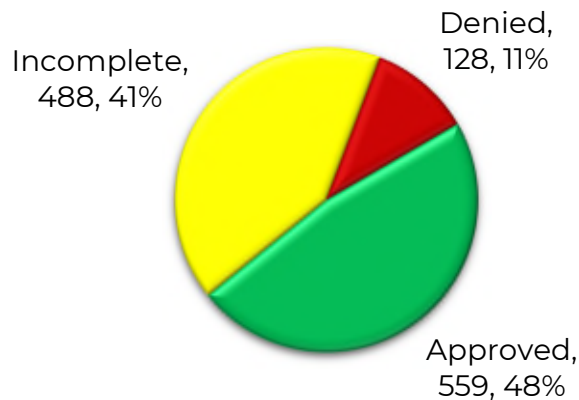
Top Prescriber Specialties of MS Medications by Number of Claims: Pharmacy Claims



Prior Authorization of MS Medications

There were 1,175 prior authorization requests submitted for MS medications during calendar year 2022. The following chart shows the status of the submitted petitions for calendar year 2022.

Status of Petitions



Market News and Updates^{1,2,3,4,5,6,7,8,9,10,11,12,13,14}

Anticipated Patent Expiration(s):

- Mayzent[®] (siponimod tablets): November 2030
- Zeposia[®] (ozanimod capsules): November 2030
- Gilenya[®] (fingolimod capsules): September 2032
- Vumerity[®] (diroximel fumarate capsules): September 2033
- Aubagio[®] (teriflunomide tablets): August 2034
- Bafiertam[®] (monomethyl fumarate capsules): August 2035
- Tecfidera[®] (dimethyl fumarate capsules): November 2035
- Ponvory[®] (ponesimod tablets): December 2035
- Tascenso ODT[®] [fingolimod orally disintegrating tablets (ODT)]: January 2036
- Mavenclad[®] (cladribine tablets): November 2038

New U.S. Food and Drug Administration (FDA) Approval(s):

- **December 2022:** The FDA approved Briumvi[™] (ublituximab-xiiy) for the treatment of relapsing forms of multiple sclerosis (RMS), to include clinically isolated syndrome (CIS), relapsing-remitting disease (RRMS), and active secondary progressive disease (SPMS), in adults. Briumvi[™] is the first and only anti-CD20 monoclonal antibody approved for patients with RMS that can be administered in a 1-hour infusion following the starting dose.
- **January 2023:** The FDA approved a 0.5mg strength of Tascenso ODT[®], a bioequivalent ODT formulation of Gilenya[®] (fingolimod). Tascenso ODT[®] was first approved in December 2021 at a 0.25mg dose for pediatric patients, 10 years of age and older, who weighed ≤ 40 kg. Tascenso ODT[®] is approved for the same indications as Gilenya[®] of RMS, to include CIS, RRMS, and SPMS, in patients 10 years of age and older. While Gilenya[®] is

available in oral capsules that must be swallowed, Tascenso ODT® is delivered as an ODT that dissolves on the tongue in just a few seconds.

News:

- **June 2022:** The FDA has placed a partial clinical hold on Phase 3 trials of tolebrutinib in MS and myasthenia gravis. As a result, new enrollment in the United States is paused, and patients who have been in the trial for fewer than 60 days shall suspend the trial drug. Importantly, United States participants who have completed at least 60 days in the trial should continue treatment. The FDA action was based on a limited number of cases of drug-induced liver injury that have been identified with tolebrutinib exposure in Phase 3 trials. The majority of the impacted patients were determined to have concurrent complications known historically to predispose to drug-induced liver injury. Importantly, the elevations of laboratory values used for monitoring liver injury were reversible after drug discontinuation for all cases. Following earlier dialog with the FDA about these cases, study protocols were revised in May 2022 to update the monitoring frequency, and enrollment criteria were revised to exclude pre-existing risk factors for hepatic dysfunction. Enrollment in the clinical program continues with the revised study protocols and enhanced safety monitoring in countries outside of the United States. Sanofi is working closely with the independent data monitoring committee members and investigators around the world to evaluate the effectiveness of safety measures. The program in MS has been enrolling patients since 2019 and includes more than 2,000 patients currently on tolebrutinib therapy with durations of treatment as long as 3 years.
- **July 2022:** The Phase 3 RIFUND-MS trial showed that off-label rituximab led to fewer relapses over 2 years than Tecfidera® (dimethyl fumarate) in patients with early RRMS. Relapses occurred in 3% of patients on rituximab and in 16% on dimethyl fumarate [risk ratio: 0.19; 94% confidence interval (CI): 0.06, 0.62; P=0.0060] over 24 months. Rituximab, which is approved in the United States for patients with non-Hodgkin lymphoma, chronic lymphocytic leukemia, and rheumatoid arthritis, was studied in the phase 2 HERMES trial of RRMS over a decade ago. RIFUND-MS screened patients at 17 Swedish university and community hospitals between July 2016 and December 2018. Researchers randomized patients to either 240mg of oral dimethyl fumarate twice daily or 1,000mg of intravenous (IV) rituximab followed by 500mg every 6 months. The primary outcome was the proportion of patients experiencing at least 1 relapse, defined as subacute onset of new or worsening neurological symptoms lasting more than 24 hours and preceded by 30 days or more of clinical stability. A total of 98 patients in the rituximab group and 97 patients in

the dimethyl fumarate group were eligible for the primary outcome analysis. Eligible patients had been diagnosed with RRMS or CIS, had a disease duration of ≤ 10 years, were untreated or exposed only to interferon or glatiramer acetate, and had evidence of clinical or radiological disease activity in the past year. The baseline Expanded Disability Status Scale (EDSS) scores averaged 1.6 in the rituximab group and 1.7 in the dimethyl fumarate group. About half of patients on dimethyl fumarate stopped treatment or switched to rituximab during the course of the trial; 14 did so because of relapse, 11 because of new disease activity found on magnetic resonance imaging (MRI), 16 due to side effects, and 7 cited no reason. Only 3 patients in the rituximab group discontinued treatment. While RIFUND-MS clearly establishes rituximab's superiority on imaging and clinical outcomes over oral dimethyl fumarate, it does not establish superiority or non-inferiority of rituximab to the FDA approved anti-CD20 therapies ocrelizumab and ofatumumab.

- **December 2022:** AB Science announced that its Phase 3 clinical trial for masitinib in the treatment of progressive forms of MS has been approved by the FDA. Currently, there is only 1 approved treatment for primary progressive forms of MS (PPMS) and none for non-active SPMS which account for approximately 15% and 35% of MS cases, respectively. Masitinib targets microglia and mast cells, which are 2 cells of the innate immune system associated with the pathology of progressive MS. The mechanism of action of masitinib is different from and potentially complementary to other tyrosine kinase inhibitors being developed in MS, such as Bruton's tyrosine kinase (BTK) inhibitors, which target B-cells. The trial will enroll 800 patients from numerous study centers with an EDSS score between 3.0 to 6.0 and absence of T1 gadolinium (Gd)-enhancing brain lesions. The primary endpoint of the trial is the effect of masitinib on time to confirmed disability progression. The objective of this trial is to confirm positive results from the Phase 2B/3 trial.

Pipeline:

- **Evobrutinib:** Evobrutinib is an investigational oral treatment for RMS, which includes RRMS and active SPMS. Evobrutinib is a BTK inhibitor that blocks the BTK protein and prevents the activation and work of B-cells, to subsequently curb T-cell function and inflammation. By inhibiting the BTK protein, researchers hope that evobrutinib can reduce the nerve cell damage seen in MS patients and prevent disease relapses. Two ongoing and global Phase 3 trials are comparing the safety and effectiveness of evobrutinib with that of teriflunomide. The trials are expected to finish in June 2026, with the release of top-line data possible in late 2023.

- **Fenebrutinib:** Fenebrutinib is an investigational oral medication, designed to be a highly selective and reversible BTK inhibitor that reduces both B-cell and myeloid lineage-cell activation. It is currently in Phase 3 trials for the treatment of RMS and PPMS. The trials are expected to conclude in 2025.
- **Remibrutinib:** Remibrutinib is an oral treatment that potently and selectively inhibits the BTK enzyme, which plays a critical role in the inflammatory activity of certain immune cells such as B-cells and microglia. By blocking this protein, remibrutinib is expected to dampen the inflammatory activity that drives MS. Similar to other BTK inhibitors in development, this medication is known to bind to BTK covalently which means that once a molecule of remibrutinib binds to a BTK protein, that protein is permanently neutralized. However, this molecule specifically binds to BTK in its inactive state, which forces the protein to remain in that inactive state. Two identically designed Phase 3 clinical trials are now ongoing and recruiting participants. Patients will be randomly assigned to receive remibrutinib at a 100mg dose twice daily or teriflunomide for 30 months. The main goal is to compare the effect of the treatments on relapse rates after 30 months. Top-line data from the trials is expected by 2025.

Briumvi™ (Ublituximab-xiyy) Product Summary¹⁵

Indication(s): Briumvi™ is a CD20-directed cytolytic antibody indicated for the treatment of RMS, to include CIS, RRMS, and active SPMS, in adults.

How Supplied: 150mg/6mL single-dose vial

Dosing and Administration:

- Briumvi™ should be administered via IV infusion:
 - 1st infusion: 150mg
 - 2nd infusion: 450mg 2 weeks after the first dose
 - Subsequent infusions: 450mg 24 weeks after the first infusion and every 24 weeks thereafter
- Hepatitis B virus (HBV) screening and quantitative serum immunoglobulin screening should be performed before the first dose.
- Patients should be pre-medicated with methylprednisolone (or an equivalent corticosteroid) and an antihistamine (e.g., diphenhydramine) prior to each infusion.
- Patients should be monitored closely during and for at least 1 hour after the completion of the first 2 infusions. Post-infusion monitoring of subsequent infusions should be at the discretion of the physician unless an infusion reaction and/or hypersensitivity has been observed.

Mechanism of Action: The precise mechanism by which ublituximab-xiiy exerts its therapeutic effects in MS is unknown, but is presumed to involve binding to CD20, a cell surface antigen present on pre-B and mature B lymphocytes. Following cell surface binding to B lymphocytes, ublituximab-xiiy results in cell lysis through mechanisms including antibody-dependent cellular cytotoxicity and complement-dependent cytotoxicity.

Contraindication(s):

- Active HBV infection
- History of life threatening infusion reaction to Briumvi™

Warnings and Precautions:

- Infusion Reactions: Briumvi™ can cause infusion reactions, which can include pyrexia, chills, headache, influenza like illness, tachycardia, nausea, throat irritation, erythema, and an anaphylactic reaction. In ULTIMATE I and ULTIMATE II, patients received methylprednisolone (or an equivalent steroid), an antihistamine, and possibly other pre-medication (i.e., acetaminophen) to reduce the risk of infusion reactions prior to each infusion. The incidence of infusion reactions in the trials in patients who received treatment with Briumvi™ was 48%, with the highest incidence within 24 hours of the first infusion. There were no fatal infusion reactions, but 0.6% of patients treated with Briumvi™ experienced infusion reactions that were serious, some requiring hospitalization. Patients treated with Briumvi™ should be observed for infusion reactions during the infusion and for at least 1 hour after the completion of the first 2 infusions. Post-infusion monitoring of subsequent infusions should be at the discretion of the physician unless infusion reaction and/or hypersensitivity has been observed in association with the current or any prior infusion. Patients should be informed that infusion reactions can occur up to 24 hours after the infusion. Management recommendations for infusion reactions depend on the type and severity of the reaction. For life threatening infusion reactions, the infusion should be stopped immediately, Briumvi™ should be permanently discontinued, and appropriate supportive treatment should be provided. For less severe infusion reactions, management may involve temporarily stopping the infusion, reducing the infusion rate, and/or administering symptomatic treatment.
- Infections: Serious, life threatening, or fatal bacterial and viral infections have been reported in patients receiving Briumvi™. An increased risk of infections, including serious and fatal bacterial, fungal, and new or reactivated viral infections, has been observed during and following completion of treatment with other anti-CD20 B-cell depleting therapies. In the trials, the overall rate of infections in MS patients treated with Briumvi™ was 56% compared to 54% in patients who were

treated with teriflunomide. The rate of serious infections was higher in patients treated with Briumvi™ compared to patients treated with teriflunomide (5% vs. 3%, respectively). There were 3 infection-related deaths that occurred in controlled clinical trials in patients with RMS, all in patients treated with Briumvi™; the infections leading to death were post-measles encephalitis, pneumonia, and post-operative salpingitis following an ectopic pregnancy. In the trials, the most common infections reported in patients treated with Briumvi™ included upper respiratory tract infection (45%) and urinary tract infection (10%). Briumvi™ administration should be delayed in patients with an active infection until the infection is resolved.

- Possible Increased Risk of Immunosuppressant Effects with Other Immunosuppressants: When initiating Briumvi™ after an immunosuppressive therapy or initiating an immunosuppressive therapy after Briumvi™, the potential for increased immunosuppressive effects should be considered. Briumvi™ has not been studied in combination with other MS therapies.
- HBV Reactivation: HBV reactivation occurred in an MS patient treated with Briumvi™ in clinical trials. Fulminant hepatitis, hepatic failure, and death caused by HBV reactivation have occurred in patients treated with anti-CD20 antibodies. HBV screening should be performed in all patients before initiation of treatment with Briumvi™. Treatment with Briumvi™ should not be started in patients with active HBV confirmed by positive results for Hepatitis B surface antigen (HBsAg) and anti-HB tests. For patients who are negative for HBsAg and positive for HB core antibody (HBcAb+) or are carriers of HBV, a liver disease expert should be consulted before starting and during treatment.
- Progressive Multifocal Leukoencephalopathy (PML): PML is an opportunistic viral infection of the brain caused by the JC virus (JCV) that typically only occurs in patients who are immunocompromised, and that usually leads to death or severe disability. Although no cases of PML have occurred in MS patients treated with Briumvi™, JCV infection resulting in PML has been observed in patients treated with other anti-CD20 antibodies and other MS therapies. At the first sign or symptom suggestive of PML, Briumvi™ should be withheld and an appropriate diagnostic evaluation should be performed. Typical symptoms associated with PML are diverse, progress over days to weeks, and include progressive weakness on 1 side of the body or clumsiness of limbs, disturbance of vision, and changes in thinking, memory, and orientation leading to confusion and personality changes. MRI findings may be apparent before clinical signs or symptoms. Cases of PML, diagnosed based on MRI findings and the detection of JCV DNA in the cerebrospinal fluid in the absence of clinical signs or symptoms specific to PML, have been reported in patients treated with other MS

medications associated with PML. Many of these patients subsequently became symptomatic with PML. Therefore, monitoring with MRI for signs that may be consistent with PML may be useful, and any suspicious findings should lead to further investigation to allow for an early diagnosis of PML, if present. Following discontinuation of another MS medication associated with PML, lower PML-related mortality and morbidity have been reported in patients who were initially asymptomatic at diagnosis compared to patients who had characteristic clinical signs and symptoms at diagnosis. It is not known whether these differences are due to early detection and discontinuation of MS treatment or due to differences in disease in these patients. If PML is confirmed, treatment with Briumvi™ should be discontinued.

- **Vaccinations:** All immunizations should be administered according to immunization guidelines at least 4 weeks prior to initiation of Briumvi™ for live or live-attenuated vaccines and, whenever possible, at least 2 weeks prior to initiation of Briumvi™ for non-live vaccines. Briumvi™ may interfere with the effectiveness of non-live vaccines. The safety of immunization with live or live-attenuated vaccines during or following administration of Briumvi™ has not been studied. Vaccination with live virus vaccines is not recommended during treatment with Briumvi™ and until B-cell repletion. In infants of mothers exposed to Briumvi™ during pregnancy, live or live attenuated vaccines should not be administered before confirming the recovery of B-cell counts as measured by CD19+ B-cells. Depletion of B-cells in these infants may increase the risks from live or live-attenuated vaccines. Inactivated or non-live vaccines may be administered as indicated, prior to recovery from B-cell depletion, but an assessment of vaccine immune responses, including consultation with a qualified specialist, should be considered to determine whether a protective immune response was mounted.
- **Fetal Risk:** Based on data from animal studies, Briumvi™ may cause fetal harm when administered to a pregnant woman. Transient peripheral B-cell depletion and lymphocytopenia have been reported in infants born to mothers exposed to other anti-CD20 B-cell depleting antibodies during pregnancy. A pregnancy test is recommended in females of reproductive potential prior to each infusion with Briumvi™. Females of reproductive potential should be advised to use effective contraception during Briumvi™ treatment and for 6 months after the last dose.
- **Reduction in Immunoglobulins:** As expected with any B-cell depleting therapy, decreased immunoglobulin levels were observed with Briumvi™. Decrease in immunoglobulin M (IgM) was reported in 0.6% of patients treated with Briumvi™ compared to none of the patients treated with teriflunomide in RMS clinical trials. No decline in

immunoglobulin G (IgG) was observed at the end of the trials. Data from clinical trials using other anti-CD20 monoclonal antibody therapies have shown an association between decreased levels of IgM [IgM <lower limit of normal (LLN)]] and IgG (IgG <LLN) and increased rates of serious infections. The levels of quantitative serum immunoglobulins should be monitored during treatment, especially in patients with opportunistic or recurrent infections, and after discontinuation of therapy until B-cell repletion. Discontinuation of Briumvi™ therapy should be considered if a patient with low immunoglobulins develops a serious opportunistic infection or recurrent infections, or if prolonged hypogammaglobulinemia requires treatment with IV immunoglobulins.

Adverse Reactions: The most common adverse reactions (incidence $\geq 10\%$ and higher than teriflunomide) were infusion reactions and upper respiratory tract infections.

Efficacy: The efficacy of Briumvi™ was demonstrated in 2 randomized, double-blind, double-dummy, parallel group, active comparator-controlled clinical trials of identical design, in patients with RMS treated for 96 weeks, ULTIMATE I and ULTIMATE II. Patients were randomized to receive either Briumvi™, given as an IV infusion of 150mg for the first infusion, 450mg 2 weeks after the first infusion for the second infusion/second dose, and 450mg every 24 weeks after the first infusion for subsequent doses (third infusion and beyond) with oral placebo administered daily; or teriflunomide given orally as a 14mg daily dose with IV placebo administered on the same schedule as Briumvi™. Both trials enrolled patients who had experienced at least 1 relapse in the previous year, 2 relapses in the previous 2 years, or had the presence of a T1 Gd-enhancing lesion in the previous year. Patients were also required to have an EDSS score from 0 to 5.5 at baseline. Neurological evaluations were performed at baseline, every 12 weeks, and at the time of a suspected relapse. Brain MRI scans were performed at baseline and at weeks 12, 24, 48, and 96.

- **Primary Endpoint:** The primary outcome of both ULTIMATE I and ULTIMATE II was the annualized relapse rate (ARR) over the treatment period. Additional outcome measures included: the total number of MRI T1 Gd-enhancing lesions by week 96, the total number of new or enlarging MRI T2 hyperintense lesions by week 96, and time to confirmed disability progression for at least 12 weeks. Disability progression was defined as an increase of ≥ 1 point from the baseline EDSS score that was attributable to MS when the baseline score was ≤ 5.5 and ≥ 0.5 points when the baseline score was >5.5 . Confirmed disability progression was evaluated in a pooled analysis of ULTIMATE I and ULTIMATE II. Disability progression was considered confirmed

when the increase in the EDSS was confirmed at a regularly scheduled visit 12 weeks after the initial documentation of neurological worsening.

- **Results:** Briumvi™ significantly lowered the ARR compared to teriflunomide in both trials. In the ULTIMATE I trial, the ARRs were 0.076 with Briumvi™ and 0.188 with teriflunomide [relative reduction (RR): 59%; P<0.001]. In the ULTIMATE II trial, the ARRs were 0.091 and 0.178, respectively (RR: 49%; P=0.002). Briumvi™ statistically significantly reduced the number of T1 Gd-enhancing lesions and the number of new or enlarging T2 lesions in both trials compared to teriflunomide. There was no statistically significant difference in disability progression confirmed at 12 weeks between Briumvi™-treated and teriflunomide-treated patients.

Cost Comparison:

Medication	Cost Per Unit	Cost Per Year
Aubagio® (teriflunomide) 14mg tablet	\$300.99	\$108,356.40 [¥]
Kesimpta® (ofatumumab) 20mg/0.4mL Sensoready® Pen	\$8,164.09	\$106,133.17 [‡]
Ocrevus® (ocrelizumab) 300mg/10mL SDV	\$1,877.56	\$75,102.40 [*]
Briumvi™ (ublituximab-xiiy) 150mg/6mL SDV	\$1,638.89	\$59,000.04[†]

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

[¥]Aubagio® cost per year based on maintenance dose of 14mg once daily.

[‡]Kesimpta® cost per year based on maintenance dose of 20mg every 4 weeks.

^{*}Ocrevus® cost per year based on maintenance dose of 600mg every 6 months.

[†]Briumvi™ cost per year based on maintenance dose of 450mg every 24 weeks.

SDV = single-dose vial; Unit = each tablet for Aubagio®, each pen for Kesimpta®, and each mL for Ocrevus® and Briumvi™

Cost Comparison: Fingolimod Products

Medication	Cost Per Unit	Cost Per Month	Cost Per Year*
Tascenso ODT® (fingolimod) 0.5mg ODT	\$347.43	\$10,422.90	\$125,074.80
Gilenya® (fingolimod) 0.5mg capsule	\$337.92	\$10,137.60	\$121,651.20
generic fingolimod 0.5mg capsule	\$74.03 [†]	\$2,220.90	\$26,650.80

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

*Cost per year based on maintenance dose of 0.5mg once daily

[†]Cost per capsule varies per NDC.

ODT = orally disintegrating tablet; Unit = capsule or ODT

Recommendations

The College of Pharmacy recommends the prior authorization of Briumvi™ (ublituximab-xiiy) and Tascenso ODT® (fingolimod ODT) with the following criteria (shown in red):

Briumvi™ (Ublituximab-xiyy) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Member must have had at least 1 relapse in the previous 12 months; and
4. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
5. Briumvi™ must be administered by a health care professional in a setting with appropriate equipment and personnel to manage anaphylaxis or serious infusion reactions. Approvals will not be granted for self-administration. Prior authorization requests must indicate how Briumvi™ will be administered; and
 - a. Briumvi™ must be shipped via cold chain supply to the facility where the member is scheduled to receive treatment; or
 - b. Briumvi™ must be shipped via cold chain supply to the member's home and administered by a home health care provider and the member or member's caregiver must be trained on the proper storage of Briumvi™; and
6. Prescriber must confirm that member will be monitored for 1 hour following the first 2 infusions and as indicated for subsequent infusions; and
7. Prescriber must verify hepatitis B virus (HBV) testing has been performed prior to initiating Briumvi™ therapy and member does not have active HBV; and
8. Verification from the prescriber that member has no active infection(s); and
9. Verification from the prescriber that female members are not currently pregnant and will use contraception while receiving Briumvi™ therapy and for 6 months after the last infusion of Briumvi™; and
10. Approvals will be for the duration of 1 year, and compliance will be checked for continued approval.

Tascenso ODT® [Fingolimod Orally Disintegrating Tablet (ODT)] Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Member must have had at least 1 relapse in the previous 12 months; and
4. Approvals will not be granted for concurrent use with other disease-modifying therapies; and

5. Prescriber must confirm that member will be observed in the prescriber's office for signs and symptoms of bradycardia for 6 hours after the first dose; and
6. Verification from the prescriber that member has no active infection(s); and
7. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
8. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
9. A patient-specific, clinically significant reason why the member cannot use Gilenya® (fingolimod) capsules must be provided; and
10. Compliance will be checked for continued approval every 6 months.

Additionally, the College of Pharmacy recommends updating the Ocrevus® (ocrelizumab) approval criteria to address the safe and proper administration of the medication and to be consistent with the approval criteria for Briumvi™ (ublituximab-xiiy) (changes shown in red):

Ocrevus® (Ocrelizumab) Approval Criteria:

1. An FDA approved diagnosis of primary progressive forms of multiple sclerosis (MS) or relapsing forms of MS, to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Approvals will not be granted for concurrent use with other disease modifying therapies; and
- ~~4. Ocrevus® must be administered in a setting with appropriate equipment and personnel to manage anaphylaxis or serious infusion reactions. The prescriber must agree that the member will be monitored for 1 hour after each infusion; and~~
5. Ocrevus® must be administered by a health care professional in a setting with appropriate equipment and personnel to manage anaphylaxis or serious infusion reactions. Approvals will not be granted for self-administration. Prior authorization requests must indicate how Ocrevus® will be administered; and
 - a. Ocrevus® must be shipped via cold chain supply to the facility where the member is scheduled to receive treatment; or
 - b. Ocrevus® must be shipped via cold chain supply to the member's home and administered by a home health care provider and the member or member's caregiver must be trained on the proper storage of Ocrevus®; and
6. Prescriber must confirm that member will be monitored for 1 hour after each infusion; and

7. Prescriber must verify hepatitis B virus (HBV) testing has been performed prior to initiating Ocrevus® therapy and member does not have active HBV; and
8. Verification from the prescriber that member has no active infection(s); and
9. Verification from the prescriber that female members are not currently pregnant and will use contraception while receiving Ocrevus® therapy and for 6 months after the last infusion of Ocrevus®; and
10. **Approvals will be for the duration of 1 year, and** compliance will be checked for continued approval.

The College of Pharmacy also recommends updating the Mavenclad® (cladribine) approval criteria to be consistent with the package labeling on duration of use (changes shown in red):

Mavenclad® (Cladribine) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include relapsing remitting disease and active secondary progressive disease, in adults; and
2. Requests for use in patients with clinically isolated syndrome (CIS) will not generally be approved; and
3. **Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and**
4. Member must have had at least 1 relapse in the previous 12 months; and
5. Member must have had an inadequate response to 2 or more medications indicated for the treatment of MS; and
6. Prescriber must confirm that the member does not have any contraindications for use of cladribine; and
7. Prescriber must confirm member does not have an active malignancy; and
8. Prescriber must confirm that female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
9. Prescriber must attest that female and male members of reproductive potential plan to use effective contraception during cladribine dosing and for 6 months after the last dose in each treatment course; and
10. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
11. Verification from the prescriber that member has no active infection(s); and
12. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and

13. The member's recent weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
14. Quantity limits according to package labeling will apply; and
15. Approvals will be limited to a total duration of 1 year of therapy, to include 2 treatment courses, according to package labeling.

Finally, the College of Pharmacy recommends the following changes to the MS medications approval criteria to be consistent with clinical practice (changes shown in red):

Multiple Sclerosis Interferon Medications	
Tier-1	Tier-2
interferon β - 1a (Avonex [®])	interferon β - 1a (Rebif [®])
interferon β - 1b (Betaseron [®])	interferon β - 1b (Extavia [®])
peginterferon β - 1a (Plegridy [®])	

Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

Multiple Sclerosis (MS) Interferon Medications Approval Criteria:

1. An FDA approved diagnosis of clinically isolated syndrome, relapsing forms of MS, or secondary progressive forms of MS; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Authorization of Tier-2 medications requires previous failure of preferred Tier-1 medication(s) defined as:
 - a. Occurrence of an exacerbation after 6 months; or
 - b. Significant increase in magnetic resonance imaging (MRI) lesion after 6 months; or
 - c. Adverse reactions or intolerable side effects; and
4. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
5. Compliance will be checked for continued approval every 6 months.

Ampyra[®] (Dalfampridine) Approval Criteria:

1. An FDA approved indication to improve walking in adult members with multiple sclerosis (MS); and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Kurtzke Expanded Disability Status Scale (EDSS) score between 3 and 7.5; and
4. Initial approvals will be for the duration of 90 days. If the member has responded well to treatment and the prescriber states that the member has shown improvement or the drug was effective, the member may receive authorization for 1 year; and
5. A quantity limit of 60 tablets for 30 days will apply.

6. Ampyra® may be used with other MS therapies.

Aubagio® (Teriflunomide) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. Brand name Aubagio® is preferred. Use of generic teriflunomide will require a patient-specific, clinically significant reason why the member cannot use the brand formulation; and
5. All of the following will be required for initiation of treatment:
 - a. Verification that female members are not pregnant and are currently using reliable contraception; and
 - b. Verification that the member has no active infection(s); and
 - c. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
 - d. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
 - e. Blood pressure (BP) measurement and verification that BP is being monitored; and
 - f. Verification that the member does not have tuberculosis (TB), or completion of standard medical treatment for members with TB; and
6. Initial approvals of Aubagio® will be for 6 months, after which time all of the following will be required for further approval:
 - a. Medication compliance; and
 - b. Repeat CBC and verification that counts are acceptable to the prescriber; and
 - c. Repeat LFTs and verification that levels are acceptable to the prescriber; and
 - d. Verification that female members are not pregnant and will continue using reliable contraception; and
 - e. Verification that BP and signs of renal failure are being monitored; and
7. Compliance will be checked for continued approval every 6 months; and
8. A quantity limit of 30 tablets per 30 days will apply.

Bafiertam® (Monomethyl Fumarate) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. Verification from the prescriber that member has no serious active infection(s); and
5. Complete blood counts (CBC), including lymphocyte count, and verification that levels are acceptable to the prescriber; and
6. Liver function tests (LFTs) and total bilirubin levels and verification that levels are acceptable to the prescriber; and
7. Intolerable adverse effects associated with a trial of Tecfidera® (dimethyl fumarate) and Vumerity® (diroximel fumarate) that are not expected to occur with Bafiertam® or a patient-specific, clinically significant reason why trials of Tecfidera® and Vumerity® are not appropriate for the member must be provided; and
8. Verification that CBC, including lymphocyte count, levels are acceptable to the prescriber in addition to compliance will be required for continued approval every 6 months; and
9. A quantity limit of 4 capsules per day will apply.

Copaxone® (Glatiramer Acetate) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. Approvals for the 40mg strength of Copaxone® will require a patient-specific, clinically significant reason why the member cannot use the 20mg strength; and
5. Approvals for the generic formulation of either strength of Copaxone®, including Glatopa®, will require a patient-specific, clinically significant reason why the member cannot use the brand formulation (brand formulation is preferred); and
6. Compliance will be checked for continued approval every 6 months.

Gilenya® (Fingolimod) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS)*, to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease; and
(*The manufacturer of Gilenya® has provided a supplemental rebate to remove the requirement of “at least 1 relapse in the previous 12 months, or transitioning from existing MS therapy”; however, Gilenya® will follow the original criteria if the manufacturer chooses not to participate in supplemental rebates); and
2. **Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and**
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. **Prescriber must confirm that member will** ~~The first dose should~~ be observed in the prescriber’s office for signs and symptoms of bradycardia for 6 hours after the first dose; and
5. Verification from the prescriber that member has no active infection(s); and
6. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
7. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
8. Compliance will be checked for continued approval every 6 months.

Kesimpta® (Ofatumumab) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. **Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and**
3. Member must have had at least 1 relapse in the previous 12 months; and
4. The prescriber must verify Hepatitis B virus (HBV) screening is performed before the first dose of Kesimpta® and the member does not have an active HBV infection; and
5. Prescriber must agree to monitor quantitative serum immunoglobulin level before, during, and after discontinuation of treatment with Kesimpta® until B-cell repletion; and
6. Prescriber must verify the member has no active infection(s); and
7. Prescriber must verify the first injection of Kesimpta® will be administered by a health care professional prepared to manage injection-related adverse reactions; and
8. Kesimpta® must be shipped via cold chain supply and the member or member’s caregiver must be trained on the proper storage and subcutaneous (sub-Q) administration of Kesimpta®; and

9. Female members must not be pregnant and must have a negative pregnancy test prior to initiation of treatment with Kesimpta®; and
10. Female members of reproductive potential must use an effective method of contraception during treatment and for 6 months after stopping Kesimpta®; and
11. A quantity limit of 1 syringe or prefilled Sensoready® Pen per month will apply. Initial dosing titration will be approved for a quantity limit override upon meeting Kesimpta® approval criteria; and
12. Compliance will be checked for continued approval every 6 months.

Lemtrada® (Alemtuzumab) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include relapsing remitting disease and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Member must have had an inadequate response to 2 or more medications indicated for the treatment of MS; and
 - a. Lemtrada® must be administered in a setting with appropriate equipment and personnel to manage anaphylaxis or serious infusion reactions. The prescriber must agree that the member will be monitored for 2 hours after each infusion; and
4. The prescriber must agree to monitor complete blood counts (CBC) with differential, serum creatinine levels, and urinalysis with urine cell counts at periodic intervals for 48 months after the last dose of Lemtrada®; and
5. The prescriber must agree that baseline and yearly skin examinations will be performed while the member is utilizing Lemtrada® therapy; and
6. Member, prescriber, pharmacy, and health care facility must all enroll in the Lemtrada® Risk Evaluation and Mitigation Strategy (REMS) Program and maintain enrollment throughout therapy.

Mayzent® (Siponimod) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Member must have been assessed for CYP2C9 genotype:
 - a. Members with a CYP2C9*3/*3 genotype will not generally be approved; or
 - b. Members with a CYP2C9*1/*3 or *2/*3 genotype will not be approved for doses exceeding 1mg per day; or

- c. All other genotypes CYP2C9 *1/*1, *1/*2, or *2/*2 will be approved for 2mg per day; and
4. Member must not have any contraindication for use of siponimod including:
 - a. CYP2C9*3/*3 genotype; or
 - b. Experienced myocardial infarction (MI), unstable angina, stroke, transient ischemic attack (TIA), decompensated heart failure (HF) requiring hospitalization, or Class III/IV HF in the last 6 months; or
 - c. Presence of Mobitz type II second-degree, third-degree atrioventricular (AV) block, or sick sinus syndrome, unless member has a functioning pacemaker; and
5. Member must not have received prior treatment with alemtuzumab; and
6. Verification from the prescriber that member has no active infection(s); and
7. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
8. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
9. Ophthalmic evaluation and verification that member will be monitored for changes in vision throughout therapy; and
10. Verification from the prescriber that the member has been assessed for medications and conditions that cause reduction in heart rate (HR) or AV conduction delays and that the member will be followed with appropriate monitoring per package labeling; and
11. Verification from the prescriber that the member has been assessed for previous confirmed history of chickenpox or vaccination against varicella. Members without history of chickenpox or varicella vaccination should receive a full course of varicella vaccine prior to commencing treatment with Mayzent®; and
12. Verification from the prescriber that members with sinus bradycardia (HR <55 beats per minute), first- or second-degree AV block (Mobitz type I), or a history of HF or MI will be monitored following the first dose for a minimum of 6 hours; and
13. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
14. Female members of reproductive potential must be willing to use effective contraception during treatment with Mayzent® and for at least 10 days after discontinuing treatment; and
15. Member must have had an inadequate response to Gilenya® (fingolimod) or a patient-specific, clinically significant reason why fingolimod is not appropriate for the member must be provided; and
16. Compliance will be checked for continued approval every 6 months; and

17. Quantity limits according to package labeling will apply.

Ponvory® (Ponesimod) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. **Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and**
3. Member must not have any contraindications for use of Ponvory® including:
 - a. Myocardial infarction (MI), unstable angina, stroke, transient ischemic attack (TIA), decompensated heart failure (HF) requiring hospitalization, or NYHA Class III/IV HF in the last 6 months; or
 - b. Presence of Mobitz type II second-degree, third-degree atrioventricular (AV) block, or sick sinus syndrome, unless member has a functioning pacemaker; and
4. Member must not have received prior treatment with alemtuzumab; and
5. Member must not be concurrently using strong CYP3A4 and UGT1A1 inducers (e.g., rifampin, phenytoin, carbamazepine); and
6. Verification from the prescriber that the member has no active infection(s); and
7. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
8. Verification from the prescriber that the member has undergone an electrocardiogram (ECG) to determine whether preexisting conduction abnormalities are present before initiating Ponvory®; and
9. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
10. Verification from the prescriber that the member's blood pressure will be monitored during treatment with Ponvory®; and
11. Verification from the prescriber that the member has undergone an ophthalmic evaluation prior to starting therapy with Ponvory® and the member will be monitored for changes in vision throughout therapy; and
12. Verification from the prescriber that the member has been assessed for medications and conditions that cause reduction in heart rate or AV conduction delays and the member will be followed with appropriate monitoring per package labeling; and
13. Verification from the prescriber that the member has a previous confirmed history of chickenpox or vaccination against varicella. Members without a history of chickenpox or varicella vaccination should receive a full course of the varicella vaccine prior to commencing treatment with Ponvory®; and

14. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
15. Female members of reproductive potential must be willing to use effective contraception during treatment with Ponvory® and for at least 1 week after discontinuing treatment; and
16. Member must have had an inadequate response to Gilenya® (fingolimod) or a patient-specific, clinically significant reason why fingolimod is not appropriate for the member must be provided; and
17. Compliance will be checked for continued approval every 6 months; and
18. A quantity limit of 30 tablets per 30 days will apply for the 20mg tablet. A quantity limit of 14 tablets per 14 days will apply for the Ponvory® starter pack.

Tecfidera® (Dimethyl Fumarate) Approval Criteria:

1. An FDA approved diagnosis of clinically isolated syndrome, relapsing forms of multiple sclerosis (MS), or secondary progressive forms of MS in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. Verification from the prescriber that member has no active infection(s); and
5. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
6. Liver function tests (LFTs) and total bilirubin levels and verification that levels are acceptable to the prescriber; and
7. Compliance will be checked for continued approval every 6 months; and
8. A quantity limit of 60 tablets per 30 days will apply.

Tysabri® (Natalizumab) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, or Crohn's disease in adults; and
2. For a diagnosis of MS, the following criteria will apply:
 - a. Prescriber must be a neurologist or an advanced care practitioner with a supervising physician that is a neurologist; and
 - b. Approvals will not be granted for concurrent use with other disease-modifying therapies; or
3. For a diagnosis of Crohn's disease, the following criteria will apply:

- a. Treatment with at least 2 different first-line therapeutic categories for Crohn's disease that have failed to yield an adequate clinical response, or a patient-specific, clinically significant reason why the member cannot use all available first- and second-line alternatives must be provided; and
4. Prescriber, infusion center, and member must enroll in the TOUCH Prescribing Program; and
5. Compliance will be checked for continued approval every 6 months.

Vumerity® (Diroximel Fumarate) Approval Criteria:

1. An FDA approved diagnosis of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults; and
2. Prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. Verification from the prescriber that member has no serious active infection(s); and
5. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
6. Liver function tests (LFTs) and total bilirubin levels and verification that levels are acceptable to the prescriber; and
7. Verification from the prescriber that member does not have moderate or severe renal impairment; and
8. Verification from the prescriber that the member has been counseled on proper administration of Vumerity® including caloric and fat intake limits at the time of dosing; and
9. Compliance will be checked for continued approval every 6 months; and
10. A quantity limit of 120 capsules per 30 days will apply.

Zeposia® (Ozanimod) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following in adults:
 - a. Relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease; or
 - b. Moderately to severely active ulcerative colitis (UC); and
2. For the diagnosis of MS, prescriber must be a neurologist (or an advanced care practitioner with a supervising physician that is a neurologist); and
3. Member must not have any contraindications for use of Zeposia® including:

- a. Experienced myocardial infarction (MI), unstable angina, stroke, transient ischemic attack (TIA), decompensated heart failure (HF) requiring hospitalization, or NYHA Class III/IV HF in the last 6 months; or
- b. Presence of Mobitz type II second-degree, third-degree atrioventricular (AV) block, or sick sinus syndrome, unless member has a functioning pacemaker; or
- c. Have severe untreated sleep apnea; or
- d. Concurrent use of monoamine oxidase inhibitors (MAOIs); and
4. Member must not have received prior treatment with alemtuzumab; and
5. Member must not be concurrently using strong CYP2C8 inhibitors/inducers or breast cancer resistance protein (BCRP) inhibitors; and
6. Verification from the prescriber that member has no active infection(s); and
7. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
8. Prescriber must conduct an electrocardiogram (ECG) to determine whether preexisting conduction abnormalities are present before initiating Zeposia®; and
9. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
10. Ophthalmic evaluation and verification that member will be monitored for changes in vision throughout therapy; and
11. Verification from the prescriber that the member has been assessed for medications and conditions that cause reduction in heart rate or AV conduction delays and that the member will be followed with appropriate monitoring per package labeling; and
12. Verification from the prescriber that the member has been assessed for previous confirmed history of chickenpox or vaccination against varicella. Members without a history of chickenpox or varicella vaccination should receive a full course of the varicella vaccine prior to commencing treatment with Zeposia®; and
13. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
14. Female members of reproductive potential must be willing to use effective contraception during treatment with Zeposia® and for at least 3 months after discontinuing treatment; and
15. For the diagnosis of MS, member must have had an inadequate response to Gilenya® (fingolimod) or a patient-specific, clinically significant reason why fingolimod is not appropriate for the member must be provided; or
16. For the diagnosis of UC, member must have had an inadequate response, loss of response, or intolerance to oral aminosalicylates,

corticosteroids, immunomodulators (e.g., 6-mercaptopurine, azathioprine), and a biologic [e.g., tumor necrosis factor (TNF) blocker].
Tier structure applies; and

17. Compliance will be checked for continued approval every 6 months; and

18. A quantity limit of 30 capsules per 30 days will apply.

Utilization Details of MS Medications: Calendar Year 2022

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/CLAIM	CLAIMS/MEMBER
GLATIRAMER ACETATE PRODUCTS					
COPAXONE INJ 20MG/ML	132	22	\$929,565.82	\$7,042.17	6
COPAXONE INJ 40MG/ML	92	15	\$523,078.07	\$5,685.63	6.13
GLATIRAMER INJ 40MG/ML	14	1	\$21,670.25	\$1,547.88	14
GLATOPA INJ 20MG/ML	2	1	\$3,022.77	\$1,511.39	2
SUBTOTAL	240	39	\$1,477,336.91	\$6,155.57	6.15
OFATUMUMAB PRODUCTS					
KESIMPTA INJ 20MG/0.4ML	207	34	\$1,713,761.02	\$8,279.04	6.09
SUBTOTAL	207	34	\$1,713,761.02	\$8,279.04	6.09
DALFAMPRIDINE PRODUCTS					
DALFAMPRIDINE TAB 10MG ER	164	24	\$8,553.51	\$52.16	6.83
AMPYRA TAB 10MG	33	3	\$116,348.66	\$3,525.72	11
SUBTOTAL	197	27	\$124,902.17	\$634.02	7.30
DIMETHYL FUMARATE PRODUCTS					
DIMETHYL FUM CAP 240MG DR	98	20	\$17,970.90	\$183.38	4.9
TECFIDERA CAP 240MG	52	6	\$435,520.73	\$8,375.40	8.67
DIMETHYL FUM STARTER	4	4	\$938.14	\$234.54	1
DIMETHYL FUM CAP 120MG DR	2	2	\$168.82	\$84.41	1
SUBTOTAL	156	32	\$454,598.59	\$2,914.09	4.88
TERIFLUNOMIDE PRODUCTS					
AUBAGIO TAB 14MG	147	22	\$1,251,773.50	\$8,515.47	6.68
AUBAGIO TAB 7MG	3	3	\$25,018.12	\$8,339.37	1
SUBTOTAL	150	25	\$1,276,791.62	\$8,511.94	6
FINGOLIMOD PRODUCTS					
GILENYA CAP 0.5MG	121	19	\$1,117,155.04	\$9,232.69	6.37
FINGOLIMOD CAP 0.5MG	11	5	\$39,787.04	\$3,617.00	2.2
SUBTOTAL	132	24	\$1,156,942.08	\$8,764.71	5.50
DIROXIMEL FUMARATE PRODUCTS					
VUMERITY CAP 231MG	121	23	\$862,710.73	\$7,129.84	5.26
SUBTOTAL	121	23	\$862,710.73	\$7,129.84	5.26
INTERFERON BETA-1A PRODUCTS					
AVONEX PEN KIT 30MCG	62	6	\$450,134.88	\$7,260.24	10.33
REBIF REBIDOSE INJ 44MCG/0.5ML	20	4	\$182,075.88	\$9,103.79	5

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/CLAIM	CLAIMS/MEMBER
REBIF INJ 44MCG/0.5ML	16	2	\$141,477.98	\$8,842.37	8
REBIF REBIDOSE INJ 22MCG/0.5ML	12	1	\$110,526.25	\$9,210.52	12
REBIF INJ 22MCG/0.5ML	8	2	\$73,916.80	\$9,239.60	4
AVONEX PREFL KIT 30MCG	1	1	\$7,352.50	\$7,352.50	1
SUBTOTAL	119	16	\$965,484.29	\$8,113.31	7.44
SIPONIMOD PRODUCTS					
MAYZENT TAB 2MG	27	3	\$230,026.76	\$8,519.51	9
MAYZENT STARTER PAK	1	1	\$857.47	\$857.47	1
SUBTOTAL	28	4	\$230,884.23	\$8,245.87	7
OZANIMOD PRODUCTS					
ZEPOSIA CAP 0.92MG	26	3	\$200,561.48	\$7,713.90	8.67
SUBTOTAL	26	3	\$200,561.48	\$7,713.90	8.67
INTERFERON BETA-1B PRODUCTS					
BETASERON INJ 0.3MG	19	2	\$159,893.84	\$8,415.47	9.5
SUBTOTAL	19	2	\$159,893.84	\$8,415.47	9.5
CLADRIBINE PRODUCTS					
MAVENCLAD 7-PAK 10MG	6	4	\$380,397.62	\$63,399.60	1.5
MAVENCLAD 10-PAK 10MG	4	2	\$365,705.24	\$91,426.31	2
MAVENCLAD 8-PAK 10MG	3	3	\$211,152.23	\$70,384.08	1
MAVENCLAD 9-PAK 10MG	2	2	\$164,572.84	\$82,286.42	1
MAVENCLAD 5-PAK 10MG	2	1	\$91,441.72	\$45,720.86	2
MAVENCLAD 6-PAK 10MG	1	1	\$51,757.99	\$51,757.99	1
SUBTOTAL	18	13	\$1,265,027.64	\$70,279.31	1.38
NATALIZUMAB PRODUCTS					
TYSABRI INJ 300MG/15ML	13	1	\$92,067.63	\$7,082.13	13
SUBTOTAL	13	1	\$92,067.63	\$7,082.13	13
OCRELIZUMAB PRODUCTS					
OCREVUS INJ 300MG/10ML	12	8	\$427,235.64	\$35,602.97	1.5
SUBTOTAL	12	8	\$427,235.64	\$35,602.97	1.5
TOTAL	1,438	210*	\$10,408,197.87	\$7,237.97	6.85

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

CAP = capsule; DR = delayed-release; ER = extended-release; FUM = fumarate; INJ = injection; PAK = pack; PREFL = prefilled; TAB = tablet

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/MEMBER	COST/CLAIM
TYSABRI INJ 300MG/15ML (J2323)	179	21	\$1,269,339	8.52	\$7,091.28
OCREVUS INJ 300MG/10ML (J2350)	133	78	\$3,889,055.70	1.71	\$29,241.02
LEMTRADA INJ 12MG/1.2ML (J0202)	1	1	\$25,549.80	1	\$25,549.80
TOTAL	313*	100*	\$5,183,944.50	3.13	\$16,562.12

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

*Total number of unduplicated claims

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- ¹ U.S. Food and Drug Administration (FDA). Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations. Available online at: <https://www.accessdata.fda.gov/scripts/cder/ob/>. Last revised 02/2023. Last accessed 02/13/2023.
- ² TG Therapeutics. TG Therapeutics Announces FDA Approval of Briumvi™ (Ublituximab-xiyy). Available online: <https://ir.tgtherapeutics.com/news-releases/news-release-details/tg-therapeutics-announces-fda-approval-briumvitm-ublituximab>. Issued 12/28/2022. Last accessed 02/13/2023.
- ³ Roy S, Mandowara K. FDA Approves TG Therapeutics' Multiple Sclerosis Drug; Shares Surge. *Medscape*. Available online at: <https://www.medscape.com/viewarticle/986262>. Issued 12/29/2022. Last accessed 02/13/2023.
- ⁴ Shapiro L. Tascenso ODT®, a Gilenya® Alternative, Wins New FDA Approval in MS. *Multiple Sclerosis News Today*. Available online at: <https://multiplesclerosisnewstoday.com/news-posts/2023/01/19/tascenso-odt-gilenya-bioequivalent-wins-fda-approval-ms/>. Issued 01/19/2023. Last accessed 02/13/2023.
- ⁵ Cycle Pharmaceuticals. Cycle Pharmaceuticals to Launch Tascenso ODT® (Fingolimod) in US in Quarter 1 2023. Available online at: <https://cyclepharma.com/tascenso-odt-fingolimod-launch/>. Issued 11/01/2022. Last accessed 02/13/2023.
- ⁶ Sanofi. Media Update: Patient Enrollment of Phase 3 Tolebrutinib Trials Paused in the U.S. Available online at: <https://www.sanofi.com/en/media-room/press-releases/2022/2022-06-30-05-30-00-2471767>. Issued 06/30/2022. Last accessed 02/13/2023.
- ⁷ Jenks, S. Off-Label Drug Lowers Relapses in Multiple Sclerosis. *Medpage Today*. Available online at: <https://www.medpagetoday.com/neurology/multiplesclerosis/99838>. Issued 07/21/2022. Last accessed 02/13/2023.
- ⁸ AB Science. AB Science Announced Today that Its Phase III Clinical Trial (AB20009) in Progressive Forms of Multiple Sclerosis Has Been Approved by the FDA. Available online at: <https://www.ab-science.com/ab-science-has-received-approval-from-the-u-s-food-and-drug-administration-fda-to-initiate-the-confirmatory-phase-3-study-with-masitinib-in-the-treatment-of-progressive-multiple-sclerosis/>. Issued 12/29/2022. Last accessed 02/13/2023.
- ⁹ AB Science. Pipeline. Available online at: <https://www.ab-science.com/pipeline/masitinib-overview/multiple-sclerosis/>. Last accessed 02/13/2023.
- ¹⁰ Carvalho T. Evobrutinib for Multiple Sclerosis. *Multiple Sclerosis News Today*. Available online at: <https://multiplesclerosisnewstoday.com/evobrutinib/>. Issued 05/31/2022. Last accessed 02/13/2023.
- ¹¹ Wexler M. Fenebrutinib for Multiple Sclerosis. *Multiple Sclerosis News Today*. Available online at: <https://multiplesclerosisnewstoday.com/fenebrutinib/>. Issued 06/01/2022. Last accessed 02/13/2023.
- ¹² Genentech Inc. Pipeline. Available online at: <https://www.gene.com/medical-professionals/pipeline>. Last accessed 02/13/2023.
- ¹³ Wexler M. Remibrutinib for Multiple Sclerosis. *Multiple Sclerosis News Today*. Available online at: <https://multiplesclerosisnewstoday.com/remibrutinib-multiple-sclerosis/>. Issued 06/21/2022. Last accessed 02/13/2023.
- ¹⁴ Novartis. Pipeline. Available online at: https://www.novartis.com/research-development/novartis-pipeline?search_api_fulltext=&field_therapeutic_area%5B%5D=2906. Last accessed 02/13/2023.
- ¹⁵ Briumvi™ (Ublituximab-xiyy) Prescribing Information. TG Therapeutics. Available online at: <https://www.tgtherapeutics.com/label-prescribing-info/uspi-briumvi.pdf>. Last revised 12/2022. Last accessed 02/13/2023.



Calendar Year 2022 Annual Review of Short-Acting Beta₂ Agonists (SABAs) and 30-Day Notice to Prior Authorize Airsupra™ (Albuterol/Budesonide)

Oklahoma Health Care Authority
March 2023

Current Prior Authorization Criteria

Short-Acting Beta ₂ Agonists	
Tier-1	Tier-2
albuterol HFA (ProAir® HFA) – Brand Preferred	albuterol HFA (generic)
albuterol inhalation powder (ProAir® RespiClick®)	albuterol inhalation powder (ProAir® Digihaler®)*
albuterol HFA (Proventil® HFA) – Brand Preferred	levalbuterol HFA (generic)
albuterol HFA (Ventolin® HFA) – Brand Preferred	
levalbuterol HFA (Xopenex® HFA) – Brand Preferred	

Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

*Additional criteria applies.

HFA = hydrofluoroalkane

Short-Acting Beta₂ Agonists Tier-2 Approval Criteria:

1. An FDA approved or clinically accepted diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use all available Tier-1 medications must be provided; and
3. Approval of generic albuterol HFA or levalbuterol HFA requires a patient-specific, clinically significant reason the member cannot use the brand formulation.

ProAir® Digihaler® (Albuterol Inhalation Powder) Approval Criteria:

1. An FDA approved or clinically accepted diagnosis; and
2. A patient-specific, clinically significant reason why the member requires the ProAir® Digihaler® formulation over all available Tier-1 medications must be provided; and
3. The prescriber agrees to closely monitor member adherence; and
4. The member should be capable and willing to use the Companion Mobile App and follow the *Instructions for Use* and ensure the ProAir® Digihaler® Companion Mobile App is compatible with their specific smartphone; and

5. Member's phone camera must be functional and able to scan the inhaler QR code and register the ProAir® Digihaler® inhaler; and
6. Approvals will be for the duration of 3 months. For continuation consideration, documentation demonstrating positive clinical response and patient compliance >80% with prescribed therapy must be provided. In addition, a patient-specific, clinically significant reason why the member cannot transition to Tier-1 medications must be provided. Tier structure rules continue to apply.

Xopenex® (Levalbuterol) Nebulizer Solution Approval Criteria:

1. A free-floating 90 days of therapy per 365 days will be in place.
2. Use of this product in excess of 90 days of therapy in a 365-day period will require a patient-specific, clinically significant reason why the member is unable to use long-acting bronchodilator and/or inhaled corticosteroid (ICS) therapy for long-term control as recommended in the National Asthma Education and Prevention Program (NAEPP) guidelines; and
3. A patient-specific, clinically significant reason why the member cannot use a metered-dose inhaler (MDI) must be provided; and
4. Clinical exceptions will be made for members with chronic obstructive pulmonary disease (COPD); and
5. A quantity limit of 288mL per 30 days will apply.

Utilization of Inhaled SABAs: Calendar Year 2022

Comparison of Calendar Years: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/Claim	Cost/Day	Total Units	Total Days
2021	102,832	231,666	\$10,859,649.22	\$46.88	\$2.05	10,216,955	5,295,689
2022	123,230	278,551	\$12,824,874.45	\$46.04	\$2.01	12,532,512	6,365,907
% Change	19.8%	20.2%	18.1%	-1.8%	-2.0%	22.7%	20.2%
Change	20,398	46,885	\$1,965,225.23	-\$0.84	-\$0.04	2,315,557	1,070,218

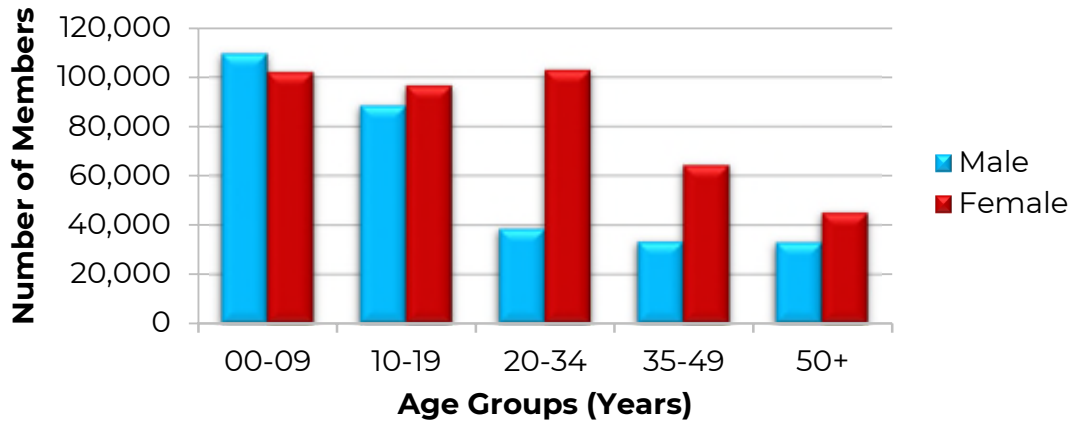
Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

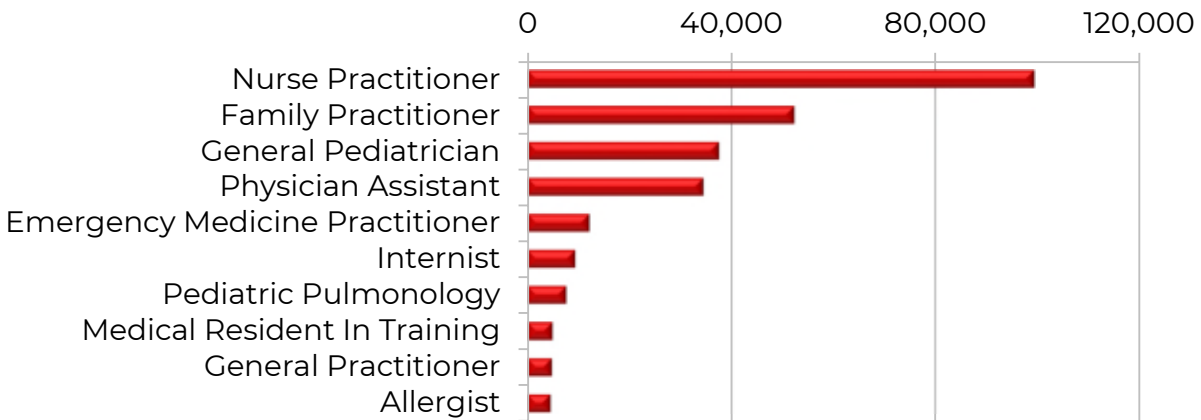
- Aggregate drug rebates collected during fiscal year 2022 (07/01/2021 to 06/30/2022) for SABAs totaled \$2,903,869.34.[^] Rebates are collected after reimbursement for the medication and are not reflected in this report. Please note, fiscal year 2022 aggregate drug rebate totals have been included in this report for informational purposes only, as the rebates for calendar year 2022 are still being collected at this time. The costs included in this report do not reflect net costs.

[^] Important considerations: Aggregate drug rebates are based on the date the claim is paid rather than the date dispensed. Claims data are based on the date dispensed.

Demographics of Members Utilizing SABAs



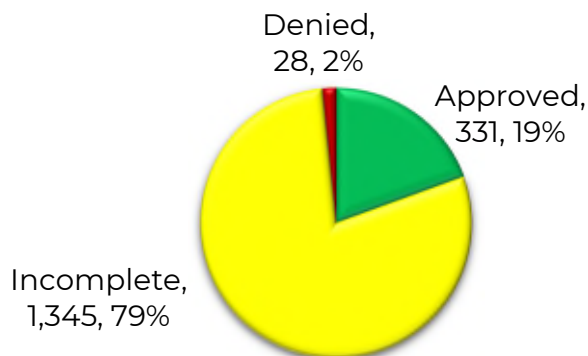
Top Prescriber Specialties of SABAs by Number of Claims



Prior Authorization of SABAs

There were 1,704 prior authorization requests submitted for inhaled short-acting beta₂ agonists during calendar year 2022. The following chart shows the status of the submitted petitions for calendar year 2022.

Status of Petitions



Market News and Updates^{1,2,3}

Anticipated Patent Expiration(s):

- Airsupra™ (albuterol/budesonide inhalation aerosol): May 2030
- ProAir® RespiClick® (albuterol sulfate inhalation powder): January 2032
- ProAir® Digihaler® (albuterol sulfate inhalation powder): February 2041

New U.S. Food and Drug Administration (FDA) Approval(s):

- **October 2022:** Teva Pharmaceuticals announced that they have discontinued manufacturing brand name ProAir® HFA (albuterol sulfate) inhalation aerosol.
- **January 2023:** The FDA approved Airsupra™ (albuterol/budesonide) inhalation aerosol for as needed treatment or prevention of bronchoconstriction and to reduce the risk of asthma attacks in patients 18 years of age or older with asthma. It is the first combination of an inhaled corticosteroid (ICS) and a SABA.

Airsupra™ (Albuterol/Budesonide) Inhalation Aerosol Product Summary⁴

Indication(s): Combination of a SABA (albuterol) and an ICS (budesonide) indicated for as needed treatment or prevention of bronchoconstriction and to reduce the risk of exacerbation in patients 18 years of age and older with asthma

How Supplied: Pressurized metered dose inhaler (MDI) that delivers a combination of albuterol 90mcg and budesonide 80mcg per actuation

Dosing and Administration:

- Recommended dose is 180mcg/160mcg (administered as 2 actuations of albuterol/budesonide 90mcg/80mcg) by oral inhalation as needed for asthma symptoms
- Should not exceed more than 6 doses (12 inhalations) in a 24-hour period
- Inhaler should be primed prior to first use and should be re-primed when inhaler has not been used for >7 days, is dropped, or after cleaning
- Should be discarded 12 months after the foil pouch is opened or when the dose counter displays 0, whichever comes first

Mechanism of Action:

- Albuterol acts on the beta₂-adrenergic receptors. Albuterol relaxes the smooth muscles of all airways and acts as a functional antagonist to relax the airway irrespective of the spasmogen involved, thus protecting against all bronchoconstrictor challenges.

- Budesonide is an anti-inflammatory corticosteroid that exhibits potent glucocorticoid activity and weak mineralocorticoid activity. The precise mechanism of corticosteroid actions in asthma is not known.

Warnings and Precautions:

- Deterioration of Asthma: If patients continue to experience symptoms after using Airsupra™ or require more doses than usual, this may be a marker of destabilization of asthma, and the patient and their treatment regimen should be evaluated.
- Paradoxical Bronchospasm: If paradoxical bronchospasm occurs following doses with Airsupra™, it should be discontinued immediately, and alternative therapy should be instituted. Paradoxical bronchospasm frequently occurs with the first use of a new canister.
- Cardiovascular (CV) Effects: Beta₂-adrenergic agonists can produce clinically significant CV effects in some patients as measured by increases in pulse rate, blood pressure, or other symptoms. Therefore, Airsupra™ should be used with caution in patients with CV disorders, especially coronary insufficiency, cardiac arrhythmias, and hypertension.
- Do Not Exceed Recommended Dosage: As with other inhaled drugs containing beta-adrenergic agonists, Airsupra™ should not be used more than the maximum daily dose. Clinically significant CV effects and fatalities have been reported in association with excessive use of inhaled sympathomimetic drugs.
- Hypersensitivity Reactions, Including Anaphylaxis: Hypersensitivity reactions can occur after administration of albuterol and budesonide, as demonstrated by cases of anaphylaxis, angioedema, bronchospasm, oropharyngeal edema, rash, and urticaria. Airsupra™ should be discontinued if such reactions occur.
- Risk of Sympathomimetic Amines with Certain Coexisting Conditions: Therapies containing sympathomimetic amines should be used with caution in patients with convulsive disorders, hyperthyroidism, or diabetes mellitus and in patients who are unusually responsive to sympathomimetic amines. Large doses of intravenous albuterol have been reported to aggravate preexisting diabetes mellitus and ketoacidosis.
- Hypokalemia: Beta-adrenergic agonist medications may produce significant hypokalemia in some patients, possibly through intracellular shunting, which has the potential to produce adverse CV effects. The decrease in serum potassium is usually transient, not requiring supplementation.
- Immunosuppression and Risk of Infections: Patients who are using drugs that suppress the immune system are more susceptible to infection. ICS medications should be used with caution, if at all, in

patients with active or latent tuberculosis infection of the respiratory tract; untreated systemic fungal, bacterial, viral, or parasitic infections; or ocular herpes simplex.

- Oropharyngeal Candidiasis: Localized infections of the mouth and pharynx with *Candida albicans* have occurred in patients treated with ICS agents. When such an infection develops, it should be treated with appropriate local or systemic antifungal therapy while on treatment with Airsupra™. Patients should rinse their mouths with water, without swallowing, following administration of Airsupra™ to help reduce the risk of oropharyngeal candidiasis.
- Hypercorticism and Adrenal Suppression: There is a possibility of systemic absorption with ICS medications. Patients treated with Airsupra™ should be carefully observed for any evidence of systemic corticosteroid effects. If such effects occur, appropriate therapy should be initiated.
- Reduction in Bone Mineral Density (BMD): Decreases in BMD have been observed with long-term administration of products containing an ICS. Patients with major risk factors for decreased bone mineral content, such as prolonged immobilization, family history of osteoporosis, postmenopausal status, tobacco use, advanced age, poor nutrition, or chronic use of drugs that can reduce bone mass (e.g., anticonvulsants, oral corticosteroids) should be monitored and treated with established standards of care.
- Glaucoma and Cataracts: Glaucoma, increased intraocular pressure, and cataracts have been reported following the long-term administration of an ICS. Referral to an ophthalmologist should be considered for patients who develop ocular symptoms.
- Drug Interactions with Strong Cytochrome P450 3A4 Inhibitors: Caution should be exercised when considering the co-administration of Airsupra™ with long-term ketoconazole and other known strong CYP3A4 inhibitors (e.g., ritonavir, atazanavir, clarithromycin, indinavir, itraconazole, nefazodone, nelfinavir, saquinavir, telithromycin) because adverse effects related to increased systemic exposure to budesonide may occur.
- Effects on Growth in Pediatric Patients: ICS medications may cause a reduction in growth velocity when administered to pediatric patients. The safety and effectiveness of Airsupra™ have not been established in pediatric patients, and it is not indicated for use in this population.

Safety:

- Pregnancy: Available data from epidemiological studies and post marketing case reports of pregnancy outcomes following inhaled albuterol use do not consistently demonstrate a risk of major defects or miscarriage. In a peri- and post-natal development study, rats were

dosed from gestation day 15 to postpartum day 21 and budesonide had no effects on delivery but did influence growth and development of offspring.

- Lactation: There are no available data on the effects of Airsupra™ on the breastfed child or on milk production.
- Pediatrics: The safety and effectiveness of Airsupra™ have not been established in pediatric patients.
- Geriatrics: In clinical studies with Airsupra™, there were 272 patients 65 years of age and older. No overall differences in safety or effectiveness were observed between patients 65 years of age and older and younger adult patients.
- Hepatic and Renal Impairment: Formal pharmacokinetic studies using Airsupra™ have not been conducted in patients with hepatic and renal impairment.

Contraindication(s):

- Hypersensitivity to albuterol, budesonide, or to any of the excipients

Adverse Reactions:

- The most common adverse reactions (incidence $\geq 1\%$) are headache, oral candidiasis, cough, and dysphonia.

Efficacy:

- The efficacy of Airsupra™ was based on data from the MANDALA and DENALI studies. While patients 12 to 17 years of age were included in these studies, Airsupra™ is not approved in this age group; therefore, the efficacy results presented are for adults only.
- MANDALA was a randomized, double-blind, multicenter study and was a variable length exacerbation study with at least 24 weeks in duration. In this study, patients 12 years of age and older were randomized 1:1 to receive at least 1 dose of Airsupra™ or albuterol as needed. Patients were required to be receiving medium to high dose ICS or low to high dose ICS/long-acting beta₂-adrenergic agonists (LABA), with or without another controller medication as maintenance therapy. All patients continued their own maintenance therapy throughout the studies. The primary efficacy endpoint was the time to first severe asthma exacerbation which was defined as worsening or onset of asthma symptoms that required systemic corticosteroids for at least 3 days or an emergency room visit that led to the use of systemic corticosteroids for at least 3 days or a hospitalization for at least 24 hours due to asthma. Compared to those receiving just albuterol, adult patients receiving Airsupra™ experienced a statically significant 28% reduction in the risk of severe asthma exacerbation [hazard ratio (HR): 0.72; 95% confidence interval (CI): 0.60, 0.86; P<0.001].

- DENALI was a double-blind, active-comparator and placebo-controlled lung function study conducted over 12 weeks. The efficacy of Airsupra™ on lung function was evaluated in patients 12 years of age and older with mild to moderate asthma who were previously treated with as-needed SABA alone or with low-dose ICS plus as-needed SABA. Patients were randomized 1:1:1:1 to receive Airsupra™ 180mcg/160mcg, Airsupra™ 180mcg/80mcg, budesonide MDI 160mcg, albuterol MDI 180mcg, or placebo MDI, all administered 4 times daily. The onset of bronchodilation [as defined by a $\geq 15\%$ increase in forced expiratory volume (FEV1) post-dose within 30 minutes on day 1] was observed in 51% of adult patients treated with Airsupra™ 180mcg/160mcg and 43% of adult patients treated with albuterol MDI 180mcg. Following a single dose on day 1, the median time to onset and mean duration of bronchodilation were 7.5 and 186.9 minutes with Airsupra™ 180mcg/160mcg and 10.0 and 167.9 minutes with albuterol MDI 180mcg, respectively.

Cost: Cost information for Airsupra™ is currently not available.

Recommendations

The College of Pharmacy recommends the prior authorization of Airsupra™ (albuterol/budesonide) with the following criteria (shown in red):

Airsupra™ (Albuterol/Budesonide) Approval Criteria:

1. An FDA approved diagnosis of asthma; and
2. Member must be 18 years of age or older; and
3. Member must be using maintenance therapy per the Global Initiative for Asthma (GINA) guidelines; and
4. A patient-specific, clinically significant reason why the member cannot use a long-acting beta₂ agonist (LABA), inhaled corticosteroid (ICS)/LABA combination, or specific individual ICS and short-acting beta₂ agonist (SABA) components must be provided; and
5. Initial approvals will be for the duration of 3 months. For continued consideration, prescriber must verify the member has had a positive clinical response to therapy; and
6. Subsequent approvals will be for the duration of 1 year.

Utilization Details of SABAs: Calendar Year 2022

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
SABA TIER-1 PRODUCTS						
VENTOLIN HFA 90MCG/ACT	43,248	32,137	\$3,109,475.38	\$71.90	1.35	24.25%
PROAIR HFA 90MCG/ACT	22,069	14,511	\$2,084,817.51	\$94.47	1.52	16.26%
PROVENTIL HFA 90MCG/ACT	4,018	3,256	\$391,968.61	\$97.55	1.23	3.06%
PROAIR RESPICLICK 90MCG/ACT	1,413	965	\$108,949.15	\$77.10	1.46	0.85%
XOPENEX HFA 45MCG/ACT	910	377	\$80,624.92	\$88.60	2.4	0.63%
SUBTOTAL	71,658	51,246	\$5,775,835.57	\$80.60	1.40	45.04%
SABA TIER-2 PRODUCTS						
ALBUTEROL HFA 90MCG/ACT	146,073	77,921	\$5,563,076.18	\$38.08	1.87	43.38%
LEVALBUTEROL HFA 45MCG/ACT	8	2	\$675.99	\$84.50	4.00	0.01%
SUBTOTAL	146,081	77,923	\$5,563,752.17	\$38.09	1.87	43.39%
SABA NEBULIZER SOLUTION PRODUCTS						
ALBUTEROL NEB 2.5MG/3ML	41,325	25,947	\$746,117.46	\$18.05	1.59	5.82%
ALBUTEROL NEB 1.25MG/3ML	10,287	7,891	\$364,220.54	\$35.41	1.30	2.84%
ALBUTEROL NEB 0.63MG/3ML	6,458	5,000	\$232,303.22	\$35.97	1.29	1.81%
LEVALBUTEROL NEB 0.63MG/3ML	979	677	\$47,591.50	\$48.61	1.45	0.37%
LEVALBUTEROL NEB 1.25MG/3ML	821	517	\$42,857.51	\$52.20	1.59	0.33%
LEVALBUTEROL NEB 0.31MG/3ML	570	412	\$23,723.29	\$41.62	1.38	0.18%
ALBUTEROL NEB 5MG/ML	348	265	\$18,802.35	\$54.03	1.31	0.15%
LEVALBUTEROL NEB 1.25MG/0.5ML	16	13	\$3,596.04	\$224.75	1.23	0.03%
XOPENEX NEB 1.25MG/3ML	8	1	\$6,074.80	\$759.35	8.00	0.05%
SUBTOTAL	60,812	40,723	\$1,485,286.71	\$24.42	1.49	11.58%
TOTAL	278,551	123,230*	\$12,824,874.45	\$46.04	1.64	100%

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

ACT = actuation; HFA = hydrofluoroalkane; NEB = nebulizer; SABA = short-acting beta₂ agonist

¹ U.S. Food and Drug Administration (FDA). Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations. Available online at: <https://www.accessdata.fda.gov/scripts/cder/ob/index.cfm>. Last revised 02/2023. Last accessed 02/22/2023.

² U.S. FDA. FDA Approves Drug Combination Treatment for Adults with Asthma. Available online at: <https://www.fda.gov/drugs/news-events-human-drugs/fda-approves-drug-combination-treatment-adults-asthma>. Last revised 01/11/2023. Last accessed 02/22/2023.

³ ProAir[®] HFA (Albuterol Sulfate) Discontinuation Notice. Available online at: <https://www.proair.com/hfa/>. Issued 10/01/2022. Last accessed 02/22/2023.

⁴ Airsupra[™] (Albuterol/Budesonide) Prescribing Information. Available online at: https://den8dhaj6zs0e.cloudfront.net/50fd68b9-106b-4550-b5d0-12b045f8b184/fe598cda-d255-4446-998e-617607f61552/fe598cda-d255-4446-998e-617607f61552_viewable_rendition_v.pdf. Last revised 01/2023. Last accessed 02/22/2023.



Appendix M

Calendar Year 2022 Annual Review of Urea Cycle Disorder (UCD) Medications and 30-Day Notice to Prior Authorize Olpruva™ (Sodium Phenylbutyrate) and Pheburane® (Sodium Phenylbutyrate)

Oklahoma Health Care Authority
March 2023

Current Prior Authorization Criteria

Ravicti® (Glycerol Phenylbutyrate) Approval Criteria:

1. An FDA approved diagnosis of urea cycle disorder (UCD); and
2. Member must be actively managing UCD with a protein restricted diet; and
3. A patient-specific, clinically significant reason why the member cannot use sodium phenylbutyrate powder and tablets (generic Buphenyl®), which are available without a prior authorization, must be provided.

Utilization of UCD Medications: Calendar Year 2022

Comparison of Calendar Years

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/Claim	Cost/Day	Total Units	Total Days
2021	8	101	\$2,726,712.41	\$26,997.15	\$967.95	12,975	2,817
2022	9	109	\$3,259,648.69	\$29,905.03	\$1,111.75	15,450	2,932
% Change	12.5%	7.9%	19.5%	10.8%	14.9%	19.1%	4.1%
Change	1	8	\$532,936.28	\$2,907.88	\$143.80	2,475	115

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members.

Demographics of Members Utilizing UCD Medications

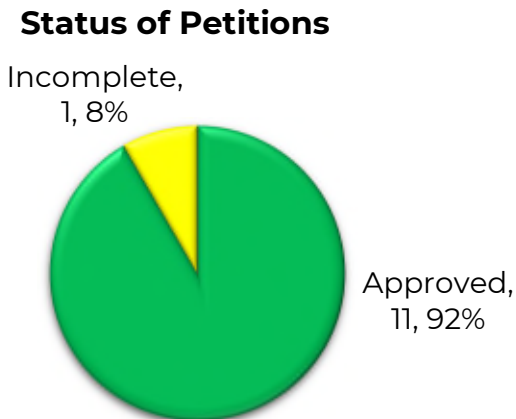
- There were 9 unique pediatric members utilizing Ravicti® (glycerol phenylbutyrate) during calendar year 2022; however, due to the limited number of members utilizing Ravicti® (glycerol phenylbutyrate), detailed demographic information could not be provided.

Top Prescriber Specialties of UCD Medications by Number of Claims

- There were 109 paid claims for Ravicti® (glycerol phenylbutyrate) during calendar year 2022, all of which were prescribed by a medical geneticist.

Prior Authorization of UCD Medications

There were 12 prior authorization requests submitted for UCD medications during calendar year 2022. The following chart shows the status of the submitted petitions for calendar year 2022.



Market News and Updates^{1,2,3,4,5,6,7,8}

Anticipated Patent Expiration(s):

- Ravicti® (glycerol phenylbutyrate): March 2032
- Olpruva™ (sodium phenylbutyrate): October 2036

New U.S. Food and Drug Administration (FDA) Approval(s):

- **June 2022:** The FDA approved Pheburane® (sodium phenylbutyrate) as an adjunctive therapy to standard of care for adult and pediatric patients with urea cycle disorders (UCD). It is supplied as 483mg/g of sodium phenylbutyrate oral coated pellets. Pheburane® is a special formulation of "palatable pellets" which has a coating that masks the taste and sugar core. The FDA approval was based on Buphenyl® (sodium phenylbutyrate) clinical data and a cohort study that surveyed patient's preferences of the products with a conclusion that taste-masked granules enhanced adherence and confirmed overall safety and effectiveness of Pheburane®.
- **December 2022:** The FDA approved Olpruva™ (sodium phenylbutyrate) pellets for oral suspension as adjunctive therapy to standard of care for the chronic management of UCDs. Olpruva™ pellets are covered by a sealed coating and an outer polymer coating that is packaged in a kit for reconstitution and is intended to mask the taste of sodium phenylbutyrate. The FDA approval was based on comparison data to Buphenyl® (sodium phenylbutyrate) powder for bioequivalence, which then utilized previous clinical trials and data for this new formulation.

Pipeline:

- **DTX301:** DTX301 is an investigational adeno-associated virus (AAV) gene therapy designed to deliver stable expression and activity of the ornithine transcarbamylase (OTC) gene using a single intravenous infusion. OTC deficiency, the most common UCD, is caused by a genetic defect in a liver enzyme (OTC enzyme) responsible for detoxification of ammonia within the urea cycle. The Phase 3 Enh3ance study is underway to evaluate the effect of DTX301 on ammonia and its ability to reduce patients' need for ammonia scavenger medication and a protein-restricted diet, the current standard of care. DTX301 was granted Orphan Drug and Fast Track designations by the FDA.

Cost Comparison: UCD Medications

Product	Cost Per Unit [†]	Cost Per Month*
Pheburane® (sodium phenylbutyrate) 0.483g/g pellet	\$25.14	\$31,229.81
Ravicti® (glycerol phenylbutyrate) 1.1g/mL solution	\$219.13	\$115,043.25
sodium phenylbutyrate 0.94g/g powder	\$18.00	\$11,489.36
sodium phenylbutyrate 500mg tablet	\$19.84	\$23,808.00

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

Cost information for Olpruva™ is currently not available.

[†]Unit = each gram for Pheburane® pellets and sodium phenylbutyrate powder, each mL for Ravicti®, and each tablet for sodium phenylbutyrate tablets.

*Cost per month is based on a 30-day supply at maximum FDA approved dosing for each product.

Recommendations

The College of Pharmacy recommends the prior authorization of Olpruva™ (sodium phenylbutyrate) and Pheburane® (sodium phenylbutyrate) with the following criteria (shown in red):

Olpruva™ (Sodium Phenylbutyrate Pellets for Oral Suspension) Approval Criteria:

1. An FDA approved diagnosis of urea cycle disorder (UCD); and
2. Member must be actively managing UCD with a protein restricted diet; and
3. A patient-specific, clinically significant reason why the member cannot use sodium phenylbutyrate powder and tablets (generic Buphenyl®), which are available without a prior authorization, must be provided; and
4. A patient-specific, clinically significant reason why the member cannot use Pheburane® (sodium phenylbutyrate oral pellets) must be provided; and
5. A maximum daily dose of 20g of sodium phenylbutyrate will apply.

Pheburane® (Sodium Phenylbutyrate Oral Pellets) Approval Criteria:

1. An FDA approved diagnosis of urea cycle disorder (UCD); and
2. Member must be actively managing UCD with a protein restricted diet; and
3. A patient-specific, clinically significant reason why the member cannot use sodium phenylbutyrate powder and tablets (generic Buphenyl®), which are available without a prior authorization, must be provided; and
4. A maximum daily dose of 20g of sodium phenylbutyrate will apply; and
5. A quantity limit of 1,218g of pellets (equivalent to 588g of sodium phenylbutyrate) per 29 days will apply.

Additionally, the College of Pharmacy recommends updating the Ravicti® (glycerol phenylbutyrate) approval criteria based on net costs (changes shown in red):

Ravicti® (Glycerol Phenylbutyrate) Approval Criteria:

1. An FDA approved diagnosis of urea cycle disorder (UCD); and
2. Member must be actively managing UCD with a protein restricted diet; and
3. A patient-specific, clinically significant reason why the member cannot use sodium phenylbutyrate powder and tablets (generic Buphenyl®), which are available without a prior authorization, must be provided; and
4. A patient-specific, clinically significant reason why the member cannot use Pheburane® (sodium phenylbutyrate oral pellets) must be provided; and
5. A maximum daily dose of 17.5mL (19g) of glycerol phenylbutyrate will apply; and
6. A quantity limit of 525mL per 30 days will apply.

Utilization Details of UCD Medications: Calendar Year 2022

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS*	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
RAVICTI LIQ 1.1MG/ML	109	9	\$3,259,648.69	\$29,905.03	12.11	100%
TOTAL	109	9*	\$3,259,648.69	\$29,905.03	12.11	100%

Costs do not reflect rebated prices or net costs.

*Total number of unduplicated utilizing members

LIQ = liquid

¹ U.S. Food and Drug Administration (FDA). Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations. Available online at: <https://www.accessdata.fda.gov/scripts/cder/ob/>. Last revised 02/2023. Last accessed 02/22/2023.

² Pheburane[®] (Sodium Phenylbutyrate) – New Orphan Drug Approval. OptumRx[®]. Available online at: https://professionals.optumrx.com/content/dam/optum3/professional-optumrx/news/rxnews/drug-approvals/drugapproval_pheburane_2022-0628.pdf. Issued 06/17/2022. Last accessed 02/22/2023.

³ Pheburane[®] (Sodium Phenylbutyrate) Prescribing Information. Medunik USA, Inc. Available online at: <https://olpruva.com/wp-content/uploads/OLPRUVA-Prescribing-Information.pdf>. Last revised 06/2022. Last accessed 02/14/2023.

⁴ Kibleur Y, Guffon N. Long-Term Follow-Up on a Cohort Temporary Utilization Authorization (ATU) Survey of Patients Treated with Pheburane[®] (Sodium Phenylbutyrate) Taste-Masked Granules. *Paediatr Drugs* 2016; 18(2):139-44. doi: 10.1007/s40272-015-0159-8.

⁵ Acer Therapeutics, Inc. Acer Therapeutics and Relief Therapeutics Announce U.S. FDA Approval of Olpruva[™] for Patients with Urea Cycle Disorders. Available online at: <https://www.acertx.com/2022/12/27/acer-therapeutics-and-relief-therapeutics-announce-u-s-fda-approval-of-olpruvafor-patients-with-urea-cycle-disorders/>. Issued 12/27/2022. Last accessed 02/22/2023.

⁶ Olpruva[™] (Sodium Phenylbutyrate) Prescribing Information. Acer Therapeutics, Inc. Available online at: <https://olpruva.com/wp-content/uploads/OLPRUVA-Prescribing-Information.pdf>. Last revised 12/2022. Last accessed 02/14/2023.

⁷ Ultragenyx. Our Pipeline: DTX301 for OTC Deficiency. Available online at: <https://www.ultragenyx.com/our-research/pipeline/dtx301-for-otc/>. Last accessed 02/23/2023.

⁸ Clinical Study of DTX301 AAV-Mediated Gene Transfer for Ornithine Transcarbamylase (OTC) Deficiency. *ClinicalTrials.gov*. Available online at: <https://clinicaltrials.gov/ct2/show/NCT05345171>. Last revised 02/15/2023. Last accessed 02/22/2023.



Appendix N

U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates **(additional information can be found at** **<http://www.fda.gov/Drugs/default.htm>)**

FDA NEWS RELEASE

For Immediate Release: February 24, 2023

FDA Authorizes First Over the Counter At-Home Test to Detect Both Influenza and COVID-19 Viruses

The FDA issued an emergency use authorization (EUA) for the first over the counter (OTC) at-home diagnostic test that can differentiate and detect influenza A, influenza B, and SARS-CoV-2. The Lucira COVID-19 & Flu Home Test is a single-use at-home test kit that provides results from self-collected nasal swab samples in roughly 30 minutes.

The Lucira COVID-19 & Flu Home Test is a single-use test for individuals with signs and symptoms consistent with a respiratory tract infection, including COVID-19. The test can be purchased without a prescription and performed completely at home using nasal swab samples self-collected by individuals ages 14 years or older or collected by an adult for individuals 2 years of age or older.

The test works by swirling the sample swab in a vial that is placed in the test unit. In 30 minutes or less, the test unit will display the results that show whether a person is positive or negative for each of the following: influenza A, influenza B and COVID-19. Individuals should report all results obtained to their health care provider for public health reporting and to receive appropriate medical care.

In individuals with symptoms, the Lucira COVID-19 & Flu Home Test correctly identified 99.3% of negative and 90% of positive influenza A samples, 100% of negative and 88.3% of positive COVID-19 samples, and 99.9% of negative influenza B samples. Since there are currently not enough cases of influenza B circulating to include in a clinical study, validation confirmed that the test can identify the virus in contrived specimens, and the EUA requires Lucira to continue to collect samples to study the test's ability to detect influenza B in real-world settings.

As with all rapid diagnostic tests, there is a risk of false positive and false negative results. Individuals who test positive for either influenza or COVID-19 should take appropriate precautions to avoid spreading the virus and should seek follow-up care with their physician or health care provider as additional testing may be necessary. Negative results for SARS-CoV-2 and influenza B should be confirmed, if necessary for patient management, with an authorized or cleared molecular test performed in a CLIA-certified laboratory that meets requirements to perform high or moderate complexity tests. Individuals who test negative and continue to experience symptoms of fever, cough and/or shortness of breath may still have a respiratory infection and should seek follow up care with their health care provider.

The collective impact of COVID-19, influenza, and respiratory syncytial virus (RSV) underscore the importance of diagnostic tests for respiratory viruses, and the FDA recognizes the benefits that home testing can provide. The agency will continue to use its authorities to increase the number of appropriately accurate and easy to use at-home tests available to the public, especially tests that detect these highly contagious respiratory viruses.

FDA NEWS RELEASE

For Immediate Release: February 1, 2023

FDA Approves First Oral Treatment for Anemia Caused by Chronic Kidney Disease (CKD) for Adults on Dialysis

The FDA approved Jesduvroq (daprodustat) tablets as the first oral treatment for anemia caused by CKD for adults who have been receiving dialysis for at least 4 months. Jesduvroq is not approved for patients who are not on dialysis. Other FDA-approved treatments for this condition are injected into the blood or under the skin.

More than a half million adults in the United States have CKD requiring dialysis. Kidneys produce a hormone called erythropoietin, which signals the body to make red blood cells. In a person with CKD on dialysis, the kidneys cannot produce enough erythropoietin, leading to reduced numbers of red blood cells.

Jesduvroq increases erythropoietin levels. The effectiveness of Jesduvroq was established in a randomized study of 2,964 adults receiving dialysis. In this study, adults received either oral Jesduvroq or injected recombinant human erythropoietin. Jesduvroq raised and maintained the hemoglobin within the target range of 10-11g/dL, similar to that of the recombinant human erythropoietin.

Jesduvroq has a *Boxed Warning* for an increased risk of thrombotic vascular events including death, heart attack, stroke, and blood clots in the lungs, legs, or dialysis access site. Jesduvroq's warnings and precautions include a risk of hospitalization for heart failure, worsening increase of blood pressure, stomach erosions, and gastrointestinal bleeding. Jesduvroq is not approved for patients with anemia due to CKD who are not on dialysis because its safety has not been established in that population. The most common side effects of Jesduvroq include high blood pressure, thrombotic vascular events, abdominal pain, dizziness, and allergic reactions. Patients should not use Jesduvroq if they also take certain drugs that cause increased levels of Jesduvroq or if they have uncontrolled hypertension. The FDA granted the approval to GlaxoSmithKline LLC.

Current Drug Shortages Index (as of February 21, 2023):

The information provided in this section is provided voluntarily to the FDA by manufacturers and is not specific to Oklahoma.

[Albuterol Sulfate Inhalational Solution](#)

[Alprostadil \(Muse\) Suppository](#)

[Amifostine Injection](#)

[Amino Acids](#)

[Amoxapine Tablets](#)

[Amoxicillin Oral Powder for Suspension](#)

[Amphetamine Aspartate; Amphetamine Sulfate; Dextroamphetamine Saccharate; Dextroamphetamine Sulfate Tablets](#)

[Atropine Sulfate Injection](#)

[Azacitidine for Injection](#)

[Azithromycin \(Azasite\) Ophthalmic Solution 1%](#)

[Bacteriostatic 0.9% Sodium Chloride Injection](#)

[Bacteriostatic Water for Injection](#)

[Belatacept \(Nulojix\) Lyophilized Powder for Injection](#)

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Currently in Shortage

Fludarabine Phosphate Injection	Currently in Shortage
Flurazepam Hydrochloride Capsules	Currently in Shortage
Furosemide Injection	Currently in Shortage
Gentamicin Sulfate Injection	Currently in Shortage
Guanfacine Hydrochloride Tablets	Currently in Shortage
Heparin Sodium and Sodium Chloride 0.9% Injection	Currently in Shortage
Hydromorphone Hydrochloride Injection	Currently in Shortage
Hydroxypropyl (Lacrisert) Cellulose Ophthalmic Insert	Currently in Shortage
Ibutilide Fumarate Injection	Currently in Shortage
Indigotindisulfonate Sodium Injection	Currently in Shortage
Isoniazid Injection	Currently in Shortage
IV Fat Emulsion	Currently in Shortage
Ketamine Injection	Currently in Shortage
Ketorolac Tromethamine Injection	Currently in Shortage
Leucovorin Calcium Lyophilized Powder for Injection	Currently in Shortage
Lidocaine Hydrochloride (Xylocaine) and Dextrose Injection Solution-Premix Bags	Currently in Shortage
Lidocaine Hydrochloride (Xylocaine) Injection	Currently in Shortage
Lidocaine Hydrochloride (Xylocaine) Injection with Epinephrine	Currently in Shortage
Lorazepam Injection	Currently in Shortage
Mannitol Injection	Currently in Shortage
Mepivacaine Hydrochloride Injection	Currently in Shortage
Methyldopa Tablets	Currently in Shortage
Methylprednisolone Acetate Injection	Currently in Shortage
Metronidazole Injection	Currently in Shortage
Midazolam Injection	Currently in Shortage
Morphine Sulfate Injection	Currently in Shortage
Multi-Vitamin Infusion (Adult and Pediatric)	Currently in Shortage
Neomycin Sulfate Tablets	Currently in Shortage
Nizatidine Capsules	Currently in Shortage
Oxybutynin Chloride Syrup	Currently in Shortage
Oxytocin Injection	Currently in Shortage
Palifermin (Kepivance) Lyophilized Powder for Injection	Currently in Shortage
Pantoprazole Sodium for Injection	Currently in Shortage
Parathyroid Hormone (Natpara) Injection	Currently in Shortage
Pentostatin Injection	Currently in Shortage
Physostigmine Salicylate Injection	Currently in Shortage
Potassium Acetate Injection	Currently in Shortage
Potassium Chloride Concentrate Injection	Currently in Shortage
Quinapril and Hydrochlorothiazide Tablets	Currently in Shortage
Quinapril Hydrochloride Tablets	Currently in Shortage

