OKLAHOMA
Health Care Authority

Drug Utilization Review Board

Wednesday,
April 13, 2022
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 – April 13, 2022

DATE: April 6, 2022

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:
Please register for the meeting at:
https://zoom.us/webinar/register/WN_73z8ERX7Sv-KeQGP3GVqPg
After registering, you will receive a confirmation email containing information about joining the webinar.

Enclosed are the following items related to the April 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 2022 Pipeline Update – Appendix B

Medication Therapy Management Program (MTM) Calendar Year 2021 Review – Appendix C

Action Item – Vote to Prior Authorize Elepsia™ XR [Levetiracetam Extended-Release (ER) Tablet] and Eprontia™ (Topiramate Oral Solution) – Appendix D

Action Item – Vote to Prior Authorize Winlevi® (Clascoterone 1% Cream) – Appendix E

Action Item – Vote to Prior Authorize Dojolvi® (Triheptanoin) – Appendix F

Action Item – Vote to Prior Authorize Qulipta™ (Atogepant) and Trudhesa™ (Dihydroergotamine Nasal Spray) and Update the Approval Criteria for the Anti-Migraine Medications – Appendix G

Action Item – Vote to Prior Authorize Erwinase® (Crisantaspase), Erwinaze® (Asparaginase *Erwinia Chrysanthemi*), Oncaspar® (Pegaspargase), Rylaze™ [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn], and Scemblix® (Asciminib) and Update the Approval Criteria for the Leukemia Medications – Appendix H

Action Item – Annual Review of Hemophilia Medications – Appendix I

Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Zynlonta™ (Loncastuximab Tesirine) – Appendix J

Annual Review of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib) – Appendix K

Annual Review of Growth Hormone Products and 30-Day Notice to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide) – Appendix L

Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Releuko™ (Filgrastim-ayow) – Appendix M

Annual Review of Anti-Parasitic Medications and 30-Day Notice to Prior Authorize Lampit® (Nifurtimox) – Appendix N

Annual Review of Systemic Antifungal Medications and 30-Day Notice to Prior Authorize Brexafemme® (Ibrexafungerp) – Appendix O

Annual Review of Multiple Sclerosis Medications and 30-Day Notice to Prior Authorize Ponvory™ (Ponesimod) – Appendix P

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

Future Business

Adjournment

Oklahoma Health Care Authority

Drug Utilization Review Board
(DUR Board)
Meeting – April 13, 2022 @ 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. Stephen Anderson –	participating in person
Dr. Jennifer de los Angeles –	participating in person
Ms. Jennifer Boyett –	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

Viewing Access Only via Zoom:

Please register for the meeting at:
https://zoom.us/webinar/register/WN_73z8ERX7Sv-KeQGP3GVqPg
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 9, 2022 DUR Board Meeting Minutes
   B. February 9, 2022 DUR Board Recommendations Memorandum
   C. Correspondence

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

4. **Update on Medication Coverage Authorization Unit/Spring 2022 Pipeline Update – See Appendix B**
   A. Pharmacy Helpdesk Activity for February 2022
   B. Medication Coverage Activity for February 2022
   C. Pharmacy Helpdesk Activity for March 2022
   D. Medication Coverage Activity for March 2022
   E. Spring Pipeline Update

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

5. **Medication Therapy Management Program (MTM) Calendar Year 2021 Review – See Appendix C**
   A. Background
   B. Workflow
   C. Results
   D. Case Study
   E. Summary

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

6. **Action Item – Vote to Prior Authorize Elepsia™ XR [Levetiracetam Extended-Release (ER) Tablet] and Eprontia™ (Topiramate Oral Solution) – See Appendix D**
   A. Market News and Updates
   B. Elepsia™ XR (Levetiracetam ER) Product Summary
   C. Eprontia™ (Topiramate Oral Solution) Product Summary
   D. College of Pharmacy Recommendations

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

7. **Action Item – Vote to Prior Authorize Winlevi® (Clascoterone 1% Cream) – See Appendix E**
   A. Market News and Updates
   B. Winlevi® (Clascoterone 1% Cream) Product Summary
   C. College of Pharmacy Recommendations

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

8. **Action Item – Vote to Prior Authorize Dojolvi® (Triheptanoin) – See Appendix F**
   A. Market News and Updates
   B. Dojolvi® (Triheptanoin) Product Summary
   C. College of Pharmacy Recommendations

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

9. **Action Item – Vote to Prior Authorize Qulipta™ (Atogepant) and Trudhesa™ (Dihydroergotamine Nasal Spray) and Update the Approval Criteria for the Anti-Migraine Medications – See Appendix G**
   A. Market News and Updates
   B. Qulipta™ (Atogepant) Product Summary
   C. Trudhesa™ (Dihydroergotamine Nasal Spray) Product Summary
   D. College of Pharmacy Recommendations

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

10. **Action Item – Vote to Prior Authorize Erwinase® (Crisantaspase), Erwinaze® (Asparaginase *Erwinia Chrysanthemi*), Oncaspar® (Pegaspargase), Rylaze™ [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn], and Scemblix® (Asciminib) and Update the Approval Criteria for the Leukemia Medications – See Appendix H**
    A. Market News and Updates
    B. Product Summaries
    C. College of Pharmacy Recommendations

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

11. **Action Item – Annual Review of Hemophilia Medications – See Appendix I**
    A. Current Prior Authorization Criteria

B. Utilization of Hemophilia Medications
C. Prior Authorization of Hemophilia Medications
D. Market News and Updates
E. Hemophilia A with Inhibitor Treatment
F. Oklahoma Health Care Authority Recommendations
G. Utilization Details of Hemophilia Medications

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

12. Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Zynlonta™ (Loncastuximab Tesirine-lply) – See Appendix J

A. Introduction
B. Current Prior Authorization Criteria
C. Utilization of Lymphoma Medications
D. Prior Authorization of Lymphoma Medications
E. Market News and Updates
F. Zynlonta® (Loncastuximab Tesirine-lply) Product Summary
G. College of Pharmacy Recommendations
H. Utilization Details of Lymphoma Medications

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

13. Annual Review of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib) – See Appendix K

A. Introduction
B. Current Prior Authorization Criteria
C. Utilization of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib)
D. Prior Authorization of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib)
E. Market News and Updates
F. College of Pharmacy Recommendations

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

14. Annual Review of Growth Hormone Products and 30-Day Notice to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide) – See Appendix L

A. Current Prior Authorization Criteria
B. Utilization of Growth Hormone Products
C. Prior Authorization of Growth Hormone Products
D. Market News and Updates
E. Skytrofa® (Lonapegsomatropin-tcgd) Product Summary
F. Voxzogo™ (Vosoritide) Product Summary
G. College of Pharmacy Recommendations
H. Utilization Details of Growth Hormone Products

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

15. **Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Releuko™ (Filgrastim-ayow) – See Appendix M**
    A. Current Prior Authorization Criteria
    B. Utilization of G-CSFs
    C. Prior Authorization of G-CSFs
    D. Market News and Updates
    E. College of Pharmacy Recommendations
    F. Utilization Details of G-CSFs

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

16. **Annual Review of Anti-Parasitic Medications and 30-Day Notice to Prior Authorize Lampit® (Nifurtimox) – See Appendix N**
    A. Current Prior Authorization Criteria
    B. Utilization of Anti-Parasitic Medications
    C. Prior Authorization of Anti-Parasitic Medications
    D. Market News and Updates
    E. Lampit® (Nifurtimox) Product Summary
    F. College of Pharmacy Recommendations
    G. Utilization Details of Anti-Parasitic Medications

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

17. **Annual Review of Systemic Antifungal Medications and 30-Day Notice to Prior Authorize Brexafemme® (Ibrexafungerp) – See Appendix O**
    A. Current Prior Authorization Criteria
    B. Utilization of Systemic Antifungal Medications
    C. Prior Authorization of Systemic Antifungal Medications
    D. Market News and Updates
    E. Brexafemme® (Ibrexafungerp) Product Summary
    F. College of Pharmacy Recommendations
    G. Utilization Details of Systemic Antifungal Medications

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

18. **Annual Review of Multiple Sclerosis (MS) Medications and 30-Day Notice to Prior Authorize Ponvory™ (Ponesimod) – See Appendix P**
    A. Current Prior Authorization Criteria
    B. Utilization of MS Medications
    C. Prior Authorization of MS Medications
    D. Market News and Updates
    E. Ponvory™ (Ponesimod) Product Summary
    F. College of Pharmacy Recommendations
    G. Utilization Details of MS Medications

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

19. **U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates – See Appendix Q**

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

20. **Future Business* (Upcoming Product and Class Reviews)**
    A. Anti-Diabetic Medications
    B. Heart Failure Medications
    C. Lung Cancer Medications
    D. Muscular Dystrophy Medications

    *Future product and class reviews subject to change.

21. **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.

Appendix A

OKLAHOMA HEALTH CARE AUTHORITY
DRUG UTILIZATION REVIEW (DUR) BOARD MEETING
MINUTES OF MEETING FEBRUARY 9, 2022

DUR BOARD MEMBERS:	PRESENT	ABSENT
Stephen Anderson, Pharm.D.		X
Jennifer de los Angeles, Pharm.D., BCOP	X	
Jennifer Boyett, MHS; PA-C		X
Markita Broyles, D.Ph.; MBA	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	
Wendi Chandler, Pharm.D.; Clinical Pharmacist	X	
Erin Ford, Pharm.D.; Clinical Pharmacist		X
Beth Galloway; Business Analyst	X	
Thomas Ha, Pharm.D.; Clinical Pharmacist	X	
Katrina Harris, Pharm.D.; Clinical Pharmacist		X
Robert Klatt, Pharm.D.; Clinical Pharmacist		X
Morgan Masterson, 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
Grant H. Skrepnek, Ph.D.; Associate Professor	X	
Regan Smith, Pharm.D.; Clinical Pharmacist		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: Allison Baxley, Pharm.D., BCOP		X
Emily Borders, Pharm.D., BCOP		X
Sarah Schmidt, Pharm.D., BCPS, BCOP	X	
Graduate Students: Matthew Dickson, Pharm.D.	X	
Michael Nguyen, Pharm.D.	X	
Corby Thompson, Pharm.D.	X	
Laura Tidmore, Pharm.D.		X
Visiting Pharmacy Student(s): Kristopher Finley	X	

OKLAHOMA HEALTH CARE AUTHORITY STAFF:	PRESENT	ABSENT
Melody Anthony, Chief State Medicaid Director; Chief Operating Officer		X
Mark Brandenburg, M.D., MSC; Medical Director	X	
David Bryan, J.D.; Deputy General Counsel	X	
Ellen Buettner; Chief of Staff		X
Kevin Corbett, C.P.A.; Chief Executive Officer		X

Terry Cothran, D.Ph.; Pharmacy Director	X	
Debra Montgomery, D.O.; Medical Director	X	
Josh Holloway, J.D.; Deputy General Counsel		X
Jill Ratterman, D.Ph.; Clinical Pharmacist	X	
Paula Root, M.D.; Senior Medical Director, Interim Chief Medical Officer	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:	
Kimberly Brackett, AbbVie	Joe Garcia, AbbVie
Kristi Kemp, AbbVie	George Vass, AbbVie
Nima Nabavi, Amgen	Don Napper, Apellis
Jamie Tobitt, Apellis	Christopher Dobberpuhl, Ascendis Pharma
Lori Howart, Bayer	Bob Atkins, Biogen
Robert Greely, Biogen	David Large, Biohaven Pharma
Phillip Jennings, Kiniksa	Brent Parker, Merck
Sarah Sanders, Novartis	Lindsey Walter, Novartis
David Prather, NovoNordisk	Burl Beasley, OMES
Victoria Jones, OUHSC	Bryan Dillon, Otsuka
Mark Kaiser, Otsuka	Jaydee Fredricksen, Paratek Pharma
Katie Hackett, Pfizer	Camille Kerr, Regeneron
Marc Parker, Sunovion	Aaron Austin, Takeda
Jeff Odell, Ultragenyx	Dave Poskey, UCB

PRESENT FOR PUBLIC COMMENT:	
Jamie Tobitt, Apellis Pharmaceuticals	Sarah Sanders, Novartis
Phillip Jennings, Kiniksa	George Vass, AbbVie

AGENDA ITEM NO. 1: **CALL TO ORDER**

1A: ROLL CALL

Dr. Muchmore called the meeting to order at 4:00pm. Roll call by Dr. Wilcox established the presence of a quorum.

ACTION: NONE REQUIRED

AGENDA ITEM NO. 2: **PUBLIC COMMENT FORUM**

2A: AGENDA ITEM NO. 12 JAMIE TOBITT
2B: AGENDA ITEM NO. 13 SARAH SANDERS
2C: AGENDA ITEM NO. 14 PHILLIP JENNINGS
2D: AGENDA ITEM NO. 18 GEORGE VASS
ACTION: NONE REQUIRED

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

3A: DECEMBER 8, 2021 DUR MINUTES

Materials included in agenda packet; presented by Dr. Muchmore
Dr. Broyles moved to approve; seconded by Dr. Mitchell

ACTION: MOTION CARRIED

AGENDA ITEM NO. 4: **UPDATE ON MEDICATION COVERAGE AUTHORIZATION UNIT/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

4A: PHARMACY HELPDESK ACTIVITY FOR JANUARY 2022

4B: MEDICATION COVERAGE ACTIVITY FOR JANUARY 2022

4C: USE OF GLP-1 AGONISTS OR 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. Ha, Dr. Nawaz

ACTION: NONE REQUIRED

<u>AGENDA ITEM NO. 5:</u> NARROW THERAPEUTIC INDEX (NTI) LIST

5A: INTRODUCTION

5B: SOONERCARE NTI DRUG LIST

5C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Wilson

ACTION: NONE REQUIRED

<u>AGENDA ITEM NO. 6:</u> VOTE TO PRIOR AUTHORIZE LIVMARLI™ (MARALIXIBAT)

6A: MARKET NEWS AND UPDATES

6B: LIVMARLI™ (MARALIXIBAT) PRODUCT SUMMARY

6C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Wilson

Dr. Mitchell moved to approve; seconded by Dr. Broyles

ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 7:</u> VOTE TO PRIOR AUTHORIZE MYFEMBREE® (RELUGOLIX/ESTRADIOL/NORETHINDRONE)

7A: MARKET NEWS AND UPDATES

7B: MYFEMBREE® (RELUGOLIX/ESTRADIOL/NORETHINDRONE) PRODUCT SUMMARY

7C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Wilson

Dr. Broyles moved to approve; seconded by Dr. Hanner

ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 8:</u> VOTE TO PRIOR AUTHORIZE SERTRALINE CAPSULES AND UPDATE THE APPROVAL CRITERIA FOR THE ANTIDEPRESSANTS

8A: MARKET NEWS AND UPDATES

8B: SERTRALINE CAPSULES PRODUCT SUMMARY

8C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Chandler

Dr. Mitchell moved to approve; seconded by Dr. Broyles

ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 9:</u> VOTE TO PRIOR AUTHORIZE TYRVAYA™ (VARENICLINE NASAL SPRAY) AND UPDATE THE APPROVAL CRITERIA FOR THE DRY EYE DISEASE (DED) MEDICATIONS

9A: MARKET NEWS AND UPDATES

9B: TYRVAYA™ (VARENICLINE NASAL SPRAY) PRODUCT SUMMARY

9C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Chandler

Dr. Broyles moved to approve; seconded by Dr. Hanner
ACTION: MOTION CARRIED

AGENDA ITEM NO. 10: VOTE TO PRIOR AUTHORIZE BYOOVIZ™ (RANIBIZUMAB-NUNA INTRAVITREAL INJECTION) AND SUSVIMO™ (RANIBIZUMAB INTRAVITREAL IMPLANT)
10A: MARKET NEWS AND UPDATES
10B: BYOOVIZ™ (RANIBIZUMAB-NUNA INTRAVITREAL INJECTION) PRODUCT SUMMARY
10C: SUSVIMO™ (RANIBIZUMAB INTRAVITREAL IMPLANT) PRODUCT SUMMARY
10D: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Nawaz
Dr. Broyles moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 11: VOTE TO UPDATE THE APPROVAL CRITERIA FOR THE GLAUCOMA MEDICATIONS
11A: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Nawaz
Dr. Mitchell moved to approve; seconded by Dr. Broyles
ACTION: MOTION CARRIED

AGENDA ITEM NO. 12: VOTE TO PRIOR AUTHORIZE EMPAVELI™ (PEGCETACOPLAN)
12A: MARKET NEWS AND UPDATES
12B: EMPAVELI™ (PEGCETACOPLAN) PRODUCT SUMMARY
12C: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Ha
Dr. Broyles moved to approve; seconded by Dr. Hanner
ACTION: MOTION CARRIED

AGENDA ITEM NO. 13: VOTE TO PRIOR AUTHORIZE EVKEEZA® (EVINACUMAB-DGNB) AND LEQVIO® (INCLISIRAN) AND UPDATE THE APPROVAL CRITERIA FOR THE ANTIHYPERLIPIDEMICS
13A: MARKET NEWS AND UPDATES
13B: EVKEEZA® (EVINACUMAB-DGNB) PRODUCT SUMMARY
13C: LEQVIO® (INCLISIRAN) PRODUCT SUMMARY
13D: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Ha
Dr. Broyles moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 14: ANNUAL REVIEW OF ARCALYST® (RILONACEPT)
14A: CURRENT PRIOR AUTHORIZATION CRITERIA
14B: UTILIZATION OF ARCALYST® (RILONACEPT)
14C: PRIOR AUTHORIZATION OF ARCALYST® (RILONACEPT)
14D: MARKET NEWS AND UPDATES
14E: CRYOPYRIN-ASSOCIATED PERIODIC SYNDROMES (CAPS)
14F: ARCALYST® (RILONACEPT) PRODUCT SUMMARY
14G: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Nawaz
Dr. Broyles moved to approve; seconded by Dr. Hanner
ACTION: MOTION CARRIED

AGENDA ITEM NO. 15: **ANNUAL REVIEW OF LEUKEMIA MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE ERWINASE® (CRISANTASPASE), ERWINAZE® (ASPARAGINASE *ERWINIA CHRYSANTHEMI*), ONCASPAR® (PEGASPARGASE), RYLAZE™ [ASPARAGINASE *ERWINIA CHRYSANTHEMI* (RECOMBINANT)-RYWN], AND SCEMBLIX® (ASCIMINIB)**

15A: CURRENT PRIOR AUTHORIZATION CRITERIA
15B: UTILIZATION OF LEUKEMIA MEDICATIONS
15C: PRIOR AUTHORIZATION OF LEUKEMIA MEDICATIONS
15D: MARKET NEWS AND UPDATES
15E: PRODUCT SUMMARIES
15F: COLLEGE OF PHARMACY RECOMMENDATIONS
15G: UTILIZATION DETAILS OF LEUKEMIA MEDICATIONS

Materials included in agenda packet; presented by Dr. Schmidt

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

AGENDA ITEM NO. 16: **ANNUAL REVIEW OF AZEDRA® (IOBENGUANE I-131)**

16A: CURRENT PRIOR AUTHORIZATION CRITERIA
16B: UTILIZATION OF AZEDRA® (IOBENGUANE I-131)
16C: PRIOR AUTHORIZATION OF AZEDRA® (IOBENGUANE I-131)
16D: MARKET NEWS AND UPDATES
16E: COLLEGE OF PHARMACY RECOMMENDATIONS
16F: UTILIZATION DETAILS OF AZEDRA® (IOBENGUANE I-131)

Materials included in agenda packet; presented by Dr. Schmidt

ACTION: NONE REQUIRED

AGENDA ITEM NO. 17: **ANNUAL REVIEW OF ANTICONVULSANTS AND 30-DAY NOTICE TO PRIOR AUTHORIZE ELEPSIA™ XR [LEVETIRACETAM EXTENDED-RELEASE (ER) TABLET] AND EPRONTIA™ (TOPIRAMATE ORAL SOLUTION)**

17A: CURRENT PRIOR AUTHORIZATION CRITERIA
17B: UTILIZATION OF ANTICONVULSANTS
17C: PRIOR AUTHORIZATION OF ANTICONVULSANTS
17D: MARKET NEWS AND UPDATES
17E: ELEPSIA™ XR (LEVETIRACETAM ER) PRODUCT SUMMARY
17F: EPRONTIA™ (TOPIRAMATE ORAL SOLUTION) PRODUCT SUMMARY
17G: COLLEGE OF PHARMACY RECOMMENDATIONS
17H: UTILIZATION DETAILS OF ANTICONVULSANTS

Materials included in agenda packet; presented by Dr. Ha

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

AGENDA ITEM NO. 18: **ANNUAL REVIEW OF ANTI-MIGRAINE MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE QULIPTA™ (ATOGEPANT) AND TRUDHESA™ (DIHYDROERGOTAMINE NASAL SPRAY)**

18A: CURRENT PRIOR AUTHORIZATION CRITERIA
18B: UTILIZATION OF ANTI-MIGRAINE MEDICATIONS
18C: PRIOR AUTHORIZATION OF ANTI-MIGRAINE MEDICATIONS
18D: MARKET NEWS AND UPDATES
18E: QULIPTA™ (ATOGEPANT) PRODUCT SUMMARY
18F: TRUDHESA™ (DIHYDROERGOTAMINE NASAL SPRAY) PRODUCT SUMMARY
18G: COLLEGE OF PHARMACY RECOMMENDATIONS
18H: UTILIZATION DETAILS OF ANTI-MIGRAINE MEDICATIONS

Materials included in agenda packet; presented by Dr. Chandler

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

AGENDA ITEM NO. 19: **ANNUAL REVIEW OF TOPICAL ACNE AND ROSACEA PRODUCTS AND 30-DAY NOTICE TO PRIOR AUTHORIZE WINLEVI® (CLASCOTERONE 1% CREAM)**

19A: CURRENT PRIOR AUTHORIZATION CRITERIA
19B: UTILIZATION OF TOPICAL ACNE AND ROSACEA PRODUCTS
19C: PRIOR AUTHORIZATION OF TOPICAL ACNE AND ROSACEA PRODUCTS
19D: MARKET NEWS AND UPDATES
19E: WINLEVI® (CLASCOTERONE 1% CREAM) PRODUCT SUMMARY
19F: COLLEGE OF PHARMACY RECOMMENDATIONS
19G: UTILIZATION DETAILS OF TOPICAL ACNE AND ROSACEA PRODUCTS

Materials included in agenda packet; presented by Dr. Wilson
ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN APRIL

AGENDA ITEM NO. 20: **30-DAY NOTICE TO PRIOR AUTHORIZE DOJOLVI® (TRIHEPTANOIN)**

20A: INTRODUCTION
20B: DOJOLVI® (TRIHEPTANOIN) PRODUCT SUMMARY
20C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Wilson
ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN APRIL

AGENDA ITEM NO. 21: **ANNUAL REVIEW OF ZOKINVY™ (LONAFARNIB)**

21A: CURRENT PRIOR AUTHORIZATION CRITERIA
21B: UTILIZATION OF ZOKINVY™ (LONAFARNIB)
21C: PRIOR AUTHORIZATION OF ZOKINVY™ (LONAFARNIB)
21D: MARKET NEWS AND UPDATES
21E: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Nawaz
ACTION: NONE REQUIRED

AGENDA ITEM NO. 22: **U.S. FOOD AND DRUG ADMINISTRATION (FDA) AND DRUG ENFORCEMENT ADMINISTATION (DEA) UPDATES**

Materials included in agenda packet; presented by Dr. Ha
ACTION: NONE REQUIRED

AGENDA ITEM NO. 23: **FUTURE BUSINESS* (UPCOMING PRODUCT AND CLASS REVIEWS)**

23A: GRANULOCYTE COLONY-STIMULATING FACTORS (G-CSFS)
23B: GROWTH HORMONE PRODUCTS
23C: HEMOPHILIA MEDICATIONS
23D: LYMPHOMA MEDICATIONS

*Future product and class reviews subject to change.
Materials included in agenda packet; presented by Dr. Adams
ACTION: NONE REQUIRED

AGENDA ITEM NO. 24: **ADJOURNMENT**

The meeting was adjourned at 5:54pm.

The University of Oklahoma
Health Sciences Center
COLLEGE OF PHARMACY
PHARMACY MANAGEMENT CONSULTANTS

Memorandum

Date: February 11, 2022

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 9, 2022

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: Narrow Therapeutic Index (NTI) Drug List

NO ACTION REQUIRED.

Recommendation 3: Vote to Prior Authorize Livmarli™ (Maralixibat)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Livmarli™ (maralixibat) with the following criteria, along with the recommended changes from the DUR Board (proposed changes shown in red):

Livmarli™ (Maralixibat) Approval Criteria:

1. An FDA approved indication for the treatment of cholestatic pruritus in members with Alagille Syndrome (ALGS); and
   a. Diagnosis must be confirmed by genetic testing identifying mutations in the *JAG1* or *NOTCH2* genes; and
2. Member must be 1 year of age or older; and
3. Livmarli™ must be prescribed by a gastroenterologist, hepatologist, geneticist, or other specialist with expertise in the treatment of ALGS (or an advanced care practitioner with a supervising physician who is a gastroenterologist, hepatologist, geneticist, or other specialist with expertise in the treatment of ALGS); and
4. Prescriber must verify member has a history of significant pruritus that is unresponsive to treatment with ursodeoxycholic acid (UDCA) and at least ~~3~~ 2 of the following, unless contraindicated:
   ~~a. Ursodeoxycholic acid (UDCA); or~~
   a. Cholestyramine; or
   b. Rifampin; or
   c. Sertraline; or
   d. Naltrexone; and
5. Member must have evidence of cholestasis demonstrated by ≥1 of the following:
   a. Total serum bile acid >3x upper limit of normal (ULN) for age; or
   b. Conjugated bilirubin >1mg/dL; or
   c. Fat soluble vitamin deficiency otherwise unexplainable; or
   d. Gamma-glutamyl transferase (GGT) >3x ULN for age; or
   e. Intractable pruritus explainable only by liver disease; and
6. Members with a history of liver transplantation will not generally be approved for Livmarli™; and
7. Prescriber must verify surgical intervention (e.g., biliary diversion, liver transplantation) is not currently clinically appropriate for the member; and
8. Prescriber must agree to monitor alanine aminotransferase (ALT), aspartate aminotransferase (AST), total bilirubin, direct bilirubin, and international normalized ratio (INR) at baseline and during treatment with Livmarli™; and
9. Prescriber must verify the member and/or member's caregiver has been counseled on appropriate storage, dosing, and administration of Livmarli™, including the use of a calibrated oral dosing dispenser for accurate measurement; and
10. Member's current weight (taken within the past 3 weeks) must be provided on initial and subsequent prior authorization requests in order to authorize the appropriate amount of drug required according to package labeling; and
11. Initial approvals will be for a duration of 3 months. After 3 months of treatment, further approval may be granted for a duration of 1 year if

the prescriber documents the member is responding well to treatment and surgical intervention is still not clinically appropriate.

Recommendation 4: Vote to Prior Authorize Myfembree® (Relugolix/ Estradiol/Norethindrone)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Myfembree® (relugolix/estradiol/norethindrone) with criteria similar to Oriahnn® (elagolix/estradiol/norethindrone and elagolix) (updates and new criteria shown in red):

Myfembree® (Relugolix/Estradiol/Norethindrone) and Oriahnn® (Elagolix/Estradiol/Norethindrone and Elagolix) Approval Criteria:

1. An FDA approved diagnosis of heavy menstrual bleeding associated with uterine leiomyomas (fibroids) 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® or Oriahnn®; and
    ~~h. Concomitant use with an organic anion transporting polypeptide (OATP) 1B1 inhibitor (e.g., cyclosporine, gemfibrozil); 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); 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 must be provided; 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 must be provided; and

7. For Myfembree®, a patient-specific, clinically significant reason why the member cannot use leuprolide depot formulations available without prior authorization must be provided; and
8. For Myfembree®, a patient-specific, clinically significant reason (beyond convenience) why the member cannot use Oriahnn® must be provided; and
9. For Oriahnn®, prescriber must verify the member will not use Oriahnn® concomitantly with an organic anion transporting polypeptide (OATP) 1B1 inhibitor (e.g., cyclosporine, gemfibrozil); and
10. Quantity limits will apply based on FDA approved dosing:
    a. For Myfembree®, a quantity limit of 28 tablets per 28 days will apply; and
    b. For Oriahnn®, a quantity limit of 56 tablets per 28 days will apply; and
11. Lifetime approval duration will be limited to a maximum of 24 months. For members previously approved for Myfembree® or Oriahnn®, a combined cumulative maximum treatment duration of 24 months will apply.

Recommendation 5: Vote to Prior Authorize Sertraline Capsules and Update the Approval Criteria for the Antidepressants

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of sertraline capsules and placement into the Special Prior Authorization (PA) Tier of the Antidepressants Product Based Prior Authorization (PBPA) category; the following additional criteria will also apply (updates and new criteria shown in red):

Antidepressants*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
Selective Serotonin Reuptake Inhibitors (SSRIs)			
citalopram (Celexa®)			citalopram 20mg/10mL soln (UDC)
escitalopram (Lexapro®)			escitalopram 10mg/10mL soln (UDC)
fluoxetine caps (Prozac®)			fluoxetine 20mg/5mL soln (UDC)
fluvoxamine (Luvox®)			fluoxetine tabs
paroxetine (Paxil®)			fluoxetine DR (Prozac® Weekly™)
sertraline tabs (Zoloft®)			fluvoxamine CR (Luvox CR®)

Antidepressants*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
			paroxetine CR (Paxil CR®)
			paroxetine (Pexeva®)
			sertraline 150mg & 200mg caps
Dual-Acting Antidepressants			
bupropion (Wellbutrin®, Wellbutrin SR®, Wellbutrin 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 ER tabs (Effexor XR® tabs)
Monoamine Oxidase Inhibitors (MAOIs)			
		phenelzine (Nardil®)	isocarboxazid (Marplan®)
		selegiline (Emsam®)	
		tranylcypromine (Parnate®)	
Unique Mechanisms of Action			
		vortioxetine (Trintellix®)	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. **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.
5. **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.
6. **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.
7. **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.
8. **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.
9. **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.
10. **Sertraline Capsule Approval Criteria:**
    a. An FDA approved indication 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.

Additionally, the College of Pharmacy recommends updating the current Tier-2 and Tier-3 antidepressant approval criteria and approval criteria for atypical antipsychotics as adjunctive treatment of major depressive disorder (MDD) to be consistent with the guideline recommendations (changes shown in red):

Antidepressants Tier-2 Approval Criteria:

1. Member must have a documented, recent (within 6 months) trial of 2 Tier-1 medications at least 4 weeks in duration each and titrated to recommended dosing, that did not provide an adequate response. Tier-1 selection must include at least 1 medication from the SSRI category ~~and 1 trial with duloxetine~~; or
2. Prior stabilization on the Tier-2 medication documented within the last 100 days. A past history of success on the Tier-2 medication will also be considered with adequate documentation; or
3. A unique FDA-approved indication not covered by Tier-1 medications or other medications from a different therapeutic class; or
4. A petition may be submitted for consideration whenever a unique patient-specific situation exists.

Antidepressants Tier-3 Approval Criteria:

1. Member must have a documented, recent (within 6 months) trial with 2 Tier-1 medications (Tier-1 selection must include at least 1 medication from the SSRI category ~~and 1 trial with duloxetine~~) and a trial of a Tier-2 medication at least 4 weeks in duration each and titrated to recommended dosing, that did not provide an adequate response; or
2. Prior stabilization on the Tier-3 medication documented within the last 100 days. A past history of success on the Tier-3 medication will also be considered with adequate documentation; or
3. A unique FDA-approved indication not covered by a lowered tiered medication or other medications from a different therapeutic class; or
4. A petition may be submitted for consideration whenever a unique patient-specific situation exists.

Approval Criteria for Atypical Antipsychotics as Adjunctive Treatment of Major Depressive Disorder (MDD):

1. For Rexulti® (brexpiprazole) or Symbyax® (olanzapine/fluoxetine), a diagnosis of MDD requires current use of an antidepressant, and previous trials with at least 2 other antidepressants from both

categories (an SSRI and a dual-acting antidepressant ~~duloxetine~~) and a trial of aripiprazole tablets that did not yield adequate response; and
2. Tier structure rules still apply.

Recommendation 6: Vote to Prior Authorize Tyrvaya™ (Varenicline Nasal Spray) and Update the Approval Criteria for the Dry Eye Disease (DED) Medications

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Tyrvaya™ (varenicline nasal spray) with the following criteria (shown in red):

Tyrvaya™ (Varenicline Nasal Spray) Approval Criteria:

1. An FDA approved indication for the treatment of the signs and symptoms of dry eye disease (DED) in members 18 years of age or older; and
2. Prescriber must verify that environmental factors (e.g., humidity, fans) have been addressed; and
3. Member must have trials with at least 3 over-the-counter (OTC) products for at least 3 days in duration (per product) in the last 30 days that failed to relieve signs and symptoms of DED; and
4. A patient-specific, clinically significant reason why the member cannot use Restasis® (cyclosporine 0.05% ophthalmic emulsion) single-use vials, which are available without a prior authorization, must be provided; and
5. A patient-specific, clinically significant reason why the member cannot use all available ophthalmic preparations FDA approved for the treatment of DED must be provided; and
6. A quantity limit of 8.4mL (2 bottles) per 30 days will apply.

Additionally, the College of Pharmacy recommends updating the prior authorization criteria for Cequa™ (cyclosporine 0.09% ophthalmic solution) and Restasis MultiDose® (cyclosporine 0.05% ophthalmic emulsion) based on net costs (changes shown in red):

Cequa™ (Cyclosporine 0.09% Ophthalmic Solution) Approval Criteria:

1. An FDA approved indication to increase tear production in members with keratoconjunctivitis sicca (dry eye); and
2. A patient-specific, clinically significant reason why the member cannot use Restasis® (cyclosporine 0.05% ophthalmic emulsion) single-use vials, which are available without a prior authorization, must be provided; and
3. A patient-specific, clinically significant reason why the member cannot use Xiidra® (lifitegrast 5% ophthalmic solution) must be provided; and
4. A quantity limit of 60 single-use vials (1 box) per 30 days will apply.

Restasis MultiDose® (Cyclosporine 0.05% Ophthalmic Emulsion) Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use Restasis® in the individual dosage formulation (single-use vials), which is available without a prior authorization, must be provided; and
2. A patient-specific, clinically significant reason why the member cannot use Xiidra® (lifitegrast 5% ophthalmic solution) must be provided.

Recommendation 7: Vote to Prior Authorize Byooviz™ (Ranibizumab-nuna Intravitreal Injection) and Susvimo™ (Ranibizumab Intravitreal Implant)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Byooviz™ (ranibizumab-nuna intravitreal injection) and Susvimo™ (ranibizumab intravitreal implant) with the following criteria:

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

1. An FDA approved indication 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) 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.

Susvimo™ (Ranibizumab Intravitreal Implant) Approval Criteria:

1. An FDA approved indication for the treatment of adults with neovascular (wet) age-related macular degeneration (AMD); 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 the disease state) must be provided; and
7. Susvimo™ will have a quantity limit of one 100mg/0.1mL single-dose vial every 180 days.

Recommendation 8: Vote to 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 net costs (changes shown in red):

1. Moving Istalol® 0.5% (timolol maleate ophthalmic solution) from Tier-1 to the Special Prior Authorization (PA) Tier
2. Making Azopt® (brinzolamide 1% suspension) brand preferred
3. Moving Lumigan® (bimatoprost 0.01% solution) and Zioptan® (tafluprost 0.0015% solution) from Tier-2 to Tier-1
4. Moving Timoptic-XE® (timolol maleate ophthalmic gel-forming solution) and Cosopt® PF (dorzolamide/timolol 2%/0.5% preservative free solution) from the Special PA Tier to Tier-2

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%)		
brinzolamide/brimonidine (Simbrinza® 0.2%/1%)		
Beta-Blockers		
brimonidine/timolol (Combigan® 0.2%/0.5%)	betaxolol (Betoptic® 0.5%, Betoptic-S® 0.25%)	~~**dorzolamide/timolol (Cosopt® PF 2%/0.5%)**~~
carteolol (Ocupress® 1%)	**dorzolamide/timolol (Cosopt® PF 2%/0.5%)**	**timolol maleate (Istalol® 0.5%)**
dorzolamide/timolol (Cosopt® 22.3/6.8mg/mL)	**timolol maleate (Timoptic-XE® 0.25%, 0.5%)**	timolol maleate (Timoptic® in Ocudose® 0.25%, 0.5%; ~~**Timoptic-XE® 0.25%, 0.5%**~~)
levobunolol (Betagan® 0.25%, 0.5%)		

Glaucoma Medications*		
Tier-1	**Tier-2**	**Special PA**
timolol maleate (~~**Istalol® 0.5%,**~~ Timoptic® 0.25%, 0.5%)		
Carbonic Anhydrase Inhibitors		
acetazolamide (Diamox® 500mg caps; 125mg, 250mg tabs)+	**dorzolamide/timolol (Cosopt® PF 2%/0.5%)**	~~**dorzolamide/timolol (Cosopt® PF 2%/0.5%)**~~
brinzolamide (Azopt® 1%) – **Brand Preferred**		methazolamide (Neptazane® 25mg, 50mg tabs)+
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%)	
Prostaglandin Analogs		
bimatoprost (Lumigan® 0.01%)	bimatoprost (Lumigan® ~~**0.01%,**~~ 0.03%)	latanoprost (Xelpros™ 0.005%)
latanoprost (Xalatan® 0.005%)	~~**tafluprost (Zioptan® 0.0015%)**~~	latanoprostene bunod (Vyzulta® 0.024%)
netarsudil/latanoprost (Rocklatan®)		
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; caps = capsules; PA = prior authorization; tabs = tablets
Please note: Combination products are included in both applicable pharmaceutical classes; therefore, combination products are listed twice in the tier chart.

Glaucoma Medications Tier-2 Approval Criteria:

1. An FDA approved diagnosis; and
2. The member must have documented, recent (within the last 120 days) trials with at least 3 Tier-1 medications for a minimum of 4 weeks duration each. Tier-1 trials may be from any pharmacologic class; or
3. Approvals may be granted if there is a documented adverse effect, drug interaction, or contraindication to all Tier-1 medications; or
4. Approvals may be granted if there is a unique FDA approved indication not covered by all Tier-1 medications; and
5. The 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.

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. The 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 9: Vote to Prior Authorize Empaveli™ (Pegcetacoplan)

MOTION CARRIED by unanimous approval

The College of Pharmacy recommends the prior authorization of Empaveli™ (pegcetacoplan) with the following criteria:

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. An age restriction of 18 years and older will apply; and
4. 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

5. Prescriber and pharmacy must be enrolled in the Empaveli™ Risk Evaluation and Mitigation Strategy (REMS) program and maintain enrollment throughout therapy; and
6. For members switching from Soliris® (eculizumab) to Empaveli™, prescriber must verify the member will continue the current dose of Soliris® for 4 weeks before switching to Empaveli™ as monotherapy; and
7. For members switching from Ultomiris® (ravulizumab-cwvz) to Empaveli™, prescriber must verify that Empaveli™ will be initiated no more than 4 weeks after the last dose of Ultomiris®.

Recommendation 10: Vote to Prior Authorize Evkeeza® (Evinacumab-dgnb) and Leqvio® (Inclisiran) and Update the Approval Criteria for the Antihyperlipidemics

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Evkeeza® (evinacumab-dgnb) and Leqvio® (inclisiran) with the following criteria (shown in red):

Evkeeza® (Evinacumab-dgnb) Approval Criteria:

1. An FDA approved diagnosis of homozygous familial hypercholesterolemia (HoFH) defined by the presence of at least 1 of the following:
    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. An untreated LDL-cholesterol (LDL-C) >500mg/dL and at least 1 of the following:
        i. Documented evidence of definite heterozygous familial hypercholesterolemia (HeFH) in both parents; or
        ii. Presence of tendinous/cutaneous xanthoma prior to 10 years of age; or
2. Member must be 12 years of age or older; and
3. 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
4. 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
5. Documented trial of a proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor (e.g., Praluent®, Repatha®) at least 12 weeks in duration; and
6. Member requires additional lowering of LDL-C (baseline, current, and goal LDL-C levels must be provided); and
7. Female members must not be pregnant and must have a negative pregnancy test prior to therapy initiation. Female members of reproductive potential must be willing to use effective contraception while on therapy and for 5 months after discontinuation of therapy; and
8. Initial approvals will be for the duration of 6 months. Continued authorization at that time will require the prescriber to provide recent LDL-C levels to demonstrate the effectiveness of this medication, and compliance will be checked at that time and every 6 months thereafter for continued approval.

Leqvio® (Inclisiran) Approval Criteria:

1. An FDA approved indication of 1 of the following:
   a. Heterozygous familial hypercholesterolemia (HeFH) as confirmed by 1 of the following:
      i. Documented functional mutation(s) in low-density lipoprotein (LDL) receptor alleles or alleles known to affect LDL receptor functionality via genetic testing; or
      ii. Both of the following:
         1. Pre-treatment total cholesterol >290mg/dL or LDL-C >190mg/dL; and
         2. History of tendon xanthomas in either the member, first degree relative, or second degree relative; or
      iii. Dutch Lipid Clinic Network Criteria score of >8; or
   b. Established atherosclerotic cardiovascular disease (ASCVD); and
      i. Supporting diagnoses/conditions and dates of occurrence signifying established ASCVD; and
2. Member must be 18 years of age or older; and
3. Documented trial of all of the following for at least 12 weeks in duration each:
   a. High dose statin therapy (LDL reduction capability equivalent to rosuvastatin 40mg) or maximally tolerated statin therapy; and
   b. Ezetimibe; and
   c. Proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor (e.g., Praluent®, Repatha®); and
4. 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

5. Member requires additional lowering of LDL-C (baseline, current, and goal LDL-C levels must be provided); and
6. Leqvio® must be administered by a health care professional. Approvals will not be granted for self-administration; and
   a. Prior authorization requests must indicate how Leqvio® will be administered (e.g., prescriber, pharmacist, home health care provider); and
      i. Leqvio® must be shipped to the facility where the member is scheduled to receive treatment; or
      ii. Prescriber must verify the member has been counseled on the proper storage of Leqvio®; and
7. Initial approvals will be for the duration of 6 months. Continued authorization at that time will require the prescriber to provide recent LDL-C levels to demonstrate the effectiveness of this medication, and compliance will be checked at that time and every 6 months thereafter for continued approval.

Additionally, the College of Pharmacy recommends updating the prior authorization criteria for PCSK9 inhibitors (changes shown in red):

Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) Inhibitors [Praluent® (Alirocumab) and Repatha® (Evolocumab)] Approval Criteria:

~~1. For Repatha® (evolocumab):~~
~~a. An FDA approved diagnosis of homozygous familial hypercholesterolemia (HoFH) defined by the presence of at least 1 of the following:~~
~~i. Documented functional mutation(s) in both low-density lipoprotein (LDL) receptor alleles or alleles known to affect LDL receptor functionality via genetic testing; or~~
~~ii. An untreated total cholesterol >500mg/dL and at least 1 of the following:~~
~~1. Documented evidence of definite heterozygous familial hypercholesterolemia (HeFH) in both parents; or~~
~~2. Presence of tendinous/cutaneous xanthoma prior to 10 years of age; or~~
~~b. An FDA approved diagnosis of primary hyperlipidemia (including HeFH); or~~
~~c. An FDA approved indication to reduce the risk of myocardial infarction, stroke, and coronary revascularization in adults with established cardiovascular disease (CVD); and~~

~~i. Documentation of established CVD; and~~
~~1. Supporting diagnoses/conditions and dates of occurrence signifying established CVD; or~~

~~2. For Praluent® (alirocumab):~~
~~a. An FDA approved diagnosis of primary hyperlipidemia (including HeFH); or~~
~~b. An FDA approved indication to reduce the risk of myocardial infarction, stroke, and unstable angina requiring hospitalization in adults with established CVD; and~~
~~i. Documentation of established CVD; and~~
~~1. Supporting diagnoses/conditions and dates of occurrence signifying established CVD; and~~

1. An FDA approved indication of 1 of the following:
   a. Heterozygous familial hypercholesterolemia (HeFH) as confirmed by 1 of the following:
      i. Documented functional mutation(s) in low-density lipoprotein (LDL) receptor alleles or alleles known to affect LDL receptor functionality via genetic testing; or
      ii. Both of the following:
         1. Pre-treatment total cholesterol >290mg/dL or LDL-cholesterol (LDL-C) >190mg/dL; and
         2. History of tendon xanthomas in either the member, first degree relative, or second degree relative; or
      iii. Dutch Lipid Clinic Network Criteria score of >8; or
   b. Homozygous familial hypercholesterolemia (HoFH) defined by the presence of at least 1 of the following:
      i. Documented functional mutation(s) in both LDL receptor alleles or alleles known to affect LDL receptor functionality via genetic testing; or
      ii. An untreated LDL-C >500mg/dL and at least 1 of the following:
         1. Documented evidence of definite HeFH in both parents; or
         2. Presence of tendinous/cutaneous xanthoma prior to 10 years of age; or
   c. As an adjunct to maximally tolerated statin therapy to reduce the risk of myocardial infarction, stroke, and coronary revascularization in adults with established cardiovascular disease (CVD); and
      i. Documentation of established CVD; and
      ii. Supporting diagnoses/conditions and dates of occurrence signifying established CVD; or
   d. Primary hyperlipidemia; and
      i. Member's untreated LDL-C level must be ≥190mg/dL; and
      ii. Current LDL-C level is ≥100mg/dL; and
2. For the use of Repatha® in members with HeFH or HoFH, member must be ~~13~~ 10 years of age or older ~~for the diagnosis of HoFH or must be~~

~~18 years of age or older for all other FDA-approved diagnoses or indications~~; and

3. For the use of Repatha® for FDA approved indications other than HeFH or HoFH or for the use of Praluent® for all FDA approved indications, the member must be 18 years of age or older; and
4. Member must be on high dose statin therapy (LDL reduction capability equivalent to rosuvastatin 40mg) or on maximally tolerated statin therapy; and
    a. Statin trials must be at least 12 weeks in duration (dosing, dates, duration of treatment, and reason for discontinuation must be provided); and
    b. LDL-cholesterol (LDL-C) levels should be included following at least 12 weeks of treatment ~~with each statin medication~~; and
    ~~c. For statin intolerance due to myalgia, creatine kinase (CK) labs verifying rhabdomyolysis must be provided; and~~
    ~~d. Tier structure rules still apply; and~~
5. 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
6. Member must have a recent trial of a statin with ezetimibe, or a recent trial of ezetimibe without a statin for members with documented statin intolerance, or a patient-specific, clinically significant reason why ezetimibe is not appropriate must be provided; and
7. Member requires additional lowering of LDL-C (baseline, current, and goal LDL-C levels must be provided); and
8. Prescriber must verify that member has been counseled on appropriate use, storage of the medication, and administration technique; and
9. A quantity limit of 2 syringes or pens per 28 days will apply for Praluent®. A quantity limit of 2 syringes or auto-injectors per 28 days will apply for Repatha® 140mg and a quantity limit of 1 auto-injector per 28 days will apply for Repatha® 420mg. Requests for the Repatha® 420mg dose will not be approved for multiple 140mg syringes or auto-injectors, but instead members should use (1) 420mg auto-injector; and
10. Initial approvals will be for the duration of 3 months. Continued authorization at that time will require the prescriber to provide recent LDL-C levels to demonstrate the effectiveness of the medication, and compliance will be checked at that time and every 6 months thereafter for continued approval.

Further, the College of Pharmacy recommends updating the prior authorization criteria for Nexletol® (bempedoic acid) and Nexlizet® (bempedoic acid/ezetimibe) (changes shown in red):

Nexletol® (Bempedoic Acid) and Nexlizet® (Bempedoic Acid/Ezetimibe) Approval Criteria:

1. An FDA approved indication as an adjunct to diet and maximally tolerated statin therapy for the treatment of 1 of the following:
    a. Heterozygous familial hypercholesterolemia (HeFH)~~; and~~ as confirmed by 1 of the following:
        i. Documented functional mutation(s) in low-density lipoprotein (LDL) receptor alleles or alleles known to affect LDL receptor functionality via genetic testing; or
        ii. Both of the following:
            1. Pre-treatment total cholesterol >290mg/dL or LDL-cholesterol (LDL-C) >190mg/dL; and
            2. History of tendon xanthomas in either the member, first degree relative, or second degree relative; or
        iii. Dutch Lipid Clinic Network Criteria score of >8; or
        ~~iv. Documentation of definite HeFH using the Simon Broome Register criteria, the Dutch Lipid Network criteria, or via genetic testing; or~~
    b. Established atherosclerotic cardiovascular disease (ASCVD); and
        i. Supporting diagnoses/conditions and dates of occurrence signifying established ASCVD; and
2. Member must be 18 years of age or older; and
3. Member must be on a stable dose of maximally tolerated statin therapy for at least 4 weeks (dosing, dates, duration of treatment, and reason for discontinuation must be provided); and
    a. LDL-C levels should be included following at least 4 weeks of treatment ~~with each statin medication~~; and
    b. Member must not be taking simvastatin at doses >20mg or pravastatin at doses >40mg due to drug interactions with Nexletol® and Nexlizet®; and
    ~~c. For statin intolerance due to myalgia, creatinine kinase (CK) labs verifying rhabdomyolysis must be provided; and~~
4. 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

5. Member requires additional lowering of LDL-cholesterol (LDL-C) (baseline, current, and goal LDL-C levels must be provided); and
6. A quantity limit of 30 tablets per 30 days will apply; and
7. Initial approvals will be for the duration of 3 months, after which time compliance and recent LDL-C levels to demonstrate the effectiveness of this medication will be required for continued approval. Subsequent approvals will be for the duration of 1 year.

Lastly, the College of Pharmacy recommends to remove the Kynamro® (mipomersen) prior authorization criteria based on product discontinuation and also add additional criteria for Juxtapid® (lomitapide) for members with statin intolerance (changes shown in red):

Juxtapid® (Lomitapide) ~~and Kynamro® (Mipomersen)~~ 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. 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. An untreated ~~total~~ LDL-cholesterol (LDL-C) >500mg/dL and triglycerides <300mg/dL and at least 1 of the following:
      i. Documentation that both parents have untreated ~~total cholesterol~~ LDL-C >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 Repatha® (evolocumab) at least 12 weeks in duration; and
5. Member requires additional lowering of LDL cholesterol (LDL-C) (baseline, current, and goal LDL-C levels must be provided); and
6. Prescriber must be certified with Juxtapid® ~~or Kynamro®~~ Risk Evaluation and Mitigation Strategy (REMS) program.

Recommendation 11: Annual Review of Arcalyst® (Rilonacept)

MOTION CARRIED by unanimous approval

The College of Pharmacy recommends the following changes to the Arcalyst® (rilonacept) prior authorization criteria based on the new FDA approved indications and net costs (changes and new criteria shown in red):

Arcalyst® (Rilonacept) Approval Criteria [Cryopyrin-Associated Periodic Syndromes (CAPS) Diagnosis]:

1. An FDA approved indication of CAPS verified by genetic testing. This includes familial cold auto-inflammatory syndrome (FCAS) and Muckle-Wells syndrome (MWS) in adults and children 12 years of age and older; and
2. A patient-specific, clinically significant reason the member cannot utilize Kineret® (anakinra) or Ilaris® (canakinumab) must be provided. Tier structure rules apply; and
3. The member should not be using a tumor necrosis factor blocking agent (e.g., adalimumab, etanercept, infliximab) or anakinra concomitantly with Arcalyst®;
4. Documentation that the member does not have active or chronic infection including hepatitis B, hepatitis C, human immunodeficiency virus (HIV), or tuberculosis must be provided; and
5. The following dosing restrictions will apply:
    a. Dosing should not be more often than once weekly; and
    b. Approved dosing schedule for members 18 years of age and older:
        i. Initial treatment: Loading dose of 320mg delivered as (2) 2mL subcutaneous (sub-Q) injections of 160mg each given on the same day at 2 different injection sites; and
        ii. Continued treatment: (1) 160mg injection given once weekly; or
    c. Approved dosing schedule for pediatric members 12 to 17 years of age (must have member weight in kilograms):
        i. Initial treatment: Loading dose of 4.4mg/kg, up to a maximum of 320mg, delivered as 1 or 2 sub-Q injections, with a maximum single-injection volume of 2mL (given at 2 different injection sites if administered as 2 injections); and
        ii. Continued treatment: 2.2mg/kg, up to a maximum of 160mg, given once weekly; and
6. Approvals will be for the duration of 1 year.

Arcalyst® (Rilonacept) Approval Criteria [Deficiency of Interleukin-1 Receptor Antagonist (DIRA) Diagnosis]:

1. An FDA approved indication of maintenance of remission of DIRA verified by genetic testing; and
2. The member must weigh ≥10kg; and

3. The member should not be using a tumor necrosis factor blocking agent (e.g., adalimumab, etanercept, infliximab) or anakinra concomitantly with Arcalyst®; and
4. Documentation that the member does not have active or chronic infection including hepatitis B, hepatitis C, human immunodeficiency virus (HIV), or tuberculosis must be provided; and
5. Arcalyst® will be used for maintenance of remission following treatment with Kineret® (anakinra); and
6. A patient-specific, clinically significant reason the member cannot continue to utilize Kineret® (anakinra) instead of switching to Arcalyst®; 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. The following dosing restrictions will apply:
    a. Dosing should not be more often than once weekly; and
    b. Approved dosing schedule for adults and pediatric members weighing ≥10kg is 4.4mg/kg up to a maximum of 320mg, delivered as 1 or 2 injections (2mL/injection) once weekly; and
9. Approvals will be for the duration of 1 year.

Arcalyst® (Rilonacept) Approval Criteria [Recurrent Pericarditis Diagnosis]:

1. An FDA approved indication of recurrent pericarditis and reduction in risk of recurrence in members 12 years of age and older; and
2. The member has had at least 2 episodes of pericarditis; and
3. Member has failure with colchicine, non-steroidal anti-inflammatory drugs (NSAIDs), and corticosteroids defined as symptomatic pericarditis recurrence; and
4. A patient-specific, clinically significant reason the member cannot utilize Kineret® (anakinra) must be provided; and
5. The member should not be using a tumor necrosis factor blocking agent (e.g., adalimumab, etanercept, infliximab) or anakinra concomitantly with Arcalyst®; and
6. Documentation that the member does not have active or chronic infection including hepatitis B, hepatitis C, human immunodeficiency virus (HIV), or tuberculosis must be provided; 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 for members 12 to 17 years of age; and
8. The following dosing restrictions will apply:
    a. Dosing should not be more often than once weekly; and
    b. Approved dosing schedule for members 18 years of age and older:
        i. Initial treatment: Loading dose of 320mg delivered as (2) 2mL subcutaneous (sub-Q) injections of 160mg each given on the same day at 2 different injection sites; and

ii. Continued treatment: (1) 160mg injection given once weekly; or

c. Approved dosing schedule for pediatric members 12 to 17 years of age (must have member weight in kilograms):
   i. Initial treatment: Loading dose of 4.4mg/kg, up to a maximum of 320mg, delivered as 1 or 2 sub-Q injections, with a maximum single-injection volume of 2mL (given at 2 different injection sites if administered as 2 injections); and
   ii. Continued treatment: 2.2mg/kg, up to a maximum of 160mg, given once weekly; and

9. Initial approvals will be for 6 months. Reauthorization may be granted if the prescriber documents the member is responding well to treatment as indicated by decreased recurrence of pericarditis or improvement in signs and symptoms of recurrent pericarditis (e.g., C-reactive protein, pericarditic chest pain, pericardial effusion). Subsequent approvals will be granted for the duration of 1 year.

Recommendation 12: Annual Review of Leukemia Medications and 30-Day Notice to Prior Authorize Erwinase® (Crisantaspase), Erwinaze® (Asparaginase *Erwinia Chrysanthemi*), Oncaspar® (Pegaspargase), Rylaze™ [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn], and Scemblix® (Asciminib)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN APRIL 2022.

Recommendation 13: Annual Review of Azedra® (Iobenguane I-131)

NO ACTION REQUIRED.

Recommendation 14: Annual Review of Anticonvulsants and 30-Day Notice to Prior Authorize Elepsia™ XR [Levetiracetam Extended-Release (ER) Tablet] and Eprontia™ (Topiramate Oral Solution)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN APRIL 2022.

Recommendation 15: Annual Review of Anti-Migraine Medications and 30-Day Notice to Prior Authorize Qulipta™ (Atogepant) and Trudhesa™ (Dihydroergotamine Nasal Spray)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN APRIL 2022.

Recommendation 16: Annual Review of Topical Acne and Rosacea Products and 30-Day Notice to Prior Authorize Winlevi® (Clascoterone 1% Cream)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN APRIL 2022.

Recommendation 17: 30-Day Notice to Prior Authorize Dojolvi® (Triheptanoin)

NO ACTION REQUIRED; WILL BE AN ACTION ITEM IN APRIL 2022.

Recommendation 18: Annual Review of Zokinvy® (Lonafarnib)

NO ACTION REQUIRED.

Recommendation 19: U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates

NO ACTION REQUIRED.

Recommendation 20: Future Business

NO ACTION REQUIRED.

My name is Leah Campbell, and I am a patient who has spent over 32 years living with Neuromyelitis Optica Spectrum Disorder (NMOSD). I am the Oklahoma Ambassador and Accessibility Manager for the Sumaira Foundation for NMO.

I am asking you to support coverage for Enspryng™ (Satralizumab-mwge), Soliris® (Eculizumab), Ultomiris® (Ravulizumab-cwvz), and Uplizna® (Inebilizumab-cdon) without restrictions or barriers that would block access to patients who may benefit.

NMOSD affects one to two per 100,000 people in the United States and seems to be similar worldwide. NMOSD is a rare, relapsing, demyelinating autoimmune disease that affects the central nervous system preferentially and attacks the optic nerves and the spinal cord. It is chronic and debilitating and typically results in vision loss or blindness in one or both eyes, weakness or paralysis in the legs or arms, painful spasms, loss of sensation, uncontrollable vomiting and hiccups, and bladder and/or bowel dysfunction.

My personal experience with NMO began in May 1989 at the age of 10. I began experiencing persistent nausea and vomiting. Two months later I began losing my vision due to optic neuritis. A little over a year later, I was totally blind. I was diagnosed with multiple sclerosis but not placed on preventative maintenance medication. Nevertheless, I was able to graduate salutatorian of Altus High School in my hometown of Altus, OK. I was then treated with MS drug therapies for six years. I went on to graduate with a BA in Mathematics from Rhodes College in Memphis, TN in May 2001.

After graduating from college, I became a quadriplegic overnight and lost the sensation of touch below my collar bone after receiving a chemotherapy approved to treat aggressive MS (a disease I had been misdiagnosed with). I went from interviewing for a career to not being able to scratch my own nose.

In 2006 after a 17-year diagnostic odyssey at the age of 27, I was finally diagnosed with Neuromyelitis Optica (NMO). What the doctors didn't know then was that some MS treatments actually make NMO worse. These treatments help patients by preventing relapses and disability.

My personal experience with proper treatment is that I have been relapse-free. I have been able to improve to a paraplegic and beginning to regain core strength through physical, occupational, aquatic and equine therapies. Without access to proper treatment, I would be dead.

Clinical data shows that for Soliris, the treatment is effective. Clinical data shows that for Enspryng, the treatment is effective. Clinical data shows that for Uplizna, the treatment is effective. Clinical data shows that for Ultomiris, the treatment is effective.

Again, I ask that you support coverage for Enspryng™ (Satralizumab-mwge), Soliris® (Eculizumab), Ultomiris® (Ravulizumab-cwvz), and Uplizna® (Inebilizumab-cdon) according to

the FDA label without requirements like “fail first,” step therapy, invasive testing, and/or other requirements that will limit patient access to this treatment.

Thank you for your consideration.

Leah Campbell

My name is Marie Abrego and I am a patient who has spent 15 years living with neuromyelitis optica spectrum disorder (NMOSD). I am the New Mexico Ambassador and Welcome Manager for The Sumaira Foundation.

I am asking you to support coverage for Enspryng™ (Satralizumab-mwge), Soliris® (Eculizumab), Ultomiris® (Ravulizumab-cwvz), and Uplizna® (Inebilizumab-cdon) without restrictions or barriers that would block access to patients who may benefit.

NMOSD is a rare, chronic and debilitating autoimmune disease that attacks the central nervous system (brain and spinal cord) leaving patients blind, incontinent, and/or paralyzed. The cause is unknown, and there is no cure.

NMOSD occurs in individuals of all races with a prevalence rate of about one to two out of 100,000. There are an estimated 4,000-8,000 patients living with NMOSD in the US. About 35% of NMOSD patients are misdiagnosed with multiple sclerosis meaning that there are likely many more people living with the disease than we are currently aware of.

In an acute context, NMOSD relapses are treated with IV steroids and/or plasmapheresis (also referred to as PLEX or plasma exchange). Long-term preventative and life-changing therapies include immunosuppressive therapy, intravenous immunoglobulin (IVIG), and oral steroids.

Without access to this treatment, I would likely be completely blind, paralyzed, and quite possibly, dead. Clinical data shows that the treatments are highly effective. These life-changing therapies enable patients like me to lead as normal of a life as possible, despite having this devastating diagnosis. These therapies keep patients like me in remission for extended periods of time, enabling us to enjoy the pleasures of life, as we deserve to, just like everyone else.

Gone are the days when NMOSD patients were essentially experiments, with off-label and incorrect therapies being used in efforts to treat our illness. We now have therapies *specifically* indicated for NMOSD and not being able to access them feels criminal.

I was robbed of my youth by this disease when I was diagnosed at just 15 years old, when there were no available therapies. But now, there are multiple available therapies that will provide patients like me with a second chance at life - something we never thought we'd ever have. We may be a small community, but our lives matter too, and we deserve access and coverage of medications that will save and preserve our lives.

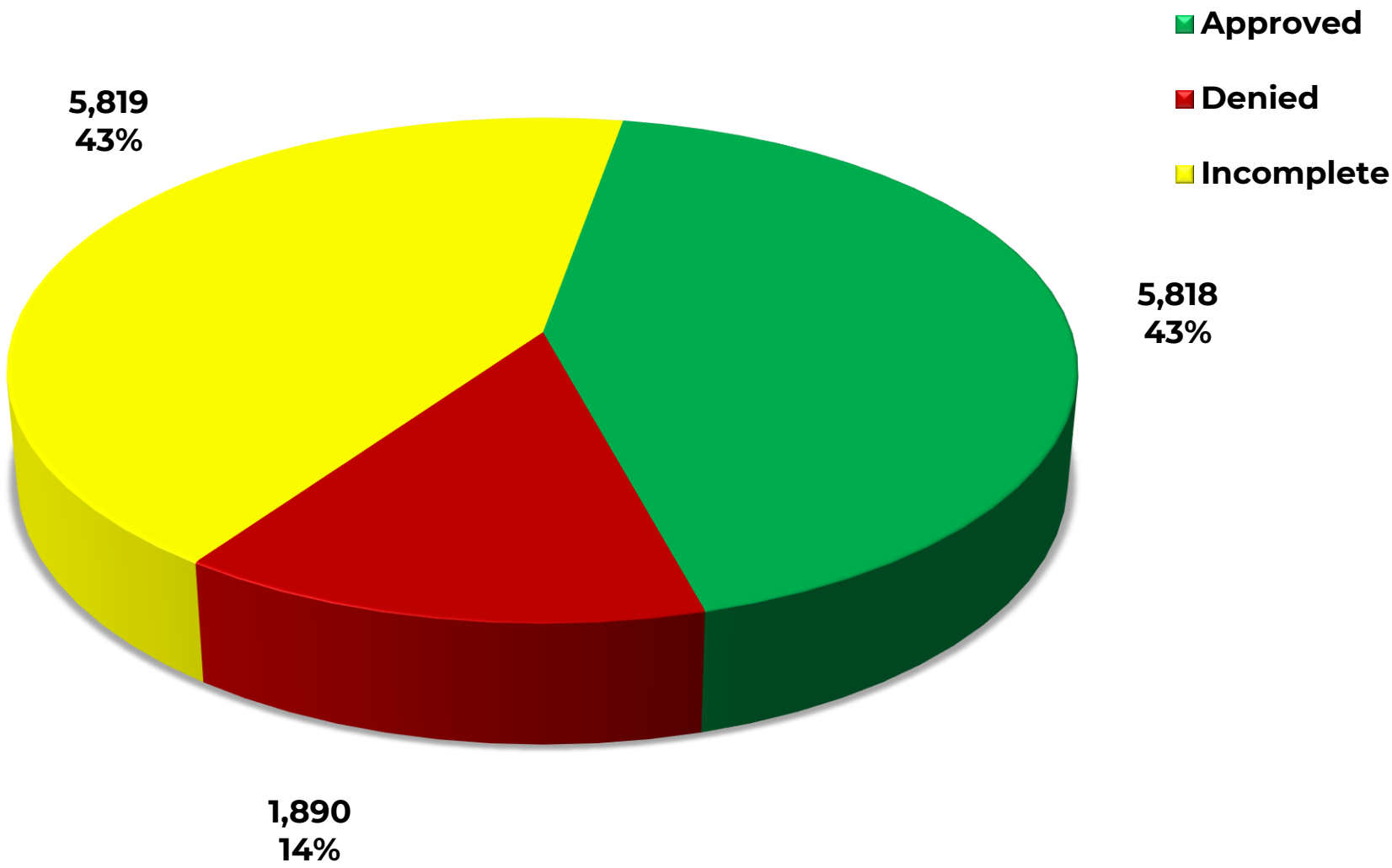
Again, I ask that you support coverage for Enspryng™ (Satralizumab-mwge), Soliris® (Eculizumab), Ultomiris® (Ravulizumab-cwvz), and Uplizna® (Inebilizumab-cdon) according to the FDA label without requirements like "fail first," step therapy, invasive testing, and/or other requirements that will limit patient access to this treatment.

Thank you for your consideration.

Marie Abrego

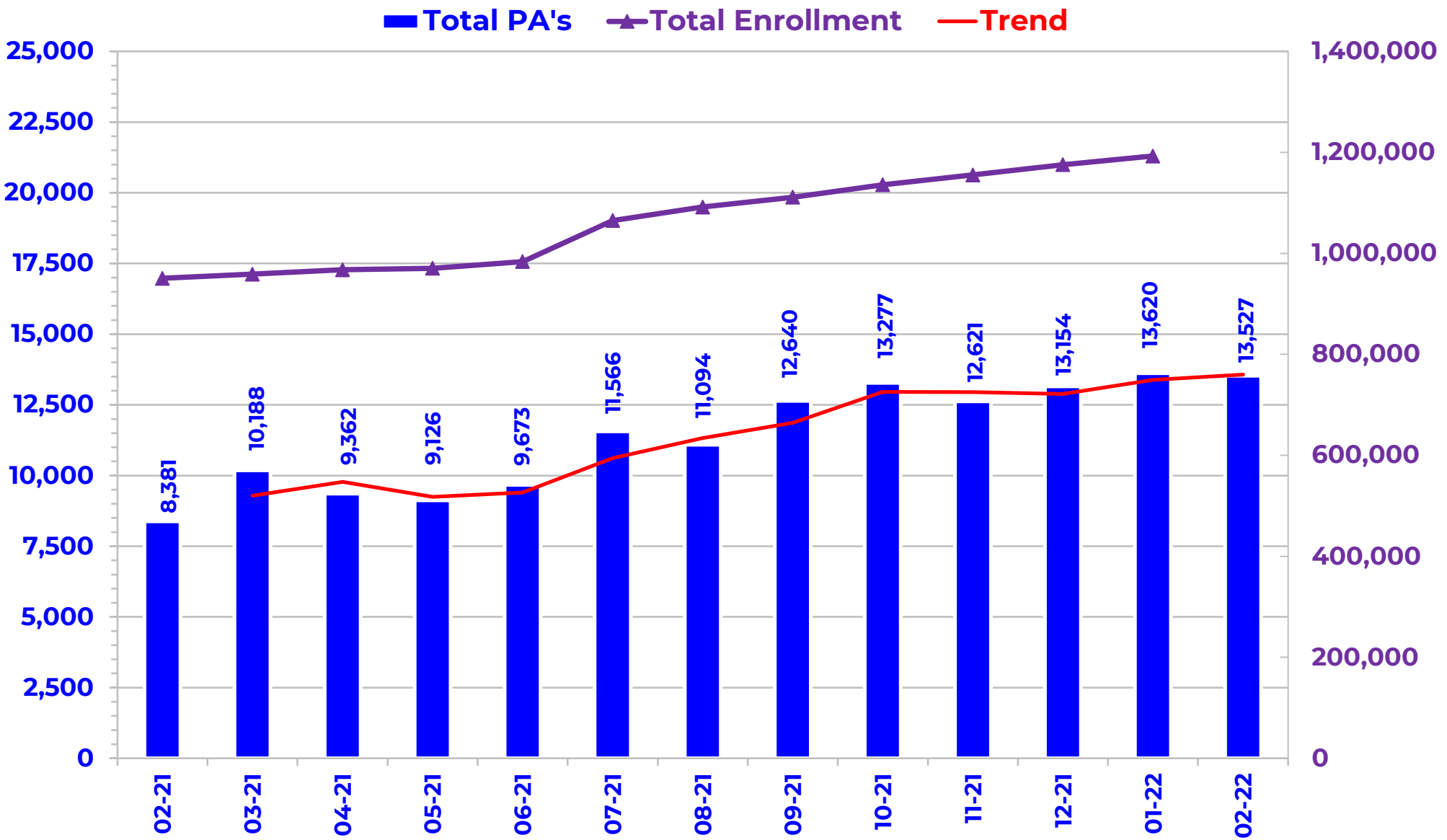
Appendix B

PRIOR AUTHORIZATION ACTIVITY REPORT: FEBRUARY 2022



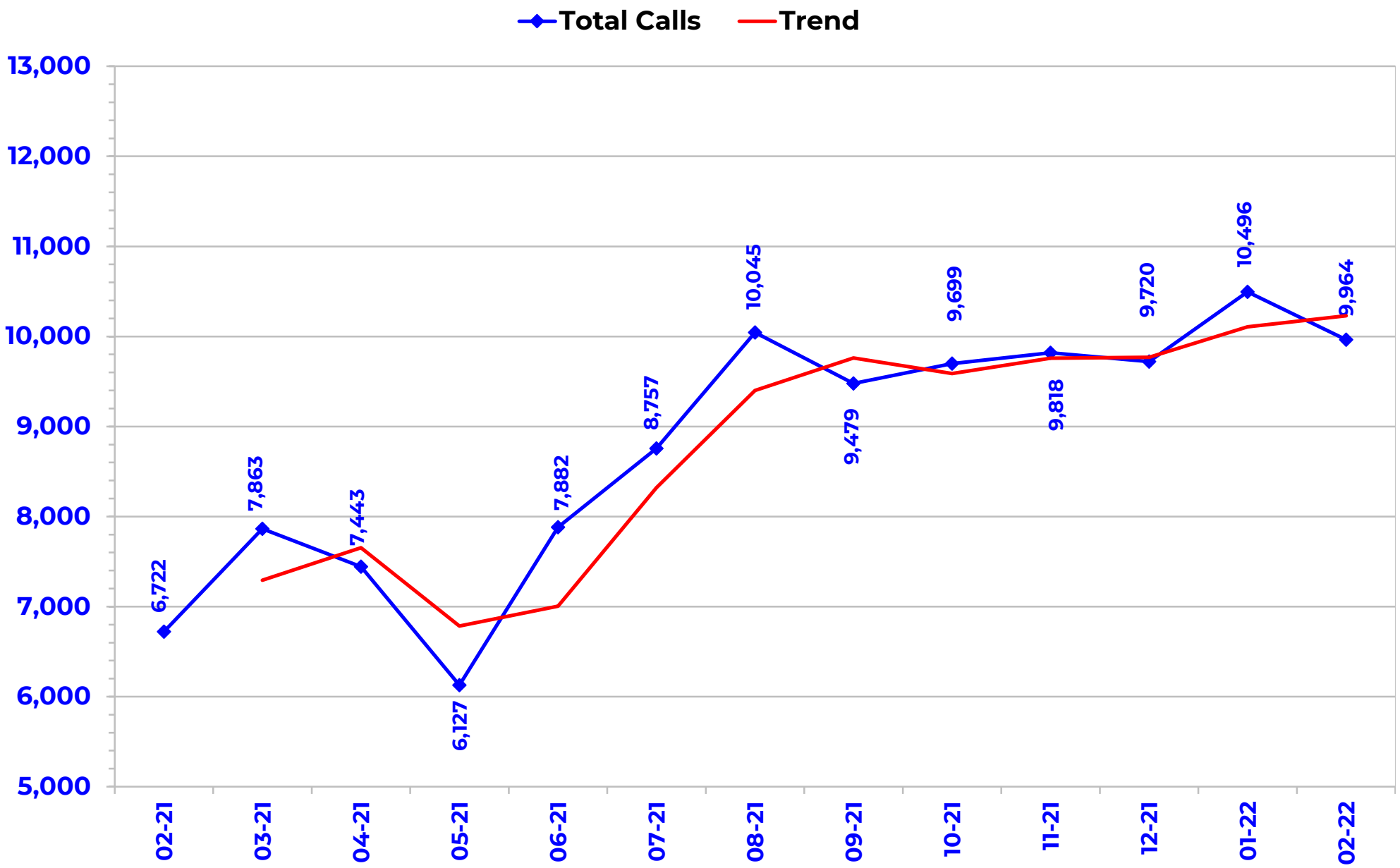
PA totals include approved/denied/incomplete/overrides

PRIOR AUTHORIZATION REPORT: FEBRUARY 2021 – FEBRUARY 2022



PA totals include approved/denied/incomplete/overrides

CALL VOLUME MONTHLY REPORT: FEBRUARY 2021 – FEBRUARY 2022



Prior Authorization Activity

2/1/2022 Through 2/28/2022

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
ACE Inhibitors	10	3	2	5	321
Advair/Symbicort/Dulera	133	40	11	82	350
Analgesic - NonNarcotic	16	0	1	15	0
Analgesic, Narcotic	289	112	34	143	165
Angiotensin Receptor Antagonist	16	2	3	11	359
Antiasthma	83	18	18	47	221
Antibiotic	50	23	4	23	164
Anticonvulsant	198	82	20	96	327
Antidepressant	365	82	68	215	338
Antidiabetic	1,195	412	216	567	356
Antihistamine	31	10	12	9	359
Antimalarial Agent	16	15	1	0	340
Antimigraine	441	71	129	241	229
Antineoplastic	232	156	12	64	171
Antiobesity	11	0	11	0	0
Antiparasitic	75	27	11	37	14
Antiparkinsons	11	0	7	4	0
Antiulcers	48	7	8	33	65
Anxiolytic	17	2	3	12	359
Atypical Antipsychotics	456	182	58	216	355
Benign Prostatic Hypertrophy	15	1	7	7	360
Biologics	328	172	35	121	271
Bladder Control	79	8	21	50	359
Blood Thinners	693	356	41	296	339
Botox	52	39	5	8	299
Buprenorphine Medications	99	48	10	41	86
Calcium Channel Blockers	25	5	3	17	205
Cardiovascular	73	28	13	32	318
Chronic Obstructive Pulmonary Disease	343	55	91	197	322
Constipation/Diarrhea Medications	265	59	71	135	255
Contraceptive	31	5	5	21	299
Corticosteroid	15	3	5	7	45
Dermatological	363	137	89	137	173
Diabetic Supplies	1,041	425	130	486	273
Diuretic	11	6	0	5	297
Endocrine & Metabolic Drugs	109	54	16	39	204
Erythropoietin Stimulating Agents	22	11	1	10	111
Fibric Acid Derivatives	15	3	2	10	357
Fibromyalgia	18	1	3	14	174
Fish Oils	36	11	6	19	359

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

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Gastrointestinal Agents	125	34	24	67	231
Genitourinary Agents	15	1	3	11	358
Glaucoma	21	7	2	12	116
Growth Hormones	87	61	7	19	144
Hematopoietic Agents	29	12	5	12	208
Hepatitis C	253	149	29	75	9
HFA Rescue Inhalers	17	1	1	15	360
Insomnia	106	10	31	65	240
Insulin	274	74	38	162	347
Miscellaneous Antibiotics	22	4	3	15	13
Multiple Sclerosis	83	38	8	37	184
Muscle Relaxant	53	4	8	41	153
Nasal Allergy	100	7	36	57	83
Neurological Agents	112	30	28	54	230
Neuromuscular Agents	12	7	2	3	332
NSAIDs	46	2	8	36	359
Ocular Allergy	17	1	7	9	83
Ophthalmic	17	3	2	12	360
Ophthalmic Anti-infectives	22	5	1	16	32
Ophthalmic Corticosteroid	16	2	1	13	186
Osteoporosis	31	17	5	9	328
Other*	364	93	61	210	305
Otic Antibiotic	24	1	1	22	28
Pediculicide	22	5	3	14	17
Respiratory Agents	53	31	2	20	290
Smoking Cess.	30	2	25	3	340
Statins	52	7	13	32	187
Stimulant	1,328	803	79	446	351
Synagis	138	94	15	29	46
Testosterone	125	37	27	61	318
Thyroid	38	12	5	21	335
Topical Antifungal	42	3	8	31	34
Topical Corticosteroids	76	1	40	35	360
Vitamin	144	22	53	69	117
Pharmacotherapy	67	65	0	2	276
Emergency PAs	0	0	0	0	
Total	**11,287**	**4,316**	**1,764**	**5,207**	

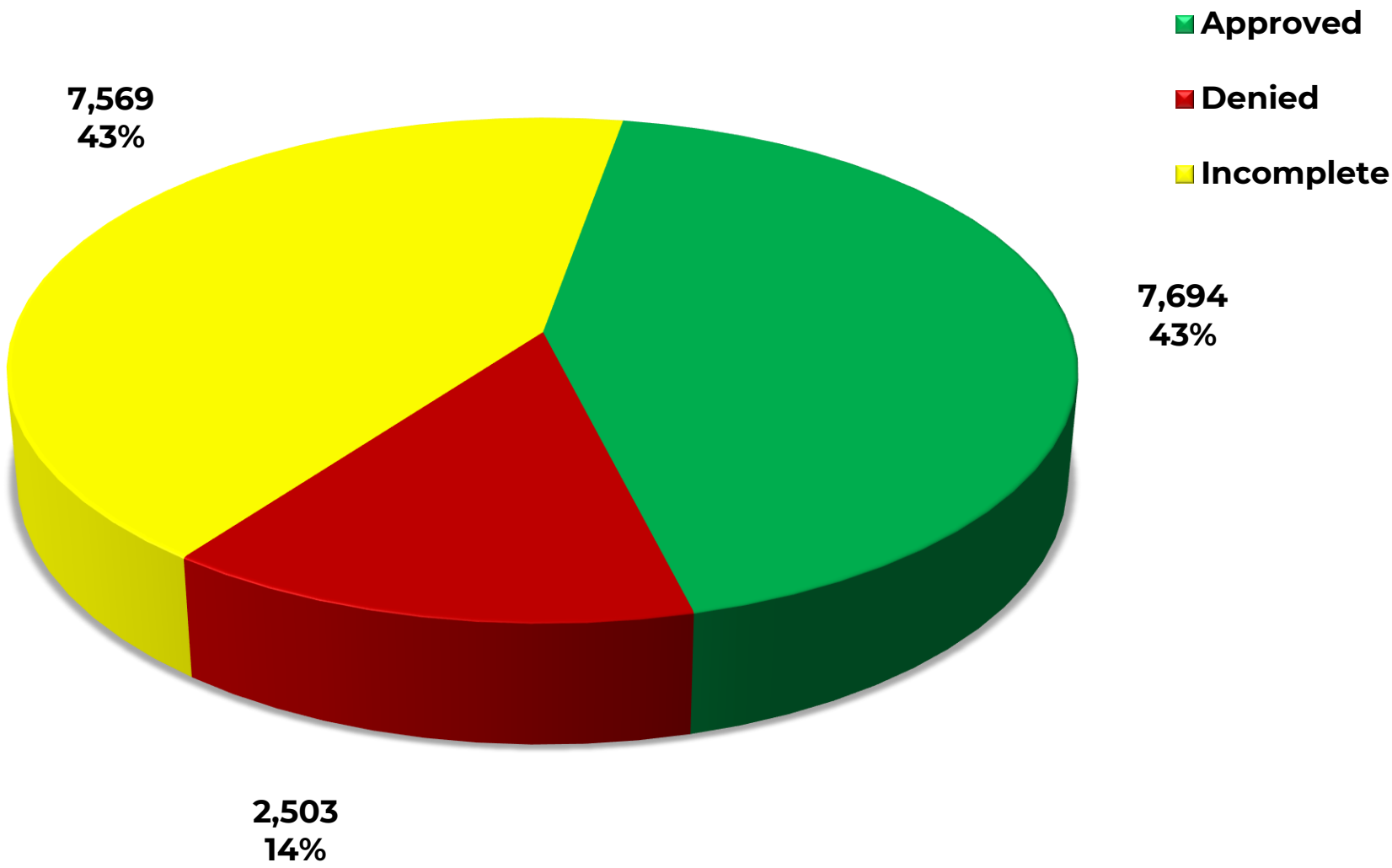
* Includes any therapeutic category with less than 10 prior authorizations for the month.

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Overrides					
Brand	19	8	1	10	301
Compound	6	6	0	0	11
Cumulative Early Refill	1	1	0	0	180
Diabetic Supplies	10	7	0	3	196
Dosage Change	396	368	1	27	14
High Dose	3	1	0	2	18
Ingredient Duplication	5	2	0	3	12
Lost/Broken Rx	112	95	10	7	16
MAT Override	249	190	3	56	83
NDC vs. Age	403	202	56	145	267
NDC vs. Sex	9	8	1	0	62
Nursing Home Issue	73	69	0	4	15
Opioid MME Limit	152	47	7	98	129
Opioid MME Limit;	4	1	0	3	176
Opioid Quantity	40	26	1	13	168
Other	46	41	1	4	14
Quantity vs. Days Supply	632	374	38	220	241
STBS/STBSM	15	9	5	1	42
Step Therapy Exception	15	7	2	6	359
Stolen	8	7	0	1	23
Third Brand Request	42	33	0	9	13
Overrides Total	**2,240**	**1,502**	**126**	**612**	
Total Regular PAs + Overrides	**13,527**	**5,818**	**1,890**	**5,819**	

Denial Reasons	
Unable to verify required trials.	4,929
Does not meet established criteria.	1,916
Lack required information to process request.	858
Other PA Activity	
Duplicate Requests	1,529
Letters	28,262
No Process	3
Changes to existing PAs	972
Helpdesk Initiated Prior Authorizations	961
PAs Missing Information	2

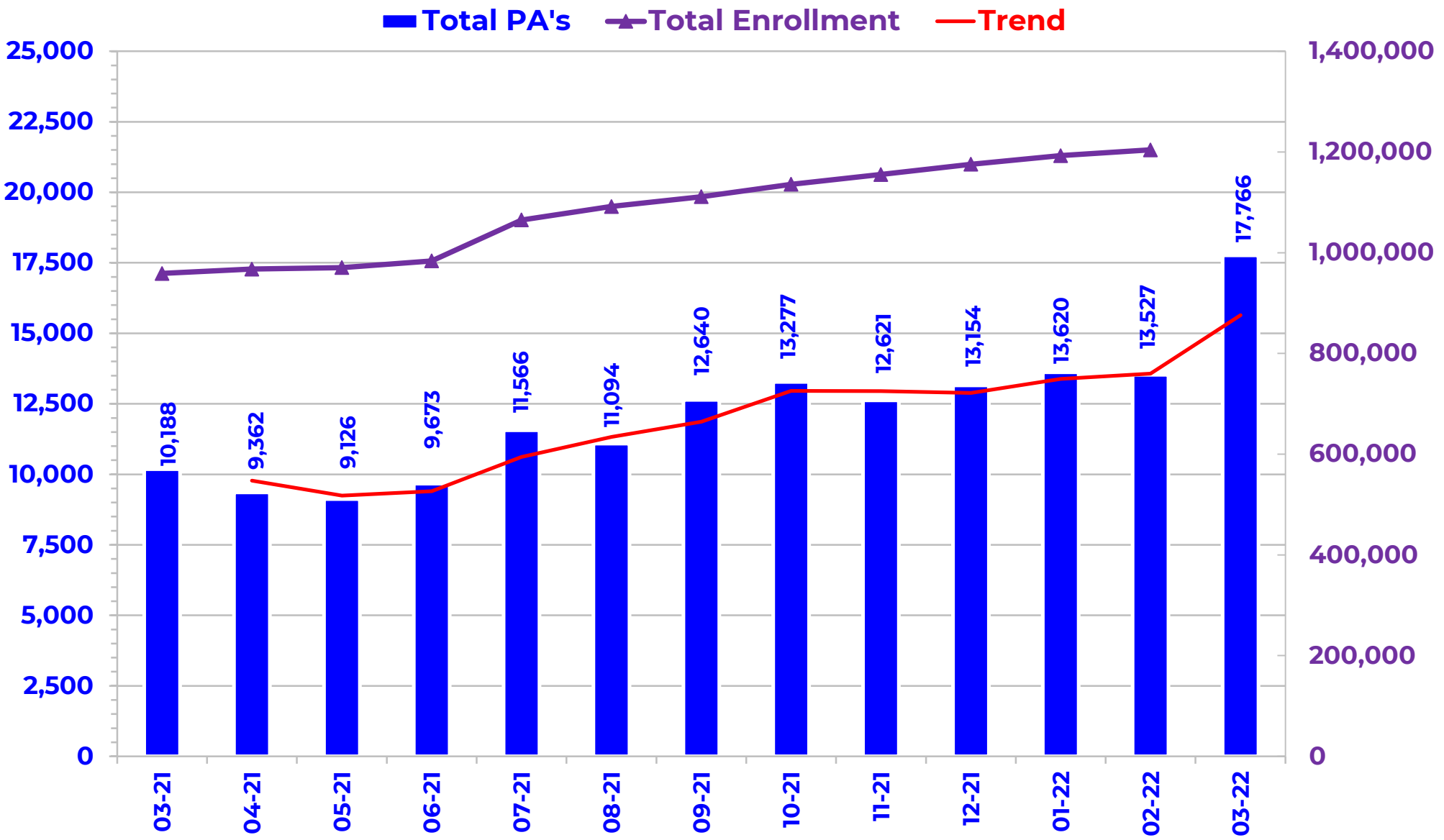
* Includes any therapeutic category with less than 10 prior authorizations for the month.

PRIOR AUTHORIZATION ACTIVITY REPORT: MARCH 2022



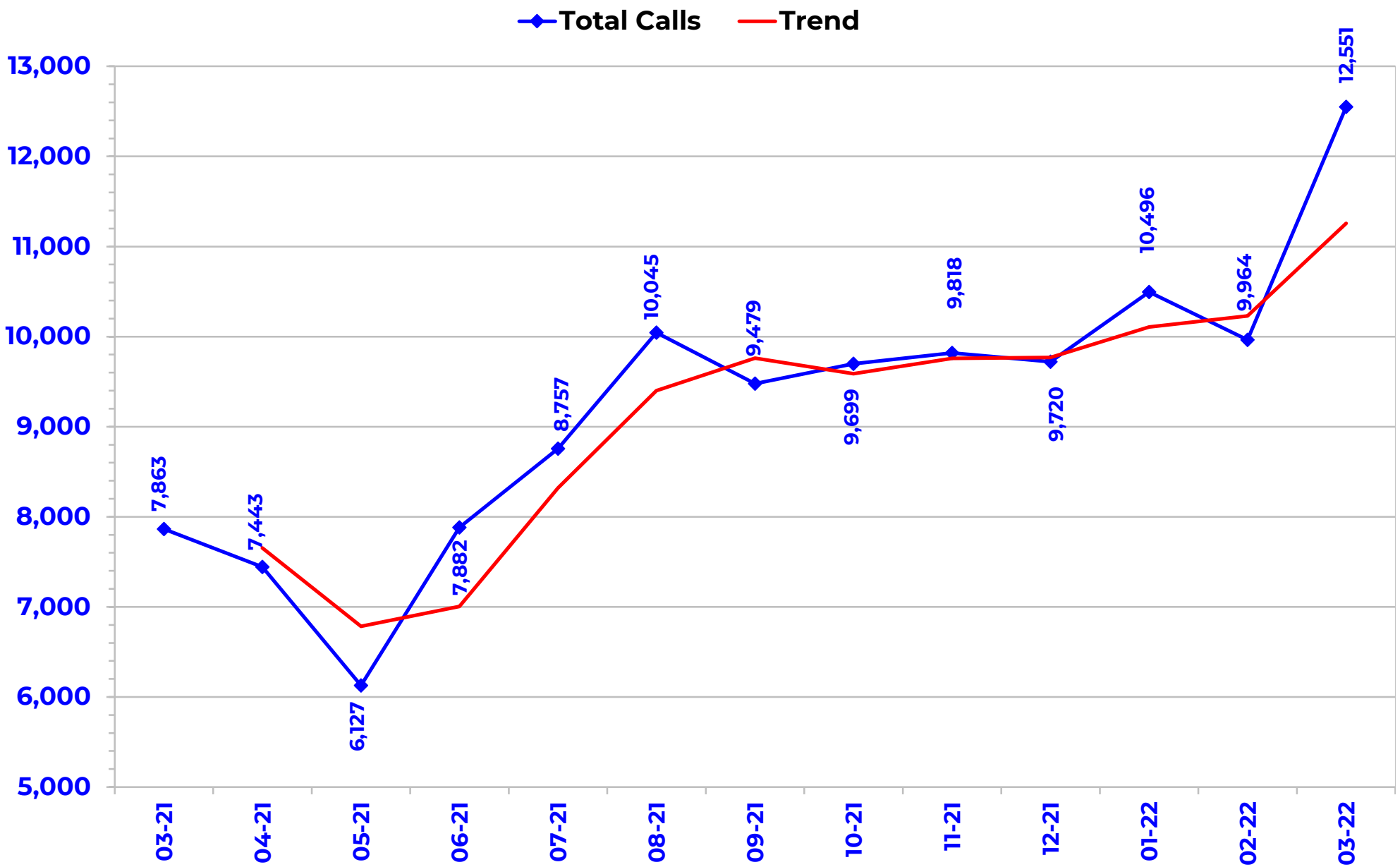
PA totals include approved/denied/incomplete/overrides

PRIOR AUTHORIZATION REPORT: MARCH 2021 – MARCH 2022



PA totals include approved/denied/incomplete/overrides

CALL VOLUME MONTHLY REPORT: MARCH 2021 – MARCH 2022



Prior Authorization Activity

3/1/2022 Through 3/31/2022

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Advair/Symbicort/Dulera	134	44	7	83	357
Analgesic - NonNarcotic	24	0	5	19	0
Analgesic, Narcotic	393	135	40	218	143
Angiotensin Receptor Antagonist	17	3	2	12	360
Antiasthma	74	17	16	41	263
Antibiotic	58	30	1	27	212
Anticoagulant	11	3	0	8	103
Anticonvulsant	249	98	17	134	310
Antidepressant	461	97	80	284	325
Antidiabetic	1,496	529	271	696	357
Antigout	18	5	4	9	359
Antihemophilic Factor	10	6	0	4	115
Antihistamine	51	12	18	21	359
Antimalarial Agent	157	126	11	20	349
Antimigraine	558	97	173	288	222
Antineoplastic	254	176	15	63	164
Antiobesity	26	0	26	0	0
Antiparasitic	70	31	5	34	12
Antiulcers	46	4	9	33	129
Anxiolytic	23	3	1	19	298
Atypical Antipsychotics	619	251	73	295	350
Benign Prostatic Hypertrophy	11	0	7	4	0
Biologics	477	234	66	177	268
Bladder Control	105	11	32	62	360
Blood Thinners	855	456	61	338	343
Botox	78	55	9	14	312
Buprenorphine Medications	101	38	11	52	80
Calcium Channel Blockers	28	6	2	20	314
Cardiovascular	98	41	15	42	318
Chronic Obstructive Pulmonary Disease	418	63	97	258	324
Constipation/Diarrhea Medications	291	51	76	164	245
Contraceptive	32	12	9	11	359
Corticosteroid	12	3	2	7	35
Dermatological	518	169	169	180	214
Diabetic Supplies	1,466	610	176	680	270
Endocrine & Metabolic Drugs	115	61	15	39	217
Erythropoietin Stimulating Agents	39	20	1	18	110
Estrogen Derivative	11	2	2	7	359
Fibric Acid Derivatives	12	1	2	9	363
Fibromyalgia	23	6	4	13	192

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

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Fish Oils	46	4	17	25	359
Gastrointestinal Agents	203	49	34	120	231
Genitourinary Agents	22	3	6	13	191
Glaucoma	22	1	6	15	39
Growth Hormones	165	110	13	42	139
Hematopoietic Agents	24	10	0	14	151
Hepatitis C	303	193	34	76	9
HFA Rescue Inhalers	23	1	4	18	350
Insomnia	89	8	15	66	175
Insulin	376	112	37	227	358
Miscellaneous Antibiotics	26	10	0	16	12
Multiple Sclerosis	105	49	10	46	223
Muscle Relaxant	86	8	18	60	168
Nasal Allergy	121	14	32	75	124
Neurological Agents	144	43	31	70	210
Neuromuscular Agents	13	6	4	3	236
NSAIDs	67	4	17	46	206
Ocular Allergy	32	4	8	20	137
Ophthalmic	17	2	4	11	269
Ophthalmic Anti-infectives	20	5	1	14	12
Ophthalmic Corticosteroid	14	3	0	11	247
Osteoporosis	50	15	13	22	339
Other*	534	110	94	330	294
Otic Antibiotic	17	1	2	14	10
Pediculicide	12	3	0	9	5
Respiratory Agents	56	39	0	17	231
Smoking Cess.	47	1	42	4	87
Statins	68	8	23	37	119
Stimulant	1,863	1,063	160	640	352
Synagis	132	97	8	27	30
Testosterone	196	60	44	92	343
Thyroid	51	24	7	20	273
Topical Antifungal	45	2	12	31	14
Topical Corticosteroids	109	3	57	49	208
Vitamin	177	22	79	76	135
Pharmacotherapy	112	104	2	6	286
Emergency PAs	0	0	0	0	
Total	**14,826**	**5,697**	**2,364**	**6,765**	

* 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	46	17	4	25	327
Compound	17	12	0	5	6
Diabetic Supplies	7	4	0	3	184
Dosage Change	497	455	0	42	17
High Dose	6	3	0	3	136
IHS-Brand	1	1	0	0	5
Ingredient Duplication	3	2	0	1	15
Lost/Broken Rx	146	140	2	4	17
MAT Override	331	245	3	83	82
NDC vs. Age	468	250	71	147	254
NDC vs. Sex	13	8	1	4	120
Nursing Home Issue	136	122	0	14	13
Opioid MME Limit	176	50	8	118	130
Opioid Quantity	64	40	2	22	154
Other	96	78	3	15	14
Quantity vs. Days Supply	831	505	39	287	237
STBS/STBSM	20	14	2	4	74
Step Therapy Exception	14	11	2	1	359
Stolen	10	8	1	1	23
Third Brand Request	57	32	1	24	14
Wrong D.S. on Previous Rx	1	0	0	1	0
Overrides Total	**2,940**	**1,997**	**139**	**804**	
Total Regular PAs + Overrides	**17,766**	**7,694**	**2,503**	**7,569**	

Denial Reasons	
Unable to verify required trials.	6,431
Does not meet established criteria.	2,544
Lack required information to process request.	1,096
Other PA Activity	
Duplicate Requests	1,424
Letters	37,930
No Process	3
Changes to existing PAs	1,454
Helpdesk Initiated Prior Authorizations	1,194
PAs Missing Information	1

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

Spring 2022 Pipeline Update

Oklahoma Health Care Authority
April 2022

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.

Tapinarof[1,2,3,4]

Anticipated Indication(s): Treatment of mild-to-severe plaque psoriasis

Clinical Trial(s): In June 2021, Dermavant Sciences submitted a New Drug Application (NDA) to the FDA for tapinarof for the treatment of adults with plaque psoriasis. Tapinarof is a novel, therapeutic aryl hydrocarbon receptor (AHR) modulating agent, formulated as a topical cream, which is being evaluated for the treatment of plaque psoriasis and atopic dermatitis. The NDA for the treatment of plaque psoriasis is supported by data from the Phase 3 PSOARING 1 and PSOARING 2 studies and by interim data from PSOARING 3, an ongoing long-term safety study. PSOARING 1 and PSOARING 2 were identical, multi-center, randomized, vehicle-controlled, double-blind studies which enrolled a total of 1,025 adult patients with mild-to-severe plaque psoriasis. Patients were randomized to receive tapinarof 1% cream or vehicle cream once daily for 12 weeks. The primary efficacy endpoint in both studies was the proportion of patients achieving a Physician Global Assessment (PGA) score of 0 (clear) or 1 (almost clear) with at least a 2-point improvement from baseline at week 12. In PSOARING 1, the primary endpoint was met in by 35.4% of patients in the tapinarof group vs. 6.0% of patients in the vehicle group. In PSOARING 2, the primary endpoint was met by 40.2% of patients in the tapinarof group vs. 6.3% of patients in the vehicle group. The difference between the tapinarof group and vehicle group was statistically significant in both studies ($P<0.0001$). Additionally, the key secondary endpoint [the proportion of patients with ≥75% improvement in Psoriasis Area and Severity Index (PASI-75)] was also met in both studies ($P<0.0001$).

The most common adverse events reported were folliculitis, nasopharyngitis, and contact dermatitis, with no drug-related serious adverse events reported in either study.

Place in Therapy: Psoriasis has a worldwide prevalence of approximately 1% to 8% and it presents in childhood in approximately one-third of cases. Plaque psoriasis is the most common type of psoriasis and typically presents with large oval-circular plaques on the scalp, trunk, and extensor body surface. Many patients have acute flares and relapses, which may progress into the more severe pustular subtype. Approximately 15% of patients with plaque psoriasis will develop psoriatic arthritis. Treatment options for plaque psoriasis include topical products (e.g., emollients, corticosteroids, keratolytics, vitamin D3 analogs), phototherapy, and systemic medications. If approved by the FDA, tapinarof would be the first AHR modulating agent available, proving a new mechanism of action for patients with plaque psoriasis.

Projected FDA Decision: May 2022

SoonerCare Impact: During calendar year 2021, there were 61,905 paid pharmacy claims for topical corticosteroids for 40,458 unique members, which accounted for a total cost of $1,092,358.97 and an average cost per claim of $17.65. This utilization data includes paid pharmacy claims for all covered indications and does not distinguish between utilization for plaque psoriasis and utilization for other indications for which use may be appropriate. These costs do not reflect rebated prices or net costs. There were 565 unique members with a reported diagnosis of psoriasis vulgaris during calendar year 2021.

Tebipenem[5,6,7,8]

Anticipated Indication(s): Treatment of adults with complicated urinary tract infection (UTI), including acute pyelonephritis (AP)

Clinical Trial(s): In October 2021, Spero Therapeutics submitted an NDA to the FDA for tebipenem, a novel, oral carbapenem antibiotic, for the treatment of complicated UTI and AP. The NDA submission is supported by data from the Phase 3 ADAPT-PO study, which was a randomized, double-blind, double-dummy study evaluating the safety and efficacy of oral tebipenem relative to intravenous (IV) ertapenem in hospitalized adult patients with complicated UTI or AP. Patients were randomized 1:1 to receive tebipenem 600mg every 8 hours or ertapenem 1g every 24 hours for 7 to 10 days (or up to 14 days for patients with concurrent bacteremia). The primary endpoint was defined as a combination of clinical cure and microbiological eradication of the causative pathogen(s) at the test-of-cure visit (day 19 ±2 days). The primary endpoint was met in 58.8% of patients who received oral tebipenem and 61.6% of

patients who received IV ertapenem at the test-of-cure visit [treatment difference: -3.3%; 95% confidence interval (CI): -9.7, 3.2], demonstrating non-inferiority of oral tebipenem relative to IV ertapenem. Safety data indicated oral tebipenem was well-tolerated and had a similar safety profile to ertapenem. In January 2022, the FDA granted priority review to tebipenem for the treatment of complicated UTI and AP.

Place in Therapy: Simple, non-complicated UTIs (occurring in non-pregnant, immune competent females) have an estimated incidence of up to 0.7 infections per person per year, with 50% of females experiencing at least 1 UTI during their lifetime. Complicated UTIs increase in frequency depending on specific risk factors, such as the use of an indwelling bladder catheter where there is a 10% daily risk of developing bacteriuria and a 25% risk that bacteriuria will progress to a UTI. Although the incidence of asymptomatic bacteriuria in pregnant females is similar to the incidence in non-pregnant females, it tends to progress to symptomatic UTI in up to 40% of pregnant women. Most cases of complicated UTI are caused by *Enterobacteriaceae*, with *Escherichia coli* being the most common pathogen in the majority of infections. In the United States, drug-resistant forms of *Enterobacteriaceae* are a serious concern, with resistance rates to fluoroquinolones >30% in most areas of the country. Carbapenem antibiotics are part of the standard-of-care for many multidrug-resistant gram-negative infections, but are currently only available in IV formulations. If approved, tebipenem would be the first oral carbapenem antibiotic approved by the FDA and would potentially allow for more outpatient treatment of complicated UTI and AP. Additionally, the use of tebipenem may allow for earlier hospital discharge for hospitalized patients.

Projected FDA Decision: June 2022

SoonerCare Impact: During calendar year 2021, there were 1,049 paid medical claims for carbapenem medications for 226 unique members, which accounted for a total cost of $18,791.82 and an average cost per claim of $17.91. These costs do not reflect rebated prices or net costs. This utilization data includes paid medical claims for all indications and does not distinguish between utilization for complicated UTI and utilization for other indications for which use may be appropriate.

Tirzepatide[9,10,11,12,13]

Anticipated Indication(s): Treatment of adults with type 2 diabetes mellitus (T2DM)

Clinical Trial(s): In October 2021, Eli Lilly submitted an NDA to the FDA for tirzepatide for the treatment of adults with T2DM. Tirzepatide is a dual agonist for both the glucose-dependent insulinotropic polypeptide (GIP) and

glucagon-like peptide-1 (GLP-1) receptors. Tirzepatide has a novel mechanism of action, combining the actions of 2 incretins into a single molecule. GIP is a hormone that may complement the effects of GLP-1 receptor agonists, and GIP has been shown to decrease food intake and increase energy expenditure in preclinical models, resulting in weight reduction. When combined with its effects on GLP-1, this may result in even greater effects on glucose and weight. Tirzepatide is being evaluated in the Phase 3 SURPASS clinical program, consisting of 5 primary studies. SURPASS-1, a 40-week, multi-center, randomized, double-blind, parallel, placebo-controlled study compared the efficacy and safety of 3 doses of tirzepatide (5mg, 10mg, or 15mg) as monotherapy relative to placebo in adults with T2DM who were inadequately controlled with diet and exercise alone. The primary endpoint (reduction in A1C from baseline at week 40) was met with all 3 doses of tirzepatide relative to placebo. SURPASS-2, a 40-week, multi-center, randomized, parallel, open-label study, compared the same 3 doses of tirzepatide to injectable semaglutide in adults with T2DM who were inadequately controlled with ≥1,500mg/day of metformin alone. The results demonstrated tirzepatide 10mg and 15mg were non-inferior to injectable semaglutide for A1C reduction from baseline at week 40. SURPASS-3, a 52-week, multi-center, randomized, open-label study, compared the 3 doses of tirzepatide to titrated insulin degludec in adults with T2DM treated with metformin with or without a sodium-glucose cotransporter-2 (SGLT-2) inhibitor. The primary endpoint (A1C reduction from baseline at week 52) was met for the 10mg and 15mg doses of tirzepatide relative to patients who received titrated insulin degludec. SURPASS-4, a 52-week, randomized, parallel, open-label study, compared the 3 doses of tirzepatide to insulin glargine in adults with T2DM who were inadequately controlled with 1-3 oral anti-hyperglycemic medications (including metformin, sulfonylureas, or SGLT-2 inhibitors) who had increased cardiovascular risk. The results demonstrated that tirzepatide 10mg and 15mg were non-inferior to insulin glargine for A1C reduction from baseline at week 52. SURPASS-5, a 40-week, multi-center, randomized, double-blind study, compared the 3 doses of tirzepatide to placebo in adults with inadequately controlled T2DM already being treated with insulin glargine, with or without metformin. The primary endpoint (A1C reduction from baseline at week 40) was met for all 3 doses of tirzepatide compared with placebo. In total, the SURPASS Phase 3 program enrolled more than 13,000 patients with T2DM. The overall safety profile of tirzepatide was consistent with the GLP-1 receptor agonist class of medications, with the most frequently reported adverse events being gastrointestinal in nature and which tended to decrease over time.

Place in Therapy: Diabetes affects approximately 37 million people in the United States, with T2DM accounting for approximately 90% to 95% of all diabetes cases nationally. Although most commonly seen in adults over age

45, more and more children, adolescents, and young adults are developing T2DM. If approved by the FDA, tirzepatide would be the first dual GIP/GLP-1 agonist medication available for the treatment of T2DM.

Projected FDA Decision: May 2022

SoonerCare Impact: During calendar year 2021, there were 13,306 paid pharmacy claims for GLP-1 agonist medications for the treatment of T2DM for 3,043 unique members. This utilization accounted for a total cost of $13,188,538.95 and an average cost per claim of $991.17. These costs do not reflect rebated prices or net costs.

Pipeline Table[14,15]

Medication Name*	Manufacturer	Therapeutic Use	Route of Admin	Approval Status	Anticipated FDA Response
Casirivimab/ Imdevimab	Regeneron/ Roche	COVID-19	IV/IM/ SC	BLA	04/2022
Dexmedetomidine	BioXcel	Acute agitation related to bipolar disorder or schizophrenia	SL	NDA; Fst Trk	04/2022
Ganaxolone	Marinus Pharmaceuticals	Seizures	PO	NDA; OD	04/2022
Mavacamten	MyoKardia	Cardiomyo-pathy	PO	NDA; Brk Thru; Fst Trk; OD	04/2022
Meloxicam/ Rizatriptan	Axsome Therapeutics	Migraine	PO	NDA	04/2022
Risperidone	Teva Pharmaceuticals/ MedinCell	Schizophrenia	SC	NDA	04/2022
Vutrisiran	Alnylam	Transthyretin-mediated amyloidosis	SC	BLA; Fst Trk; OD	04/2022
Dihydroergotamine Autoinjector	Amneal	Migraine and cluster headache treatment	SC	NDA	04/2022 – 09/2022
Cantharidin	Verrica	Molluscum	TOP	NDA	05/2022
Edaravone	Mitsubishi Tanabe Pharma	ALS	PO	NDA; OD	05/2022
Faricimab	Roche/Chugai	Diabetic macular edema/AMD	INVT	BLA	05/2022
Tapinarof	Roivant	Plaque psoriasis	TOP	NDA	05/2022

Medication Name*	Manufacturer	Therapeutic Use	Route of Admin	Approval Status	Anticipated FDA Response
Tirzepatide	Eli Lilly	T2DM	SC	NDA	05/2022
Vonoprazan Fumarate	Phathom Pharmaceuticals	*H. pylori* infection	PO	NDA	05/2022
Sodium Phenylbutyrate	Acer Therapeutics	Urea cycle disorders	PO	NDA	06/2022
Sodium Phenylbutyrate/ Taurursodiol	Amylyx Pharmaceuticals	ALS	PO	NDA; OD	06/2022
Spesolimab	Boehringer Ingelheim	Generalized pustular psoriasis	IV	BLA	06/2022
Tebipenem	Spero Therapeutics	Complicated UTI	PO	NDA; Fst Trk	06/2022
Trientine Tetrahydrochloride	Orphalan	Wilson's disease	PO	NDA; OD	06/2022 – 07/2022
Bulevirtide	Gilead	Hepatitis delta virus	SC	BLA; OD	07/2022
Cipaglucosidase Alfa	Amicus	Pompe disease	IV	BLA; OD	07/2022
Narsoplimab	Omeros	HSCT-associated thrombotic microanio-pathy	IV	BLA; OD	07/2022
Olipudase Alfa	Sanofi	Acid sphingomyelin-ase deficiency	IV	BLA; OD	07/2022
Ravulizumab-cwvz	AstraZeneca/ Alexion	PNH	SC	BLA; OD	07/2022
Roflumilast	Arcutis Biotherapeutics	Plaque psoriasis	TOP	NDA	07/2022
Betibeglogene Autotemcel	Bluebird Bio	Beta thalassemia	IV	BLA; Brk Thru; Fst Trk; OD	08/2022
Measles/Mumps/ Rubella Vaccine	GlaxoSmithKline	MMR	SC	BLA	08/2022
Aprepitant	Heron Therapeutics	Postoperative nausea and vomiting	IV	NDA	09/2022
Deucravacitinib	Bristol-Myers Squibb	Plaque psoriasis	PO	NDA	09/2022
Elivaldogene Tavalentivec	Bluebird Bio	Adrenomyelo-neuropathy	IV	BLA; OD	09/2022
Linzagolix	ObsEva	Uterine fibroids	PO	NDA	09/2022
Ublituximab	TG Therapeutics	MS	IV	BLA	09/2022
Apomorphine	Supernus Pharmaceuticals	PD	SC infusion	NDA	10/2022

Medication Name*	Manufacturer	Therapeutic Use	Route of Admin	Approval Status	Anticipated FDA Response
Treprostinil	Liquidia Technologies	PAH	INH	NDA	10/2022
Omecamtiv Mecarbil	Amgen	Heart failure	PO	NDA	11/2022
Sotagliflozin	Lexicon	DM	PO	NDA	12/2022
Dextromethorphan/ Bupropion	Axsome	TRD	PO	NDA; Brk Thru; Fst Trk	2022
Palovarotene	Ipsen	Fibrodysplasia ossificans progressiva	PO	NDA; Brk Thru; Fst Trk; OD	1H/2023

*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.
1H = 1st half; 1Q = 1st quarter; Admin = administration; ALS = amyotrophic lateral sclerosis; AMD = age-related macular degeneration; BLA = Biologic License Application; Brk Thru = breakthrough; CKD = chronic kidney disease; DM = diabetes mellitus; Fst Trk = fast track; HSCT = hematopoietic stem cell transplantation; INH = inhaled; INVT = intravitreal; IV = intravenous; MMR = measles/mumps/rubella; MS = multiple sclerosis; NDA = New Drug Application; OD = orphan drug; PAH = pulmonary hypertension; PD = Parkinson's disease; PNH = paroxysmal nocturnal hemoglobinuria; PO = by mouth; SC = subcutaneous; SL = sublingual; T2DM = type 2 diabetes mellitus; TOP = topical; TRD = treatment-resistant depression; UTI = urinary tract infection

[1] Dermavant Sciences. Pipeline. Available online at: https://www.dermavant.com/pipeline/. Last accessed 03/21/2022.
[2] Dermavant Sciences. Dermavant Submits New Drug Application (NDA) to FDA for Tapinarof Cream for the Treatment of Adults with Plaque Psoriasis. Available online at: https://www.dermavant.com/dermavant-submits-new-nda-to-fda-for-tapinarof-cream/. Issued 06/03/2021. Last accessed 03/21/2022.
[3] Dermavant Sciences. Dermavant Reports Positive Phase 3 Results for Tapinarof Cream in Adult Patients with Plaque Psoriasis. Available online at: https://www.dermavant.com/dermavant-reports-positive-phase-3-results-for-tapinarof-cream-in-adult-patients-with-plaque-psoriasis/. Issued 08/26/2020. Last accessed 03/21/2022.
[4] Badri T, Kumar P, Oakley AM. Plaque Psoriasis: StatPearls. Available online at: https://www.ncbi.nlm.nih.gov/books/NBK430879/. Last revised 08/11/2021. Last accessed 03/21/2022.
[5] Spero Therapeutics, Inc. Pipeline: Tebipenem HBr: Oral Gram-Negative Program. Available online at: https://sperotherapeutics.com/pipeline/tebipenem-hbr-oral-gram-negative-program/. Last accessed 03/21/2022.
[6] Park B. Spero Therapeutics Seeks Approval of Oral Tebipenem HBr for Complicated UTI. *MPR*. Available online at: https://www.empr.com/home/news/drugs-in-the-pipeline/spero-therapeutics-seeks-approval-of-oral-tebipenem-hbr-for-complicated-uti/. Issued 10/28/2021. Last accessed 03/21/2022.
[7] Park B. Tebipenem HBr Gets Priority Review for Oral Treatment of Complicated UTI. *MPR*. Available online at: https://www.empr.com/home/news/drugs-in-the-pipeline/tebipenem-hbr-gets-priority-review-for-oral-treatment-of-complicated-uti/. Issued 01/04/2022. Last accessed 03/21/2022.
[8] Sabih A, Leslie SW. Complicated Urinary Tract Infections: StatPearls. Available online at: https://www.ncbi.nlm.nih.gov/books/NBK436013/. Last revised 02/14/2022. Last accessed 03/21/2022.
[9] Eli Lilly. Lilly's Tirzepatide Significantly Reduced A1C and Body Weight in People with Type 2 Diabetes. Available online at: https://investor.lilly.com/news-releases/news-release-details/lillys-tirzepatide-significantly-reduced-a1c-and-body-weight. Issued 12/09/2020. Last accessed 03/21/2022.
[10] Eli Lilly. Tirzepatide Achieved Superior A1C and Body Weight Reductions Across All Three Doses Compared to Injectable Semaglutide in Adults with Type 2 Diabetes. Available online at: https://lilly.mediaroom.com/2021-03-04-Tirzepatide-achieved-superior-A1C-and-body-weight-reductions-across-all-three-doses-compared-to-injectable-semaglutide-in-adults-with-type-2-diabetes. Issued 03/04/2021. Last accessed 03/21/2022.
[11] Eli Lilly. Tirzepatide Significantly Reduced A1C and Body Weight in People with Type 2 Diabetes in Two Phase 3 Trials from Lilly's SURPASS Program. *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/tirzepatide-significantly-reduced-a1c-and-body-weight-in-people-with-type-2-diabetes-in-two-phase-3-trials-from-lillys-surpass-program-301229506.html. Issued 02/17/2021. Last accessed 03/21/2022.
[12] Eli Lilly. Lilly's Tirzepatide Achieves All Primary and Key Secondary Study Outcomes against Insulin Glargine in Adults with Type 2 Diabetes and Increased Cardiovascular Risk in SURPASS-4 Trial. Available online at: https://investor.lilly.com/news-releases/news-release-details/lillys-tirzepatide-achieves-all-primary-and-key-secondary-study. Issued 05/20/2021. Last accessed 03/21/2022.
[13] Centers for Disease Control and Prevention (CDC). Diabetes Basics: Type 2 Diabetes. Available online at: https://www.cdc.gov/diabetes/basics/type2.html. Last revised 12/16/2021. Last accessed 03/21/2022.
[14] OptumRx. RxOutlook® 1st Quarter 2022. Available online at: https://professionals.optumrx.com/content/dam/optum3/optum/en/resources/PDFs/RxOutlook2022Q1_FINAL.pdf. Issued 02/21/2022. Last accessed 03/18/2022.
[15] MagellanRx Management. *MRx Pipeline*. Available online at: https://issuu.com/magellanrx/docs/mrx_pipeline_jan_0122?fr=sNmEyNzQ2MjEyNDg. Issued 01/2022. Last accessed 03/17/2022.

Appendix C

Medication Therapy Management Program (MTM) Calendar Year 2021 Review

Oklahoma Health Care Authority
April 2022

Background[1]

The Oklahoma Health Care Authority (OHCA) is responsible for controlling costs of state-purchased health care while continuing to protect and improve the health of Oklahoma SoonerCare members. OHCA collaborated with the University of Oklahoma College of Pharmacy: Pharmacy Management Consultants (PMC) to develop and implement an MTM program for SoonerCare members. MTM is defined by the Centers for Disease Control and Prevention (CDC) as a "distinct service or group of services provided by healthcare providers, including pharmacists, to ensure the best therapeutic outcomes for patients." The SoonerCare MTM program started in December 2019, and since that time, over 1,900 MTM reviews have been completed with a PMC clinical pharmacist.

The MTM program uses a data-driven approach to perform medication reconciliation, evaluate any opportunities to further optimize medications, address barriers to access, and improve quality measures. PMC clinical pharmacists perform telephonic MTM services for SoonerCare members across the state of Oklahoma. As part of the review, clinical pharmacists provide counseling to members regarding any medication issues identified and address any medication-related questions or concerns.

The goals of the program include:

- Increased member understanding of and adherence to medication therapy
- Optimized therapeutic outcomes
- Decreased medication-related adverse effects
- Reduced overall health care spending

Clinical pharmacists assist members with:

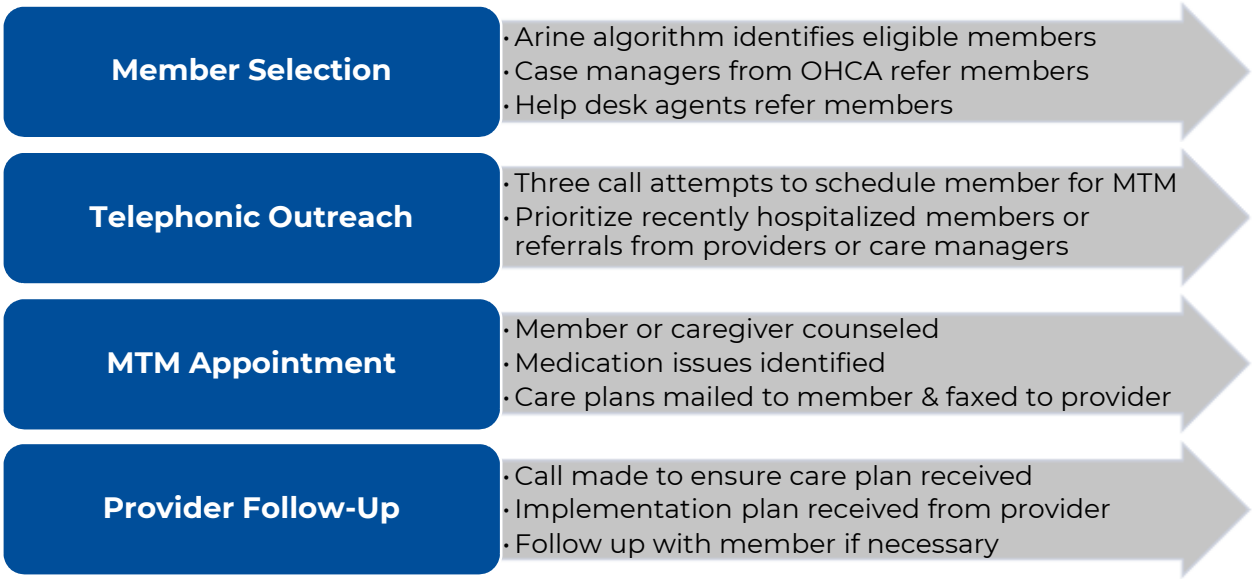
- Maximizing their prescription limit
- Navigating preferred formulary options
- Identifying medication-related problems
- Counseling on disease state management
- Connecting them with OHCA's Care Coordination program
- Answering any questions the members may have about their medications

Workflow[2]

The following figure (Figure 1) describes the workflow for MTM services. Member selection criteria for the MTM program includes members 18 years of age or older who are currently receiving ≥4 chronic medications or have had ≥1 inpatient or emergency department admission(s) in the preceding 12 months. Once the members are selected, telephonic outreach begins to schedule a review with a clinical pharmacist at PMC. During the review, the clinical pharmacist identifies any drug-related problems (DRPs), and counsels the member or caregiver appropriately.

After the review is complete, care plans are sent to both the member and provider. The member care plan includes an updated medication list and a summary of the discussion that occurred during the MTM review. The provider care plan contains an updated medication list and a report of the DRPs identified. Each DRP contains both an evidence-based assessment and recommendation for the provider.

Figure 1: MTM Workflow



The DRPs identified are organized into categories that were based on the Pharmacy Quality Alliance (PQA) Medication Therapy Problem Categories Framework, which are listed below:

- Adherence refers to whether the patient is taking the medication as prescribed and addressing any barriers that may be preventing them from taking their medication correctly.
- Effectiveness refers to a medication being ineffective, dosage too low, or additional patient monitoring needed to establish effectiveness (e.g., blood sugar monitoring).

- Indication refers to unnecessary medication therapy or patient need for additional medication therapy.
- Safety refers to adverse drug reactions, dosage too high, or additional patient monitoring needed to establish safety (e.g., serum potassium monitoring for diuretics).

The last 2 categories were added to the existing PQA framework to address current public health concerns and include:

- Preventative care refers to measures taken for disease prevention or detection, such as vaccinations, cancer screenings, nutrition counseling, diabetes screening, and cholesterol screenings.
- SoonerCare resources refers to prior authorization assistance, information regarding covered medications, referral to care coordination, referral to a specialist, or referral to member services to resolve eligibility issues and/or primary care provider selection.

To assess the percentage of care plan implementation by providers, each DRP report asks providers to indicate their planned implementation of the suggested changes. After a reasonable time, providers are contacted to ensure the reports have been received and reviewed by the provider. Upon verification of receipt and review, clinical pharmacists at PMC review the planned provider changes and communicate new information to members as necessary. Changes in prescription drug regimens are verified in each member's pharmacy claims history.

Results

In calendar year 2021, PMC pharmacists completed 801 MTM reviews for SoonerCare members. Figure 2 represents program engagement. On average, 6.4 DRPs were identified per member completing a MTM review, and 943 unique providers received MTM reports. Providers stated their intention to implement 49.2% of the changes recommended by the clinical pharmacists. The number is lower than previous reports due to a change in the provider follow-up process. Providers are now contacted a maximum of 3 times before the DRPs are closed out and marked as no (not implemented); therefore, the percentage of DRPs implemented by providers is lower. Previously DRPs remained open and were listed as unknown until a response was received from the provider. DRPs listed as unknown are not included in the implementation percentage.

Figure 2: Calendar Year 2021 Program Engagement	
Total number of outreach calls to members	15,803
Unique members receiving outreach calls	4,687
Percentage of members answering outreach calls	40%
Total number of members scheduling and/or rescheduling MTM services	1,266
Total number of members completing MTM services	801
Total number of unique DRPs identified	9,318
Average number of unique DRPs per member [mean (SD)]	6.4 (3.4)
Total number of unique providers receiving MTM reports	943
Number of DRPs reviewed by providers	2,218
Percentage of DRPs reviewed by providers	47.5%
Percentage of DRPs implemented by providers that have been reviewed	49.2%

DRPs = drug-related problems; MTM = medication therapy management; SD = standard deviation

Figure 3 shows the top 5 disease areas and the total number of DRPs identified for each disease area listed. Figure 4 shows the number of DRPs identified for each medication therapy problem category. As mentioned before, 801 members completed an MTM review during calendar year 2021. From those 801 reviews, 5,094 unique DRPs were identified with an average of 6.4 DRPs per member. DRPs are sent to the member, their primary care provider, and the member's specialists, if applicable; therefore, 1 DRP may be sent multiple times. The total number of DRPs sent to both members and providers was 9,318. The numbers below are categorized based on the total number of DRPs sent.

Figure 3: Recommendations Sent to Members and Providers – Disease Areas	
Disease Area	**Total Number of DRPs**
Preventative Health	1,808
Diabetes	1,485
Cardiovascular Disease	1,236
Asthma/COPD	900
Behavioral Health	513

COPD = chronic obstructive pulmonary disease; DRPs = drug-related problems

Figure 4: Recommendations Sent to Members and Providers – Category	
Medication Therapy Problem Category	**Total Number of DRPs**
Preventative Care	2,949
Adherence	2,239
Safety	823
Indication	605
Effectiveness	236
SoonerCare Resources	77

DRPs = drug-related problems

The study period for the following member analysis was for MTM reviews completed from January 1st, 2021, to July 31st, 2021. Of the 516 reviews completed during that time frame, 361 of those members were included in the results. The 361 members selected for analysis had to have at least 3 months follow up data after the MTM review and be eligible for SoonerCare at least 12 months before and 3 months after the MTM review. Members who were eligible for Medicare or had one of the exclusionary diagnosis codes during the study period were excluded from the analysis. Exclusionary diagnosis codes include diagnoses that are not modifiable through our interventions (e.g., cancer, respiratory failure). Member demographic information is shown in Figure 5. The average age of members receiving MTM services was 45 years.

Figure 5: MTM Program Member Demographics

Characteristic	Percent
Gender	
Female	77.6%
Male	22.4%
Race	
American Indian or Alaskan Native	3.3%
Asian	0.6%
Black or African American	18.0%
White	68.7%
More than one race	5.8%
Unspecified	3.6%
Age	
18-44	52.1%
45-64	46.0%
65+	1.9%
Charlson Comorbidity Index (CCI)	
Average score [mean (SD)]	2.23 (2.04)

MTM = medication therapy management; SD = standard deviation

According to PQA, the preferred method to measure medication adherence is through proportion of days covered (PDC). A member is considered adherent if the PDC is ≥80%. The results in Figure 6 and Figure 7 show the change in PDC for the identified drug classes before and after MTM reviews. The analysis is based on paid SoonerCare pharmacy claims and does not include whether a member is paying cash for inexpensive medications, receiving office samples, or receiving their medications through a non-SoonerCare source (i.e., Indian Health Services, private insurance, free clinics).

Figure 6: Medication Adherence – Chronic Disease			
Medication Class	**Antihypertensives (n=119)**	**Statins (n=51)**	**Anti-Diabetics (n=67)**
Adherent (PDC ≥80%)			
Pre MTM	74	27	39
Post MTM	88	33	42
Increase in number of members with PDC ≥ 80% (percent change)	14 (18.9%)	6 (22.2%)	3 (7.7%)
Mean PDC			
Pre MTM PDC (SD)	80.1 (22.1)	74.9 (25.0)	78.3 (21.7)
Post MTM PDC (SD)	87.0 (18.5)	80.9 (21.2)	81.2 (22.9)
Percent change in mean PDC	8.6%	8.0%	3.7%

The above analysis includes members with at least 150 days after first fill of a target medication in the pre and post MTM periods.
MTM = medication therapy management; PDC = proportion of days covered; SD = standard deviation

Figure 7: Medication Adherence – Behavioral Health		
Medication class	**Antidepressants (n=133)**	**Antipsychotics (n=48)**
Adherent (PDC ≥80%)		
Pre MTM	73	25
Post MTM	79	29
Increase in number of members with PDC ≥ 80% (percent change)	6 (8.2%)	4 (16.0%)
Mean PDC		
Pre MTM PDC (SD)	76.4 (21.1)	74.9 (23.0)
Post MTM PDC (SD)	77.1 (24.4)	78.4 (22.6)
Percent change in mean PDC	0.9%	4.7%

The above analysis includes members with at least 150 days after first fill of a target medication in the pre and post MTM periods.
MTM = medication therapy management; PDC = proportion of days covered; SD = standard deviation

Figure 8 shows the change in inpatient admissions and emergency department visits for the 361 members included in the analysis. Of the 361 members, 93 members contributed to 178 inpatient stays, and 313 members contributed to 1,208 emergency department visits. The rate of admissions/visits has decreased post MTM review.

Figure 8: IP Admissions and ED Visits	
Total IP Admissions (n=93)	
Pre MTM	112
Post MTM	66
Percent change in IP admissions	-41.1%

Total ED Visits (n=313)	
Pre MTM	756
Post MTM	452
Percent change in ED visits	-40.2%

ED = emergency department; IP = inpatient; MTM = medication therapy management

Case Study

Member is a 37-year-old male with hyperlipidemia, congestive heart failure, type 2 diabetes, hypertension, obesity, and recent myocardial infarction with stent placement. A PMC clinical pharmacist reached out to the member after a recent emergency department visit for syncope and collapse.

DRPs identified by pharmacist:

- Non-adherence to all of his medications except clopidogrel and low-dose aspirin
- Furosemide dose was incorrectly filled for 80mg instead of 20mg
- Diagnosis of type 2 diabetes without treatment
  - Member reported being told to discontinue his glipizide ER after emergency department visit
  - Jardiance® (empagliflozin) and Trulicity® (dulaglutide) needed prior authorizations, so his prescriptions were never filled at the pharmacy
  - No longer taking metformin due to side effects
- Missing key vaccinations – influenza and pneumonia
- Currently using a non-preferred blood glucose meter and testing supplies

DRPs resolved by pharmacist:

- Counseled member on the use of each medication and the benefit of taking each medication as prescribed
- Member agreed to restart medications and take as prescribed
- Prior authorizations were approved for both Jardiance® and Trulicity®
- Furosemide 20mg was restarted after follow-up with his cardiologist

PMC clinical pharmacists are continuing to follow up with this member to resolve the remaining drug related problems (DRPs) and ensure continued adherence to prescribed therapy.

Summary[3]

OHCA's mission includes "to analyze and recommend strategies for optimizing the accessibility and quality of health care; and, to cultivate relationships to improve the health outcomes of Oklahomans." The results described in this report demonstrate how the SoonerCare MTM program is

working to achieve this mission. The MTM program provides access to extra care for high-risk members who may need additional support. By developing relationships with members, providers, and care mangers, the MTM program is improving the quality of care for SoonerCare members. The SoonerCare MTM program is well accepted by members as evidenced by the 801 members completing MTM reviews in calendar year 2021. Members are receiving care that is more closely aligned with the existing evidence as demonstrated by the identification of 6.4 DRPs per member.

PMC clinical pharmacists continue to complete MTM reviews on a daily basis. Since reporting these results, additional reviews have been completed totaling more than 1,900 MTM reviews since December 2019. PMC will continue to work with OHCA to identify members who may benefit from MTM services with the goal of promoting evidence-based use of medications for SoonerCare members. Future results of the SoonerCare MTM program will be reviewed with the Drug Utilization Review (DUR) Board as they become available.

[1] Centers for Disease Control and Prevention (CDC). Community Pharmacists and Medication Therapy Management. Available online at: https://www.cdc.gov/dhdsp/pubs/guides/best-practices/pharmacist-mtm.htm. Last accessed 03/28/2022.
[2] Pharmacy Quality Alliance (PQA). PQA Medication Therapy Problem Categories Framework. Available online at: https://www.pqaalliance.org/medication-management-services. Last accessed 03/28/2022.
[3] Oklahoma Health Care Authority (OHCA). About Us. Available online at: https://oklahoma.gov/ohca/about.html. Last accessed 03/28/2022.

Appendix D

Vote to Prior Authorize Elepsia™ XR [Levetiracetam Extended-Release (ER) Tablet] and Eprontia™ (Topiramate Oral Solution)

Oklahoma Health Care Authority
April 2022

Market News and Updates[1,2,3]

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

- **September 2020:** In 2018, the FDA approved Elepsia™ XR (levetiracetam ER) as adjunctive therapy for the treatment of partial-onset seizures in patients 12 years of age and older. Elepsia™ XR contains the same active ingredient as Keppra® XR, but is available in higher strength tablets (1,000mg and 1,500mg). Elepsia™ XR was formulated to decrease the pill burden in patients taking higher doses of Keppra® XR since this medication is only available in 500mg and 750mg strength tablets. In September 2020, Sun Pharma announced an exclusive license agreement with Tripoint Therapeutics to commercialize Elepsia™ XR tablets in the United States.
- **November 2021:** The FDA approved Eprontia™ (topiramate oral solution) as the first and only liquid formulation of topiramate indicated for the treatment of partial-onset or primary generalized tonic-clonic (PGTC) seizures, for adjunctive therapy in seizures associated with Lennox-Gastaut syndrome (LGS), and for prophylaxis of migraine headaches.

Elepsia™ XR (Levetiracetam ER) Product Summary[4]

Indication(s): Elepsia™ XR is indicated as adjunctive therapy for the treatment of partial-onset seizures in patients 12 years of age and older.

How Supplied: 1,000mg and 1,500mg oral ER tablets

Dosing: The initial recommended dose is 1,000mg once daily and may be increased by 1,000mg every 2 weeks to a maximum dose of 3,000mg once daily; tablets should not be split or cut.

Contraindication(s): Known hypersensitivity to levetiracetam

Adverse Reactions: The most common adverse reactions reported in clinical studies (incidence ≥5%) were somnolence and irritability.

Cost Comparison:

Product	Cost Per Unit	Cost Per Month*
Elepsia™ XR (levetiracetam ER) 1,500mg tablet	**$33.08**	**$1,984.80**
Elepsia™ XR (levetiracetam ER) 1,000mg tablet	**$26.42**	**$2,377.80**
levetiracetam ER 750mg tablet	$0.57	$68.40
levetiracetam ER 500mg tablet	$0.26	$46.80

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 month based on the FDA approved maximum daily dose of 3,000mg/day.
ER = extended-release

Eprontia™ (Topiramate Oral Solution) Product Summary[5]

Indication(s): Eprontia™ is indicated for the treatment of partial-onset or PGTC seizures, for adjunctive therapy in seizures associated with LGS, and for prophylaxis of migraine headaches.

How Supplied: 25mg/mL oral solution

Dosing: The initial, titration, and recommended maintenance doses vary by indication and age group and can be found in the Eprontia™ *Prescribing Information*.

Contraindication(s): None

Adverse Reactions:

- The most common adverse reactions reported in the epilepsy clinical studies (incidence ≥10%) were paresthesia, anorexia, weight loss, disorders related to speech problems, fatigue, dizziness, somnolence, nervousness, psychomotor slowing, abnormal vision, and fever.
- The most common adverse reactions reported in the migraine clinical studies (incidence ≥5%) were paresthesia, anorexia, weight loss, difficulty with memory, taste perversion, diarrhea, hypoesthesia, nausea, abdominal pain, and upper respiratory tract infection.

Cost Comparison:

Product	Cost Per Unit	Cost Per Month*
Eprontia™ (topiramate) 25mg/mL oral solution	**$1.41**	**$676.80**
topiramate 25mg sprinkle capsule	$0.67	$321.60
topiramate 200mg tablet	$0.12	$7.20

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 month based on the FDA approved maximum daily dose of 400mg/day.

Recommendations

The College of Pharmacy recommends the prior authorization of Elepsia™ XR (levetiracetam ER tablet) and Eprontia™ (topiramate oral solution) with the following criteria:

Elepsia™ XR [Levetiracetam Extended-Release (ER) Tablet] Approval Criteria:

1. An FDA approved diagnosis of partial-onset seizures; and
2. A patient-specific, clinically significant reason (beyond convenience) why the member cannot use generic formulations of levetiracetam ER must be provided; and
3. A quantity limit of 60 tablets per 30 days will apply.

Eprontia™ (Topiramate Oral Solution) Approval Criteria:

1. An FDA approved indication of 1 of the following:
    a. Partial-onset or primary generalized tonic-clonic (PGTC) seizures; or
    b. Adjunctive therapy in 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 topiramate tablets and sprinkle capsules must be provided; and
3. An age restriction of 11 years of age and younger will apply. Members older than 11 years of age will require a patient-specific, clinically significant reason why a special formulation product is needed; and
4. A quantity limit of 473mL per 29 days will apply.

---

[1] Elepsia™ XR (Levetiracetam) – New Drug Approval. *OptumRx*. Available online at: https://professionals.optumrx.com/content/dam/optum3/professional-optumrx/news/rxnews/drug-approvals/drugapproval_elepsiaxr_2018-1224.pdf. Last accessed 03/15/2022.
[2] Tripoint Therapeutics. SPARC Licenses Commercialization Rights of Elepsia™ XR to Tripoint Therapeutics. Available online at: https://www.tripointtherapeutics.com/news/elepsiatm-xr-press-release. Issued 09/22/2020. Last accessed 03/15/2022.
[3] Azurity Pharmaceuticals, Inc. Azurity Pharmaceuticals, Inc. Announces FDA Approval of Eprontia™ (Topiramate) Oral Solution. Available online at: https://azurity.com/azurity-pharmaceuticals-inc-announces-fda-approval-of-eprontia-topiramate-oral-solution/. Issued 11/08/2021. Last accessed 03/15/2022.
[4] Elepsia™ XR (Levetiracetam ER) Prescribing Information. Tripoint Therapeutics, LLC. Available online at: https://dailymed.nlm.nih.gov/dailymed/getFile.cfm?setid=cac83d47-88a2-4447-a0c0-90b44ffda0ac&type=pdf. Last revised 12/2020. Last accessed 03/15/2022.
[5] Eprontia™ (Topiramate Oral Solution) Prescribing Information. Azurity Pharmaceuticals, Inc. Available online at: https://eprontia.com/wp-content/uploads/2021/11/65628-00603_EPRONTIA-PI-REV-01.pdf. Last revised 11/2021. Last accessed 03/15/2022.

Appendix E

Vote to Prior Authorize Winlevi® (Clascoterone 1% Cream)

Oklahoma Health Care Authority
April 2022

Market News and Updates[1]

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

- **August 2020:** The FDA approved Winlevi® (clascoterone 1% cream), an androgen receptor inhibitor, for the topical treatment of acne vulgaris in patients 12 years of age and older. Winlevi® is the first product with a novel mechanism of action to be FDA approved for acne in nearly 40 years.

Winlevi® (Clascoterone 1% Cream) Product Summary[2,3,4]

Indication: Winlevi® (clascoterone 1% cream) is an androgen receptor inhibitor indicated for the topical treatment of acne vulgaris in patients 12 years of age and older.

How Supplied: 1% topical cream (containing 10mg clascoterone per gram) in a 60g tube

Dosing and Administration:

- A thin, uniform layer of cream should be applied to clean and dry skin twice daily to the affected area in the morning and evening.
- Patients should avoid accidental transfer of the cream into the eyes, mouth, or other mucous membranes, and should rinse those areas thoroughly with water if contact occurs.

Cost Comparison:

Product	Cost Per Unit*	Cost Per Package[+]
Winlevi® (clascoterone) 1% topical cream	**$9.17**	**$550.20**
Amzeeq® (minocycline) 4% topical foam	$15.51	$465.30
dapsone 5% topical gel (generic)	$2.85	$171.00
tazarotene 0.1% cream (generic)	$2.81	$168.60
erythromycin 2% topical solution (generic)	$0.43	$25.80
clindamycin 1% topical solution (generic)	$0.20	$12.00

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).
*Unit = 1 gram or 1mL
[+]Cost per package based on 60g for Winlevi®, dapsone, and tazarotene; 30g for Amzeeq®; and 60mL for erythromycin 2% solution and clindamycin 1% solution.

Recommendations

The College of Pharmacy recommends the prior authorization of Winlevi® (clascoterone 1% cream) with the following criteria:

Winlevi® (Clascoterone 1% Cream) Approval Criteria:

1. An FDA approved indication of acne vulgaris; and
2. Member must be 12 to 20 years of age; and
3. A patient-specific, clinically significant reason why the member cannot use erythromycin 2% topical solution, clindamycin 1% topical solution, benzoyl peroxide, preferred tazarotene formulations, oral isotretinoin medications, and other generically available preferred oral or topical antibiotic products must be provided; and
4. A quantity limit of 60 grams per 30 days will apply.

[1] Cassiopea. Cassiopea Receives FDA Approval for Winlevi® (Clascoterone Cream 1%), First-in-Class Topical Acne Treatment Targeting the Androgen Receptor. *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/cassiopea-receives-fda-approval-for-winlevi-clascoterone-cream-1-first-in-class-topical-acne-treatment-targeting-the-androgen-receptor-301119454.html. Issued 08/07/2020. Last accessed 03/30/2022.

[2] Winlevi® (Clascoterone) Prescribing Information. Sun Pharmaceutical Industries, Inc. Available online at: https://www.winlevi-hcp.com/pdf/winlevi-prescribing-information.pdf. Last revised 09/2021. Last accessed 03/30/2022.

[3] Hebert A, Thiboutot D, Stein Gold L, et al. Efficacy and Safety of Topical Clascoterone Cream, 1%, for Treatment in Patients with Facial Acne: Two Phase 3 Randomized Clinical Trials. *JAMA Dermatol* 2020; 156(6):621-630.

[4] U.S. FDA. Drugs@FDA. Drug Approval Package: Winlevi®: Multi-Discipline Review. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2020/213433Orig1s000MultidisciplineR.pdf. Last accessed 03/30/2022.

Appendix F

Vote to Prior Authorize Dojolvi® (Triheptanoin)

Oklahoma Health Care Authority
April 2022

Market News and Updates[1]

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

- **June 2020:** The FDA approved Dojolvi® (triheptanoin) as the first FDA approved product for the treatment of patients with molecularly confirmed long-chain fatty acid oxidation disorders (LC-FAODs).

Dojolvi® (Triheptanoin) Product Summary[2,3,4]

Indication(s): Dojolvi® (triheptanoin) is a medium-chain triglyceride (MCT) indicated as a source of calories and fatty acids for the treatment of pediatric and adult patients with molecularly confirmed LC-FAODs.

How Supplied: Oral liquid containing 100% triheptanoin in a 500mL bottle

Dosing and Administration:

- The patient's metabolic requirements should be assessed, and the patient's total prescribed daily caloric intake (DCI) should be determined before calculating the Dojolvi® dose.
- The caloric value of Dojolvi® is 8.3kcal/mL.
- The recommended target daily dosage of Dojolvi® is up to 35% of DCI divided into ≥4 daily doses.
- <u>Patients Not Currently Taking an MCT Product:</u>
  - Dojolvi® should be initiated at a total daily dosage of approximately 10% of DCI divided into ≥4 daily doses.
  - The dose should be increased to the recommended target daily dosage over a period of 2 to 3 weeks.
- <u>Patients Switching from Another MCT Product:</u>
  - The other MCT product should be discontinued prior to the first dose of Dojolvi®.
  - Dojolvi® should be initiated at the last tolerated daily dosage of MCT divided into ≥4 daily doses.
  - The dose should be increased by approximately 5% of DCI every 2 to 3 days until the target daily dosage is achieved.
- Dojolvi® should be mixed with semi-solid food or liquids and administered at mealtimes or with snacks orally or enterally via a silicone or polyurethane feeding tube. Dojolvi® should not be administered alone to avoid gastrointestinal (GI) upset.

- For patients experiencing GI adverse reactions, dosage reduction should be considered until the GI symptoms resolve. If a patient is unable to achieve the target daily dosage of 35% of DCI, the patient should be maintained at the maximum tolerated dosage.

Mechanism of Action: Triheptanoin is an MCT consisting of 3 odd-chain 7-carbon length fatty acids (heptanoate) that provide a source of calories and fatty acids to bypass the LC-FAOD enzyme deficiencies for energy production and replacement.

Adverse Reactions: The most common adverse reactions reported in clinical studies of triheptanoin were GI-related, including abdominal pain (60%), diarrhea (44%), vomiting (44%), and nausea (14%).

Efficacy: The efficacy of triheptanoin for the treatment of LC-FAODs was assessed in a 4-month Phase 3, double-blind, randomized study which compared triheptanoin, a 7-carbon chain fatty acid, to trioctanoin, an 8-carbon chain fatty acid. A total of 32 adult and pediatric patients with a confirmed LC-FAOD diagnosis were enrolled, with a median age of 12 years (range: 7 to 64 years of age). Patients were randomized 1:1 to receive a target dosage of 20% of DCI with either triheptanoin or trioctanoin for 4 months.

- Inclusion Criteria: All patients had a molecularly confirmed LC-FAOD diagnosis and history of at least 1 significant episode of rhabdomyolysis.
- Exclusion Criteria: Patients were excluded if they had anemia (hemoglobin <10g/dL), had peripheral neuropathy limiting the ability to walk, were pregnant, were breastfeeding, or had a history of myocardial infarction.
- Primary Endpoint: The primary efficacy endpoints were changes from baseline in total energy expenditure (TEE), cardiac function assessed by echocardiogram (ECHO) [including left ventricular ejection fraction (LVEF) and left ventricular wall mass (LVWM)], exercise tolerance [including maximum heart rate (HR) during moderate intensity exercise], and phosphocreatine recovery following acute exercise.
- Results: After 4 months of treatment, there were no statistically significant differences in TEE or phosphocreatine recovery following acute exercise between the triheptanoin and trioctanoin groups. Additionally, there were no significant differences between the 2 groups in musculoskeletal symptoms (including the incidence of rhabdomyolysis) or blood glucose concentrations. ECHO data was only available for 21 of 32 patients (65.6%), and ECHO results were uninterpretable in 4 patients due to technical difficulties. Among patients with interpretable ECHO results, LVEF was on average 7.5% greater in the triheptanoin group relative to the trioctanoin group (P=0.046). LVWM decreased 8% from baseline in the triheptanoin group and increased 15% from baseline in the trioctanoin group; the difference

between the 2 groups at month 4 was statistically significant (P=0.041). At month 4, maximum HR during moderate intensity exercise was on average 6.98 beats per minute lower in the triheptanoin group relative to the trioctanoin group (P=0.040). These observed differences in LVEF, LVWM, and HR, while statistically significant, occurred within the normal range and within the test/retest variability normally observed in repeated ECHOs. Based on these data, the FDA determined no clinically meaningful differences were observed between the 2 treatment groups. After 4 months of treatment, both groups had similar mean changes from baseline in LVEF and LVWM and similar maximal HR during moderate intensity exercise.

Cost Comparison:

Product	Cost Per mL	Cost Per Package[+]
Dojolvi® (triheptanoin) oral liquid, 8.3kcal/mL	**$9.75**	**$4,875.00**
MCT Oil® (medium-chain triglycerides) oral oil, 7.7kcal/mL	$0.06	$56.76

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 package based on 500mL for Dojolvi® and 946mL for MCT Oil®.

Recommendations

The College of Pharmacy recommends the prior authorization of Dojolvi® (triheptanoin) with the following criteria:

Dojolvi® (Triheptanoin) Approval Criteria:

1. An FDA approved diagnosis of molecularly confirmed long-chain fatty acid oxidation disorder (LC-FAOD); and
2. Molecular testing confirms 1 of the following types of LC-FAOD:
   a. Carnitine-acylcarnitine translocase (CACT) deficiency; or
   b. Carnitine palmitoyltransferase I (CPT I) deficiency; or
   c. Carnitine palmitoyltransferase II (CPT II) deficiency; or
   d. Long-chain 3-hydroxyacyl-CoA dehydrogenase (LCHAD) deficiency; or
   e. Trifunctional protein (TFP) deficiency; or
   f. Very long-chain acyl-CoA dehydrogenase (VLCAD) deficiency; and
3. Prescriber must verify member has a history of at least 1 significant or recurrent manifestation of LC-FAOD (e.g., cardiomyopathy, rhabdomyolysis, hypoglycemia); and
4. Member must have tried and failed dietary management with an alternate medium chain triglyceride (MCT) product (e.g., MCT oil) or a patient-specific, clinically significant reason why dietary management with an alternate MCT product is not appropriate for the member must be provided; and

5. Dojolvi® will not be approved for concomitant use with another MCT product (other MCT products must be discontinued prior to the first dose of Dojolvi®); and
6. Member must not be taking a pancreatic lipase inhibitor concomitantly with Dojolvi®; and
7. Prescriber must verify the member does not have pancreatic insufficiency; and
8. Prescriber must verify that member or member's caregiver has been counseled on the proper storage, preparation, and administration of Dojolvi®, including specific considerations for use in a feeding tube, if applicable; and
9. Dojolvi® must be prescribed by a geneticist or other specialist with expertise in the treatment of LC-FAOD; and
10. Prescriber must verify the member is under the care of a clinical specialist knowledgeable in appropriate disease-related dietary management based on member's specific LC-FAOD and current nutritional recommendations; and
11. The member's daily caloric intake (DCI) must be provided (in kcal) on the prior authorization request to verify appropriate dosing based on package labeling; and
12. Initial approvals will be for the duration of 3 months. After 3 months of treatment, compliance will be required, and the prescriber must verify the member has had a positive response to and is tolerating treatment with Dojolvi®. Additionally, for members who switched from another MCT product due to adverse effects, the prescriber must verify the member has experienced fewer adverse effects with Dojolvi®; and
13. Quantity limits according to package labeling will apply, with the maximum approvable dosing regimen based on a target daily dosage of Dojolvi® up to 35% of the member's total DCI.

---

[1] Ultragenyx Pharmaceutical, Inc. Ultragenyx Announces U.S. FDA Approval of Dojolvi® (UX007/Triheptanoin), the First FDA-Approved Therapy for the Treatment of Long-Chain Fatty Acid Oxidation Disorders. Available online at: https://ir.ultragenyx.com/news-releases/news-release-details/ultragenyx-announces-us-fda-approval-dojolvitm-ux007triheptanoin. Issued 06/30/2020. Last accessed 03/30/2022.

[2] Dojolvi® (Triheptanoin) Prescribing Information. Ultragenyx Pharmaceutical, Inc. Available online at: https://www.ultragenyx.com/wp-content/uploads/2021/11/DOJOLVI-USPI.pdf. Last revised 11/2021. Last accessed 03/30/2022.

[3] Gillingham MB, Heitner SB, Martin J, et al. Triheptanoin versus Trioctanoin for Long-Chain Fatty Acid Oxidation Disorders: A Double Blinded, Randomized Controlled Trial. *J Inherit Metab Dis* 2017; 40(6):831-843.

[4] U.S. Food and Drug Administration (FDA). Drugs@FDA. Drug Approval Package: Dojolvi®: Integrated Review. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2020/213687Orig1s000IntegratedR.pdf. Issued 06/30/2020. Last accessed 03/30/2022.

Appendix G

Vote to Prior Authorize Qulipta™ (Atogepant) and Trudhesa™ (Dihydroergotamine Nasal Spray) and Update the Approval Criteria for the Anti-Migraine Medications

Oklahoma Health Care Authority
April 2022

Market News and Updates[1,2,3]

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

- **May 2021:** The FDA approved Nurtec® ODT (rimegepant) for the preventive treatment of episodic migraine (e.g., those who experience <15 headache days per month) in adults. The approved product label was also expanded to include the use of Nurtec® ODT for up to 18 doses/month, allowing for both acute and preventive therapy in the same patient. This new approval makes Nurtec® ODT the first oral calcitonin gene-related peptide (CGRP) receptor antagonist approved for the preventive treatment of migraine and the only migraine medication approved as a dual therapy for both acute and preventive treatment. Nurtec® ODT can be taken up to once daily as needed (up to 18 doses/month) to stop migraine attacks or taken every other day to help prevent migraine. The FDA approval of Nurtec® ODT is based on a double-blind, randomized, placebo-controlled Phase 3 clinical trial with an open label extension. Primary study endpoint results demonstrated that Nurtec® ODT was superior to placebo, decreasing monthly migraine days by 4.3 days/month after 3 months of treatment. The preventive effects of Nurtec® ODT were seen as early as the first week of therapy. Further, a key secondary endpoint result showed that approximately half of Nurtec® ODT-treated patients had a 50% or greater reduction in the number of moderate-to-severe migraine days per month. In the pivotal trial for the preventive treatment of migraine, Nurtec® ODT was generally well tolerated, with the most common side effects being nausea (2.7% vs. 0.8% in placebo) and stomach pain/indigestion (2.4% vs. 0.8% in placebo).
- **September 2021:** The FDA approved Trudhesa™ (dihydroergotamine mesylate nasal spray) for the acute treatment of migraine with or without aura in adults. Trudhesa™ uses Impel's proprietary Precision Olfactory Delivery (POD®) technology which allows quick absorption of dihydroergotamine into the bloodstream through the vascular-rich upper nasal space, bypassing the gastrointestinal (GI) tract and potential absorption issues.

- **September 2021:** The FDA approved Qulipta™ (atogepant) for the preventive treatment of episodic migraine in adults. Qulipta™ is the first and only CGRP receptor antagonist specifically developed for the preventive treatment of migraine.

Qulipta™ (Atogepant) Product Summary[4]

Indication(s): Qulipta™ (atogepant) is a CGRP receptor antagonist indicated for the preventive treatment of episodic migraine in adults.

How Supplied: Qulipta™ is supplied as an oral tablet available in 3 strengths: 10mg, 30mg, and 60mg.

Dosing and Administration:

- The recommended dosing is (1) 10mg, 30mg, or 60mg tablet daily with or without food.
- The following dose modifications apply for concomitant use of specific drugs or for patients with renal impairment:
  - Strong CYP3A4 inhibitors (e.g., ketoconazole, itraconazole, clarithromycin): 10mg daily
  - Strong and moderate CYP3A4 inducers (e.g., rifampin, carbamazepine, phenytoin): 30mg or 60mg daily
  - OATP inhibitors (e.g., cyclosporine): 10mg or 30mg daily
  - Severe renal impairment/end-stage renal disease (ESRD) [creatinine clearance (CrCl) <30mL/min]: 10mg daily

Cost Comparison:

Medication	Cost Per Dose	Cost Per 30 Days*
Qulipta™ (atogepant tablet) all strengths	**$33.03**	**$990.90**
Nurtec® ODT 75mg (rimegepant ODT)	$106.98	$1,604.70
Emgality® 120mg (galcanezumab-gnlm auto-injection pen)	$607.58	$607.58

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 30 days based on FDA recommended dosing (does not include loading dose for Emgality®).
ODT = orally disintegrating tablet

Trudhesa™ (Dihydroergotamine Nasal Spray) Product Summary[5]

Indication(s): Trudhesa™ is an ergotamine derivative indicated for the acute treatment of migraine with or without aura in adults.

- Limitation(s) of Use: Trudhesa™ is not indicated for the preventive treatment of migraine or for the management of hemiplegic or basilar migraine.

Boxed Warning: Peripheral Ischemia Following Coadministration with Potent CYP3A4 Inhibitors

- Serious and/or life-threatening peripheral ischemia has been associated with the coadministration of dihydroergotamine with strong CYP3A4 inhibitors (e.g., ritonavir, clarithromycin, ketoconazole)
- Concomitant use of Trudhesa™ with strong CYP3A4 inhibitors is contraindicated

How Supplied: Trudhesa™ is supplied as a nasal spray that delivers 0.725mg per spray and is available in a package containing 4 single-dose units.

- Each single-dose unit contains 1 amber glass vial with 4mg dihydroergotamine mesylate in a 1mL solution and 1 nasal spray device.

Dosing and Administration:

- Prior to initiation of treatment with Trudhesa™, a cardiovascular evaluation is recommended.
- The recommended dose of Trudhesa™ is 1.45mg (administered as 1 metered spray of 0.725mg into each nostril).
- The dose may be repeated, if needed, a minimum of 1 hour after the first dose. No more than 2 doses should be used within a 24-hour period or no more than 3 doses within 7 days.
- Trudhesa™ should be assembled and primed (i.e., pumped 4 times) before use and used immediately after priming.
- Each single-dose unit should be discarded after 1 dose (0.725mg into each nostril) is administered.
- After a Trudhesa™ vial has been opened, it must be thrown away after 8 hours.

Cost Comparison:

Medication	Cost Per Day*	Cost Per 30 Days+
Trudhesa™ (dihydroergotamine 4mg/mL nasal spray)	**$212.50**	**$2,550.00**
dihydroergotamine 1mg/mL injection (generic D.H.E. 45®)	$232.14	$1,857.12
dihydroergotamine 4mg/mL nasal spray (generic Migranal®)	$143.52	$1,148.16

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 day based on FDA recommended dosing for each product in a 24-hour period.
+Cost per 30 days based on maximum FDA recommended dosing per 7 days.

Recommendations

The College of Pharmacy recommends the prior authorization of Qulipta™ (atogepant) with criteria similar to Aimovig® (erenumab-aooe) and Vyepti® (eptinezumab-jjmr) and the addition of Nurtec® ODT (rimegepant) to the

current criteria for Aimovig® and Vyepti® based on the recent FDA approval for the preventive treatment of episodic migraine (changes noted in red):

Aimovig® (Erenumab-aooe), Nurtec® ODT (Rimegepant)*, Qulipta™ (Atogepant)*, and Vyepti® (Eptinezumab-jjmr) Approval Criteria:

1. An FDA approved indication for the preventive treatment of migraine in adults; and
2. Member must be 18 years of age or older; and
3. Member has documented chronic migraine or episodic migraine headaches:
    a. Chronic migraine: 15 or more headache days per month with 8 or more migraine days per month; or
    b. Episodic migraine: 4 to 14 migraine days per month on average for the past 3 months (*Nurtec® ODT and Qulipta™ are only FDA approved for the preventive treatment of episodic migraines); and
        i. For episodic migraine, member must have had a history of migraines for a duration of 12 months or longer; and
4. Non-migraine medical conditions known to cause headache have been ruled out and/or have been treated. This includes, but is not limited to:
    a. Increased intracranial pressure (e.g., tumor, pseudotumor cerebri, central venous thrombosis); or
    b. Decreased intracranial pressure (e.g., post-lumbar puncture headache, dural tear after trauma); and
5. Migraine headache exacerbation secondary to other medication therapies or conditions have been ruled out and/or treated. This includes, but is not limited to:
    a. Hormone replacement therapy or hormone-based contraceptives; and
    b. Chronic insomnia; and
    c. Obstructive sleep apnea; and
6. The member has failed medical migraine preventive therapy with at least 3 agents with different mechanisms of action. Trials must be at least 8 weeks in duration (or documented adverse effects) within the last 365 days. This includes, but is not limited to:
    a. Select antihypertensive therapy (e.g., beta-blocker therapy); or
    b. Select anticonvulsant therapy; or
    c. Select antidepressant therapy [e.g., tricyclic antidepressants (TCA), serotonin and norepinephrine reuptake inhibitors (SNRI)]; and
7. Member is not frequently taking medications that are known to cause medication overuse headaches (MOH or rebound headaches) in the absence of intractable conditions known to cause chronic pain. MOH are a frequent cause of chronic headaches. A list of prescription or non-prescription medications known to cause MOH includes, but is not limited to:

   a. Decongestants (alone or in combination products) (≥10 days/month for >3 months); and
   b. Combination analgesics containing caffeine and/or butalbital (≥10 days/month for >3 months); and
   c. Opioids (≥10 days/month for >3 months); and
   d. Analgesic medications including acetaminophen or non-steroidal anti-inflammatory drugs (NSAIDs) (≥15 days/month for >3 months); and
   e. Ergotamine-containing medications (≥10 days/month for >3 months); and
   f. Triptans (≥10 days/month for >3 months); and
8. Member is not taking any medications that are likely to be the cause of the headaches; and
9. Member must have been evaluated within the last 6 months by a neurologist for migraine headaches and the requested medication (e.g., Aimovig®, Nurtec® ODT, Qulipta™, Vyepti®) recommended as treatment (not necessarily prescribed by a neurologist); and
10. Member will not use requested medication concurrently with botulinum toxin for the prevention of migraine or with an alternative calcitonin gene-related peptide (CGRP) inhibitor; and
11. Other aggravating factors that are contributing to the development of episodic/chronic migraine headaches are being treated when applicable (e.g., smoking); and
12. For Aimovig®, prescriber must verify that member has been counseled on appropriate use, storage of the medication, and administration technique; and
13. For Vyepti®, prescriber must verify the medication will be prepared and administered according the Vyepti® *Prescribing Information*; and
14. A patient-specific, clinically significant reason why member cannot use Ajovy® (fremanezumab-vfrm) or Emgality® (galcanezumab-gnlm) must be provided (members currently taking Nurtec® ODT for acute migraine treatment are not exempt from this criteria requirement); and
15. For consideration of Vyepti® at the maximum recommended dosing (300mg every 3 months), a patient-specific, clinically significant reason why other available CGRP inhibitors for migraine prophylaxis are not appropriate for the member must be provided; and
16. Initial approvals will be for the duration of 3 months. Compliance and information regarding efficacy, such as a reduction in monthly migraine days, will be required for continued approval. Continuation approvals will be granted for the duration of 1 year; and
17. Quantity limits will apply based on FDA-approved dosing and indication:
   a. For Aimovig®, a quantity limit of 1 syringe or autoinjector per 30 days will apply; and

b. For Nurtec® ODT, a quantity limit of 15 tablets per 30 days will apply; and
c. For Qulipta™, a quantity limit of 30 tablets per 30 days will apply; and
d. For Vyepti®, a quantity limit of 3 vials per 90 days will apply.

Additionally, the College of Pharmacy recommends the placement of Trudhesa™ (dihydroergotamine nasal spray) into the Special Prior Authorization (PA) Tier of the Anti-migraine Product Base Prior Authorization (PBPA) category and updating the D.H.E. 45® (dihydroergotamine injection) and Migranal® (dihydroergotamine nasal spray) criteria based on net cost with the following criteria (changes noted in red in the following criteria and Tier chart):

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 dihydroergotamine nasal spray (Migranal®) will require a patient-specific, clinically significant reason why the member cannot use lower-tiered triptan medications and dihydroergotamine injection (D.H.E. 45®).~~
3. 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.
4. 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).
5. 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.

6. 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.
7. 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.

   *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 Aimovig®, Qulipta™, and Vyepti® approval criteria.
8. 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.
9. 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.

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, nasal spray (Zomig®, Zomig-ZMT®, Zomig® nasal spray)	frovatriptan tablet (Frova®)	dihydroergotamine nasal spray (Migranal®) – **Brand Preferred**
sumatriptan tablet (Imitrex®)			**dihydroergotamine nasal spray (Trudhesa™)**

Anti-Migraine Medications			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
sumatriptan/ naproxen tablet (Treximet®)			eletriptan tablet (generic Relpax®)
			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®)
			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

[1] Biohaven Pharmaceutical Holding Company. FDA Approves Biohaven's Nurtec® ODT (Rimegepant) for Prevention: Now the First and Only Migraine Medication for both Acute and Preventive Treatment. *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/fda-approves-biohavens-nurtec-odt-rimegepant-for-prevention-now-the-first-and-only-migraine-medication-for-both-acute-and-preventive-treatment-301301304.html. Issued 05/27/2021. Last accessed 03/24/2022.
[2] Impel NeuroPharma. Impel NeuroPharma Announces U.S. FDA Approval of Trudhesa™ (Dihydroergotamine Mesylate) Nasal Spray for the Acute Treatment of Migraine. *Globe Newswire*. Available online at: https://www.globenewswire.com/news-release/2021/09/03/2291459/0/en/Impel-NeuroPharma-Announces-U-S-FDA-Approval-of-TRUDHESA-Dihydroergotamine-Mesylate-Nasal-Spray-for-the-Acute-Treatment-of-Migraine.html. Issued 09/03/2021. Last accessed 03/24/2022.
[3] AbbVie. FDA Approves Qulipta™ (Atogepant), the First and Only Oral CGRP Receptor Antagonist Specifically Developed for the Preventive Treatment of Migraine. *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/fda-approves-qulipta-atogepant-the-first-and-only-oral-cgrp-receptor-antagonist-specifically-developed-for-the-preventive-treatment-of-migraine-301387297.html. Issued 09/28/2021. Last accessed 03/24/2022.
[4] Qulipta™ (Atogepant) Prescribing Information. AbbVie. Available online at: https://www.rxabbvie.com/pdf/QULIPTA_pi.pdf. Last revised 10/2021. Last accessed 03/30/2022.
[5] Trudhesa™ (Dihydroergotamine Mesylate) Prescribing Information. Impel NeuroPharma. Available online at: https://www.trudhesa.com/trudhesa-prescribing-information.pdf. Last revised 09/2021. Last accessed 03/30/2022.

Appendix H

Vote to Prior Authorize Prior Authorize Erwinase® (Crisantaspase), Erwinaze® (Asparaginase *Erwinia Chrysanthemi*), Oncaspar® (Pegaspargase), Rylaze™ [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn], and Scemblix® (Asciminib) and Update the Approval Criteria for the Leukemia Medications

Oklahoma Health Care Authority
April 2022

Market News and Updates[1,2,3,4,5,6,7,8]

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

- **July 2006:** The FDA approved an expanded indication for Oncaspar® (pegaspargase) for first-line treatment of pediatric and adult patients with acute lymphoblastic leukemia (ALL) as a component of a multi-agent chemotherapy regimen. Oncaspar® was originally FDA approved in 1994 as a component of a multi-agent chemotherapeutic regimen for treatment of pediatric and adult patients with ALL and hypersensitivity to asparaginase.
- **November 2011:** The FDA approved Erwinaze® (asparaginase *Erwinia chrysanthemi*) for intramuscular (IM) injection as part of a treatment regimen for ALL in patients who have had a hypersensitivity reaction to *Escherichia coli* (*E. coli*)-derived asparaginase. In 2014, the FDA approved the intravenous (IV) administration of Erwinaze® for the same indication, to give patients unable to tolerate IM injections another administration option.
- **June 2021:** The FDA approved Ayvakit™ (avapritinib) for the treatment of adult patients with advanced systemic mastocytosis, including patients with aggressive systemic mastocytosis, systemic mastocytosis with an associated hematological neoplasm, and mast cell leukemia.
- **July 2021:** The FDA approved Rylaze™ [asparaginase *Erwinia chrysanthemi* (recombinant)-rywn] as a component of a multi-agent chemotherapeutic regimen for the treatment of ALL and lymphoblastic lymphoma (LBL) in adult and pediatric patients 1 month of age or older who have developed hypersensitivity to *E. coli*-derived asparaginase.
- **August 2021:** The FDA approved Tibsovo® (ivosidenib) for the treatment of adult patients with previously treated, locally advanced or metastatic cholangiocarcinoma with an isocitrate dehydrogenase-1 (*IDH1)* mutation.

- **October 2021:** The FDA approved Tecartus® (brexucabtagene autoleucel) for the treatment of adult patients with relapsed or refractory B-cell precursor ALL.
- **October 2021:** The FDA granted accelerated approval to Scemblix® (asciminib) for patients with Philadelphia chromosome-positive chronic myeloid leukemia (Ph+ CML) in chronic phase (CP), previously treated with 2 or more tyrosine kinase inhibitors (TKIs), and for the treatment of adult patients with Ph+ CML in CP with the T315I mutation.
- **December 2021:** The FDA approved Rituxan® (rituximab) in combination with chemotherapy for pediatric patients 6 months of age and older with previously untreated, advanced stage, CD20-positive diffuse large B-cell lymphoma (DLBCL), Burkitt lymphoma (BL), Burkitt-like lymphoma (BLL), or mature B-cell acute leukemia (B-AL).

News:

- **May 2021:** In order to alleviate a critical shortage of Erwinaze® (asparaginase *Erwinia chrysanthemi*) in the United States' market, Porton Biopharma Limited coordinated with the FDA to make available in the United States the non-FDA licensed Erwinase® (crisantaspase) 10,000 international units (IU)/vial powder for solution for injection/infusion. This does not represent a formal FDA approval of Erwinase® in the United States. Like the FDA approved Erwinaze®, Erwinase® is an L-asparaginase enzyme derived from the bacterium *Erwinia chrysanthemi* and is indicated for the treatment of ALL. Erwinase® was first licensed in the United Kingdom in 1985 and is supplied to many countries worldwide.

Guideline Update(s):

- The National Comprehensive Cancer Network (NCCN) guidelines recommend combination therapy with asparaginase-based regimens as preferred induction therapy in patients with extranodal NK/T-cell lymphoma with nasal involvement.

Product Summaries[9,2,10,11]

Erwinaze® (Asparaginase *Erwinia Chrysanthemi*)

- **Therapeutic Class:** Asparagine specific enzyme
- **Indication(s):** As a component of a multi-agent chemotherapeutic regimen for the treatment of patients with ALL who have developed hypersensitivity to *E. coli*-derived asparaginase
- **How Supplied:** 10,000 IU of lyophilized powder per single-dose vial (SDV)
- **Dose:**
  - To substitute for a dose of pegaspargase: 25,000 IU/m^2 administered IM or IV 3 times a week for 6 doses

    - To substitute for a dose of native *E. coli* asparaginase: 25,000 IU/m^2 administered IM or IV for each scheduled dose of native *E. coli* asparaginase
- **Cost:** The Wholesale Acquisition Cost (WAC) is $4,030.84 per SDV, resulting in a cost of $20,154.20 per dose for an adult with a body surface area (BSA) of 1.7m^2.

Oncaspar® (Pegaspargase):
- **Therapeutic Class:** Asparagine specific enzyme
- **Indication(s):** As a component of a multi-agent chemotherapeutic regimen for the treatment adult and pediatric patients for the following:
    - First-line treatment of ALL
    - ALL and hypersensitivity to asparaginase
- **How Supplied:** 3,750 IU/5mL (750 IU/mL) solution in a SDV
- **Dose:**
    - 21 years of age and younger: 2,500 IU/m^2
    - Older than 21 years of age: 2,000 IU/m^2
    - Oncaspar® should be administered IM or IV no more frequently than every 14 days
- **Cost:** The WAC is $4,448.49 per mL, resulting in a cost per dose of $44,484.90 for an adult with a BSA of 1.7m^2.

Rylaze™ [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn]:
- **Therapeutic Class:** Asparagine specific enzyme
- **Indication(s):** As a component of a multi-agent chemotherapeutic regimen for the treatment of ALL and LBL in adult and pediatric patients 1 month of age or older who have developed hypersensitivity to *E. coli*-derived asparaginase
- **How Supplied:** 10mg/0.5mL solution in a SDV
- **Dose:** When replacing a long-acting asparaginase product, the recommended dosage is 25mg/m^2 administered IM every 48 hours.
- **Cost:** The WAC is $8,780.00 per mL, resulting in a cost per dose of $21,950.00 for an adult with a BSA of 1.7m^2.

Scemblix® (Asciminib):
- **Therapeutic Class:** TKI
- **Indication(s):**
    - Ph+ CML in CP, previously treated with 2 or more TKIs
    - Ph+ CML in CP with the T315I mutation
- **How Supplied:** 20mg and 40mg oral tablets
- **Dose:**
    - Ph+ CML in CP: 80mg once daily or 40mg twice daily

- Ph+ CML in CP with the T315I mutation: 200mg twice daily

- **Cost:** The WAC is $298.33 per tablet for the 20mg and 40mg strengths, resulting in monthly cost of $89,499.00 based on the recommended dosing for Ph+ CML in CP with the T315I mutation or $17,899.80 for Ph+ CML in CP without the T315I mutation.

Recommendations

The College of Pharmacy recommends the prior authorization of Erwinase® (crisantaspase), Erwinaze® (asparaginase *Erwinia chrysanthemi*), Rylaze™ [asparaginase *Erwinia chrysanthemi* (recombinant)-rywn], and Scemblix® (asciminib) with the following criteria (shown in red):

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.

Scemblix® (Asciminib) Approval Criteria [Chronic Myeloid Leukemia (CML) Diagnosis]:

1. Diagnosis of Philadelphia chromosome-positive (Ph+) CML in chronic phase; and
   a. Previously treated with ≥2 tyrosine kinase inhibitors (TKIs); or
   b. Frontline or subsequent therapy in members with the T315I mutation.

Additionally, College of Pharmacy recommends the prior authorization of Oncaspar® (pegaspargase) with criteria similar to Asparlas® (calaspargase pegol-mknl) and updating the Asparlas® criteria based on NCCN guideline recommendations and product availability with the following criteria (changes and updates shown in red):

Asparlas® (Calaspargase Pegol-mknl) and Oncaspar® (Pegaspargase) Approval Criteria [Acute Lymphoblastic Leukemia (ALL) 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 ALL; and
4. Used as first line therapy; or
5. May be used to treat members with a hypersensitivity to native forms of L-asparaginase; or
6. Used as systemic central nervous system (CNS)-directed therapy; or

7. Used in relapsed/refractory disease; and
    a. Philadelphia chromosome negative (Ph-); or
    b. Philadelphia chromosome positive (Ph+); and
        i. Refractory to tyrosine kinase inhibitor (TKI) therapy or used in conjunction with a TKI (if not previously used).

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.

Finally, the College of Pharmacy recommends updating the prior authorization criteria for Ayvakit™ (avapritinib), Tecartus® (brexucabtagene autoleucel), and Tibsovo® (ivosidenib) based on recent FDA approvals (changes shown in red):

Ayvakit™ (Avapritinib) Approval Criteria [Systemic Mastocytosis Diagnosis]:

1. Diagnosis of advanced systemic mastocytosis, including members with aggressive systemic mastocytosis, systemic mastocytosis with an associated hematologic neoplasm, and mast cell leukemia; and
2. Platelet count ≥50 x 10^9/L.

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

1. Diagnosis of 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.

Tibsovo® (Ivosidenib) Approval Criteria [Cholangiocarcinoma Diagnosis]:

1. Diagnosis of locally advanced or metastatic cholangiocarcinoma; and
2. An isocitrate dehydrogenase-1 (IDH1) mutation; and
3. Member has received prior treatment for this diagnosis.

[1] Dinndorf PA, Gootenberg J, Cohen MH, et al. FDA Drug Approval Summary: Pegaspargase (Oncaspar®) for the First-Line Treatment of Children with Acute Lymphoblastic Leukemia (ALL). *Oncologist* 2007; 12(8):991-998.
[2] Oncaspar® (Pegaspargase) Prescribing Information. Servier Pharmaceuticals. Available online at: https://www.oncaspar.com/resource/1636640946000/oncaspar_files/prescribing_information.pdf. Last revised 11/2021. Last accessed 03/24/2022.
[3] Traynor K. FDA Approves Erwinaze® for Treatment of Leukemia. *ASHP*. Available online at: https://www.ashp.org/news/2011/11/18/fda_approves_erwinaze_for_treatment_of_leukemia?loginreturnUrl=SSOCheckOnly. Issued 11/18/2011. Last accessed 03/24/2022.
[4] Jazz Pharmaceuticals. Jazz Pharmaceuticals Receives FDA Approval for Intravenous Administration of Erwinaze® (Asparaginase *Erwinia Chrysanthemi*). *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/jazz-pharmaceuticals-receives-fda-approval-for-intravenous-administration-of-erwinaze-asparaginase-erwinia-chrysanthemi-300012792.html. Issued 12/19/2014. Last accessed 03/24/2022.
[5] U.S. Food and Drug Administration (FDA). Hematology/Oncology (Cancer) Approvals & Safety Notifications. Available online at: https://www.fda.gov/drugs/resources-information-approved-drugs/hematologyoncology-cancer-approvals-safety-notifications. Last revised 03/23/2022. Last accessed 03/28/2022.
[6] Porton Biopharma. Temporary Importation of Erwinase® (Crisantaspase) Injection, Powder, Lyophilized, for Solution to Address a Drug Shortage in the United States (U.S.). Available online at: https://www.fda.gov/media/149614/download#:~:text=In%20order%20to%20alleviate%20a,the%20non%2DFDA%20licensed%20Erwinase%20. Issued 05/25/2021. Last accessed 03/28/2022.
[7] Porton Biopharma. Products. Erwinase® (Crisantaspase). Available online at: https://portonbiopharma.com/products/erwinase/?professionals=true. Last accessed 03/28/2022.
[8] National Comprehensive Cancer Network (NCCN) Guidelines. T-cell lymphomas. V 1.2022. Available online at: https://www.nccn.org/professionals/physician_gls/pdf/cll.pdf. Last accessed 03/28/2022.
[9] Erwinaze® (Asparaginase *Erwinia Chrysanthemi*) Prescribing Information. Jazz Pharmaceuticals. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2016/125359s088lbl.pdf. Last revised 03/2016. Last accessed 02/10/2022.
[10] Rylaze™ [Asparaginase *Erwinia Chrysanthemi* (Recombinant)-rywn] Prescribing Information. Jazz Pharmaceuticals. Available online at: https://pp.jazzpharma.com/pi/rylaze.en.USPI.pdf. Last revised 06/2021. Last accessed 03/28/2022.
[11] Scemblix® (Asciminib) Prescribing Information. Novartis Pharmaceuticals. Available online at: https://www.novartis.us/sites/www.novartis.us/files/scemblix.pdf. Last revised 10/2021. Last accessed 03/28/2022.

Appendix I

Calendar Year 2021 Annual Review of Hemophilia Medications

Oklahoma Health Care Authority
April 2022

Current Prior Authorization Criteria

Adynovate®, Afstyla®, Alprolix®, Eloctate®, Esperoct®, Idelvion®, Jivi®, and Rebinyn® Approval Criteria:

1. An FDA approved indication; and
2. Requested medication must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders; and
3. A patient-specific, clinically significant reason why the member cannot use the following must be provided:
    a. Hemophilia A: Advate® or current factor VIII replacement product; or
    b. Hemophilia B: Benefix® or current factor IX replacement product; and
4. A half-life study must be performed to determine the appropriate dose and dosing interval; and
5. Initial approvals will be for the duration of the half-life study. If the half-life study shows significant benefit in prolonged half-life, subsequent approvals will be for the duration of 1 year.

Coagadex® [Coagulation Factor X (Human)] Approval Criteria:

1. An FDA approved indication; and
2. Coagadex® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders; and
3. A half-life study must be performed to determine the appropriate dose and dosing interval; and
4. Initial approvals will be for the duration of the half-life study and immediate needs. After a half-life study is performed and appropriate dose and interval is determined, subsequent approvals will be for the duration of 1 year.

Corifact® [Factor XIII Concentrate (Human)] and Tretten® [Coagulation Factor XIII A-Subunit (Recombinant)] Approval Criteria:

1. An FDA approved indication; and

2. Corifact® or Tretten® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders; and
3. A half-life study must be performed to determine the appropriate dose and dosing interval; and
4. Initial approvals will be for the duration of the half-life study and immediate needs. After a half-life study is performed and appropriate dose and interval is determined, subsequent approvals will be for the duration of 1 year.

Feiba® (Anti-Inhibitor Coagulation Complex) Approval Criteria:

1. Member must be diagnosed with hemophilia A or B with an inhibitor; and
2. Feiba® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders.

Hemlibra® (Emicizumab-kxwh) Approval Criteria:

1. Member must have a diagnosis of hemophilia A; and
2. Hemlibra® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders; and
3. Prescriber must be able to monitor appropriate blood clotting tests and levels utilizing testing which accounts for the interaction of Hemlibra® and blood factors by following the Medical and Scientific Advisory Council (MASAC) guidance; and
4. For members with hemophilia A with an inhibitor to factor VIII:
    a. Member must have failed immune tolerance induction (ITI) or is not a good candidate for ITI; and
    b. Member's hemophilia cannot be managed without the use of bypassing agent(s) (e.g., Feiba®, NovoSeven® RT) as prophylaxis for prevention of bleeding episodes, or the member is unable to maintain venous access for daily infusions; and
    c. Member's hemophilia is not currently controlled with the use of bypassing agent(s); and
    d. Prescriber must counsel member and/or caregiver on the risks of utilizing Feiba® for breakthrough bleeding while on Hemlibra®, and member should be monitored closely if any bypassing agent is given; or
5. For members with hemophilia A without an inhibitor:

a. Member's current prophylaxis therapy is not adequate to prevent spontaneous bleeding episodes, or the member is unable to maintain venous access for prophylactic infusions; and
b. Treatment plan must be made to address breakthrough bleeds and procedures; and
c. Routine lab screenings must occur for factor VIII inhibitor while using Hemlibra® since this would change the treatment plan for bleeds and procedures; and

6. First dose must be given in a health care facility; and
7. In order to calculate appropriate dosing, the member's recent weight must be provided and been taken within the last 3 months; and
8. Initial approvals will be for 3 months of therapy. Subsequent approvals will be for the duration of 1 year, if there has been a decrease in the member's spontaneous bleeding episodes since initiating Hemlibra® treatment.

NovoSeven® RT [Coagulation Factor VIIa (Recombinant)] Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
   a. Hemophilia A or B with inhibitors; or
   b. Congenital factor VII deficiency; or
   c. Glanzmann's thrombasthenia with refractoriness to platelet transfusions, with or without antibodies to platelets; or
   d. Acquired hemophilia; and
2. NovoSeven® RT must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders.

Obizur® [Antihemophilic Factor (Recombinant), Porcine Sequence] Approval Criteria:

1. An FDA approved indication; and
2. Obizur® must be prescribed by a hematologist specializing in hemophilia or a mid-level practitioner with a supervising physician that is a hematologist specializing in hemophilia; and
3. A patient-specific, clinically significant reason why the member cannot use Feiba® (anti-inhibitor coagulant complex) or NovoSeven® RT [coagulation factor VIIa (recombinant)] must be provided; and
4. A half-life study must be performed to determine the appropriate dose and dosing interval; and
5. Initial approvals will be for the duration of the half-life study. After a half-life study is performed and appropriate dose and interval is determined, subsequent approvals will be for the duration of 1 year.

Sevenfact® [Coagulation Factor VIIA (Recombinant)-jncw] Approval Criteria:

1. An FDA approved diagnosis; and

2. Sevenfact® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders.

Standards-of-Care for Pharmacies Providing Factor Replacement Products can be found on the Oklahoma Health Care Authority (OHCA) website on the Pharmacy Prior Authorization (PA) page in the Hemophilia Therapeutic Category at https://oklahoma.gov/ohca/pa.

Utilization of Hemophilia Medications: Calendar Year 2021

Comparison of Calendar Years: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost Per Utilizer Per Year
2020	96	772	$16,552,358.34	$21,440.88	$172,420.40
2021	114	870	$19,136,799.74	$21,996.32	$167,866.66
% Change	**18.8%**	**12.7%**	**15.6%**	**2.6%**	**-2.64%**
Change	**18**	**98**	**$2,584,441.40**	**$555.44**	**-$4,553.74**

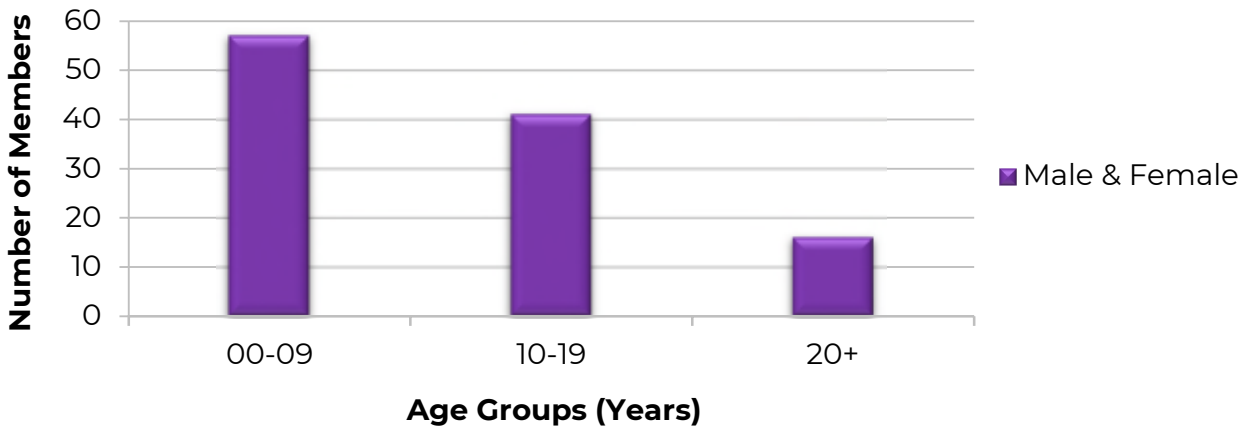
Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

Comparison of Calendar Years: Medical Claims

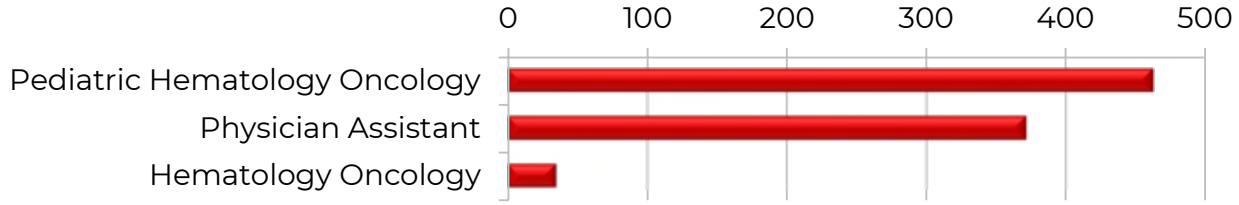
Calendar Year	*Total Members	+Total Claims	Total Cost	Cost/ Claim	Cost Per Utilizer Per Year
2020	8	46	$752,728.61	$16,363.66	$94,091.08
2021	8	32	$3,131,167.14	$97,848.97	$391,395.89
% Change	**0%**	**-30.4%**	**316%**	**498%**	**316%**
Change	**0**	**-14**	**$2,378,438.53**	**$81,485.31**	**$297,304.82**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
+Total number of unduplicated claims.

Demographics of Members Utilizing Hemophilia Medications



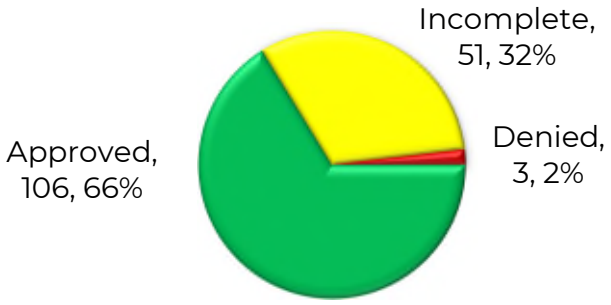
Top Prescriber Specialties of Hemophilia Medications by Number of Claims



Prior Authorization of Hemophilia Medications

There were 160 prior authorization requests submitted for hemophilia medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions



Market News and Updates[1,2,3,4,5,6,7]

News:

- **March 2021:** At the request of the U.S. Food and Drug Administration (FDA), the *Warnings and Precautions* section of the Hemlibra® *Prescribing Information* was updated to remind health care professionals of the long-half-life of Hemlibra® when prescribing activated prothrombin complex concentrate (aPCC) after Hemlibra® is discontinued, as it could take up to 6 months for the body to clear Hemlibra®. The *Specific Populations* section of the label was updated as well to make clear to health care professionals that Hemlibra® has not been studied in patients with severe hepatic or renal impairment and congenital hemophilia A with and without factor VIII inhibitors.

Pipeline:

- **Etranacogene dezaparvovec:** In April 2021, after addressing the FDA's concerns satisfactorily, the clinical hold was lifted on the Phase 3 HOPE-

B clinical trial. The hold had been placed in December 2020 due to a patient developing hepatocellular carcinoma. The HOPE-B trial is studying etranacogene dezaparvovec, an adeno-associated virus (AAV) serotype 5 (AAV5) viral vector carrying the Padua variant of factor IX, in patients with moderate-to-severe hemophilia B. In May 2021, an update was presented at the American Society of Gene and Cell Therapy meeting on the HOPE-B clinical trial with the most notable being the therapy performed well in patients with pre-existing AAV neutralizing antibodies. On December 9, 2021, uniQure and CSL Behring announced the primary non-inferiority endpoint was achieved in the HOPE-B pivotal trial. The primary endpoint measured the annualized bleed rate for the 6-month lead in period, 4.19, compared to at least a 6-month period after stable factor IX expression, 1.51. CSL Behring plans to file for approval with the FDA and European Medicines Agency (EMA) in the first half of 2022.

- **Valoctocogene roxaparvovec:** Valoctocogene roxaparvovec is an AAV vector-mediated factor VIII gene transfer intended for patients with hemophilia A. In July 2021, Biomarin presented 5 years of clinical data from the ongoing Phase 1/2 clinical trial to the International Society on Thrombosis and Haemostatis. The clinical benefit has been sustained in both the low and high dose cohorts with participants remaining off prophylactic treatment. However, the factor VIII expression continues to decrease over time. BioMarin resubmitted an application to the EMA in July 2021. Data from the ongoing Phase 3 pivotal trial, GENEr8-1, was presented at the European Association for Haemophilia and Allied Disorders' meeting in February 2022. The increased bleed-free rate was maintained through year 2 from 32% at baseline with 82% and 84% for year 1 and 2, respectively. Factor VIII treatment burden was decreased by 98%, and 95% of the participants remained off prophylactic treatment. Data submission to the FDA is expected in the second quarter of 2022 with an expected decision by the end of 2022.

Hemophilia A with Inhibitor Treatment[8,9,10,11]

Inhibitor or antibody development can be a devastating development for those patients with hemophilia. Approximately 20% of patients with hemophilia A will develop an inhibitor. Occasionally the inhibitor is transient and disappears without intervention. Treatment for patients with inhibitors can be complex. Patients may undergo immune tolerance induction (ITI) to overcome the inhibitor by giving large doses of factor daily; however, some patients may not be suited for ITI. Patients with inhibitors can use prophylactic treatment to prevent bleeding and on-demand treatment for

breakthrough bleeding or use only on-demand treatment for bleeding episodes. The current recommendations from the World Federation of Hemophilia (WFH) and the National Hemophilia Foundation's Medical and Scientific Advisory Council (MASAC) are the use of emicizumab, recombinant bi-specific monoclonal antibody, should be considered as first line for prophylactic treatment in patients with hemophilia A with persistent inhibitors who experience spontaneous or traumatic bleeding. Bypassing agents such as Novoseven® RT or Sevenfact® are safer to use as treatment for breakthrough bleeding episodes while patients are using emicizumab as prophylaxis. The Hemlibra® *Prescribing Information* has a *Boxed Warning* regarding the use of Feiba®, aPCC, for breakthrough bleeding due to cases of thrombotic microangiopathy and thromboembolism when Feiba® was given at doses >100u/kg/24 hours while patients were using emicizumab as prophylaxis.

Recommendations

The Oklahoma Health Care Authority recommends the following changes to the current hemophilia A inhibitor treatments approval criteria based on WFH and MASAC recommendations:

Feiba® (Anti-Inhibitor Coagulation Complex) Approval Criteria:

1. Member must be diagnosed with hemophilia A or B with an inhibitor; and
    a. For a diagnosis of hemophilia A with an inhibitor, a patient-specific, clinically significant reason why the member cannot use Hemlibra® for prophylaxis therapy must be provided; and
2. Feiba® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders.

Hemlibra® (Emicizumab-kxwh) Approval Criteria:

1. Member must have a diagnosis of hemophilia A; and
2. Hemlibra® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders; and
3. Prescriber must be able to monitor appropriate blood clotting tests and levels utilizing testing which accounts for the interaction of Hemlibra® and blood factors by following the Medical and Scientific Advisory Council (MASAC) guidance; and
4. For members with hemophilia A with an inhibitor to factor VIII:
    ~~a. Member must have failed immune tolerance induction (ITI) or is not a good candidate for ITI; and~~

~~b. Member's hemophilia cannot be managed without the use of bypassing agent(s) (e.g., Feiba®, NovoSeven® RT) as prophylaxis for prevention of bleeding episodes, or the member is unable to maintain venous access for daily infusions; and~~
~~c. Member's hemophilia is not currently controlled with the use of bypassing agent(s); and~~
d. A treatment plan must be developed to address breakthrough bleeds and procedures. Prescriber must counsel member and/or caregiver on the risks of utilizing Feiba® for breakthrough bleeding while on Hemlibra®, and member should be monitored closely if any bypassing agent is given; or

5. For members with hemophilia A without an inhibitor:
   a. Member's current prophylaxis therapy is not adequate to prevent spontaneous bleeding episodes, or the member is unable to maintain venous access for prophylactic infusions; and
   b. Treatment plan must be made to address breakthrough bleeds and procedures; and
   c. Routine lab screenings must occur for factor VIII inhibitor while using Hemlibra® since this would change the treatment plan for bleeds and procedures; and
6. First dose must be given in a health care facility; and
7. In order to calculate appropriate dosing, the member's recent weight must be provided and been taken within the last 3 months; and
8. Initial approvals will be for 3 months of therapy. Subsequent approvals will be for the duration of 1 year, if there has been a decrease in the member's spontaneous bleeding episodes since initiating Hemlibra® treatment.

NovoSeven® RT [Coagulation Factor VIIa (Recombinant)] Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
   a. Hemophilia A or B with inhibitors; and
      i. For a diagnosis of hemophilia A with an inhibitor, a patient-specific, clinically significant reason why the member cannot use Hemlibra® for prophylaxis therapy must be provided; or
   b. Congenital factor VII deficiency; or
   c. Glanzmann's thrombasthenia with refractoriness to platelet transfusions, with or without antibodies to platelets; or
   d. Acquired hemophilia; and
2. NovoSeven® RT must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders.

Sevenfact® [Coagulation Factor VIIA (Recombinant)-jncw] Approval Criteria:

1. An FDA approved diagnosis; and
   a. For a diagnosis of hemophilia A with an inhibitor, a patient-specific, clinically significant reason why the member cannot use Hemlibra® for prophylaxis therapy must be provided; and
2. Sevenfact® must be prescribed by a hematologist specializing in rare bleeding disorders or a mid-level practitioner with a supervising physician that is a hematologist specializing in rare bleeding disorders.

Utilization Details of Hemophilia Medications: Calendar Year 2021

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
HEMLIBRA PRODUCTS						
HEMLIBRA INJ 60MG/0.4ML	185	25	$3,711,005.72	$20,059.49	5.00	0.75%
HEMLIBRA INJ 105MG/0.7ML	90	17	$2,638,003.97	$29,311.16	6.00	1.81%
HEMLIBRA INJ 30MG/ML	83	14	$707,111.03	$8,519.41	5.00	0.51%
HEMLIBRA INJ 150MG/ML	43	9	$1,490,834.73	$34,670.58	6.00	2.02%
SUBTOTAL	**401**	**65**	**$8,546,955.45**	**$21,314.10**	**6.17**	**5.09%**
KOGENATE PRODUCTS						
KOGENATE FS INJ 2000U	36	13	$905,177.96	$25,143.83	1.50	0.20%
KOGENATE FS INJ 500U	18	6	$160,241.33	$8,902.30	1.50	0.83%
KOGENATE FS INJ 3000U	17	3	$1,096,070.98	$64,474.76	3.00	1.09%
KOGENATE FS INJ 1000U	15	10	$102,103.04	$6,806.87	1.33	0.44%
KOGENATE FS INJ 250U	11	4	$39,459.41	$3,587.22	3.00	1.49%
SUBTOTAL	**97**	**36**	**$2,303,052.72**	**$23,742.81**	**2.69**	**4.05%**
ALPROLIX PRODUCTS						
ALPROLIX INJ 3000U	21	2	$527,728.12	$25,129.91	1.50	0.53%
ALPROLIX INJ 250U	18	2	$25,475.76	$1,415.32	2.67	1.69%
ALPROLIX INJ 500U	12	1	$136,217.01	$11,351.42	6.50	3.06%
ALPROLIX INJ 1000U	10	1	$137,236.15	$13,723.62	9.00	0.13%
ALPROLIX INJ 2000U	7	2	$178,542.37	$25,506.05	5.67	5.73%
ALPROLIX INJ 4000U	6	1	$346,940.76	$57,823.46	1.75	0.76%
SUBTOTAL	**74**	**9**	**$1,352,140.17**	**$18,272.16**	**8.22**	**11.90%**
ADVATE PRODUCTS						
ADVATE INJ 2000U	27	9	$303,299.45	$11,233.31	5.93	19.39%
ADVATE INJ 1500U	16	6	$323,414.81	$20,213.43	5.29	13.78%
ADVATE INJ 3000U	13	2	$585,479.04	$45,036.85	2.77	3.70%
ADVATE INJ 1000U	7	5	$85,446.89	$12,206.70	7.40	7.79%
ADVATE INJ 500U	5	3	$17,109.03	$3,421.81	4.00	4.73%
ADVATE INJ 250U	2	2	$3,921.39	$1,960.70	4.78	3.57%
SUBTOTAL	**70**	**27**	**$1,318,670.61**	**$18,838.15**	**2.59**	**52.96%**
NUWIQ PRODUCTS						
NUWIQ KIT 1000U	14	8	$146,206.81	$10,443.34	1.00	0.02%
NUWIQ KIT 250U	11	6	$26,991.29	$2,453.75	1.00	0.02%
NUWIQ KIT 2000U	9	2	$174,787.08	$19,420.79	1.00	0.02%
NUWIQ KIT 500U	9	7	$15,261.25	$1,695.69	1.00	0.02%
NUWIQ KIT 3000U	3	1	$285,622.17	$95,207.39	1.00	0.02%
NUWIQ KIT 2500U	1	1	$3,047.90	$3,047.90	1.00	0.03%

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
SUBTOTAL	**47**	**25**	**$651,916.50**	**$13,870.56**	**1.88**	**0.13%**
KOATE PRODUCTS						
KOATE INJ 1000U	27	1	$39,860.37	$1,476.31	1.67	0.09%
KOATE INJ 500U	10	1	$5,719.90	$571.99	2.00	0.03%
SUBTOTAL	**37**	**2**	**$45,580.27**	**$1,231.90**	**18.50**	**0.12%**
WILATE PRODUCTS						
WILATE INJ 1000U	28	7	$682,447.00	$24,373.11	1.00	1.00%
WILATE INJ 500U	5	5	$11,836.44	$2,367.29	1.00	0.00%
SUBTOTAL	**33**	**12**	**$694,283.44**	**$21,038.89**	**2.75**	**1.00%**
HUMATE PRODUCTS						
HUMATE-P SOL 2400U	8	4	$140,211.52	$17,526.44	2.50	0.24%
HUMATE-P SOL 250-600U	8	7	$8,153.46	$1,019.18	5.00	3.90%
HUMATE-P SOL 500-1200U	5	4	$7,301.14	$1,460.23	1.25	0.04%
SUBTOTAL	**21**	**15**	**$155,666.12**	**$7,412.67**	**1.40**	**4.18%**
FEIBA PRODUCTS						
FEIBA INJ 1000U	8	1	$1,144,802.72	$143,100.34	1.4	0.45%
FEIBA INJ 2500U	5	1	$746,100.09	$149,220.02	3.5	0.93%
SUBTOTAL	**13**	**2**	**$1,890,902.81**	**$145,454.06**	**6.50**	**1.38%**
ADYNOVATE PRODUCTS						
ADYNOVATE INJ 3000U	6	1	$386,132.77	$64,355.46	27.00	0.21%
ADYNOVATE INJ 2000U	6	1	$261,944.99	$43,657.50	3.00	1.58%
SUBTOTAL	**12**	**2**	**$648,077.76**	**$54,006.48**	**6.00**	**1.79%**
KOVALTRY PRODUCTS						
KOVALTRY INJ 2000U	9	2	$295,819.90	$32,868.88	1.00	0.20%
KOVALTRY INJ 500U	2	1	$44,028.06	$22,014.03	2.00	0.23%
SUBTOTAL	**11**	**3**	**$339,847.96**	**$30,895.27**	**3.67**	**0.43%**
BENEFIX PRODUCTS						
BENEFIX INJ 3000U	4	3	$83,315.03	$20,828.76	2.75	0.21%
BENEFIX INJ 500U	4	2	$6,520.25	$1,630.06	1.83	0.14%
BENEFIX INJ 2000U	3	2	$38,157.88	$12,719.29	12	0.71%
SUBTOTAL	**11**	**7**	**$127,993.16**	**$11,635.74**	**1.57**	**1.06%**
ESPEROCT PRODUCTS						
ESPEROCT INJ 1500U	5	1	$143,117.05	$28,623.41	2.00	0.73%
ESPEROCT INJ 1000U	5	1	$97,117.05	$19,423.41	8.00	5.98%
SUBTOTAL	**10**	**2**	**$240,234.10**	**$24,023.41**	**5.00**	**6.71%**
NOVOSEVEN PRODUCTS						
NOVOSEVEN RT INJ 1MG	5	2	$46,563.05	$9,312.61	1.00	0.15%
NOVOSEVEN RT INJ 5MG	3	2	$159,696.23	$53,232.08	2.00	0.01%
NOVOSEVEN RT INJ 2MG	2	2	$32,586.82	$16,293.41	1.00	0.17%
SUBTOTAL	**10**	**6**	**$238,846.10**	**$23,884.61**	**1.67**	**0.33%**
ELOCTATE PRODUCTS						
ELOCTATE INJ 3000U	3	1	$209,228.70	$69,742.90	1.29	0.08%
ELOCTATE INJ 1500U	2	2	$37,596.48	$18,798.24	4.50	1.55%
ELOCTATE INJ 2000U	1	1	$34,856.53	$34,856.53	4.50	0.91%
ELOCTATE INJ 500U	1	1	$8,460.54	$8,460.54	1.14	0.04%
SUBTOTAL	**7**	**5**	**$290,142.25**	**$41,448.89**	**1.40**	**2.58%**
RIXUBIS PRODUCTS						
RIXUBIS INJ 3000U	2	2	$27,928.29	$13,964.15	1.00	0.06%
RIXUBIS INJ 1000U	2	2	$5,997.14	$2,998.57	1.00	0.04%
RIXUBIS INJ 2000U	1	1	$3,246.13	$3,246.13	1.00	0.04%
RIXUBIS INJ 500U	1	1	$830.28	$830.28	1.00	0.06%
SUBTOTAL	**6**	**6**	**$38,001.84**	**$6,333.64**	**1.00**	**0.20%**

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
ALPHANATE PRODUCTS						
ALPHANATE INJ 2000U	1	1	$4,869.21	$4,869.21	3.00	0.84%
ALPHANATE INJ 1000U	1	1	$3,722.86	$3,722.86	10.50	2.76%
SUBTOTAL	**2**	**2**	**$8,592.07**	**$4,296.04**	**1.00**	**3.60%**
FIBRYGA PRODUCTS						
FIBRYGA INJ 1GM	2	1	$2,332.82	$1,166.41	6.00	1.37%
SUBTOTAL	**2**	**1**	**$2,332.82**	**$1,166.41**	**6.00**	**1.37%**
SEVENFACT PRODUCTS						
SEVENFACT INJ 1MG	1	1	$191,975.00	$191,975.00	1.00	0.18%
SUBTOTAL	**1**	**1**	**$191,975.00**	**$191,975.00**	**1.00**	**0.18%**
IDELVION PRODUCTS						
IDELVION SOL 2000U	1	1	$18,150.12	$18,150.12	1.00	0.06%
SUBTOTAL	**1**	**1**	**18,150.12**	**$18,150.12**	**1.00**	**0.06%**
CORIFACT PRODUCTS						
CORIFACT KIT 1000-1600U	1	1	$11,763.06	$11,763.06	10.00	0.72%
SUBTOTAL	**1**	**1**	**$11,763.06**	**$11,763.06**	**10.00**	**0.72%**
RECOMBINATE PRODUCTS						
RECOMBINATE INJ 1801-2400U	1	1	$,661.60	$10,661.60	1.00	0.09%
SUBTOTAL	**1**	**1**	**$10,661.60**	**$10,661.60**	**1.00**	**0.09%**
NOVOEIGHT PRODUCTS						
NOVOEIGHT INJ 1500U	1	1	$6,779.91	$6,779.91	1.00	0.03%
SUBTOTAL	**1**	**1**	**$6,779.91**	**$6,779.91**	**1.00**	**0.03%**
COAGADEX PRODUCTS						
COAGADEX INJ 500U	1	1	$4,233.90	$4,233.90	10.00	0.03%
SUBTOTAL	**1**	**1**	**$ 4,233.90**	**$4,233.90**	**10.00**	**0.03%**
TOTAL	**870**	**114***	**$19,136,799.74**	**$21,996.32**	**7.63**	**100%**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
FS = formulated with sucrose; INJ = injection; RT = recombinant; SOL = solution; U = units

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM
J7187 VON WILLEBRAND FACTOR COMPLEX	3	3	$5,947.80	$1,982.60
J7189 FACTOR VIIA RT	24	1	$3,107,583.76	$129,482.66
J7192 FACTOR VIII RT	5	4	$17,635.58	$3,527.12
TOTAL	**32⁺**	**8***	**$3,131,167.14**	**$97,848.97**

⁺Total number of unduplicated claims.
*Total number of unduplicated utilizing members.
Costs do not reflect rebated prices or net costs.
RT = recombinant

[1] Updated Hemlibra®(emicizumab-kxwh) USPI. Available online at: https://www.hemophilia.org/news/update-to-hemlibrar-emicizumab-kxwh-uspi. Issued 03/2021. Last accessed 02/2022.
[2] BioMarin Announces Oral Presentation at ISTH 2021 Virtual Congress with 5 Years of Clinical Data from Ongoing Phase 1/2 Study of Valoctocogene Roxaparvovec in Adults with Severe Hemophilia A, Demonstrating Continued, Durable Clinical Benefit. Available online at: https://www.biospace.com/article/releases/biomarin-announces-oral-presentation-at-isth-2021-virtual-congress-with-5-years-of-clinical-data-from-ongoing-phase-1-2-study-of-valoctocogene-roxaparvovec-in-adults-with-severe-hemophilia-a-demonstrating-continued-durable-clinical-benefit/. Issued 07/ 2021. Last accessed 02/2022.
[3] BioMarin Announces Oral Presentation of 2-Year Analysis of Largest Phase 3 Gene Therapy Study in Adults with Severe Hemophilia A at 15th Annual Congress of European Association for Haemophilia and Allied Disorders. Available Online at:https://investors.biomarin.com/2022-02-04-BioMarin-Announces-Oral-Presentation-of-2-Year-Analysis-of-Largest-Phase-3-Gene-Therapy-Study-in-Adults-with-Severe-Hemophilia-A-at-15th-Annual-Congress-of-European-Association-for-Haemophilia-and-Allied-Disorders-EAHAD-2-4-February. Issued 02/2022. Last accessed 02/2022.
[4] uniQure Announces FDA Removes Clinical Hold on Hemophilia B Gene Therapy Program. Available online at: https://www.globenewswire.com/news-release/2021/04/26/2216691/0/en/uniQure-Announces-FDA-Removes-Clinical-Hold-on-Hemophilia-B-Gene-Therapy-Program.html. Issued 04/2021. Last accessed 02/2022.
[5] Gene Therapy Trial Data Suggests Efficacy in the Presence of Antibodies. Available online at: https://www.hemophilia.org/news/gene-therapy-trial-data-suggests-efficacy-in-the-presence-of-antibodies. Issued 05/2021. Last accessed 02/2022.
[6] EMA Speeds Approval Process for Hemophilia B Gene Therapy. Available online at: https://hemophilianewstoday.com/2021/12/17/hemophilia-b-gene-therapy-granted-accelerated-assessment-ema/ . Issued 12/2021. Last accessed 02/2022.
[7] uniQure and CSL Behring Announce Primary Endpoint Achieved in HOPE-B Pivotal Trial of Etranacogene Dezaparvovec Gene Therapy in Patients with Hemophilia. Available online at: https://www.cslbehring.com/newsroom/2021/hope-b-gene-therapy-for-hemophilia-b-topline-results. Issued 12/2021. Last accessed 02/ 2022.
[8] Inhibitors and Hemophilia. Available online at: https://www.cdc.gov/ncbddd/hemophilia/inhibitors.html. Last revised 07/2020. Last accessed 02/2022.
[9] WFH Guidelines for the Management of Hemophilia, 3rd edition. Chapter 8. Available online at: https://onlinelibrary.wiley.com/doi/10.1111/hae.14046. Published 08/2020. Last accessed 02/2022.
[10] MASAC Document 258 - Recommendation on the Use and Management of Emicizumab-kxwh (Hemlibra®) for Hemophilia A with and without Inhibitors. Available online at: https://www.hemophilia.org/healthcare-professionals/guidelines-on-care/masac-documents/masac-document-258-recommendation-on-the-use-and-management-of-emicizumab-kxwh-hemlibrar-for-hemophilia-a-with-and-without-inhibitors. Issued 03/2020. Last accessed 02/ 2022.
[11] Hemlibra® Prescribing Information. Available online at: https://www.gene.com/download/pdf/hemlibra_prescribing.pdf. Last revised 12/2021. Last accessed 02/2022.

Appendix J

Calendar Year 2021 Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Zynlonta® (Loncastuximab Tesirine-lply)

Oklahoma Health Care Authority
April 2022

Introduction[1,2,3,4,5,6,7,8]

Lymphoma is a general term for cancers that develop in the lymphatic system. Lymphomas that do not start in white blood cells (WBCs) are called non-Hodgkin's lymphoma (NHL). NHL consists of a diverse group of neoplasms derived from B-cell progenitors, mature B-cells, mature T-cells, T-cell progenitors, or natural killer (NK) cells. The majority of NHL types develop in B-cells and the most common forms of B-cell NHL include diffuse large B-cell lymphoma (DLBCL), follicular lymphoma (FL), mantle cell lymphoma (MCL), and marginal zone lymphoma (MZL). The clinical presentation of NHL varies widely depending on the type of lymphoma and the areas involved. Common presentations include lymphadenopathy, hepatosplenomegaly, fever, weight loss, and night sweats. Some NHLs behave indolently with waxing and waning lymphadenopathy for years, while others are highly aggressive and result in death within weeks if left untreated. NHL is the seventh most common cancer in the United States and is slightly more common in Caucasian men. In 2022, there will be an estimated 80,470 new diagnoses of NHL and 20,250 deaths due to NHL in the United States.

Hodgkin's lymphoma (HL) is a type of lymphoma that arises from germinal center or post-germinal center B-cells. Almost all HL cases contain Reed-Sternberg cells, a specific type of cancer cells not found in NHL. Most patients with HL can be treated successfully, even in advanced stages. HL is divided into 2 major types, based on the appearance and immunophenotype of the tumor cells: classic HL (cHL) and nodular lymphocyte-predominant HL (NLPHL). Most patients with cHL present with painless localized peripheral lymphadenopathy. HL has a bimodal age distribution and is most common in young adults (15 to 40 years of age) and older adults (older than 55 years of age). Males are slightly more likely to develop HL. In 2022, there will be an estimated 8,540 new diagnoses of HL and 920 deaths due to HL in the United States.

T-cell lymphomas can develop in lymphoid tissues or outside of lymphoid tissues. A similar lymphocyte called an NK cell shares many features with T-cells and when NK cells become cancerous, the cancer is called NK or NK/T-cell lymphoma and is generally grouped with other T-cell lymphomas. T-cell

lymphomas account for approximately 7% of all NHLs in the United States; each particular subtype of T-cell lymphoma is very uncommon. They can be aggressive or indolent. Lymphomas that arise from mature T-cells are sometimes categorized together under the general term peripheral T-cell lymphoma (PTCL). Almost all types of T-cell lymphomas fall under the category of PTCL. The following are among the PTCLs: peripheral T-cell lymphoma, not otherwise specified (PTCL, NOS); anaplastic large cell lymphoma (ALCL), primary systemic type; angioimmunoblastic T-cell lymphoma (AITL); extranodal NK/T-cell lymphoma, nasal type; subcutaneous panniculitis-like T-cell lymphoma; enteropathy associated T-cell lymphoma; and hepatosplenic T-cell lymphoma.

PTCL, NOS accounts for the largest number of patients with PTCL in western countries, accounting for approximately 30% of PTCL and approximately 4% of NHLs overall. It is likely that this group of PTCL, NOS tumors represents a conglomerate of many not yet identified PTCL subtypes. The incidence of PTCL, NOS in the United States was approximately 0.4 cases per 100,000 population in 2006. In the United States, the incidence is highest among blacks, lower among non-Hispanic whites, Hispanic whites, and Asian/Pacific Islanders, and lowest among American Indian/Alaskan natives. The median age at diagnosis is 60 years, and the diagnosis is more common in men than women. Most patients with PTCL, NOS present with generalized lymphadenopathy with or without extranodal disease.

ALCL accounts for approximately 1% of all NHLs. Symptoms associated with ALCL include fever, backache, painless swelling of lymph nodes, loss of appetite, itching, skin rash, and fatigue. ALCL can be systemic or cutaneous; systemic ALCL is typically in an advanced stage at diagnosis and can progress rapidly. The systemic subtype is classified as anaplastic lymphoma kinase (ALK)-positive or ALK-negative, depending on whether or not it contains an abnormal ALK fusion protein that results from a genetic event. The non-systemic subtype is called primary cutaneous ALCL and has a good prognosis.

AITL is a rare, aggressive type accounting for approximately 7% of all patients with T-cell lymphomas in the United States. Most patients are diagnosed with advanced stage disease and are middle-aged or elderly. Symptoms include fever, night sweats, skin rash, itching, and some autoimmune disorders (autoimmune hemolytic anemia and immune thrombocytopenia).

Cutaneous T-cell lymphomas (CTCL) account for 2 to 3% of all NHL cases and generally affect adults. CTCL describes a group of typically indolent lymphomas that appear on the skin; mycosis fungoides (MF) is the most common type of CTCL.

Current Prior Authorization Criteria

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's 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 [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 [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 [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 [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. A diagnosis of relapsed/refractory FL; and
2. Member must have failed at least 2 prior systemic therapies.

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

1. First-line treatment of CLL in combination with chlorambucil or bendamustine; or
2. Relapsed/refractory disease as a single agent or in combination with fludarabine and cyclophosphamide; or
3. Maintenance therapy as second-line extended dosing following complete or partial response to relapsed/refractory therapy (maximum 2 years).

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.

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 [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 [Peripheral T-Cell Lymphoma (PTCL) Diagnosis]:

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

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

1. As a single agent 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 adults; and

2. Member must have received at least 1 prior therapy.

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

1. As a single agent.

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

1. 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.

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.

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 [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.

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.

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 [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 [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 [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.

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.

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 [Primary Cutaneous Lymphomas – Mycosis Fungoides (MF)/Sézary Syndrome (SS) Diagnosis]:

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

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

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

Tazverik® (Tazemetostat) Approval Criteria [Epitheloid 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 [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 [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.

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.

Approval criteria for Xalkori® (crizotinib) for indications other than lymphoma can be found in the April 2021 Drug Utilization Review (DUR) Board packet. Xalkori® is reviewed annually with the lung cancer medications.

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.

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; and
4. Member must have had 2 or more lines of therapy; 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 REMS requirements; and
6. 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.

Approval criteria for Xpovio® (selinexor) for the indication of multiple myeloma can be found in the November 2021 DUR Board packet. Xpovio® is reviewed annually with the multiple myeloma medications.

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.

Approval criteria for Gazyva® (obinutuzumab), Imbruvica® (ibrutinib), Kymriah® (tisagenlecleucel), Venclexta® (venetoclax), and Zydelig® (idelalisib) for indications other than lymphoma can be found in the February 2022 DUR Board packet. These medications are reviewed annually with the leukemia medications.

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

1. Grade 1 or 2 members with stage I (≥7cm), contiguous stage II (≥7cm), 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 [Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL) Diagnosis]:

1. As first-line or subsequent therapy for CLL/SLL; and
2. As a single agent or in combination with bendamustine, rituximab, or obinutuzumab.

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 [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 [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.

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)]; 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 or more 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 risk evaluation and mitigation strategy (REMS) requirements.

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

1. As first-line therapy in combination with obinutuzumab for a maximum duration of 12 months; or
2. Relapsed/refractory disease in combination with rituximab or as a single agent.

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

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

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.

The following approval criteria for Keytruda® (pembrolizumab) and Opdivo® (nivolumab) includes only criteria for indications of lymphoma. Complete prior authorization criteria for Keytruda® (pembrolizumab) and Opdivo® (nivolumab) can be found in the December 2021 DUR Board packet. These medications are reviewed annually with the skin cancer medications.

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

1. As a single agent; and
2. The member has not previously failed other programmed death 1 (PD-1) inhibitors [i.e., Opdivo® (nivolumab)]; and
3. For adult members:
    a. Diagnosis of relapsed or refractory cHL; and
        i. Exception: Lymphocyte-predominant Hodgkin's lymphoma; or
4. For pediatric members:
    a. Diagnosis of refractory cHL; or
    b. 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)].

Opdivo® (Nivolumab) Approval Criteria [Classical Hodgkin's 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)].

Utilization of Lymphoma Medications: Calendar Year 2021

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
2020	18	94	$1,178,061.27	$12,532.57	$436.00	4,126	2,702
2021	30	131	$1,703,386.74	$13,002.95	$443.13	8,696	3,844
% Change	**66.70%**	**39.40%**	**44.60%**	**3.80%**	**1.60%**	**110.80%**	**42.30%**
Change	**12**	**37**	**$525,325.47**	**$470.38**	**$7.13**	**4,570**	**1,142**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

Calendar Year Comparison: Medical Claims

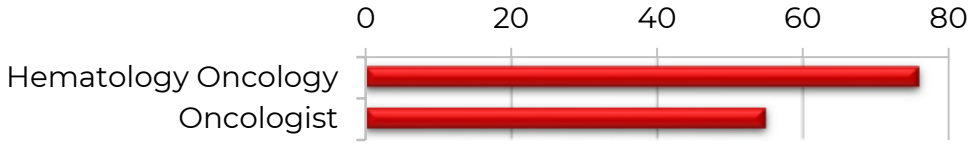
Calendar Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2020	158	748	$7,578,324.69	$10,131.45	4.73
2021	218	853	$11,243,853.17	$13,181.54	3.91
% Change	**37.97%**	**14.04%**	**48.37%**	**30.11%**	**-17.34%**
Change	**60**	**105**	**$3,665,528.48**	**$3,050.09**	**-0.82**

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 2021, detailed demographic information could not be provided.

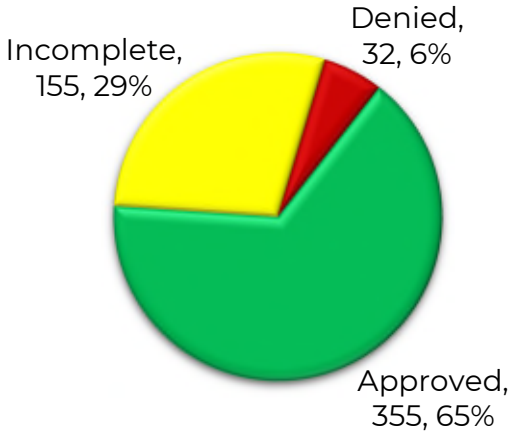
Top Prescriber Specialties of Lymphoma Medications by Number of Claims: Pharmacy Claims



Prior Authorization of Lymphoma Medications

There were 542 prior authorization requests submitted for lymphoma medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions



Market News and Updates[9,10,11,12,13,14]

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

- **April 2021:** FDA granted accelerated approval to Zynlonta® (loncastuximab tesirine-lpyl), a CD19-directed antibody and alkylating agent conjugate, for the treatment of adult patients with relapsed or refractory large B-cell lymphoma after 2 or more lines of systemic therapy, including DLBCL not otherwise specified, DLBCL arising from low grade lymphoma, and high-grade B-cell lymphoma.
- **July 2021[A]:** The FDA approved Rylaze™ [asparaginase *Erwinia chrysanthemi* (recombinant)-rywn] as a component of a multi-agent chemotherapeutic regimen for the treatment of acute lymphoblastic

leukemia (ALL) and lymphoblastic lymphoma (LBL) in adult and pediatric patients 1 month of age or older who have developed hypersensitivity to *Escherichia coli*-derived asparaginase.

- **August 2021:** The FDA approved Brukinsa® (zanubrutinib) for the treatment of adult patients with Waldenström's macroglobulinemia.
- **September 2021:** The FDA granted accelerated approval to Brukinsa® (zanubrutinib) for the treatment of adult patients with relapsed or refractory MZL who have received at least 1 anti-CD20-based regimen.
- **October 2021[Δ]:** The FDA approved Tecartus® (brexucabtagene autoleucel) for the treatment of adult patients with relapsed or refractory B-cell precursor ALL.
- **December 2021[†]:** The FDA approved Rituxan® (rituximab) in combination with chemotherapy for the treatment of pediatric patients (6 months of age to younger than 18 years of age) with previously untreated, advanced stage, CD20-positive DLBCL, Burkitt lymphoma (BL), Burkitt-like lymphoma (BLL), or mature B-cell acute leukemia (B-AL).
- **April 2022:** The FDA approved an expanded indication for Yescarta® (axicabtagene ciloleucel) to include the treatment of adult patients with large B-cell lymphoma (LBCL) that is refractory to first line chemoimmunotherapy or relapses within 12 months of first line chemoimmunotherapy.

  [Δ]Rylaze™ [asparaginase *Erwinia chrysanthemi* (recombinant)-rywn] and Tecartus® (brexucabtagene autoleucel) are reviewed annually with the leukemia medications and additional information can be found in the February 2022 DUR Board packet. Additionally, the recommended prior authorization criteria for Rylaze™ and Tecartus® can be found in the Vote to Prior Authorize Prior Authorize Erwinase® (Crisantaspase), Erwinaze® (Asparaginase Erwinia Chrysanthemi), Oncaspar® (Pegaspargase), Rylaze™ [Asparaginase Erwinia Chrysanthemi (Recombinant)-rywn], and Scemblix® (Asciminib) and Update the Approval Criteria for the Leukemia Medications report available in the April 2022 DUR Board packet.

  [†]The complete prior authorization criteria for Rituxan® (rituximab) can be found in the October 2021 DUR Board packet. Rituxan® is reviewed annually with the targeted immunomodulator agents.

News:

- **July 2021:** The accelerated approval indication for Keytruda® (pembrolizumab) in patients with gastric cancer in the third-line setting will be voluntarily withdrawn by Merck, the pharmaceutical company responsible for the agent. This will not affect other indications for pembrolizumab. The accelerated approval was for recurrent locally advanced or metastatic gastric or gastroesophageal junction (GEJ)

adenocarcinoma in patients whose tumors expressed PD-L1 and had disease progression on or after 2 or more prior lines of therapy. The decision was made following a consultation with an FDA Oncologic Drugs Advisory Committee evaluation of Keytruda® in the third-line setting. The first Phase 3 trial leading to action was the KEYNOTE-061 trial investigating pembrolizumab monotherapy in the second line setting for patients with advanced gastric or GEJ adenocarcinoma (N=592). The KEYNOTE-061 trial failed to meet its primary end point of overall survival (OS; P=0.042). Additionally, the Phase 3 KEYNOTE-062 trial investigated pembrolizumab both as monotherapy and in combination with chemotherapy in the first line setting in a similar cohort of patients as KEYNOTE-061. While pembrolizumab monotherapy met its primary end point of OS non-inferiority in the intent-to-treat population, the combination therapy was not superior for OS. The safety profile across both studies of pembrolizumab in patients with advanced gastric or GEJ adenocarcinoma was consistent with previously observed data in gastric cancer.

- **February 2022:** The FDA announced an investigation of a possible increased risk of death for patients treated with Ukoniq® (umbralisib) based on initial findings from the Phase 3 UNITY clinical trial evaluating Ukoniq® in combination with a CD20-targeting monoclonal antibody to treat chronic lymphocytic leukemia (CLL). The FDA noted the "results showed a possible increased risk of death in patients receiving the combination of Ukoniq® and the monoclonal antibody compared to the control. Those receiving the combination of Ukoniq® and the monoclonal antibody also experienced more serious adverse events than those in the control arm." Ukoniq® is approved for adults with relapsed or refractory MZL who have received at least 1 previous anti-CD20-based treatment and for adults with relapsed or refractory FL who have received at least 3 previous lines of systemic therapy. These indications were approved under accelerated approval based on overall response rate. In September 2021, results from an integrated safety analysis of Ukoniq® in patients with relapsed or refractory lymphoid malignancies were published supporting its differentiated safety profile. Currently, however, the FDA is letting patients and physicians know that it is re-evaluating the risk-benefit profile of the drug for its approved uses. The FDA will continue to analyze the data from the UNITY trial and may hold a future advisory committee meeting to discuss the findings and determine continued marketing of the drug. The FDA has suspended enrollment of new patients in other ongoing clinical trials of Ukoniq® while the UNITY findings are reviewed. UNITY was only conducted in patients with CLL, but the FDA is concerned the safety signals may also apply to MZL and FL. Additionally, clinical trials

of other drugs in the same class as Ukoniq® have demonstrated similar safety problems.

Guideline Update(s):

- The National Comprehensive Cancer Network (NCCN) Guidelines for Hodgkin Lymphoma version 2.2022 includes 2 new updates for the use of pembrolizumab in the refractory/relapsed setting. The first update recommends pembrolizumab monotherapy be considered in this setting based on results of the KEYNOTE-204 trial which showed a significant improvement in progression-free survival compared to brentuximab vedotin. Additionally, a Phase 2 trial of pembrolizumab combined with gemcitabine, vinorelbine, and liposomal doxorubicin demonstrated a 100% objective response rate and a 95% complete response rate in 39 evaluable patients with relapsed/refractory disease.

Zynlonta® (Loncastuximab Tesirine-lply) Product Summary[15]

- **Therapeutic Class:** CD19-directed antibody and alkylating agent conjugate
- **Indication(s):** Treatment of adult patients with relapsed or refractory large B-cell lymphoma after 2 or more lines of systemic therapy, including DLBCL not otherwise specified, DLBCL arising from low-grade lymphoma, and high-grade B-cell lymphoma
- **How Supplied:** 10mg of loncastuximab tesirine-lpyl as a lyophilized powder in a single-dose vial for reconstitution
- **Dosing and Administration:**
  - Initial dose: 0.15mg/kg via intravenous (IV) infusion every 3 weeks for 2 cycles
  - Subsequent cycles: 0.075mg/kg every 3 weeks
  - Premedication with dexamethasone 4mg orally or IV twice daily for 3 days beginning the day before treatment with Zynlonta® is recommended
- **Cost:** The Wholesale Acquisition Cost (WAC) is $23,770.25 per vial, resulting in a cost for the initial doses of $47,540.50 and $23,770.25 for subsequent doses for an adult weighing 75kg.

Recommendations

The College of Pharmacy recommends the prior authorization of Zynlonta® (loncastuximab tesirine-lply) with the following criteria (shown in red):

Zynlonta® (Loncastuximab Tesirine-lpyl) 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.

Additionally, the College of Pharmacy recommends updating the Brukinsa® (zanubrutinib) and Yescarta® (axicabtagene ciloleucel) criteria based on the recent FDA approvals (shown in red):

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.

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 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.

Finally, the College of Pharmacy recommends updating the Keytruda® (pembrolizumab) criteria based on the NCCN guideline update and the manufacturer voluntary market withdrawal (shown in red):

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

~~1. As a single agent; and~~

2. The member has not previously failed other PD-1 inhibitors [i.e., Opdivo® (nivolumab)]; and
3. 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
4. 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 [Gastric or Gastroesophageal Junction (GEJ) Adenocarcinoma Diagnosis]:

1. Diagnosis of locally advanced, unresectable, or metastatic gastric or GEJ adenocarcinoma; and
2. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Opdivo® (nivolumab)]; and
3. For first-line therapy:
    a. Human epidermal receptor 2 (HER2)-positive disease; and
    b. In combination with trastuzumab, fluoropyrimidine- and platinum-containing chemotherapy.~~; or~~

~~4. For second-line or greater therapy:~~

~~a. As a single agent; and~~

~~b. Tumor expresses programmed death ligand 1 (PD-L1) [combined positive score (CPS) ≥1]; and~~

~~c. Following disease progression on or after 2 or more lines of therapy including fluoropyrimidine- and platinum-containing chemotherapy and if appropriate, HER2-targeted therapy.~~

Utilization Details of Lymphoma Medications: Calendar Year 2021

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
IBRUTINIB PRODUCTS					
IMBRUVICA TAB 420MG	36	7	$501,588.00	5.14	$13,933.00
IMBRUVICA TAB 140MG	23	2	$343,368.59	11.5	$14,929.07
IMBRUVICA CAP 280MG	13	3	$181,137.22	4.33	$13,933.63
IMBRUVICA TAB 560MG	2	1	$27,870.00	2	$13,935.00
SUBTOTAL	**74**	**13**	**$1,053,963.81**	**5.69**	**$14,242.75**
VENETOCLAX PRODUCTS					
VENCLEXTA TAB 100MG	39	16	$453,349.50	2.44	$11,624.35
VENCLEXTA TAB START PK	2	2	$5,590.84	1	$2,795.42
SUBTOTAL	**41**	**18**	**$458,940.34**	**2.28**	**$11,193.67**
IDELALISIB PRODUCTS					
ZYDELIG TAB 150MG	9	1	$106,038.72	9	$11,782.08
SUBTOTAL	**9**	**1**	**$106,038.72**	**9**	**$11,782.08**
ACALABRUTINIB PRODUCTS					
CALQUENCE CAP 100MG	7	2	$84,443.87	3.5	$12,063.41
SUBTOTAL	**7**	**2**	**$84,443.87**	**3.5**	**$12,063.41**
TOTAL	**131**	**30***	**$1,703,386.74**	**4.37**	**$13,002.95**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
CAP = capsule; START PK = starter pack; TAB = tablet

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS⁺	TOTAL MEMBERS*	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
PEMBROLIZUMAB J9271	528	138	$6,725,078.00	3.83	$12,736.89
NIVOLUMAB J9299	244	56	$2,882,586.15	4.36	$11,813.88
BRENTUXIMAB VEDOTIN J9042	53	13	$1,287,786.02	4.08	$24,297.85
OBINUTUZUMAB J9301	15	4	$109,312.00	3.75	$7,287.47
RITUXIMAB-ABBS Q5115	5	2	$24,392.00	2.5	$4,878.40
ASPARAGINASE J9019	4	3	$145,271.80	1.33	$36,317.95
TAFASITAMAB-CXIX J9349	2	1	$44,240.00	2	$22,120.00
PRALATREXATE J9307	2	1	$25,187.20	2	$12,593.60
TOTAL	**853**	**218**	**$11,243,853.17**	**3.91**	**$13,181.54**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
⁺Total number of unduplicated claims.

[1] Freedman AS, Friedberg JW, Aster JC. Clinical Presentation and Diagnosis of Non-Hodgkin Lymphoma. *UpToDate*. Available online at: https://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-non-hodgkin-lymphoma?search=non%20hodgkins%20lymphoma&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1. Last revised 07/08/2020. Last accessed 03/24/2022.
[2] Cancer Treatment Centers of America. Non-Hodgkin Lymphoma. Available online at: https://www.cancercenter.com/cancer-types/non-hodgkin-lymphoma/types. Last accessed 03/24/2022.
[3] Siegel RL, Miller KD, Jemal A. Cancer Statistics, 2018. *CA Cancer J Clin* 2018; 68:7-30.
[4] MD Anderson Cancer Center. Non-Hodgkin's Lymphoma. Available online at: https://www.mdanderson.org/cancer-types/non-hodgkins-lymphoma.html. Last accessed 03/24/2022.
[5] MD Anderson Cancer Center. Hodgkin's Lymphoma. Available online at: https://www.mdanderson.org/cancer-types/hodgkins-lymphoma.html. Last accessed 03/24/2022.
[6] Aster JC, Pozdnyakova O. Epidemiology, Pathologic Features, and Diagnosis of Classic Hodgkin Lymphoma. *UpToDate*. Available online at: https://www.uptodate.com/contents/epidemiology-pathologic-features-and-diagnosis-of-classic-hodgkin-lymphoma?search=hodgkins%20disease%20adult&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2. Last revised 01/31/2022. Last accessed 03/24/2022.
[7] Freedman AS, Aster JC. Clinical Manifestations, Pathologic Features, and Diagnosis of Peripheral T Cell Lymphoma, Not Otherwise Specified. *UpToDate*. Available online at: https://www.uptodate.com/contents/clinical-manifestations-pathologic-features-and-diagnosis-of-peripheral-t-cell-lymphoma-not-otherwise-specified?search=t-cell%20lymphoma&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2. Last revised 03/16/2021. Last accessed 03/24/2022.
[8] Lymphoma Research Foundation. T-Cell Lymphoma. Available online at: https://www.lymphoma.org/aboutlymphoma/nhl/tcell/. Last accessed 03/24/2022.
[9] U.S. Food and Drug Administration (FDA). Hematology/Oncology (Cancer) Approvals & Safety Notifications. Available online at: https://www.fda.gov/drugs/resources-information-approved-drugs/hematologyoncology-cancer-approvals-safety-notifications. Last revised 04/01/2022. Last accessed 04/05/2022.
[10] Fowler M. Merck to Withdraw Indication for Pembrolizumab in Third Line Gastric Cancer. *Cancer Network*. Available Online at: https://www.cancernetwork.com/view/merck-to-withdraw-indication-for-pembrolizumab-in-third-line-gastric-cancer. Issued 07/07/2021. Last accessed 04/01/2022.
[11] Terry M. FDA Investigating Possible Death Risk Linked to TG Therapeutics' Lymphoma Drug. *BioSpace*. Available online at: https://www.biospace.com/article/fda-investigating-possible-risk-of-death-linked-to-tg-therapeutics-lymphoma-drug/#:~:text=FDA%20Investigating%20Possible%20Death%20Risk%20Linked%20to%20TG%20Therapeutics'%20Lymphoma%20Drug,-Published%3A%20Feb%2007&text=The%20U.S.%20Food%20and%20Drug,for%20two%20types%20of%20lymphoma. Issued 02/07/2022. Last accessed 03/30/2022.
[12] National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (Hodgkin Lymphoma). Version 2.2022. Available online at: https://www.nccn.org/professionals/physician_gls/pdf/hodgkins.pdf. Last accessed 04/04/2022.
[13] Kuruvilla J, Ramchandren R, Santoro A, et al. Pembrolizumab Versus Brentuximab Vedotin in Relapsed or Refractory Classical Hodgkin Lymphoma (KEYNOTE-204): An Interim Analysis of a Multicentre, Randomised, Open-Label, Phase 3 Study. *Lancet Oncol* 2021; 22:512-524.
[14] Moskowitz AJ, Shah G, Schöder H, et al. Phase II Trial of Pembrolizumab Plus Gemcitabine, Vinorelbine, and Liposomal Doxorubicin as Second-Line Therapy for Relapsed or Refractory Classical Hodgkin Lymphoma. *J Clin Oncol* 2021; 39:3109-3117.
[15] Zynlonta® (Loncastuximab Tesirine-lply) Prescribing Information. ADC Therapeutics. Available online at: https://www.adctherapeutics.com/wp-content/uploads/2021/12/ZYNLONTA-PI_8.5-x-11-Format_Download_093021.pdf. Last revised 09/2021. Last accessed 03/30/2022.

Appendix K

Calendar Year 2021 Annual Review of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib)

Oklahoma Health Care Authority
April 2022

Introduction[1,2,3,4]

Gastroenteropancreatic Neuroendocrine Tumors (GEP-NETs):
GEP-NETs are complex neoplasms that present many clinical challenges. GEP-NETs, also known as carcinoids and islet cell tumors, are tumors derived from neuroendocrine cells that occur anywhere along the gastrointestinal (GI) tract and comprise a heterogeneous family of neoplasms with a wide and complex spectrum of clinical behavior. These tumors have been considered rare diseases; however, data from the United States Surveillance Epidemiology and End Results show an increase of more than 400% in the incidence of GEP-NETs over a period of 29 years (1.09 per 100,000 population in 1973 to 5.25 per 100,000 population in 2004). GEP-NETs are more prevalent than many other tumors of the GI tract, including stomach and pancreatic carcinomas combined. The age at diagnosis is generally younger than for carcinomas (5th decade), and GEP-NETs may arise sporadically or as a result of hereditary predisposition. GEP-NETs have traditionally been divided into foregut, midgut, and hindgut tumors. Survival is dependent on stage and histology. In January 2018, the U.S. Food and Drug Administration (FDA) approved Lutathera® (lutetium Lu-177 dotatate) for the treatment of adult patients with somatostatin receptor-positive GEP-NETs.

Neurotrophic Tyrosine Receptor Kinase (*NTRK*) Gene Fusions:
The underlying genomic profile of a tumor has become increasingly important in oncology. Genomic alterations, such as *NTRK* gene fusions, are an area of focus. In tropomyosin receptor kinase (TRK) fusion cancer, the *NTRK* gene fuses with an unrelated gene, causing overexpression of the TRK protein. TRK fusion cancer is rare but occurs in a broad range of tumor types with varying prevalence across both adult and pediatric patient populations. In November 2018, Vitrakvi® (larotrectinib) was approved by the FDA for use in adults and children with any solid tumor with an *NTRK* gene fusion without a known acquired resistance mutation, which is either metastatic or where surgical resection is likely to result in severe morbidity, and who have no other satisfactory alternative treatments or whose cancer has progressed following treatment. This represents the first new oncology drug to be approved based on a DNA test, instead of based on the tissue of origin.

Current Prior Authorization Criteria

Lutathera® (Lutetium Lu-177 Dotatate) Approval Criteria [Gastroenteropancreatic Neuroendocrine Tumor (GEP-NET) Diagnosis]:

1. Diagnosis of progressive locoregional advanced disease or metastatic disease; and
2. Positive imaging of somatostatin receptor; and
3. Used as second-line or subsequent therapy following progression on octreotide or lanreotide; or
4. May be used first line for treatment of pheochromocytoma/ paraganglioma.

Vitrakvi® (Larotrectinib) Approval Criteria [Solid Tumors with Neurotrophic Receptor Tyrosine Kinase (*NTRK*) Gene Fusion Diagnosis]:

1. Diagnosis of a solid tumor with a *NTRK* gene fusion without a known acquired resistance mutation; and
2. Disease is metastatic or surgical resection (or radioactive iodine refractory if thyroid carcinoma) is contraindicated; and
3. Documentation of no satisfactory alternative treatments or progression following acceptable alternative treatments.

Utilization of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib): Calendar Year 2021

Calendar Year Comparison: Medical Claims

Calendar Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2020	1	3	$125,844.00	$41,948.00	3
2021	2	6	$253,130.25	$42,188.38	3
% Change	**100.00%**	**100.00%**	**101.15%**	**0.57%**	**0.00%**
Change	**1**	**3**	**$127,286.25**	**$240.38**	**0**

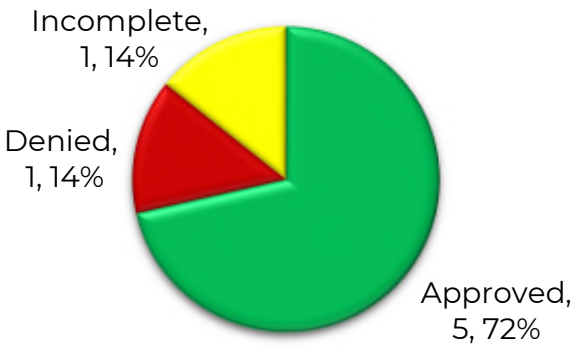
*Total number of unduplicated utilizing members.
†Total number of unduplicated claims.
Cost do not reflect rebated prices or net costs.

- The medical claims information provided is for Lutathera® (lutetium Lu-177 dotatate). There was no SoonerCare utilization (pharmacy or medical) of Vitrakvi® (larotrectinib) in calendar year 2021.
- Due to the limited number of members utilizing Lutathera® during calendar year 2021, detailed demographic information could not be provided.

Prior Authorization of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib)

There were 7 prior authorization requests submitted for Lutathera® (lutetium Lu-177 dotatate) during calendar year 2021. There were no prior authorization requests submitted for Vitrakvi® (larotrectinib) during calendar year 2021. The following chart shows the status of the submitted petitions for Lutathera® for calendar year 2021.

Status of Petitions



Market News and Updates[5]

Anticipated Patent Expiration(s):

- Vitrakvi® (larotrectinib oral capsules): August 2036
- Vitrakvi® (larotrectinib oral solution): April 2037
- Lutathera® (lutetium Lu-177 dotatate intravenous solution): July 2038

Recommendations

The College of Pharmacy does not recommend any changes to the current Lutathera® (lutetium Lu-177 dotatate) or Vitrakvi® (larotrectinib) prior authorization criteria at this time.

---

[1] Díez M, Teulé A, Salazar R. Gastroenteropancreatic Neuroendocrine Tumors: Diagnosis and Treatment. *Ann Gastroenterol* 2013; 26(1):29-36.
[2] Chan JA, Kulke M. Metastatic Well-Differentiated Gastroenteropancreatic Neuroendocrine Tumors: Presentation, Prognosis, Imaging, and Biochemical Monitoring. *UpToDate*. Available online at: https://www.uptodate.com/contents/metastatic-well-differentiated-gastroenteropancreatic-neuroendocrine-tumors-presentation-prognosis-imaging-and-biochemical-monitoring. Last revised 12/2021. Last accessed 03/23/2022.
[3] TRK Fusion Cancer. Bayer and Loxo Oncology, Inc. Available online at: https://trkcancer.com/. Last revised 09/2018. Last accessed 03/23/2022.
[4] Savarese D, Zand J. What's New in Drug Therapy. *UpToDate*. Available online at: https://www.uptodate.com/contents/whats-new-in-drug-therapy. Last revised 03/25/2022. Last accessed 03/28/2022.
[5] 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 03/2022. Last accessed 03/28/2022.

Appendix L

Calendar Year 2021 Annual Review of Growth Hormone Products and 30-Day Notice to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide)

Oklahoma Health Care Authority
April 2022

Current Prior Authorization Criteria

The current product based prior authorization (PBPA) Tier chart and specific prior authorization criteria for the growth hormone products can be found in the *Recommendations* section at the end of this report.

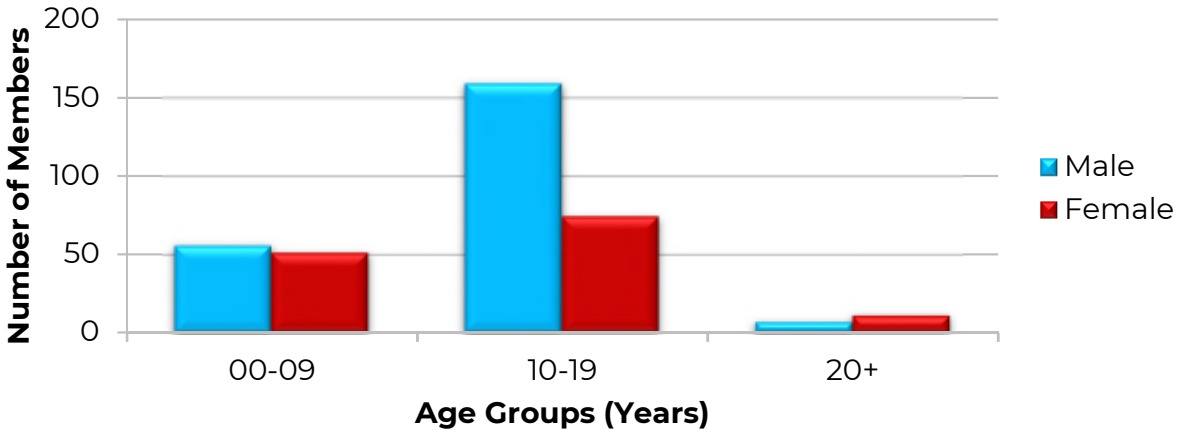
Utilization of Growth Hormone Products: Calendar Year 2021

Comparison of Calendar Years

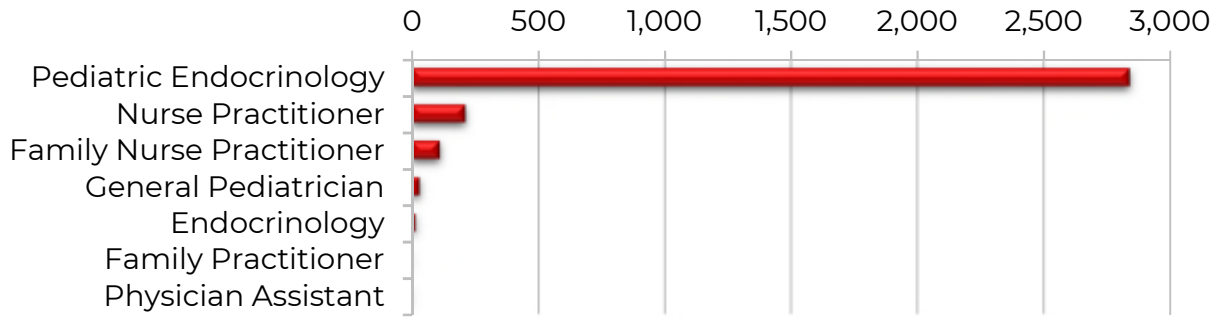
Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	337	2,875	$11,055,495.96	$3,845.39	$136.13	33,074	81,210
2021	358	3,222	$13,563,336.33	$4,209.60	$146.45	39,489	92,616
% Change	**6.20%**	**12.10%**	**22.70%**	**9.50%**	**7.60%**	**19.40%**	**14.00%**
Change	**21**	**347**	**$2,507,840.37**	**$364.21**	**$10.32**	**6,415**	**11,406**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

Demographics of Members Utilizing Growth Hormone Products



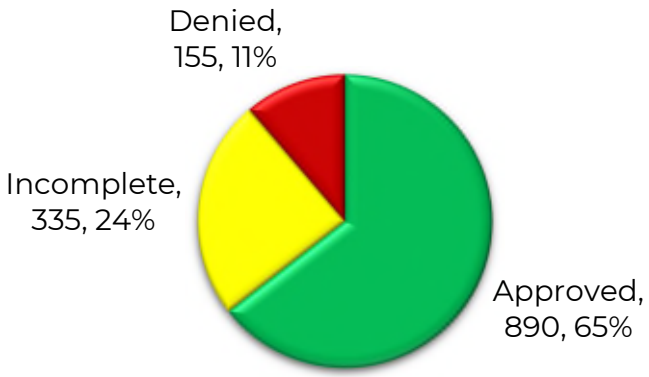
Top Prescriber Specialties of Growth Hormone Products by Number of Claims



Prior Authorization of Growth Hormone Products

There were 1,380 prior authorization requests submitted for 421 unique members for growth hormone products during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions



Market News and Updates[1,2,3,4,5,6,7,8,9,10,11,12]

Anticipated Patent Expiration(s):

- Voxzogo™ (vosoritide): August 2036

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

- **August 2021:** The FDA approved Skytrofa® (lonapegsomatropin-tcgd) for the treatment of pediatric patients 1 year of age and older who weigh ≥11.5kg with growth hormone deficiency (GHD). Skytrofa® is the first product for pediatric GHD to be approved for once-weekly subcutaneous (sub-Q) administration.
- **November 2021:** The FDA approved Voxzogo™ (vosoritide), a C-type natriuretic peptide (CNP) analog, to increase linear growth in pediatric

patients with achondroplasia who are 5 years of age or older with open epiphyses. Achondroplasia is the most common form of skeletal dysplasia resulting in disproportionate short stature. Achondroplasia occurs in approximately 1 in 26,000 to 28,000 live births and is caused by gain of function mutations in the fibroblast growth factor receptor 3 (*FGFR3*) gene. These mutations can be inherited in an autosomal dominant manner, however approximately 80% of cases occur due to *de novo* mutations occurring in children of unaffected parents. These mutations cause continuous activation of FGFR3 protein, leading to the inhibition of chondrocyte proliferation and subsequent inhibition of bone growth. CNP acts as a counterbalance to the effects of FGFR3 at the growth plate, allowing for the potential therapeutic use of CNP analogs to oppose the continuous activation of FGFR3 in patients with achondroplasia. The use of Voxzogo™ for this indication was approved by the FDA under accelerated approval based on improvement in annualized growth velocity. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory studies. With this approval, Voxzogo™ is the first medication to be FDA approved for the treatment of children with achondroplasia.

Pipeline:

- **Lonapegsomatropin:** Ascendis is evaluating the use of lonapegsomatropin for additional new indications. The Phase 3 foresiGHt study is currently ongoing in adult patients with GHD, and Ascendis plans to submit a protocol to the FDA in the second quarter of 2022 to evaluate the use of lonapegsomatropin in patients with Turner syndrome.
- **Somapacitan:** Novo Nordisk is conducting Phase 3 studies of somapacitan, a long-acting, once-weekly formulation of human growth hormone (hGH) for the treatment of pediatric patients with GHD. In December 2021, 3-year data from the Phase 2 REAL 3 study were published. The study randomized patients 1:1:1:1 to 3 different doses of once-weekly somapacitan (0.04mg/kg/week, 0.08mg/kg/week, or 0.16mg/kg/week) or once-daily somatropin (0.034mg/kg/day), and patients were followed for up to 3 years of treatment. After the first year of treatment, all patients receiving somapacitan were switched to the 0.16mg/kg/week dose. At years 2 and 3, height velocity and height standard deviation scores (SDS) were similar between the weekly somapacitan and daily somatropin groups. Weekly somapacitan was well tolerated through 3 years of treatment with overall adverse event rates similar between the somapacitan and somatropin groups. Somapacitan was previously FDA approved in August 2020 for the

treatment of adult patients with GHD under the brand name Sogroya®, but the product has not yet been launched.

- **Somatrogon:** Pfizer and OPKO are developing somatrogon for the treatment of pediatric patients with GHD. Somatrogon is a glycosylated hGH product that also contains multiple copies of the C-terminal peptide (CTP) from the beta chain of human chorionic gonadotropin (hCG). The glycosylation and CTP domains increase the half-life of the molecule and allow for once-weekly dosing. In January 2022, the FDA issued a Complete Response Letter (CRL) regarding the Biologics License Application (BLA) for somatrogon. Pfizer is currently evaluating the FDA's comments and plans to work with the FDA to determine an appropriate path forward.
- **TransCon CNP:** Ascendis is conducting Phase 2 studies of TransCon CNP in patients with achondroplasia. TransCon CNP is a prodrug of CNP designed to provide continuous CNP exposure to optimize efficacy with a once-weekly dose. The Phase 2 ACcomplisH study is ongoing in patients 2 to 10 years of age with achondroplasia. Ascendis plans to release topline data from the study in the fourth quarter of 2022. Additionally, Ascendis plans to file an Investigational New Drug (IND) application in the second quarter of 2022 to study TransCon CNP in patients 0 to 2 years of age with achondroplasia.

Skytrofa® (Lonapegsomatropin-tcgd) Product Summary[13,14]

Indication(s): Skytrofa® (lonapegsomatropin-tcgd) is a pegylated hGH analog indicated for the treatment of pediatric patients 1 year of age and older weighing ≥11.5kg with GHD.

How Supplied: Lyophilized powder in single-dose, dual-chamber, prefilled cartridges (containing the lyophilized drug in 1 chamber and diluent in the other chamber), available in 9 strengths: 3mg, 3.6mg, 4.3mg, 5.2mg, 6.3mg, 7.6mg, 9.1mg, 11mg, and 13.3mg

- The cartridges are for use only with the Skytrofa™ auto-injector, which is packaged separately and not supplied with the Skytrofa™ cartridges. The Skytrofa™ auto-injector is available for patients with a prescription for Skytrofa™ through Ascendis Pharma Customer Support.

Dosing and Administration:

- Recommended initial dose is 0.24mg/kg once weekly via sub-Q injection into the abdomen, buttock, or thigh for all patients, whether treatment-naïve or switching from daily somatropin injections
- Following initial dosing, the dose should then be individualized and titrated based on response
- Skytrofa™ is contraindicated in patients with closed epiphyses and should be discontinued once epiphyseal fusion has occurred

Mechanism of Action: Lonapegsomatropin is a long-acting prodrug of somatropin which has been conjugated to a methoxypolyethylene glycol carrier via a proprietary TransCon linker. This conjugation extends the half-life of the product, allowing for once-weekly administration. Following sub-Q administration, lonapegsomatropin releases fully active somatropin via autocleavage of the TransCon linker. Somatropin binds to the growth hormone receptor in the cell membrane of target cells, resulting in intracellular signal transduction and a variety of subsequent pharmacodynamic effects, some of which are mediated through insulin-like growth factor 1 (IGF-1), such as the stimulation of chondrocyte differentiation and proliferation, stimulation of hepatic glucose output, protein synthesis and lipolysis, and stimulation of skeletal growth through effects on the epiphyses of long bones.

Contraindication(s):

- Acute critical illness after open-heart surgery, abdominal surgery, or multiple accidental trauma, or those with acute respiratory failure because of the risk of increased mortality with use of pharmacologic doses of somatropin
- Hypersensitivity to somatropin or any of the excipients in Skytrofa®
- Closed epiphyses
- Active malignancy
- Active proliferative or severe non-proliferative diabetic retinopathy
- Children with Prader-Willi syndrome who are severely obese or have severe respiratory impairment due to risk of sudden death

Adverse Reactions: The most common adverse reactions (occurring in ≥5% of patients receiving Skytrofa® and more frequently than in placebo) in clinical studies were viral infection, pyrexia, cough, nausea and vomiting, hemorrhage (including epistaxis, contusion, petechiae, and eye hemorrhage), diarrhea, abdominal pain, arthralgia, and arthritis.

Efficacy: The efficacy of lonapegsomatropin for the treatment of pediatric GHD was established in a randomized, open-label, active-controlled Phase 3 study in 161 treatment-naïve pediatric patients with GHD. The enrolled patients had a mean age of 8.5 years (range: 3.2 to 13.1 years of age) and a mean baseline height standard deviation score (SDS) of -2.9. Patients were randomized 2:1 to receive lonapegsomatropin once weekly (N=105) or somatropin once daily (N=56) at a dose of 0.24mg/kg/week in both groups for 52 weeks of treatment. The primary efficacy endpoint was annualized height velocity at week 52. The sample sizes were calculated to provide 90% power to demonstrate noninferiority of lonapegsomatropin compared to somatropin, with the noninferiority margin set at 2cm/year. At week 52, annualized height velocity was 11.2cm/year in the weekly lonapegsomatropin

group and 10.3cm/year in the daily somatropin group [treatment difference: 0.9cm/year; 95% confidence interval (CI): 0.2, 1.5; P=0.0088], demonstrating noninferiority of weekly lonapegsomatropin to daily somatropin. A subsequent analysis also demonstrated statistical superiority of lonapegsomatropin to somatropin; however, the observed treatment difference of 0.9cm/year is smaller than the prespecified noninferiority margin and is of unknown clinical significance.

Cost Comparison:

Product	Cost Per mg	Cost Per 28 Days[+]	Cost Per Year[+]
Skytrofa® (lonapegsomatropin-tcgd) 5.2mg cartridge	**$218.50**	**$4,544.80**	**$59,082.40**
Genotropin® (somatropin) 5mg/mL cartridge	$135.71	$2,714.11	$35,283.43

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 28 days and cost per year based on recommended dosing of 0.24mg/kg/week for both products for a member weighing 21kg.

Voxzogo™ (Vosoritide) Product Summary[15,16]

Indication(s): Voxzogo™ (vosoritide) is a human CNP analog indicated to increase linear growth in pediatric patients with achondroplasia who are 5 years of age and older with open epiphyses.

- This indication is approved under accelerated approval based on an improvement in annualized growth velocity. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory studies.

How Supplied: Voxzogo™ is supplied as a co-pack containing:

- Lyophilized powder in 0.4mg, 0.56mg, or 1.2mg single-dose vials (SDVs)
- Diluent (sterile water for injection) in single-dose prefilled syringes
- Diluent transfer needles
- Single-dose administration syringes

Dosing and Administration:

- Voxzogo™ is administered once daily, at approximately the same time each day, by sub-Q injection into the thighs, abdomen, buttocks, or back of the upper arms. Injection sites should be rotated.
- Recommended dosing is based on actual body weight, with specific dose recommendations depending on the patient's weight range. All patients would require the use of 1 SDV (0.4mg, 0.56mg, or 1.2mg) once daily, regardless of weight (refer to the full dosing recommendations for each weight range in the full Voxzogo™ *Prescribing Information*).
- To reduce the risk of low blood pressure and its signs and symptoms, the patient should have adequate food intake prior to Voxzogo™

administration and should drink approximately 240-300mL of fluid during the hour prior to Voxzogo™ administration.
- Voxzogo™ should be permanently discontinued upon confirmation of no further growth potential, indicated by closure of epiphyses.

Mechanism of Action: Vosoritide is a CNP analog. In patients with achondroplasia, endochondral bone growth is negatively regulated due to a gain of function mutation in *FGFR3*. Vosoritide binds to natriuretic peptide receptor-B (NPR-B), which antagonizes *FGFR3* downstream signaling by inhibiting the extracellular signal-regulated kinases 1 and 2 (ERK1/2) in the mitogen-activated protein kinase (MAPK) pathway at the level of rapidly accelerating fibrosarcoma serine/threonine protein kinase (RAF-1). Therefore, vosoritide acts as a positive regulator of endochondral bone growth as it promotes chondrocyte proliferation and differentiation.

Contraindication(s): None

Adverse Reactions: The most common adverse reactions (occurring in ≥5% of patients receiving vosoritide and more frequently than in placebo) in clinical studies were injection site erythema, injection site swelling, vomiting, injection site urticaria, arthralgia, decreased blood pressure, gastroenteritis, diarrhea, dizziness, ear pain, influenza, fatigue, seasonal allergy, and dry skin.

Efficacy: The efficacy of Voxzogo™ was established in a 52-week double-blind, placebo-controlled Phase 3 study. The study enrolled 121 patients with achondroplasia, randomized to vosoritide or placebo at a dose of 15mcg/kg once daily by sub-Q injection. Patients had a mean age of 8.7 years (range: 5.1 to 14.9 years of age) and the baseline height SDS was -5.13.
- Inclusion Criteria: All patients had a genetically confirmed diagnosis of achondroplasia and were ≤17 years of age at study entry.
- Exclusion Criteria: Patients were excluded if they had a history of limb-lengthening surgery in the prior 18 months or if limb-lengthening surgery was planned during the study period, had closed epiphyses, had severe untreated sleep apnea, or had other medical conditions or treatments known to affect growth.
- Primary Endpoint: The primary efficacy endpoint was the change from baseline in annualized growth velocity at week 52 compared with placebo.
- Results: After 52 weeks of treatment, the annualized growth velocity was -0.17cm/year in the placebo group and 1.40cm/year in the vosoritide group. The treatment difference of 1.57cm/year was statistically significant, demonstrating an improvement in growth velocity in patients treated with vosoritide relative to placebo (95% CI: 1.22, 1.93; $P<0.0001$).

Cost: The Wholesale Acquisition Cost (WAC) of Voxzogo™ is $899 per SDV, regardless of the strength, resulting in an estimated cost of $26,970 per 30 days and $323,640 per year based on the FDA approved dosing requiring the use of 1 SDV per day.

Recommendations

The College of Pharmacy recommends the placement of Skytrofa® (lonapegsomatropin-tcgd) into Tier-2 of the growth hormone products Product Based Prior Authorization (PBPA) category with the following additional criteria:

Growth Hormone Products	
Tier-1*	**Tier-2**
Genotropin® (somatropin) (Pfizer) - Cartridge, MiniQuick	**Humatrope®** (somatropin) (Eli Lilly) - Vial, Cartridge Kit
	Norditropin® (somatropin) (NovoNordisk) - 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) (NovoNordisk) - 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.

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 ≥11.5kg; 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 Skytrofa® *Prescribing Information*; 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.

Additionally, the College of Pharmacy recommends the prior authorization of Voxzogo™ (vosoritide) with the following criteria:

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 Voxzogo™ *Prescribing Information*; 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.

Lastly, the College of Pharmacy recommends updating the current growth hormone prior authorization criteria with the following changes to be consistent with current guideline recommendations for growth hormone treatment (changes and additions shown in red):

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 with history of pituitary or hypothalamic injury due to tumor, trauma, surgery, whole brain radiation, irradiation, hemorrhage or infarction, or a congenital anomaly; or~~
    ~~c. Panhypopituitarism in children with height ≥2.25 SD below the mean for age and gender and MRI evidence of pituitary stalk agenesis, empty sella, or ectopic posterior pituitary "bright spot"; 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 Zorbtive® can be used, regardless of its current Tier status.

~~**Requirements for Initiation of Growth Hormone Therapy – All Indications:**~~

~~1. Evaluated and prescribed by an endocrinologist, pediatric nephrologist, or infectious disease specialist; and~~
~~2. Covered indication; and~~
~~3. Member must be 2 years of age or older [*Exceptions*: hypoglycemia related to growth hormone deficiency (GHD): any age; idiopathic short stature (ISS): 8 years of age or older]; and~~
~~4. Height ≥2.25 SD below the mean for age (excludes chronic renal failure); and~~
~~5. Evidence of delayed bone age (undefined delay) (excludes chronic renal failure) and open epiphyses; and~~
~~6. The following information must be provided:~~
~~a. Growth chart; and~~
~~b. Parental heights.~~

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 <2.5cm/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 ~~(in 3 to 7 doses per week)~~ 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 (AACE/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; ~~and~~ 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 ≤10ng/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 ~~Standard dosing applies for members receiving pediatric dosing (0.044mg/kg/day) (Dose may vary based on whether pre-pubertal or pubertal. Is sometimes adjusted based on IGF-1 levels)~~; 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. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]~~
        iii. GV <2.5cm/year; and
        iv. If either ~~the epiphyses have closed or covered height has been reached~~ 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; ~~and~~ 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 <50th 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); and

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 ~~Standard dosing applies for members receiving pediatric dosing (0.044mg/kg/day) (Dose may vary based on whether pre-pubertal or pubertal. Is sometimes adjusted based on IGF-1 levels)~~; 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. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]~~
        iii. GV <2.5cm/year; and
        iv. If either ~~the epiphyses have closed or covered height has been reached~~ 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.

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; and
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 ~~Standard dosing applies for members receiving pediatric dosing (0.044mg/kg/day) (Dose may vary based on whether pre-pubertal or pubertal. Is sometimes adjusted based on IGF-1 levels)~~; 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. Covered height [Boys: 165.1cm (65 inches) Girls: 152.4cm (60 inches)]; or
        iii. GV <2.5cm/year; and

iv. If ~~either the epiphyses have closed or covered height has been reached~~ 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.

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
      i. If the form is completed a growth chart is not required; and
      ii. Parental heights are not always available; and
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 ~~0.47mg/kg/week~~. Treatment may continue until 1 ~~or both~~ 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.

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 ~~or both~~ 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 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; and
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 ~~or both~~ 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]. ~~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. 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 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); and
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 ~~standard dosing applies for members receiving pediatric dosing (0.054mg/kg/day)~~. Treatment should continue until 1 ~~or both~~ 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 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); and
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 ~~0.044~~ 0.066mg/kg/day). Treatment should continue until 1 ~~or both~~ 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 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; and

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 ~~0.044~~ 0.05mg/kg/day). Treatment should continue until 1 ~~or both~~ 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
    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 ~~standard dosing applies for members receiving pediatric dosing (0.05-0.068mg/kg/day)~~. Treatment should continue until 1 ~~or both~~ 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.

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 Sogroya® *Prescribing Information*; 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.

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 Details of Growth Hormone: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
TIER-1 PRODUCTS						
GENOTROPIN PRODUCTS						
GENOTROPIN INJ 12MG	1,047	123	$5,994,112.46	$5,725.04	8.51	44.19%
GENOTROPIN INJ 5MG	785	104	$2,303,438.66	$2,934.32	7.55	16.98%
GENOTROPIN INJ 0.6MG	196	23	$477,775.60	$2,437.63	8.52	3.52%
GENOTROPIN INJ 1.2MG	165	29	$884,590.91	$5,361.16	5.69	6.52%
GENOTROPIN INJ 1.4MG	154	23	$891,458.26	$5,788.69	6.7	6.57%
GENOTROPIN INJ 0.4MG	143	18	$236,928.89	$1,656.85	7.94	1.75%
GENOTROPIN INJ 1MG	132	23	$546,118.24	$4,137.26	5.74	4.03%
GENOTROPIN INJ 0.8MG	87	16	$288,087.35	$3,311.35	5.44	2.12%
GENOTROPIN INJ 2MG	65	8	$537,204.85	$8,264.69	8.13	3.96%
GENOTROPIN INJ 0.2MG	63	8	$52,635.91	$835.49	7.88	0.39%
GENOTROPIN INJ 1.6MG	49	11	$323,890.25	$6,610.01	4.45	2.39%
GENOTROPIN INJ 1.8MG	46	9	$342,216.54	$7,439.49	5.11	2.52%
TIER-1 SUBTOTAL	**2,932**	**395**	**$12,878,457.92**	**$4,392.38**	**7.42**	**94.95%**
TIER-2 PRODUCTS⁺						
NORDITROPIN PRODUCTS						
NORDITROPIN INJ 5MG/1.5ML	109	18	$149,180.26	$1,368.63	6.06	1.10%
NORDITROPIN INJ 10MG/1.5ML	94	15	$222,671.87	$2,368.85	6.27	1.64%
NORDITROPIN INJ 15MG/1.5ML	55	9	$206,326.69	$3,751.39	6.11	1.52%
NORDITROPIN INJ 30MG/3ML	10	4	$92,759.39	$9,275.94	2.5	0.68%
SUBTOTAL	**268**	**46**	**$670,938.21**	**$2,503.50**	**5.83**	**4.95%**
NUTROPIN PRODUCTS						
NUTROPIN AQ INJ 20MG/2ML	17	3	$11,366.94	$668.64	5.67	0.08%
NUTROPIN AQ INJ NUSPIN 5MG/2ML	5	1	$2,573.26	$514.65	5	0.02%
SUBTOTAL	**22**	**4**	**$13,940.20**	**$633.65**	**5.5**	**0.10%**
TIER-2 SUBTOTAL	**290**	**50**	**$684,878.41**	**$2,361.65**	**5.8**	**5.05%**
TOTAL	**3,222**	**358***	**$13,563,336.33**	**$4,209.60**	**9**	**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 03/2022. Last accessed 03/17/2022.
[2] Ascendis Pharma. Ascendis Pharma A/S Announces U.S. Food and Drug Administration Approval of Skytrofa® (Lonapegsomatropin-tcgd), the First Once-Weekly Treatment for Pediatric Growth Hormone Deficiency. Available online at: https://investors.ascendispharma.com/news-releases/news-release-details/ascendis-pharma-announces-us-food-and-drug-administration. Issued 08/25/2021. Last accessed 01/12/2022.
[3] BioMarin Pharmaceutical, Inc. BioMarin Receives FDA Approval for Voxzogo™ (Vosoritide) for Injection, Indicated to Increase Linear Growth in Children with Achondroplasia Aged 5 and Up with Open Growth Plates. Available online at: https://investors.biomarin.com/2021-11-19-BioMarin-Receives-FDA-Approval-for-VOXZOGO-TM-vosoritide-for-Injection,-Indicated-to-Increase-Linear-Growth-in-Children-with-Achondroplasia-Aged-5-and-Up-with-Open-Growth-Plates. Issued 11/19/2021. Last accessed 01/12/2022.
[4] Pereira E. Achondroplasia. *Pediatr Rev* 2019; 40(6): 316–318.
[5] Pauli RM. Achondroplasia: A Comprehensive Clinical Review. *Orphanet J Rare Dis* 2019; 14(1):1.
[6] Ascendis Pharma. Pipeline Overview. Available online at: https://ascendispharma.us/pipeline/. Last accessed 03/17/2022.
[7] Ascendis Pharma. Ascendis Pharma A/S Reports Full Year 2021 Financial Results and Provides a Business Update. Available online at: https://investors.ascendispharma.com/news-releases/news-release-details/ascendis-pharma-reports-full-year-2021-financial-results-and. Issued 03/02/2022. Last accessed 03/17/2022.
[8] Novo Nordisk. Science & Technology: R&D Pipeline. Available online at: https://www.novonordisk.com/science-and-technology/r-d-pipeline.html. Last accessed 03/17/2022.
[9] Savendahl L, Battelino T, Rasmussen MH, et al. Effective GH Replacement with Once-Weekly Somapacitan vs Daily GH in Children with GHD: 3-Year Results from REAL 3. *J Clin Endocrinol Metab* 2021; dgab928. doi: 10.1210/clinem/dgab928. Online ahead of print.
[10] OPKO Biologics. OPKO Pipeline: Somatrogon. Available online at: https://www.opkobiologics.com/pipeline/product-candidates/hgh-ctp/. Last accessed 03/17/2022.
[11] Pfizer, Inc. Pfizer and OPKO Provide Update on the Biologics License Application for Somatrogon for Pediatric Growth Hormone Deficiency. Available online at: https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-opko-provide-update-biologics-license. Issued 01/21/2022. Last accessed 03/17/2022.
[12] Ascendis Pharma. Pipeline: TransCon-CNP. Available online at: https://ascendispharma.com/pipeline/endocrinology/transcon-cnp/. Last accessed 03/17/2022.
[13] Skytrofa® (Lonapegsomatropin-tcgd) Prescribing Information. Ascendis Pharma, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/761177Orig1s000lbl.pdf. Last revised 08/2021. Last accessed 01/12/2022.
[14] Thornton PS, Maniatis AK, Aghajanova E, et al. Weekly Lonapegsomatropin in Treatment-Naïve Children with Growth Hormone Deficiency: The Phase 3 heiGHt Trial. *J Clin Endocrinol Metab* 2021; 106(11):3184-3195.
[15] Voxzogo™ (Vosoritide) Prescribing Information. BioMarin Pharmaceutical, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/214938Orig1s000Corrected_lbl.pdf. Last revised 11/2021. Last accessed 01/12/2022.
[16] Savarirayan R, Tofts L, Irving M, et al. Once-Daily, Subcutaneous Vosoritide Therapy in Children with Achondroplasia: A Randomised, Double-Blind, Phase 3, Placebo-Controlled, Multicentre Trial. *Lancet* 2020; 396:684-92.

Appendix M

Calendar Year 2021 Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Releuko™ (Filgrastim-ayow)

Oklahoma Health Care Authority
April 2022

Current Prior Authorization Criteria

Fulphila® (Pegfilgrastim-jmdb), Nyvepria™ (Pegfilgrastim-apgf), 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), Neulasta® (pegfilgrastim), Neupogen® (filgrastim), 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.

Nivestym® (Filgrastim-aafi) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use Neupogen® (filgrastim), Granix® (tbo-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.

Utilization of G-CSFs: Calendar Year 2021

Comparison of Calendar Years: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	53	262	$732,594.79	$2,796.16	$209.19	1,101	3,502
2021	71	260	$927,536.81	$3,567.45	$226.17	1,392	4,101
% Change	**34.0%**	**-0.8%**	**26.6%**	**27.6%**	**8.1%**	**26.4%**	**17.1%**
Change	**18**	**-2**	**$194,942.02**	**$771.29**	**$16.98**	**291**	**599**

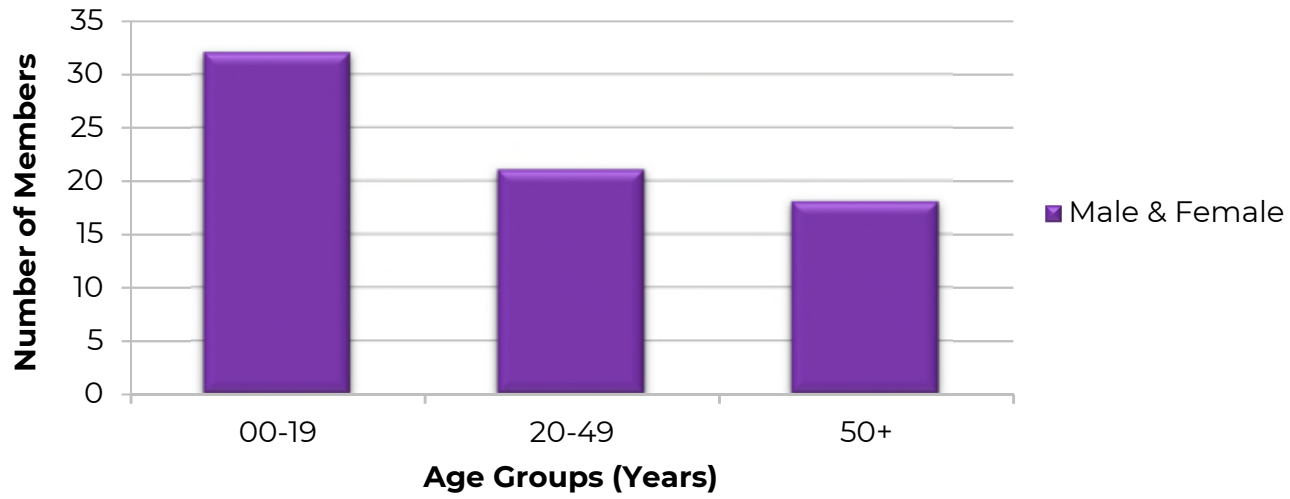
Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

Comparison of Calendar Years: Medical Claims

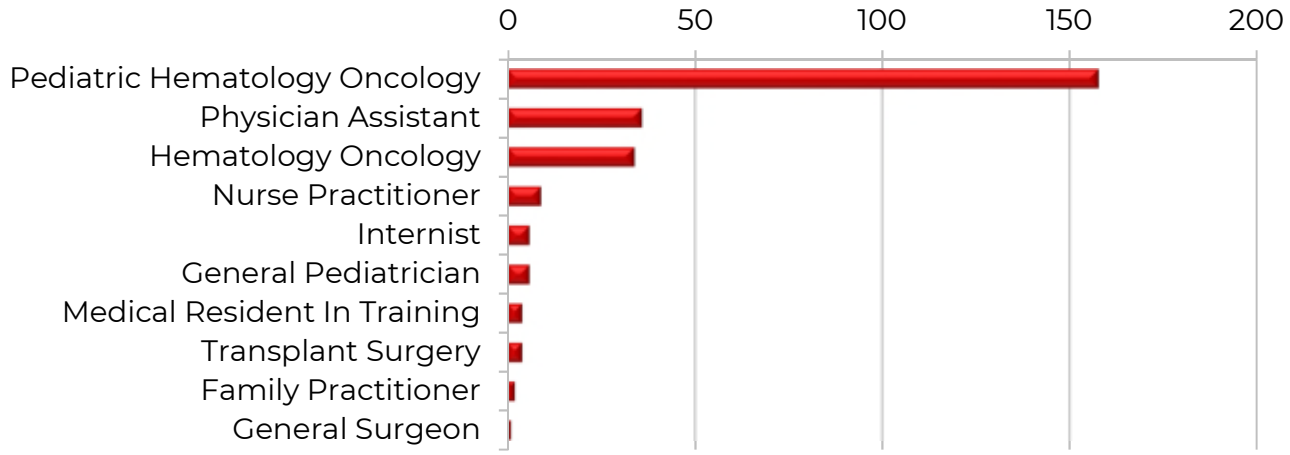
Calendar Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2020	249	722	$2,928,049.81	$4055.47	2.90
2021	322	973	$2,565,825.15	$2,637.02	3.02
% Change	**29.32%**	**33.80%**	**-12.37%**	**-34.98%**	**4.14%**
Change	**73**	**244**	**-$362,224.66**	**-$1,418.45**	**0.12**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
†Total number of unduplicated claims.

Demographics of Members Utilizing G-CSFs



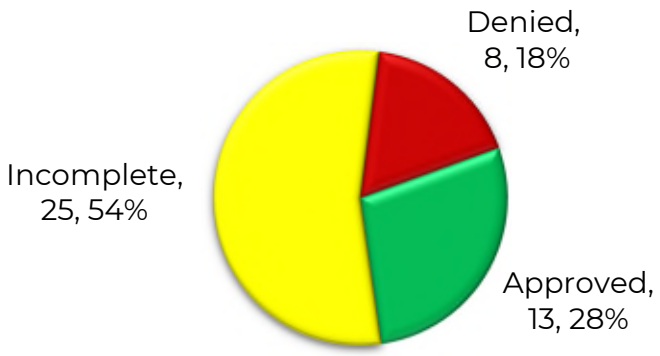
Top Prescriber Specialties of G-CSFs by Number of Claims



Prior Authorization of G-CSFs

There were 46 prior authorization requests submitted for G-CSFs during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions



Market News and Updates[1,2,3,4]

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

- **March 2022:** The FDA approved Releuko™ (filgrastim-ayow) as a biosimilar to Neupogen® (filgrastim) to treat chemotherapy-induced neutropenia (CIN).

Pipeline:

- **BBT-015:** Currently in Phase I trials, BBT-015 is a G-CSF analog created using site-specific peglyation technology. BBT-015 is a long acting G-CSF and is expected to be given once every 2 to 3 weeks. This medication is being investigated as a treatment for CIN and also acute radiation syndrome.
- **Ryzneuta™ (Efbemalenograstim Alfa):** In March 2021, Evive Biotech announced the submission of its Biologic License Application (BLA) for Ryzneuta™ (efbemalenograstim alfa) for the treatment of CIN. Ryzneuta™ has a novel structure that is achieved through Evive's proprietary DiKine™ fusion protein platform and provides a treatment alternative to pegylated G-CSF treatments.
- **Rolontis® (Eflapegrastim):** In August 2021, the FDA issued a Complete Response Letter (CRL) to Spectrum Pharmaceuticals in regard to its BLA for Rolontis® (eflapegrastim). Rolontis® is a long-acting G-CSF and was developed to be an alternative to Neulasta® (pegfilgrastim) for the treatment of CIN. The response cited deficiencies related to manufacturing and indicated that a reinspection would be necessary prior to approval.

Cost Comparison for Filgrastim Products

Product	Cost Per Syringe
Neupogen® (filgrastim) 300mcg/0.5mL PFS	$295.20
Releuko™ (filgrastim-ayow) 300mcg/0.5mL PFS	**$228.00**
Nivestym® (filgrastim-aafi) 300mcg/0.5mL PFS	$219.00
Granix® (tbo-filgrastim) 300mcg/0.5mL PFS	$134.70
Zarxio (filgrastim-sndz) 300mcg/0.5mL PFS	$91.80

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).
PFS = pre-filled syringe

Recommendations

The College of pharmacy recommends the prior authorization of Releuko™ (filgrastim-ayow) and Neulasta® (pegfilgrastim) and removing the prior authorization requirement for Nyvepria™ (pegfilgrastim-apgf) based on net cost (changes shown in red):

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 Neupogen® (filgrastim), Granix® (tbo-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) ~~Nyvepria™ (Pegfilgrastim-apgf)~~, 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), ~~Neulasta® (pegfilgrastim)~~, 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 Details of G-CSFs: Calendar Year 2021

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
FILGRASTIM PRODUCTS						
NEUPOGEN INJ 300MCG/1ML	115	14	$233,616.98	$2,031.45	8.21	25.19%
NEUPOGEN INJ 480MCG/0.8ML PFS	31	22	$175,203.90	$5,651.74	1.41	18.89%
NEUPOGEN INJ 300MCG/0.5ML PFS	18	15	$46,939.98	$2,607.78	1.2	5.06%
ZARXIO INJ 300MCG/0.5ML PFS	12	2	$37,190.32	$3,099.19	6	4.01%
ZARXIO INJ 480MCG/0.8ML PFS	3	3	$6,498.39	$2,166.13	1	0.70%
GRANIX INJ 300MCG/0.5ML PFS	2	2	$2,051.62	$1,025.81	1	0.22%
GRANIX INJ 300MCG/1ML	1	1	$1,893.01	$1,893.01	1	0.20%
GRANIX INJ 480MCG/0.8ML PFS	1	1	$1,539.57	$1,539.57	1	0.17%
NEUPOGEN INJ 480MCG/1.6ML	1	1	$1,407.59	$1,407.59	1	0.15%
SUBTOTAL	**184**	**61**	**$506,341.36**	**$2,751.86**	**3.02**	**54.59%**
PEGFILGRASTIM PRODUCTS						
NEULASTA INJ 6MG/0.6ML PFS	73	18	$415,282.29	$5,688.80	4.06	44.77%
ZIEXTENZO INJ 6MG/0.6ML PFS	3	2	$5,913.16	$1,971.05	1.5	0.64%
SUBTOTAL	**76**	**20**	**$421,195.45**	**$5,542.05**	**3.8**	**45.41%**
TOTAL	**260**	**71***	**$927,536.81**	**$3,567.45**	**3.66**	**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 (J2505)	827	282	$2,311,522.74	$2,795.07	2.93
PEGFILGRASTIM-BMEZ INJ (Q5120)	57	21	$215,105.13	$3,773.77	2.71
SUBTOTAL	**884**	**303**	**$2,526,627.87**	**$2,858.18**	**2.92**
FILGRASTIM PRODUCTS					
FILGRASTIM INJ (J1442)	63	17	$31,875.60	$505.96	3.71
TBO-FILGRASTIM INJ (J1447)	15	6	$5,815.80	$387.72	2.50
FILGRASTIM-SNDZ INJ (Q5101)	11	9	$1,505.88	$136.90	1.22
SUBTOTAL	**89**	**32**	**$39,197.28**	**$440.42**	**2.78**
TOTAL	**973⁺**	**322***	**$2,565,825.15**	**$2,637.02**	**3.02**

Costs do not reflect rebated prices or net costs.
⁺Total number of unduplicated claims.
*Total number of unduplicated utilizing members.
INJ = injection

[1] Kashiv Biosciences, LLC. Kashiv Biosciences Receives Approval for Its First Biosimilar Releuko™ (Filgrastim-ayow). *Business Wire*. Available online at: https://www.businesswire.com/news/home/20220302005951/en/Kashiv-Biosciences-Receives-Approval-for-Its-First-Biosimilar-RELEUKOTM-filgrastim-ayow. Issued 03/02/2022. Last accessed 03/16/2022.
[2] Evive Biotech. Evive Biotech Submits Biologics License Application to US FDA for Ryzneuta™. *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/evive-biotech-submits-biologics-license-application-to-us-fda-for-ryzneutatm-301259250.html. Issued 03/31/2021. Last accessed 03/16/2022.
[3] Spectrum Pharmaceuticals. Spectrum Pharmaceuticals Receives Complete Response Letter from FDA for Rolontis® (Eflapegrastim). *Business Wire*. Available online at: https://www.businesswire.com/news/home/20210806005079/en/Spectrum-Pharmaceuticals-Receives-Complete-Response-Letter-from-FDA-for-ROLONTIS%C2%AE-eflapegrastim. Issued 08/06/2021. Last accessed 03/16/2022.
[4] Bolder Bio Technology, Inc. BBT-015: A Long-Acting G-CSF Analog for Treating Neutropenia and Acute Radiation Syndrome. Available online at: http://www.bolderbio.com/pipeline/bbt-015/. Last accessed 03/16/2022.

Appendix N

Calendar Year 2021 Annual Review of Anti-Parasitic Medications and 30-day Notice to Prior Authorize Lampit® (Nifurtimox)

Oklahoma Health Care Authority
April 2022

Current Prior Authorization Criteria

Albenza® (Albendazole) Approval Criteria:

1. A quantity of 6 tablets will process without prior authorization.
2. For infections requiring additional doses, a prior authorization will need to be submitted and the following criteria will apply:
    a. An FDA approved diagnosis of 1 of the following:
        i. Treatment of parenchymal neurocysticercosis due to active lesions caused by larval forms of the pork tapeworm, *Taenia solium*; or
        ii. Treatment of cystic hydatid disease of the liver, lung, and peritoneum, caused by the larval form of the dog tapeworm, *Echinococcus granulosus*.

Benznidazole Tablets Approval Criteria:

1. An FDA approved diagnosis of Chagas disease (American trypanosomiasis) caused by *Trypanosoma cruzi*; and
2. Benznidazole must be prescribed by or in consultation with an infectious disease specialist; and
3. Female members of reproductive potential must have a negative pregnancy test prior to treatment with benznidazole; and
4. Female members of reproductive potential must be willing to use effective contraception during treatment with benznidazole tablets and for 5 days after the last dose; and
5. Member must not have taken disulfiram within the last 2 weeks; and
6. The member's recent weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug. The approval duration will be for 60 days of therapy.

Daraprim® (Pyrimethamine) Approval Criteria:

1. An FDA approved indication for the treatment of toxoplasmosis; or
2. An FDA approved indication for the treatment of susceptible strains of acute malaria; and
3. Member must take Daraprim® concomitantly with a sulfonamide; and
4. Approval length will be based on recommended dosing regimen specific to the member's diagnosis.

Emverm® (Mebendazole) Approval Criteria:

1. An FDA approved diagnosis of any of the following:
   a. Treatment of *Enterobius vermicularis* (pinworm); or
   b. Treatment of *Trichuris trichiura* (whipworm); or
   c. Treatment of *Ascaris lumbricoides* (roundworm); or
   d. Treatment of *Ancylostoma duodenale* (hookworm); or
   e. Treatment of *Necator americanus* (hookworm); and
2. For the treatment of *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (hookworm), or *Necator americanus* (hookworm), a patient-specific, clinically significant reason why a more cost-effective anthelmintic therapy, such as albendazole or pyrantel pamoate, cannot be used must be provided; and
3. The following quantity limits will apply:
   a. *Enterobius vermicularis* (pinworm): 2 tablets per approval.
   b. *Trichuris trichiura* (whipworm): 6 tablets per approval.
   c. *Ascaris lumbricoides* (roundworm): 6 tablets per approval.
   d. *Ancylostoma duodenale* (hookworm): 6 tablets per approval.
   e. *Necator americanus* (hookworm): 6 tablets per approval.

Impavido® (Miltefosine) Approval Criteria:

1. An FDA approved indication for treatment of:
   a. Visceral leishmaniasis due to *Leishmania donovani*; or
   b. Cutaneous leishmaniasis due to *Leishmania braziliensis*, *Leishmania guyanensis*, or *Leishmania panamensis*; or
   c. Mucosal leishmaniasis due to *Leishmania braziliensis*; and
2. Female members must not be pregnant and must have a negative pregnancy test prior to therapy initiation. Female members must be willing to use effective contraception while on therapy and for 5 months after completion of therapy; and
3. 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
4. A quantity limit of 84 capsules per 28 days will apply.

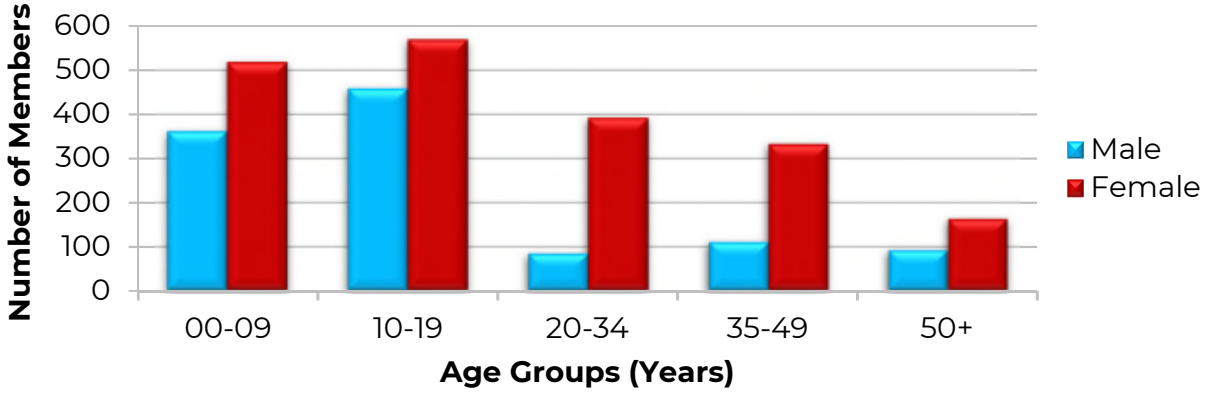
Utilization of Anti-Parasitic Medications: Calendar Year 2021

Comparison of Calendar Years

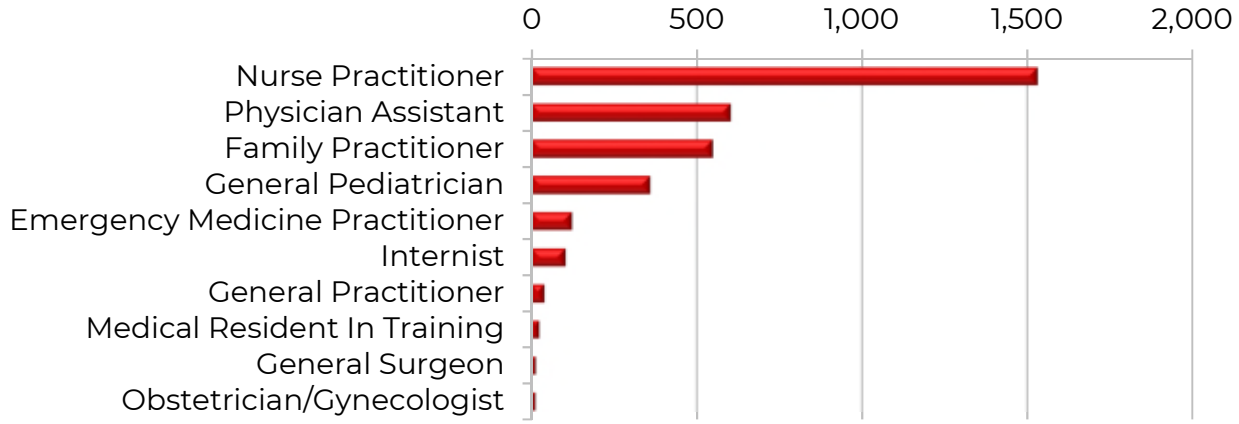
Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	1,839	2,169	$303,072.84	$139.73	$17.15	9,835	17,673
2021	3,073	3,449	$290,344.42	$84.18	$10.88	39,529	26,695
% Change	**67.1%**	**59.0%**	**-4.2%**	**-39.8%**	**-36.6%**	**301.9%**	**51.0%**
Change	**1,234**	**1,280**	**-12,728**	**-55.55**	**-6.27**	**29,694**	**9,022**

*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.

Demographics of Members Utilizing Anti-Parasitic Medications



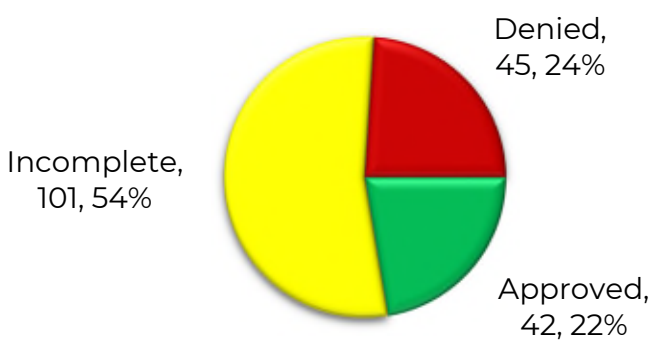
Top Prescriber Specialties of Anti-Parasitic Medications by Number of Claims



Prior Authorization of Anti-Parasitic Medications

There were 188 prior authorization requests submitted for anti-parasitic medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions



Market News and Updates[1,2]

Anticipated Exclusivity Expiration(s):

- Lampit® (nifurtimox tablets): August 2027

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

- **August 2020:** The FDA approved Lampit® (nifurtimox) for the treatment of Chagas disease caused by *Trypanosoma cruzi* (*T. cruzi*) in pediatric patients from birth to younger than 18 years of age and weighing ≥2.5kg. Chagas is an infectious tropical disease that affects approximately 300,000 patients in the United States and is commonly found in Latin America. This disease is primarily transmitted to humans via the feces of infected triatomines but may also be transmitted by infected blood transfusions or infected organ transplantation. Chagas disease is curable if detected and treated soon after infection, but if left untreated, individuals become carriers and move to the chronic phase of the disease. Approximately 30% of patients in the chronic phase of the disease may experience life-threatening cardiovascular and gastrointestinal (GI) complications. The FDA granted Lampit® accelerated approval based on the number of treated patients who became immunoglobulin G (IgG) antibody negative or who showed at least a 20% decrease in optical density on 2 different IgG antibody tests against antigens of *T. cruzi*. The most common adverse reactions reported in the clinical study were vomiting, abdominal pain, headache, and decreased appetite.

Lampit® (Nifurtimox) Product Summary[3]

Indication(s): Lampit® is a nitrofuran antiprotozoal, indicated in pediatric patients (birth to younger than 18 years of age and weighing ≤2.5kg) for the treatment of Chagas disease (American trypanosomiasis), caused by *T. cruzi*.

How Supplied: 30mg and 120mg oral tablets

Dosing:

- Weight based dosing to be taken 3 times daily with food for 60 days:
  - ≥41kg: 8-10mg/kg/day
  - <41kg: 10-20mg/kg/day
- Please see the Lampit® *Prescribing Information* for the recommended individual doses based on body weight.

Mechanism of Action: Nifurtimox is an antiprotozoal drug and studies suggest that this medication is metabolized and activated by Type I (oxygen insensitive) and Type II (oxygen sensitive) nitroreductases (NTR) leading to production of toxic intermediate metabolites and/or reactive oxygen species

that induce DNA damage and cell death of both intracellular and extracellular forms of *T. cruzi*.

Contraindication(s):

- Known hypersensitivity to nifurtimox
- Alcohol consumption during treatment

Safety

- Potential for Genotoxicity and Carcinogenicity: In a study evaluating the cytogenetic effect of nifurtimox in pediatric patients 7 months to 14 years of age with Chagas disease, a 13-fold increase in chromosomal aberrations were observed. Carcinogenicity has been observed in mice and rats treated chronically with nitrofuran agents, which have a similar structure to nifurtimox. It is unknown if nifurtimox is associated with carcinogenicity in humans.
- Embryo-Fetal Toxicity: Based on animal studies, nifurtimox can cause fetal harm when administered to pregnant women. Pregnancy testing is recommended for females of reproductive potential and prior to treatment. Effective contraception should be used while on therapy and at least 6 months after the first dose. Male patients with female partners of reproductive potential should use condoms during treatment and for 3 months after the last dose.
- Worsening of Neurological and Psychiatric Conditions: Patients with a history of brain injury, seizures, psychiatric disease, or serious behavioral alterations may experience worsening of their condition, and close medical supervision is recommended in these patients and those that develop neurological disturbances or psychiatric drug reactions.
- Decreased Appetite and Weight Loss: This was reported in patients treated with nifurtimox in the clinical studies. Body weight should be checked every 14 days and dose adjustments should be made when clinically appropriate.
- Porphyria: The use of nifurtimox and other nitrofuran derivatives may precipitate acute attacks of porphyria.

Adverse Reactions: The most common adverse reactions reported in clinical studies (incidence ≥5%) were vomiting, abdominal pain, headache, decreased appetite, nausea, pyrexia, and rash.

Efficacy: The safety and efficacy of nifurtimox were assessed in a prospective, randomized, double-blind, Phase 3 trial in 330 patients with serologic evidence of *T. cruzi* infection and without Chagas disease-related cardiac or GI symptoms. Patients were randomized 2:1 to receive either a 60-day or 30-day regimen with a total daily dose of 10-20mg/kg (<40kg) or 8-10mg/kg (≥40kg). Chagas disease diagnosis was confirmed by direct observation of *T.*

cruzi by concentration test and by a positive result for both lysate enzyme-linked immunosorbent assay (ELISA) and recombinant ELISA.

- Primary endpoint: The primary efficacy endpoint was the percentage of patients cured, which was defined as sero-reduction or sero-conversion. Sero-reduction was defined as a ≥20% reduction in optical density measured by lysate and recombinant ELISA serology tests and sero-conversion was defined as having a negative IgG concentration measured by lysate and recombinant ELISA serology tests.
- Results: At 12 months post-treatment, 32.9% of patients in the 60-day arm were cured, while 18.9% of patients in the 30-day arm were cured.

Cost: The Wholesale Acquisition Cost (WAC) for Lampit® 30mg is $2.50 per tablet, while the WAC for Lampit® 120mg is $3 per tablet. For a member weighing 30kg, the cost for a full course of treatment would be $540 based on the recommended dose of 360mg/day for 60 days.

Recommendations

The College of Pharmacy recommends the prior authorization of Lampit® (nifurtimox) with the following criteria:

Lampit® (Nifurtimox) Approval Criteria:

1. An FDA approved diagnosis of Chagas disease (American trypanosomiasis) caused by *Trypanosoma cruzi*; and
2. Member must be younger than 18 years of age and weigh ≥2.5kg; and
3. Lampit® must be prescribed by, or in consultation with, an infectious disease specialist; and
4. Prescriber must agree to counsel the member on the contraindication and potential drug interaction that may occur with concomitant use of Lampit® with alcohol, if applicable, based on the Lampit® *Prescribing Information*; and
5. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiating treatment with Lampit®; and
6. Female members of reproductive potential must be willing to use effective contraception during treatment with Lampit® and for 6 months after the last dose; and
7. Male members with female partners of reproductive potential must be willing to use condoms for contraception during treatment with Lampit® and for 3 months after the last dose; and
8. Prescriber must agree to monitor the member's weight every 14 days and adjust the Lampit® dosage accordingly, as recommended in the Lampit® *Prescribing Information*; and

9. 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
10. Initial approvals will be for 30 days. For continuation of therapy after 30 days, an updated weight must be provided in order to authorize the appropriate amount of drug required for the remaining 30 days of treatment. The total approval duration will be for 60 days of treatment; and
11. A quantity limit of #270 tablets per 30 days will apply to the 30mg tablet, and a quantity limit of #225 tablets per 30 days will apply to the 120mg tablet.

Utilization Details of Anti-Parasitic Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
IVERMECTIN TAB 3MG	2,129	1,937	$144,419.69	$67.83	1.10	49.74%
ALBENDAZOLE TAB 200MG	1,296	1,128	$136,556.41	$105.37	1.15	47.03%
PRAZIQUANTEL TAB 600MG	16	15	$2,902.19	$181.39	1.07	1.00%
EMVERM CHW 100MG	4	4	$3,212.34	$803.09	1.00	1.11%
BENZNIDAZOLE TAB 100MG	2	1	$562.82	$281.41	2.00	0.19%
BILTRICIDE TAB 600MG	1	1	$343.56	$343.56	1.00	0.12%
PYRIMETHAMINE TAB 25MG	1	1	$2,347.41	$2,347.41	1.00	0.81%
TOTAL	**3,449**	**3,073***	**$290,344.42**	**$84.18**	**1.12**	**100%**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
CHW = chewable tablet; TAB = tablet

[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 02/2022. Last accessed 03/17/2022.
[2] Bayer. U.S. Food and Drug Administration Approves Lampit® (Nifurtimox) for the Treatment of Chagas Disease in Children. *Business Wire*. Available online at: https://www.biospace.com/article/releases/u-s-food-and-drug-administration-approves-lampit-nifurtimox-for-the-treatment-of-chagas-disease-in-children/. Issued 08/07/2020. Last accessed 03/18/2022.
[3] Lampit® (Nifurtimox) Prescribing Information. Bayer HealthCare Pharmaceuticals Inc. Available online at: https://labeling.bayerhealthcare.com/html/products/pi/Lampit_PI.pdf. Last revised 01/2022. Last accessed 03/17/2022.

Appendix O

Calendar Year 2021 Annual Review of Systemic Antifungal Medications and 30-Day Notice to Prior Authorize Brexafemme® (Ibrexafungerp)

Oklahoma Health Care Authority
April 2022

Current Prior Authorization Criteria

Cresemba® (Isavuconazonium Sulfate) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
   a. Invasive aspergillosis; or
   b. Invasive mucormycosis; and
2. For the treatment of invasive aspergillosis, a patient-specific, clinically significant reason why voriconazole cannot be used must be provided.

Ketoconazole Oral Tablets Approval Criteria:

1. An FDA approved indication of systemic fungal infections with 1 of the following:
   a. Blastomycosis; or
   b. Coccidioidomycosis; or
   c. Histoplasmosis; or
   d. Chromomycosis; or
   e. Paracoccidioidomycosis; and
2. Member is 3 years of age or older; and
3. Member does not have underlying hepatic disease; and
4. Trials with other effective oral antifungal therapies, including fluconazole, itraconazole, and voriconazole, have failed to resolve infection; or
5. Other effective oral antifungal therapies are not tolerated or potential benefits outweigh the potential risks; and
6. Hepatic function tests must be done at baseline and weekly during treatment; and
7. A clinical exception may apply for members with a diagnosis of Cushing's disease when other modalities are not available.

Noxafil® (Posaconazole) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
   a. Prophylaxis of invasive *Aspergillus* and *Candida* infections in high-risk patients due to being severely immunocompromised, such as hematopoietic stem cell transplant (HSCT) recipients with graft-versus-host disease (GVHD) or those with hematologic malignancies with prolonged neutropenia from chemotherapy; or

b. Treatment of oropharyngeal candidiasis (OPC), including OPC refractory (rOPC) to itraconazole and/or fluconazole; or
2. Treatment of invasive mucormycosis; or
3. Other appropriate diagnoses for which Noxafil® is not FDA approved may be considered with submission of a manual prior authorization; and
4. For the diagnosis of OPC, only the oral suspension may be used.

Onmel® (Itraconazole Oral Tablets) Approval Criteria:

1. An FDA approved diagnosis of onychomycosis of the toenail caused by *Trichophyton rubrum* or *T. mentagrophytes;* and
2. A patient-specific, clinically significant reason why itraconazole 100mg oral capsules cannot be used in place of Onmel® 200mg tablets must be provided.

Oravig® (Miconazole Buccal Tablets) Approval Criteria:

1. An FDA approved diagnosis of oropharyngeal candidiasis in adult members 18 years of age and older; and
2. Recent trials (within the last month) of the following medications at the recommended dosing and duration of therapy:
   a. Clotrimazole troches; and
   b. Nystatin suspension; and
   c. Fluconazole tablets; or
3. Contraindication(s) to all available alternative medications.

Tolsura® (Itraconazole Oral Capsules) Approval Criteria:

1. An FDA approved indication of 1 of the following fungal infections in immunocompromised and non-immunocompromised adult members:
   a. Blastomycosis, pulmonary and extrapulmonary; or
   b. Histoplasmosis, including chronic cavitary pulmonary disease and disseminated, non-meningeal histoplasmosis; or
   c. Aspergillosis, pulmonary and extrapulmonary, in members who are intolerant of or who are refractory to amphotericin B therapy; and
2. A patient-specific, clinically significant reason why the member cannot use itraconazole 100mg capsules, which are available without prior authorization, must be provided.

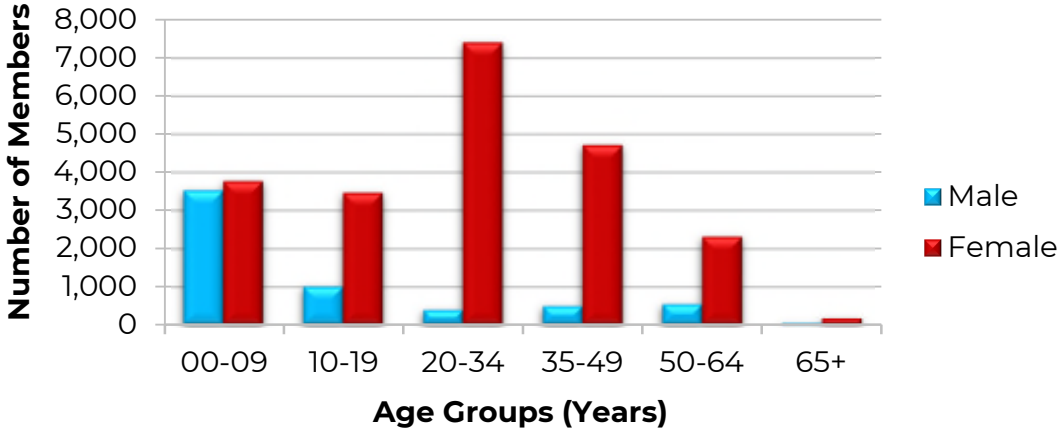
Utilization of Systemic Antifungal Medications: Calendar Year 2021

Comparison of Calendar Years

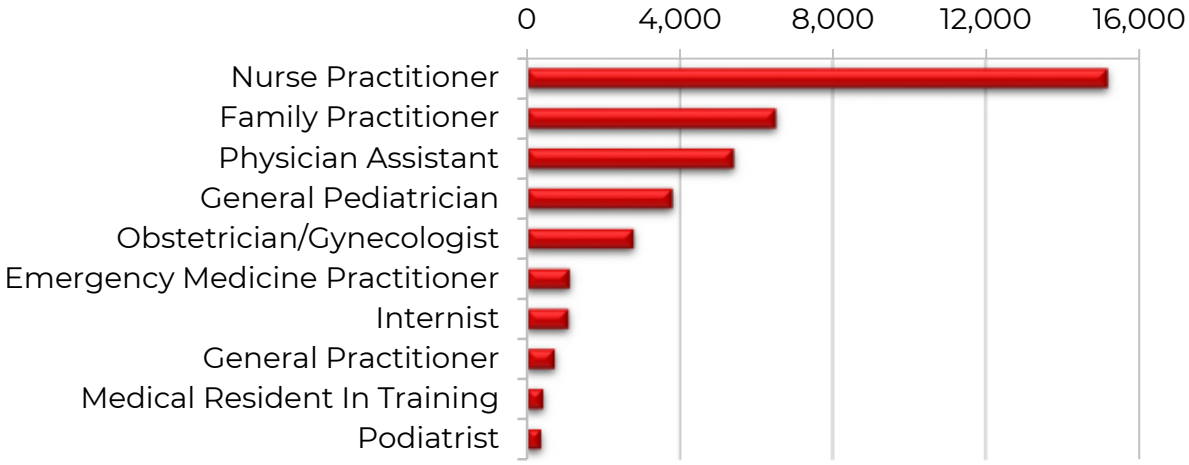
Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	22,294	32,533	$1,436,985.27	$44.17	$4.02	1,643,126	357,277
2021	27,744	40,032	$1,972,917.95	$49.28	$4.48	1,829,293	440,284
% Change	**24.40%**	**23.10%**	**37.30%**	**11.60%**	**11.40%**	**11.30%**	**23.20%**
Change	**5,450**	**7,499**	**$535,932.68**	**$5.11**	**$0.46**	**186,167**	**83,007**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

Demographics of Members Utilizing Systemic Antifungal Medications

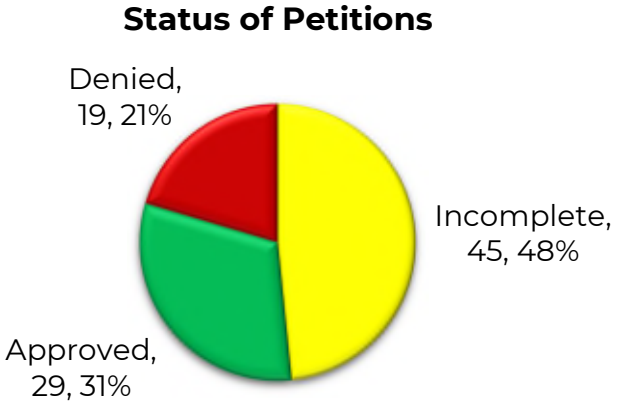


Top Prescriber Specialties of Systemic Antifungal Medications by Number of Claims



Prior Authorization of Systemic Antifungal Medications

There were 93 prior authorization requests submitted for systemic antifungal medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.



Market News and Updates[1,2,3,4,5]

Anticipated Patent Expiration(s):

- Noxafil® (posaconazole oral suspension): April 2022
- Oravig® (miconazole buccal tablet): September 2022
- Cresemba® [isavuconazonium capsule and intravenous (IV) powder for solution]: October 2025
- Noxafil® (posaconazole IV solution): February 2033
- Tolsura® (itraconazole capsule): June 2033

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

- **May 2021:** The FDA approved Noxafil® (posaconazole) PowderMix delayed-release (DR) oral suspension, for the prophylaxis of invasive *Aspergillus* and *Candida* infections in pediatric patients 2 years of age and older (weighing ≤40kg) who are at high risk of developing these infections due to being severely immunocompromised, such as hematopoietic stem cell transplant (HSCT) recipients with graft-versus-host disease (GVHD) or those with hematologic malignancies with prolonged neutropenia from chemotherapy. Noxafil® oral suspension is not substitutable with Noxafil® DR tablets or Noxafil® PowderMix DR for oral suspension due to the differences in the dosing of each formulation. Therefore, the specific dosage recommendations for each of the formulations should be followed. Merck's launch plans for Noxafil® PowderMix are tentatively set for July 2022. Noxafil® PowderMix will be available as a 300mg DR oral suspension.
- **June 2021:** The FDA approved Brexafemme® (ibrexafungerp tablets), for oral use in patients with vulvovaginal candidiasis (VVC), also known as

vaginal yeast infection. Brexafemme® is the first FDA approved drug in a novel antifungal class in more than 20 years. It was approved based on positive results from 2 Phase 3 studies in which oral ibrexafungerp demonstrated efficacy and a favorable tolerability profile in women with VVC.

- **June 2021:** The FDA approved expanded indications for Noxafil® (posaconazole) IV injection and Noxafil® DR oral tablets to include treatment of invasive aspergillosis in adults and pediatric patients 13 years of age and older. Additionally, expanded indications for Noxafil® IV injection and Noxafil® DR tablets have been approved for the prophylactic treatment of invasive *Aspergillus* and *Candida* infections in patients who are at high risk of developing these infections due to being severely immunocompromised. The FDA approved indication now includes patients 2 years of age and older for Noxafil® IV injection and patients who are at least 2 years of age and weigh >40kg for Noxafil® DR oral tablets. Previously, Noxafil® IV injection was only indicated for use in adults, and Noxafil® DR oral tablets were only indicated for use in patients 13 years of age and older.

Brexafemme® (Ibrexafungerp) Product Summary[6]

Indication(s): Brexafemme® is a triterpenoid antifungal indicated for the treatment of adult and post-menarchal pediatric females with VVC.

How Supplied: 150mg oral tablets

Dosing and Administration:

- The recommended dosing is 300mg [(2) 150mg tablets] twice daily for 1 day for a total treatment dose of 600mg.
- Brexafemme® may be taken with or without food.
- Prior to initiating treatment with Brexafemme®, pregnancy status should be verified in females of reproductive potential.

Contraindication(s):

- Pregnancy
- Hypersensitivity to ibrexafungerp

Safety:

- Pregnancy: Based on findings from animal studies, ibrexafungerp use is contraindicated in pregnancy because it may cause fetal harm. In pregnant rabbits, oral ibrexafungerp administered during organogenesis was associated with rare malformations including absent forelimb(s), absent hindpaw, absent ear pinna, and thoracogastroschisis at approximate dose exposures ≥5 times the human exposure at the recommended human dose (RHD). Available data on ibrexafungerp use in pregnant women are insufficient to draw

conclusions about any drug-associated risks of major birth defects, miscarriage, or other adverse maternal or fetal outcomes. There is a pregnancy safety study for ibrexafungerp. If ibrexafungerp is inadvertently administered during pregnancy or if pregnancy is detected within 4 days after a patient receives ibrexafungerp, pregnant women exposed to ibrexafungerp and health care providers should report pregnancies to Scynexis, Inc.

- Lactation: There is no data on the presence of ibrexafungerp in either human or animal milk, the effects on the breast-fed infant, or the effects on milk production.
- Females and Males of Reproductive Potential: Based on animal data, ibrexafungerp may cause fetal harm when administered to a pregnant female. The pregnancy status in females of reproductive potential should be determined prior to initiating treatment with ibrexafungerp. Females of reproductive potential should be advised to use effective contraception during treatment with ibrexafungerp and for 4 days after the last dose.
- Pediatric Use: The safety and effectiveness of ibrexafungerp for treatment of VVC have been established in post-menarchal pediatric females. Use of ibrexafungerp in post-menarchal pediatric patients is supported by evidence from adequate and well-controlled studies of ibrexafungerp in adult non-pregnant women with additional safety data from post-menarchal pediatric females. The safety and effectiveness of ibrexafungerp have not been established in pre-menarchal pediatric females.
- Geriatric Use: Clinical studies with ibrexafungerp did not include sufficient numbers of patients 65 years of age and older to determine whether they respond differently from younger subjects. No clinically meaningful differences in the pharmacokinetics of ibrexafungerp were observed in geriatric patients compared to younger adults.

Adverse Reactions: The most common adverse reactions in the clinical studies of ibrexafungerp (incidence ≥2% and more frequently than placebo) were diarrhea, nausea, abdominal pain, dizziness, and vomiting.

Efficacy: Two randomized placebo-controlled clinical trials with a similar design were conducted to evaluate the safety and efficacy of a single day of ibrexafungerp 600mg [(2) 150mg tablets per dose, administered 12 hours apart] for the treatment of VVC. Non-pregnant post-menarchal females with a diagnosis of VVC were eligible. A diagnosis of VVC was defined as (a) minimum composite vulvovaginal signs and symptoms (VSS) score of ≥4 with at least 2 signs or symptoms having a score of 2 (moderate) or greater; (b) positive microscopic examination with 10% potassium hydroxide in a vaginal sample revealing yeast forms or budding yeasts; and (c) normal vaginal pH

(≤4.5). The total composite VSS score was based on the vulvovaginal signs (erythema, edema, excoriation) and vulvovaginal symptoms (itching, burning, or irritation) where each was scored as 0 to 3 based on symptom severity with 3 being severe. Study visits included the test of cure (TOC, day 8 to 14) visit and a follow-up (day 21 to 29) visit. The modified intent to treat (MITT) population included randomized subjects with a baseline culture positive for *Candida* species who took at least 1 dose of study medication. Efficacy was assessed by clinical outcome at the TOC visit. The primary endpoint was a complete clinical response, defined as the complete resolution of signs and symptoms (VSS score of 0). Additional endpoints included a negative culture for *Candida* spp. at the TOC visit, and clinical outcome at the follow-up visit. Statistically significantly greater percentages of patients experienced a complete clinical response at TOC, negative culture at TOC, and complete clinical response at follow-up with treatment with ibrexafungerp compared to placebo.

- **Trial 1:** The MITT population consisted of 190 patients treated with ibrexafungerp and 100 patients treated with placebo. The average age was 34 years (range 17-67 years of age). The median VSS score at baseline was 9 (range 4-18). The majority (92%) of the patients were culture-positive with *C. albicans*. In this trial, 95 (50%) ibrexafungerp-treated patients achieved a complete clinical response at TOC compared to 28 (28%) of patients receiving placebo (P=0.001). Additionally, 49.5% of ibrexafungerp-treated patients had a negative culture at TOC compared to placebo (19%). At follow up, 59.5% of ibrexafungerp-treated patients had a complete clinical response compared 44% of patients receiving placebo.
- **Trial 2:** The MITT population consisted of 189 patients treated with ibrexafungerp and 89 patients treated with placebo. The average age was 34 years (range 18-65 years of age). The median VSS score at baseline was 10 (range 4-18). The majority (89%) of the patients were culture-positive with *C. albicans*. In this trial, 120 (63.5%) ibrexafungerp-treated patients achieved a complete clinical response at TOC compared to 40 (44.9%) of patients receiving placebo (P=0.009). Additionally, 58.7% of ibrexafungerp-treated patients had a negative culture at TOC compared to placebo (29.2%). At follow up, 72.5% of ibrexafungerp-treated patients had a complete clinical response compared 49.4% of patients receiving placebo.

Cost Comparison:

Medication	Cost Per Unit[Δ]	Cost Per Treatment*
Brexafemme® (ibrexafungerp) tablet	**$118.75**	**$475.00**
terconazole 0.8% cream (Rx)	$1.30	$26.00
Monistat® 3 (miconazole 0.4% cream, OTC)[+]	$1.33	$19.99
fluconazole 150mg tablet	$0.68	$0.68

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 treatment based on FDA recommended dosing for VSS (1-day treatment for tablet formulations and 3-day treatment for topical formulations).
[+]Cost for Monistat® 3 (OTC) based on price available as of 03/17/2022 on Walgreens.com.
[Δ]Unit = tablet or gram; OTC = over-the-counter; Rx = prescription

Recommendations

The College of Pharmacy recommends the prior authorization of Brexafemme® (ibrexafungerp) with the following criteria:

Brexafemme® (Ibrexafungerp) Approval Criteria:

1. An FDA approved diagnosis of vulvovaginal candidiasis (VVC); and
2. Member must be an adult female or a post-menarchal pediatric female; and
3. Prescriber must verify that female members are not pregnant and are currently using reliable contraception; and
4. Member must not be taking concurrent strong or moderate CYP3A4 inducers (e.g., rifampin, carbamazepine, phenytoin, St. John's wort, long-acting barbiturates, bosentan, efavirenz, etravirine); and
5. Authorization consideration requires a patient-specific, clinically significant reason why oral fluconazole and all topical antifungals (prescription and over-the-counter) FDA approved for the treatment of VVC are not appropriate for the member; and
6. A quantity limit of 4 tablets for a 1-day supply will apply.

Additionally, the College of Pharmacy recommends updating the current Noxafil® (posaconazole) criteria based on the recent FDA approvals (changes shown in red):

Noxafil® (Posaconazole) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
    a. Prophylaxis of invasive *Aspergillus* and *Candida* infections in high-risk patients due to being severely immunocompromised, such as hematopoietic stem cell transplant (HSCT) recipients with graft-versus-host disease (GVHD) or those with hematologic malignancies with prolonged neutropenia from chemotherapy with product use as follows:

i. Delayed-release (DR) tablets: Adults and pediatric members 2 years of age and older who weigh >40kg; or
ii. Intravenous (IV) injection: Adults and pediatric members 2 years of age and older; or
iii. Oral suspension: Adults and pediatric members 13 years of age and older; or
iv. PowderMix for DR oral suspension: Pediatric members 2 years of age and older who weigh ≤40kg; or

b. Treatment of oropharyngeal candidiasis (OPC), including OPC refractory (rOPC) to itraconazole and/or fluconazole in adults and pediatric members 13 years of age and older with product use as follows:
   i. For the treatment of OPC, including rOPC to itraconazole and/or fluconazole, only the oral suspension may be used; or
c. Treatment of invasive aspergillosis in adults and pediatric members 13 years of age and older with product use as follows:
   i. For the treatment of invasive aspergillosis only the IV injection or DR tablets may be used; or

2. Treatment of invasive mucormycosis; or
3. Other appropriate diagnoses for which Noxafil® is not FDA approved may be considered with submission of a manual prior authorization.~~;~~ ~~and~~

~~4. For the diagnosis of OPC, only the oral suspension may be used.~~

Finally, the College of Pharmacy recommends removing the prior authorization criteria for Onmel® (itraconazole oral tablets) based on product discontinuation (changes shown in red):

~~**Onmel® (Itraconazole Oral Tablets) Approval Criteria:**~~

~~1. An FDA approved diagnosis of onychomycosis of the toenail caused by *Trichophyton rubrum* or *T. mentagrophytes;* and~~
~~2. A patient-specific, clinically significant reason why itraconazole 100mg oral capsules cannot be used in place of Onmel® 200mg tablets must be provided.~~

Utilization Details of Systemic Antifungal Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
FLUCONAZOLE PRODUCTS						
FLUCONAZOLE TAB 150MG	19,970	14,121	$234,699.31	$11.75	1.41	11.90%
FLUCONAZOLE TAB 200MG	2,726	1,996	$47,068.73	$17.27	1.37	2.39%
FLUCONAZOLE TAB 100MG	1,985	1,632	$25,014.05	$12.60	1.22	1.27%
FLUCONAZOLE SUS 40MG/ML	1,241	1,017	$47,549.42	$38.32	1.22	2.41%
FLUCONAZOLE SUS 10MG/ML	987	829	$24,762.29	$25.09	1.19	1.26%

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
FLUCONAZOLE TAB 50MG	33	28	$469.93	$14.24	1.18	0.02%
FLUCONAZOLE INJ 400MG	13	8	$1,056.74	$81.29	1.63	0.05%
FLUCONAZOLE INJ 200MG	1	1	$83.41	$83.41	1	0.00%
SUBTOTAL	**26,956**	**19,632**	**$380,703.88**	**$14.12**	**1.37**	**19.30%**
NYSTATIN PRODUCTS						
NYSTATIN SUS 100,000 U/ML	7,571	6,325	$133,950.02	$17.69	1.2	6.79%
NYSTATIN TAB 500,000 U	43	25	$1,423.37	$33.10	1.72	0.07%
SUBTOTAL	**7,614**	**6,350**	**$135,373.39**	**$17.78**	**1.2**	**6.86%**
TERBINAFINE PRODUCTS						
TERBINAFINE TAB 250MG	2,763	1,978	$43,618.85	$15.79	1.4	2.21%
SUBTOTAL	**2,763**	**1,978**	**$43,618.85**	**$15.79**	**1.4**	**2.21%**
GRISEOFULVIN PRODUCTS						
GRISEOFULVIN SUS 125MG/5ML	1,241	972	$114,095.89	$91.94	1.28	5.78%
GRISEOFULVIN TAB MICR 500MG	398	331	$112,927.36	$283.74	1.2	5.72%
GRISEOFULVIN TAB ULTR 250MG	118	94	$22,833.15	$193.50	1.26	1.16%
GRISEOFULVIN TAB ULTR 125MG	33	24	$7,969.37	$241.50	1.38	0.40%
SUBTOTAL	**1,790**	**1,421**	**$257,825.77**	**$144.04**	**1.26**	**13.06%**
VORICONAZOLE PRODUCTS						
VORICONAZOLE INJ 200MG	214	156	$784,003.99	$3,663.57	1.37	39.74%
VORICONAZOLE TAB 200MG	101	36	$17,602.01	$174.28	2.81	0.89%
VORICONAZOLE SUS	36	8	$49,703.30	$1,380.65	4.5	2.52%
VORICONAZOLE TAB 50MG	12	6	$8,200.75	$683.40	2	0.42%
SUBTOTAL	**363**	**206**	**$859,510.05**	**$2,367.80**	**1.76**	**43.57%**
ITRACONAZOLE PRODUCTS						
ITRACONAZOLE CAP 100MG	275	148	$21,617.61	$78.61	1.86	1.10%
ITRACONAZOLE SOL 10MG/ML	36	28	$15,029.45	$417.48	1.29	0.76%
SUBTOTAL	**311**	**176**	**$36,647.06**	**$117.84**	**1.77**	**1.86%**
CLOTRIMAZOLE PRODUCTS						
CLOTRIMAZOLE TRO 10MG	144	123	$4,057.77	$28.18	1.17	0.21%
SUBTOTAL	**144**	**123**	**$4,057.77**	**$28.18**	**1.17**	**0.21%**
POSACONAZOLE PRODUCTS						
POSACONAZOLE TAB 100MG DR	55	20	$109,053.12	$1,982.78	2.75	5.53%
NOXAFIL TAB 100MG	7	4	$39,118.47	$5,588.35	1.75	1.98%
NOXAFIL SUS 40MG/ML	3	1	$8,671.53	$2,890.51	3	0.44%
SUBTOTAL	**65**	**25**	**$156,843.12**	**$2,412.97**	**2.6**	**7.95%**
ISAVUCONAZONIUM PRODUCTS						
CRESEMBA CAP 186MG	15	4	$79,516.25	$5,301.08	3.75	4.03%
SUBTOTAL	**15**	**4**	**$79,516.25**	**$5,301.08**	**3.75**	**4.03%**
AMPHOTERICIN B PRODUCTS						
AMBISOME INJ 50MG	11	3	$18,821.81	$1,711.07	3.67	0.95%
SUBTOTAL	**11**	**3**	**$18,821.81**	**$1,711.07**	**3.67**	**0.95%**
TOTAL	**40,032**	**27,744***	**$1,972,917.95**	**$49.28**	**1.44**	**100.00%**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
CAP = capsule; DR = delayed-release; INJ = injection; MICRO = microcrystalline; POW = powder; SOL = solution; SUS = suspension; TAB = tablet; TRO = troche; U = units; ULTR = ultramicrocrystalline

[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 03/2022. Last accessed 03/14/2022.
[2] Noxafil® PowderMix, Noxafil® (Posaconazole) – New Formulation Approval, Expanded Indication. OptumRx. Available online at: https://professionals.optumrx.com/content/dam/optum3/professional-optumrx/news/rxnews/drug-approvals/drugapproval_noxafilpowdermix_noxafil_2021-0607.pdf. Last accessed 03/18/2022.
[3] Scynexis, Inc. Scynexis Announces FDA Approval of Brexafemme® (Ibrexafungerp Tablets) as the First and Only Oral Non-Azole Treatment for Vaginal Yeast Infections. Available online at: https://www.scynexis.com/news-media/press-releases/detail/240/scynexis-announces-fda-approval-of-brexafemme. Issued 06/02/2021. Last accessed 03/16/2022.
[4] Noxafil® Receives Expanded Indication and New Dosage Form. Benecard®. Available online at: https://www.benecard.com/noxafil-receives-expanded-indication-and-new-dosage-form/. Issued 06/04/2021. Last accessed 03/18/2022.
[5] Noxafil® (Posaconazole) Prescribing Information. Merck. Available online at: https://www.merck.com/product/usa/pi_circulars/n/noxafil/noxafil_pi.pdf. Last revised 01/2022. Last accessed 03/30/2022.
[6] Brexafemme® (Ibrexafungerp) Prescribing Information. AbbVie. Available online at: https://d1io3yog0oux5.cloudfront.net/scynexis/files/pages/scynexis/db/pis/Digital+Ibrexafungerp+Prescribing+Information+%28PI%29.pdf. Last revised 06/2021. Last accessed 03/16/2022.

Appendix P

Calendar Year 2021 Annual Review of Multiple Sclerosis Medications and 30-Day Notice to Prior Authorize Ponvory™ (Ponesimod)

Oklahoma Health Care Authority
April 2022

Current Prior Authorization Criteria

Multiple Sclerosis (MS) Interferon Medications	
Tier-1	**Tier-2**
interferon β - 1a (Avonex®)	peginterferon β - 1a (Plegridy®)
interferon β - 1b (Betaseron®)	interferon β - 1a (Rebif®)
	interferon β - 1b (Extavia®)

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. 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) lesions after 6 months; or
   c. Adverse reactions or intolerable side effects; and
3. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
4. 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. Kurtzke Expanded Disability Status Scale (EDSS) score between 3 and 7.5; and
3. Initial approvals will be for the duration of 90 days. If the member has responded well to treatment and the prescriber states the member has shown improvement or the drug was effective, the member may receive authorization for 1 year; and
4. A quantity limit of 60 tablets for 30 days will apply; and
5. 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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. 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
4. 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
5. Compliance will be checked for continued approval every 6 months; and
6. 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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. Verification from the prescriber that member has no serious active infection(s); and
4. Complete blood counts (CBC), including lymphocyte count, and verification that levels are acceptable to the prescriber; and

5. LFTs and total bilirubin levels and verification that levels are acceptable to the prescriber; and
6. 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 a trial of Tecfidera® and Vumerity® is not appropriate for the member must be provided; and
7. 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
8. A quantity limit of 120 capsules per 30 days 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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. Approvals for the 40mg strength of Copaxone® will require a patient-specific, clinically significant reason why the member cannot use the 20mg strength; and
4. 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
5. 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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. 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
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 verification that levels are acceptable to the prescriber; and
7. 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. Member must have had at least 1 relapse in the previous 12 months; and
3. 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
4. Prescriber must agree to monitor quantitative serum immunoglobulin level before, during, and after discontinuation of treatment with Kesimpta® until B-cell repletion; and
5. Prescriber must verify the member has no active infection(s); and
6. Prescriber must verify the first injection of Kesimpta® will be administered by a health care professional prepared to manage injection-related adverse reactions; and
7. Kesimpta® must be shipped via cold chain supply and the member or member's caregiver must be trained on the proper storage of Kesimpta®; and
8. Female members must not be pregnant and must have a negative pregnancy test prior to initiation of treatment with Kesimpta®; and
9. Female members of reproductive potential must use an effective method of contraception during treatment and for 6 months after stopping Kesimpta®; and
10. 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
11. 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. 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
3. 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
4. The prescriber must agree that baseline and yearly skin examinations will be performed while the member is utilizing Lemtrada® therapy; and
5. Member, prescriber, pharmacy, and health care facility must all enroll in the Lemtrada® REMS Program and maintain enrollment throughout therapy.

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 will not generally be approved; and
3. Member must have had at least 1 relapse in the previous 12 months; and
4. Member must have had an inadequate response to 2 or more medications indicated for the treatment of MS; and
5. Prescriber must confirm the member does not have any contraindications for use of cladribine; and
6. Prescriber must confirm the member does not have an active malignancy; and
7. Prescriber must confirm that females members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
8. 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
9. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
10. Verification from the prescriber that member has no active infection(s); and
11. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
12. 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
13. Quantity limits according to package labeling will apply.

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. 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
3. Member must not have any contraindications 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
4. Member must not have received prior treatment with alemtuzumab; 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. Ophthalmic evaluation and verification that member will be monitored for changes in vision throughout therapy; and
9. 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
10. 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 the varicella vaccine prior to commencing treatment with Mayzent®; and
11. 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
12. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and
13. 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

14. 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
15. Compliance will be checked for continued approval every 6 months; and
16. Quantity limits according to package labeling will apply.

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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. 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
4. Prescriber must verify hepatitis B virus (HBV) testing has been performed prior to initiating Ocrevus® therapy and member does not have active HBV; and
5. Verification from the prescriber that member has no active infection(s); and
6. 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
7. Compliance will be checked for continued approval.

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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. Verification from the prescriber that member has no active infection(s); and
4. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
5. Liver function tests (LFTs) and total bilirubin levels and verification that levels are acceptable to the prescriber; and
6. Compliance will be checked for continued approval every 6 months; and
7. 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 prescriber 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. Approvals will not be granted for concurrent use with other disease-modifying therapies; and
3. Verification from the prescriber that member has no serious active infection(s); and
4. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
5. Liver function tests (LFTs) and total bilirubin levels and verification that levels are acceptable to the prescriber; and
6. Verification from the prescriber that member does not have moderate or severe renal impairment; and
7. 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
8. Compliance will be checked for continued approval every 6 months; and
9. A quantity limit of 120 capsules per 30 days will apply.

Zeposia® (Ozanimod) 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. 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
3. Member must not have received prior treatment with alemtuzumab; and
4. Member must not be concurrently using strong CYP2C8 inhibitors/inducers or breast cancer resistance protein (BCRP) inhibitors; 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. Prescriber must conduct an electrocardiogram (ECG) to determine whether preexisting conduction abnormalities are present before initiating Zeposia®; 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 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 a history of chickenpox or varicella vaccination should receive a full course of the varicella vaccine prior to commencing treatment with Zeposia®; and
12. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and

13. 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
14. 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
15. Compliance will be checked for continued approval every 6 months; and
16. A quantity limit of 30 capsules per 30 days will apply.

Utilization of MS Medications: Calendar Year 2021

Comparison of Calendar Years: Pharmacy Claims

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	137	1,033	$6,655,314.46	$6,442.71	$215.76	36,020	30,846
2021	166	1,096	$7,470,429.01	$6,816.08	$225.30	38,193	33,157
% Change	**21.20%**	**6.10%**	**12.20%**	**5.80%**	**4.40%**	**6.00%**	**7.50%**
Change	**29**	**63**	**$815,114.55**	**$373.37**	**$9.54**	**2,173**	**2,311**

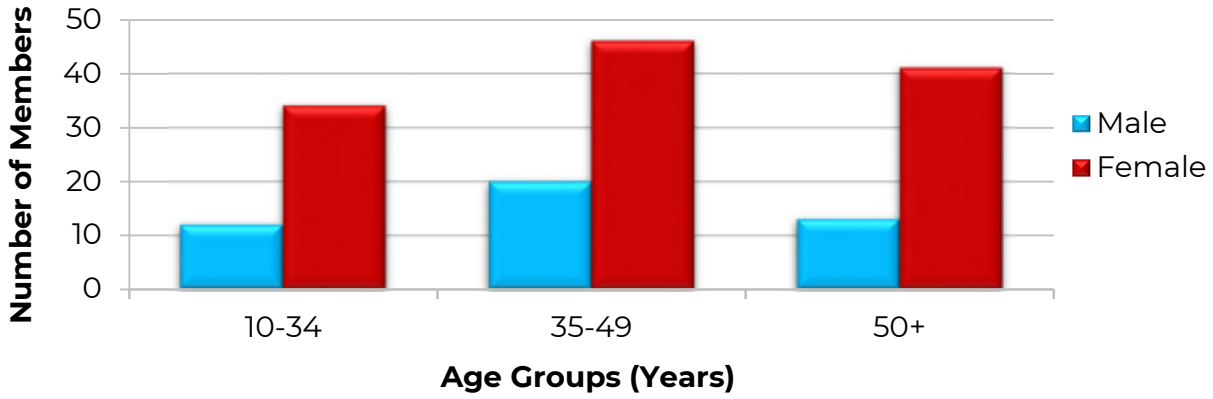
Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

Comparison of Calendar Years: Medical Claims

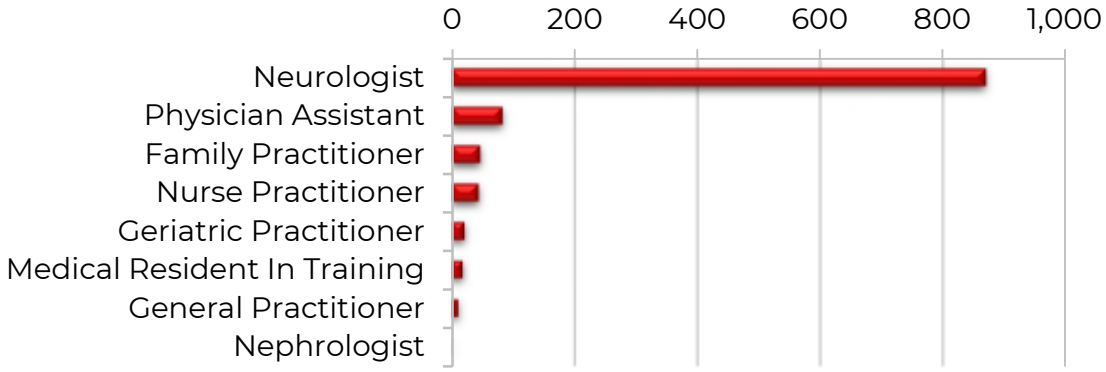
Calendar Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2020	58	194	$2,580,209.9	$13,300.05	3.34
2021	74	221	$3,377,644.09	$15,283.46	2.99
% Change	**27.59%**	**13.92%**	**23.61%**	**12.98%**	**-11.71%**
Change	**16**	**27**	**$797,434.19**	**$1,983.41**	**-0.35**

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



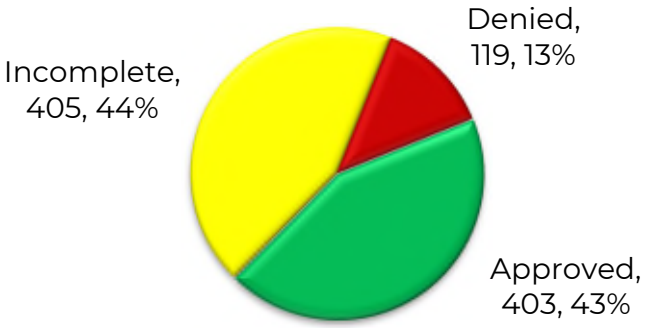
Top Prescriber Specialties of MS Medications by Number of Claims



Prior Authorization of MS Medications

There were 927 prior authorization requests submitted for MS medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions



Market News and Updates[1,2,3,4,5]

Anticipated Patent Expiration(s):

- Mavenclad® (cladribine tablets): October 2026
- Zeposia® (ozanimod capsules): May 2029
- Mayzent® (siponimod tablets): 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

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

- **March 2021:** The FDA approved Ponvory™ (ponesimod), a once-daily oral selective sphingosine-1-phosphate receptor 1 (S1P1) modulator, to treat adults with relapsing forms of multiples sclerosis (RMS) to include clinically isolated syndrome (CIS), relapsing-remitting MS (RRMS), and active secondary progressive MS (SPMS) disease. The FDA approval is based, in part, on a 2-year, head-to-head Phase 3 clinical trial, Oral Ponesimod Versus Teriflunomide in Relapsing Multiple Sclerosis (OPTIMUM), in which Ponvory™ 20mg demonstrated superior efficacy in significantly reducing annual relapses by 30.5% compared to teriflunomide (Aubagio®) 14mg in patients with RMS. Over the trial period, 71% of patients treated with Ponvory™ had no confirmed relapses, compared to 61% in the teriflunomide group. The most common adverse reactions reported with ponesimod in the clinical trial were upper respiratory tract infection, hepatic transaminase elevation, and hypertension.
- **May 2021:** The FDA approved Zeposia® (ozanimod) oral capsules for the treatment of adults with moderately to severely active ulcerative colitis (UC), a chronic inflammatory bowel disease (IBD). Zeposia® is the first and only S1P1 receptor modulator approved for patients with moderately to severely active UC. The mechanism by which Zeposia® exerts therapeutic effects in UC is unknown but may involve the reduction of lymphocyte migration into the intestines, as it is thought that by targeting S1P1 receptors on lymphocytes, Zeposia® reduces the number of lymphocytes in peripheral blood. The approval for UC is based on data from True North, a pivotal Phase 3 trial evaluating Zeposia® as an induction and maintenance therapy versus placebo in adult patients with moderately to severely active UC. During induction at week 10, the trial met its primary endpoint of clinical remission (18% vs. 6%; P<0.0001). During maintenance at week 52, the trial met its primary endpoint of clinical remission (37% vs. 19%; P<0.0001). Decreases in rectal bleeding and stool frequency sub scores were observed as early as week 2 in patients treated with Zeposia®. Zeposia® (ozanimod) was previously FDA approved in March 2020 for the treatment of adults with RMS. Bristol Myers Squibb is continuing to evaluate Zeposia® in an ongoing open-label extension trial, which is assessing the longer-term profile of Zeposia® for the treatment of UC. The company is also investigating Zeposia® for the treatment of moderately to severely active Crohn's disease in the ongoing Phase 3 YELLOWSTONE clinical trial.

Pipeline:

- **Ublituximab:** In December 2021, the FDA accepted the Biologics License Application (BLA) for ublituximab as a treatment for patients

with RMS. The FDA has set a Prescription Drug User Fee Act (PDUFA) goal date of September 28, 2022. Ublituximab is an investigational glycoengineered monoclonal antibody that targets a unique epitope on CD20-expressing B-cells. The submission was based on the results of the ULTIMATE I & II trials which were conducted under a Special Protocol Assessment (SPA) agreement with the FDA. Both studies met their primary endpoint with ublituximab treatment demonstrating a statistically significant reduction in annualized relapse rate (ARR) compared to teriflunomide over a 96-week period ($P<0.005$ in each trial).

Ponvory™ (Ponesimod) Product Summary[6]

Indication(s): Ponvory™ (ponesimod) is indicated for the treatment of RMS, to include CIS, RRMS, and active SPMS, in adults.

How Supplied:

- 14-day starter pack containing 2mg, 3mg, 4mg, 5mg, 6mg, 7mg, 8 mg, 9mg, 10mg strength oral tablets
- 20mg oral tablets

Dosing:

- Assessments should be done prior to the initiation of treatment with Ponvory™ which include a complete blood count (CBC), including lymphocyte count, cardiac evaluation, liver function tests (LFTs), ophthalmic evaluation, review medication history for current/prior immunosuppressive/immune-modulating therapy, and varicella zoster virus (VZV) antibody test.
- Initiate Ponvory™ with a 14-day titration starter pack.
- The maintenance dose of Ponvory™ is 20mg once daily.
- First-dose monitoring is recommended for patients with sinus bradycardia, first- or second-degree [Mobitz type I] atrioventricular (AV) block, or a history of myocardial infarction (MI) or heart failure (HF).
- Ponvory™ tablets should be swallowed whole and intact.
- Ponvory™ can be taken with or without food.

Mechanism of Action: Ponesimod is a S1P1 modulator that binds with high affinity to S1P receptor 1. Ponesimod blocks the capacity of lymphocytes to egress from lymph nodes, reducing the number of lymphocytes in peripheral blood. The mechanism by which ponesimod exerts therapeutic effects in MS is unknown but may involve reduction of lymphocyte migration into the central nervous system.

Contraindication(s):

- MI, unstable angina, stroke, transient ischemic attack (TIA), decompensated HF requiring hospitalization, or Class III/IV HF within the last 6 months
- Presence of Mobitz type II second-degree, third-degree AV block, sick sinus syndrome, or sino-atrial block, unless the patient has a functioning pacemaker

Warnings and Precautions:

- Infections: Ponvory™ may increase the risk of infections. A CBC should be obtained before initiating treatment, and patients should be monitored for infection during treatment and for 1-2 weeks after discontinuation of Ponvory™. Ponvory™ should not be started in patients with an active infection.
- Bradyarrhythmia and Atrioventricular Conduction Delays: Ponvory™ may result in a transient decrease in heart rate (HR); dose titration is required for treatment initiation. An electrocardiogram (ECG) should be assessed for preexisting cardiac conduction abnormalities before starting Ponvory™, and cardiology consultation should be considered for conduction abnormalities or concomitant use with other drugs that decrease HR.
- Respiratory Effects: Ponvory™ may cause a decline in pulmonary function. Pulmonary function (e.g., spirometry) should be assessed if clinically indicated.
- Liver Injury: Ponvory™ should be discontinued if significant liver injury is confirmed. Liver function tests should be obtained before initiating Ponvory™.
- Increased Blood Pressure (BP): BP should be monitored during treatment with Ponvory™.
- Cutaneous Malignancies: Cutaneous malignancies, including basal and squamous cell carcinoma and melanoma, have been reported. Periodic skin examination and monitoring is recommended, especially in patients with risk factors for skin cancer.
- Fetal Risk: Women of childbearing potential should use effective contraception during and for 1 week after stopping Ponvory™.
- Macular Edema: An ophthalmic evaluation is recommended before starting treatment and if there is any change in vision while taking Ponvory™. Diabetes mellitus and uveitis increase the risk of macular edema.

Adverse Reactions: The most common adverse reactions (incidence ≤10%) are upper respiratory tract infection, hepatic transaminase elevation, and hypertension.

Efficacy: The safety and efficacy of Ponvory™ were assessed in a randomized, double-blind, Phase 3 trial in 1,133 patients with RMS for 108 weeks. Patients were randomized 1:1 to receive either once daily Ponvory™, beginning with a 14-day dose titration, or teriflunomide 14mg.

- Primary endpoint: The primary efficacy endpoint was the annualized relapse rate (ARR) based on the number of confirmed relapses over the 108-week treatment period.
- Results: Ponvory showed superior efficacy in reducing annual relapses by 30.5% compared to the teriflunomide group. Over the trial period, 71% of patients treated with Ponvory had no confirmed relapses compared to 61% in the teriflunomide group.

Cost Comparison:

Medication	Cost Per Unit	Cost Per Month	Cost Per Year
Ponvory™ (ponesimod) 20mg tablet	**$284.00**	**$8,520.00**	**$102,240.00***
Aubagio® (teriflunomide) 14mg tablet	$283.95	$8,518.50	$102,222.00⁺
Gilenya® (fingolimod) 0.5mg capsule	$309.62	$9,288.60	$111,463.20ᵝ
Mayzent® (siponimod) 2mg tablet	$282.02	$8,460.60	$101,527.20¥
Zeposia® (ozanimod) 0.92mg capsule	$257.30	$7,719.00	$92,628.00±

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).
Unit = capsule or tablet
*Ponvory™ cost per year is based on maintenance dose of 20mg once daily.
⁺Aubagio® cost per year based on maintenance dose of 14mg once daily.
±Zeposia® cost per month and cost per year based on the recommended maintenance dose of 0.92mg once daily.
¥Mayzent® cost per month and cost per year based on the recommended maintenance dosage of 2mg once daily.
ᵝGilenya® cost per month and cost per year based on the recommended dosage for adults and pediatric patients (10 years of age and older) weighing more than 40kg of 0.5mg once daily.

Recommendations

The College of Pharmacy recommends the prior authorization of Ponvory™ (ponesimod) and recommends adding additional prior authorization criteria for Zeposia® (ozanimod), based on the new FDA approved indication for UC, with the following criteria (new criteria and updates noted in red):

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. 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
3. Member must not have received prior treatment with alemtuzumab; and
4. Member must not be concurrently using strong CYP3A4 and UGT1A1 inducers (e.g., rifampin, phenytoin, carbamazepine); and
5. Verification from the prescriber that the member has no active infection(s); and
6. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber; and
7. Verification from the prescriber that the member has undergone an electrocardiogram (ECG) to determine whether preexisting conduction abnormalities are present before initiating Ponvory™; and
8. Liver function tests (LFTs) and verification that levels are acceptable to the prescriber; and
9. Verification from the prescriber that the member's blood pressure will be monitored during treatment with Ponvory™; and
10. 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
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 the member will be followed with appropriate monitoring per package labeling; and
12. 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
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 Ponvory™ and for at least 1 week 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. 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.

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. 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
3. Member must not have received prior treatment with alemtuzumab; and
4. Member must not be concurrently using strong CYP2C8 inhibitors/inducers or breast cancer resistance protein (BCRP) inhibitors; 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. Prescriber must conduct an electrocardiogram (ECG) to determine whether preexisting conduction abnormalities are present before initiating Zeposia®; 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 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 a history of chickenpox or varicella vaccination should receive a full course of the varicella vaccine prior to commencing treatment with Zeposia®; and
12. Female members of reproductive potential must not be pregnant and must have a negative pregnancy test prior to initiation of therapy; and

13. 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
14. 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
15. For the diagnosis of UC, member must have had an inadequate response, loss of response, or intolerant to oral aminosalicylates, corticosteroids, immunomodulators (e.g., 6-mercaptopurine and azathioprine), and a biologic (e.g., TNF blocker). Tier structure applies; and
16. Compliance will be checked for continued approval every 6 months; and
17. A quantity limit of 30 capsules per 30 days will apply.

Utilization Details of MS Medications: Calendar Year 2021

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
GLATIRAMER ACETATE PRODUCTS					
COPAXONE INJ 20MG/ML	151	30	$1,054,376.64	5.03	$6,982.63
COPAXONE INJ 40MG/ML	64	10	$362,045.36	6.4	$5,656.96
GLATIRAMER INJ 40MG/ML	7	2	$8,939.94	3.5	$1,277.13
GLATOPA INJ 20MG/ML	2	1	$3,014.82	2	$1,507.41
SUBTOTAL	**224**	**43**	**$1,428,376.76**	**5.21**	**$6,376.68**
DALFAMPRIDINE PRODUCTS					
DALFAMPRIDINE TAB 10MG ER	164	21	$12,670.75	7.81	$77.26
AMPYRA TAB 10MG	23	3	$74,069.90	7.67	$3,220.43
SUBTOTAL	**187**	**24**	**$86,740.65**	**7.79**	**$463.85**
DIMETHYL FUMARATE PRODUCTS					
DIMETHYL FUM CAP 240MG DR	104	20	$117,341.10	5.2	$1,128.28
TECFIDERA CAP 240MG	40	9	$331,375.50	4.44	$8,284.39
TECFIDERA STARTER	2	2	$16,570.60	1	$8,285.30
DIMETHYL FUM STARTER	2	1	$3,597.60	2	$1,798.80
DIMETHYL FUM CAP 120MG DR	1	1	$200.52	1	$200.52
SUBTOTAL	**149**	**33**	**$469,085.32**	**4.52**	**$3,148.22**
TERIFLUNOMIDE PRODUCTS					
AUBAGIO TAB 14MG	109	15	$878,656.01	7.27	$8,061.06
AUBAGIO TAB 7MG	2	1	$15,750.18	2	$7,875.09
SUBTOTAL	**111**	**16**	**$894,406.19**	**6.94**	**$8,057.71**
FINGOLIMOD PRODUCTS					
GILENYA CAP 0.5MG	103	14	$904,087.18	7.36	$8,777.55
SUBTOTAL	**103**	**14**	**$904,087.18**	**7.36**	**$8,777.55**
INTERFERON BETA-1A PRODUCTS					
AVONEX PEN KIT 30MCG	44	7	$307,906.38	6.29	$6,997.87
REBIF REBIDOSE INJ 44MCG/0.5ML	16	3	$141,600.11	5.33	$8,850.01
REBIF INJ 44MCG/0.5ML	14	2	$110,219.24	7	$7,872.80
REBIF REBIDOSE INJ 22MCG/0.5ML	13	2	$113,525.70	6.5	$8,732.75
AVONEX PREFL KIT 30MCG	3	3	$21,110.36	1	$7,036.79
REBIF INJ 22MCG/0.5ML	3	1	$25,251.03	3	$8,417.01
REBIF REBIDOSE INJ TITRATION	1	1	$8,885.15	1	$8,885.15
SUBTOTAL	**94**	**19**	**$728,497.97**	**4.95**	**$7,749.98**
OFATUMUMAB PRODUCTS					
KESIMIPTA INJ 20MG/0.4ML	83	16	$697,774.46	5.19	$8,406.92
SUBTOTAL	**83**	**16**	**$697,774.46**	**5.19**	**$8,406.92**
DIROXIMEL FUMARATE PRODUCTS					
VUMERITY 231MG CAP	37	9	$271,650.48	4.11	$7,341.90
SUBTOTAL	**37**	**9**	**$271,650.48**	**4.11**	**$7,341.90**
INTERFERON BETA-1B PRODUCTS					

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
BETASERON INJ 0.3MG	26	4	$215,165.69	6.5	$8,275.60
SUBTOTAL	**26**	**4**	**$215,165.69**	**6.5**	**$8,275.60**
SIPONIMOD PRODUCTS					
MAYZENT TAB 2MG	23	3	$185,114.75	7.67	$8,048.47
MAYZENT STARTER PAK	2	2	$1,626.36	1	$813.18
SUBTOTAL	**25**	**5**	**$186,741.11**	**5**	**$7,469.64**
CLADRIBINE PRODUCTS					
MAVENCLAD 6-PAK 10MG	6	3	$310,531.94	2	$51,755.32
MAVENCLAD 10-PAK 10MG	3	2	$258,767.13	1.5	$86,255.71
MAVENCLAD 7-PAK 10MG	3	2	$181,135.26	1.5	$60,378.42
MAVENCLAD 9-PAK 10MG	2	2	$155,258.56	1	$77,629.28
MAVENCLAD 8-PAK 10MG	1	1	$69,002.85	1	$69,002.85
SUBTOTAL	**15**	**10**	**$974,695.74**	**1.5**	**$64,979.72**
OCRELIZUMAB PRODUCTS					
OCREVUS INJ 300MG/10ML	15	7	$422,090.97	2.14	$28,139.40
SUBTOTAL	**15**	**7**	**$422,090.97**	**2.14**	**$28,139.40**
NATALIZUMAB PRODUCTS					
TYSABRI INJ 300MG/15ML	13	1	$88,828.23	13	$6,832.94
SUBTOTAL	**13**	**1**	**$88,828.23**	**13**	**$6,832.94**
OZANIMOD PRODUCTS					
ZEPOSIA 0.92MG CAP	8	2	$59,151.84	4	$7,393.98
SUBTOTAL	**8**	**2**	**$59,151.84**	**4**	**$7,393.98**
PEGINTERFERON BETA-1A PRODUCTS					
PLEGRIDY INJ 125MCG/0.5ML	6	1	$43,136.42	6	$7,189.40
SUBTOTAL	**6**	**1**	**$43,136.42**	**6**	**$7,189.40**
TOTAL	**1,096**	**166***	**$7,470,429.01**	**6.6**	**$6,816.08**

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
NATALIZUMAB PRODUCTS					
TYSABRI INJ 300MG/15ML (J2323)	135	19	$937,554.00	7.11	$6,944.84
OCRELIZUMAB PRODUCTS					
OCREVUS INJ 300MG/10ML (J2350)	85	54	$2,367,262.45	1.57	$27,850.15
ALEMTUZUMAB PRODUCTS					
LEMTRADA INJ 12MG/1.2ML (J0202)	1	1	$72,827.64	1	$72,827.64
TOTAL	**221⁺**	**74***	**$3,377,644.09**	**2.99**	**$15,283.46**

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 02/2022. Last accessed 02/17/2022.
[2] Janssen Pharmaceutical Companies of Johnson & Johnson. Janssen Announces U.S. FDA Approval of Ponvory™ (Ponesimod), an Oral Treatment for Adults with Relapsing Multiple Sclerosis Proven Superior to Aubagio® (Teriflunomide) in Reducing Annual Relapses and Brain Lesions. Available online at: https://www.janssen.com/janssen-announces-us-fda-approval-ponvory-ponesimod-oral-treatment-adults-relapsing-multiple. Issued 03/19/2021. Last accessed 02/17/2022.
[3] Bristol-Myers Squibb. United States Food and Drug Administration Approves Bristol Myers Squibb's Zeposia® (Ozanimod), a New Oral Treatment for Relapsing Forms of Multiple Sclerosis. *Business Wire*. Available online at: https://news.bms.com/news/corporate-financial/2020/US-Food-and-Drug-Administration-Approves-Bristol-Myers-Squibbs-ZEPOSIA-ozanimod-a-New-Oral-Treatment-for-Relapsing-Forms-of-Multiple-Sclerosis/default.aspx. Issued 03/26/2020. Last accessed 02/17/2022.
[4] Bristol-Myers Squibb. U.S. Food and Drug Administration Approves Bristol Myers Squibb's Zeposia® (Ozanimod), an Oral Treatment for Adults with Moderately to Severely Active Ulcerative Colitis. *Business Wire*. Available online at https://news.bms.com/news/details/2021/U.S.-Food-and-Drug-Administration-Approves-Bristol-Myers-Squibbs-Zeposia-ozanimod-an-Oral-Treatment-for-Adults-with-Moderately-to-Severely-Active-Ulcerative-Colitis1/default.aspx. Issued 05/27/2021. Last accessed 02/17/2022.
[5] TG Therapeutics. TG Therapeutics Announces FDA Acceptance of Biologics License Application for Ublituximab as a Treatment for Patients with Relapsing Forms of Multiple Sclerosis. *Globe Newswire*. Available online at: https://ir.tgtherapeutics.com/news-releases/news-release-details/tg-therapeutics-announces-fda-acceptance-biologics-license-0. Issued 12/14/2021. Last accessed 02/17/2022.
[6] Ponvory™ Prescribing Information. Janssen Pharmaceutical Companies. Available online at: https://www.janssenlabels.com/package-insert/product-monograph/prescribing-information/PONVORY-pi.pdf. Last revised 04/2021. Last accessed 02/17/2022.

Appendix Q

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: March 29, 2022

Coronavirus (COVID-19) Update: FDA Authorizes Second Booster Dose of Two COVID-19 Vaccines for Older and Immunocompromised Individuals

The FDA authorized a second booster dose of either the Pfizer-BioNTech or the Moderna COVID-19 vaccines for older people and certain immunocompromised individuals. The FDA previously authorized a single booster dose for certain immunocompromised individuals following completion of a three-dose primary vaccination series. This action will now make a second booster dose of these vaccines available to other populations at higher risk for severe disease, hospitalization, and death. Emerging evidence suggests that a second booster dose of an mRNA COVID-19 vaccine improves protection against severe COVID-19 and is not associated with new safety concerns.

The FDA has determined that the known and potential benefits of a second COVID-19 vaccine booster dose with either of these vaccines outweigh their known and potential risks in these populations. The evidence considered for authorization of a second booster dose following primary vaccination and first booster dose included safety and immune response information provided to the agency as well as additional information on effectiveness submitted by the companies.

A summary of safety surveillance data provided to the FDA by the Ministry of Health of Israel on the administration of approximately 700,000 fourth (second booster) doses of the Pfizer-BioNTech COVID-19 Vaccine given at least 4 months after the third dose in adults 18 years of age and older (approximately 600,000 of whom were 60 years of age or older) revealed no new safety concerns.

The safety of Moderna COVID-19 Vaccine, when administered as a second booster dose, is informed by experience with the Pfizer-BioNTech COVID-19 Vaccine and safety information reported from an independently conducted study in which the Moderna COVID-19 Vaccine was administered as a second booster dose to 120 participants 18 years of age and older who had received a two-dose primary series and a first booster dose of Pfizer-BioNTech COVID-19 Vaccine at least 4 months prior. No new safety concerns were reported during up to three weeks of follow up after the second booster dose.

FDA NEWS RELEASE

For Immediate Release: February 24, 2022

FDA Approves Treatment for Wider Range of Patients with Heart Failure

The FDA approved Jardiance (empagliflozin) to reduce the risk of cardiovascular death and hospitalization for heart failure in adults.

Jardiance was originally approved by the FDA in 2014 as a supplement to diet and exercise to improve glucose control in adults with type 2 diabetes. Jardiance is also approved to reduce the risk of cardiovascular death in adults with type 2 diabetes and established cardiovascular disease, and to reduce the risk of death and hospitalization in patients with heart failure and low ejection fraction.

Jardiance's safety and effectiveness were evaluated as an adjunct to standard of care therapy in a randomized, double-blind, international trial comparing 2,997 participants who received Jardiance, 10 mg, once daily to 2,991 participants who received the placebo. The main efficacy measurement was the time to death from cardiovascular causes or need to be hospitalized for heart failure. Of the individuals who received Jardiance for an average of about two years, 14% died from cardiovascular causes or were hospitalized for heart failure, compared to 17% of the participants who received the placebo. This benefit was mostly attributable to fewer patients being hospitalized for heart failure.

The side effects in clinical studies with Jardiance for patients with heart failure were generally consistent with side effects for patients with diabetes. In diabetic patients, the most common adverse events were urinary tract infections and female fungal infections. Jardiance must not be used in patients who previously have had a serious allergic reaction to it as well as patients on dialysis.

FDA NEWS RELEASE

For Immediate Release: February 11, 2022

Coronavirus (COVID-19) Update: FDA Authorizes New Monoclonal Antibody for Treatment of COVID-19 that Retains Activity Against Omicron Variant

The FDA issued an emergency use authorization (EUA) for a new monoclonal antibody for the treatment of COVID-19 that retains activity against the omicron variant. The EUA for bebtelovimab is for the treatment of mild to moderate COVID-19 in adults and pediatric patients (12 years of age and older weighing at least 40kg) with a positive COVID-19 test, and who are at high risk for progression to severe COVID-19, including hospitalization or death, and for whom alternative COVID-19 treatment options approved or authorized by the FDA are not accessible or clinically appropriate.

Bebtelovimab is not authorized for patients who are hospitalized due to COVID-19 or require oxygen therapy due to COVID-19. Treatment with bebtelovimab has not been studied in patients hospitalized due to COVID-19. Monoclonal antibodies, such as bebtelovimab, may be associated with worse clinical outcomes when administered to hospitalized patients with COVID-19 requiring high flow oxygen or mechanical ventilation.

Based on the FDA's review of the totality of the scientific evidence available, the agency has determined that it is reasonable to believe that bebtelovimab may be effective in treating certain patients with mild or moderate COVID-19. When used to treat COVID-19 for the authorized population, the known and potential benefits of these antibodies outweigh the known and potential risks. There are no adequate, approved, and available alternative treatments to bebtelovimab.

The EUA for bebtelovimab is supported by clinical and nonclinical data. The clinical data are from a phase 2, randomized, single-dose clinical trial evaluating the efficacy of bebtelovimab alone and bebtelovimab combined with other monoclonal antibodies for treating mild to moderate COVID-19.

Bebtelovimab is not a substitute for vaccination in individuals for whom COVID-19 vaccination and a booster dose are recommended.

FDA NEWS RELEASE

For Immediate Release: February 02, 2022

FDA Approves First Generic of Restasis

The FDA approved the first generic of Restasis (cyclosporine ophthalmic emulsion) 0.05% single-use vials (eye drops) to increase tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with keratoconjunctivitis sicca (commonly known as dry eye). Increased tear production was not seen in patients currently taking topical anti-inflammatory drugs or using punctal plugs.

Keratoconjunctivitis sicca, or dry eye, happens when a person's eyes don't make enough tears to stay wet, or when the tears are not of the correct consistency. This condition, affecting millions of Americans each year, can make the eyes feel uncomfortable. Cyclosporine ophthalmic emulsion is a commonly prescribed immunomodulator (affects the functioning of the immune system) with anti-inflammatory effects that generally helps to increase tear production in these patients.

The most common side effect reported in the clinical trials for Restasis was ocular burning. Other reactions included conjunctival hyperemia (dilation and redness of blood vessels in the eye), discharge, epiphora (excessive watering of the eye), eye pain, foreign body sensation (the sensation of having something in your eye), pruritus (itchy skin), stinging and visual disturbance (most often blurring).

Current Drug Shortages Index (as of March 29, 2022):

The information provided in this section is provided voluntarily to the FDA by manufacturers and is not specific to Oklahoma.

Acetazolamide Injection	***Currently in Shortage***
Amifostine Injection	***Currently in Shortage***
Amino Acids	***Currently in Shortage***
Amoxapine Tablets	***Currently in Shortage***
Amphetamine Aspartate; Amphetamine Sulfate; Dextroamphetamine Saccharate; Dextroamphetamine Sulfate Tablets	***Currently in Shortage***
Amphetamine Oral Suspension, Extended Release	***Currently in Shortage***
Atropine Sulfate Injection	***Currently in Shortage***
Azacitidine for Injection	***Currently in Shortage***
Azithromycin (Azasite) Ophthalmic Solution 1%	***Currently in Shortage***
Bacteriostatic 0.9% Sodium Chloride Injection	***Currently in Shortage***
Bacteriostatic Water for Injection	***Currently in Shortage***
Belatacept (Nulojix) Lyophilized Powder for Injection	***Currently in Shortage***
Bumetanide Injection	***Currently in Shortage***
Bupivacaine Hydrochloride and Epinephrine Injection	***Currently in Shortage***
Bupivacaine Hydrochloride Injection	***Currently in Shortage***
Calcium Disodium Versenate Injection	***Currently in Shortage***
Calcium Gluconate Injection	***Currently in Shortage***
Cefazolin Injection	***Currently in Shortage***
Cefixime Oral Capsules	***Currently in Shortage***
Cefotaxime Sodium Injection	***Currently in Shortage***
Cefotetan Disodium Injection	***Currently in Shortage***
Chlordiazepoxide Hydrochloride Capsules	***Currently in Shortage***

Chloroprocaine Hydrochloride Injection	***Currently in Shortage***
Conivaptan Hydrochloride (Vaprisol) in 5% Dextrose Plastic Container	***Currently in Shortage***
Continuous Renal Replacement Therapy (CRRT) Solutions	***Currently in Shortage***
Cortisone Acetate Tablets	***Currently in Shortage***
Cyclopentolate Ophthalmic Solution	***Currently in Shortage***
Cysteamine Hydrochloride Ophthalmic Solution	***Currently in Shortage***
Cytarabine Injection	***Currently in Shortage***
Dacarbazine Injection	***Currently in Shortage***
Desmopressin Acetate Nasal Spray	***Currently in Shortage***
Dexamethasone Sodium Phosphate Injection	***Currently in Shortage***
Dexmedetomidine Injection	***Currently in Shortage***
Dextrose 10% Injection	***Currently in Shortage***
Dextrose 25% Injection	***Currently in Shortage***
Dextrose 5% Injection	***Currently in Shortage***
Dextrose 50% Injection	***Currently in Shortage***
Diflunisal Tablets	***Currently in Shortage***
Digoxin Injection	***Currently in Shortage***
Diltiazem Hydrochloride Injection	***Currently in Shortage***
Disopyramide Phosphate (Norpace) Capsules	***Currently in Shortage***
Dobutamine Hydrochloride Injection	***Currently in Shortage***
Dopamine Hydrochloride Injection	***Currently in Shortage***
Echothiophate Iodide (Phospholine Iodide) Ophthalmic Solution	***Currently in Shortage***
Enalaprilat Injection	***Currently in Shortage***
Epinephrine Injection, 0.1 mg/mL	***Currently in Shortage***
Epinephrine Injection, Auto-Injector	***Currently in Shortage***
Fentanyl Citrate (Sublimaze) Injection	***Currently in Shortage***
Floxuridine for Injection	***Currently in Shortage***
Fluvoxamine ER Capsules	***Currently in Shortage***
Furosemide Injection	***Currently in Shortage***
Gemifloxacin Mesylate (Factive) Tablets	***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***
Hydrocortisone Tablets	***Currently in Shortage***
Hydromorphone Hydrochloride Injection	***Currently in Shortage***
Hydroxypropyl (Lacrisert) Cellulose Ophthalmic Insert	***Currently in Shortage***
Imipenem and Cilastatin for Injection	***Currently in Shortage***
Isoniazid Injection	***Currently in Shortage***
Ketamine Injection	***Currently in Shortage***
Ketoprofen Capsules	***Currently in Shortage***
Ketorolac Tromethamine Injection	***Currently in Shortage***
Leucovorin Calcium Lyophilized Powder for Injection	***Currently in Shortage***
Leuprolide Acetate 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***
Lipid Injection	***Currently in Shortage***
Lithium Oral Solution	***Currently in Shortage***
Lorazepam Injection	***Currently in Shortage***
Loxapine Capsules	***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***
Nefazodone Hydrochloride Tablets	***Currently in Shortage***
Nizatidine Capsules	***Currently in Shortage***
Ondansetron Hydrochloride Injection	***Currently in Shortage***
Paclitaxel Injection (protein-bound particles)	***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***
Promethazine (Phenergan) Injection	***Currently in Shortage***
Propofol Injectable Emulsion	***Currently in Shortage***
Protamine Sulfate Injection	***Currently in Shortage***
Rifampin Capsules	***Currently in Shortage***
Rifampin Injection	***Currently in Shortage***
Rifapentine Tablets	***Currently in Shortage***
Ropivacaine Hydrochloride Injection	***Currently in Shortage***
Sclerosol Intrapleural Aerosol	***Currently in Shortage***
Semaglutide (WEGOVY®) Injection	***Currently in Shortage***
Sincalide (Kinevac) Lyophilized Powder for Injection	***Currently in Shortage***
Sodium Acetate Injection	***Currently in Shortage***
Sodium Bicarbonate Injection	***Currently in Shortage***
Sodium Chloride 0.9% Injection Bags	***Currently in Shortage***
Sodium Chloride 14.6% Injection	***Currently in Shortage***
Sodium Chloride 23.4% Injection	***Currently in Shortage***
Sodium Chloride Injection USP, 0.9% Vials and Syringes	***Currently in Shortage***
Sodium Phosphates Injection	***Currently in Shortage***
Sterile Water for Injection	***Currently in Shortage***
Streptozocin Powder for Injection	***Currently in Shortage***
Sulfasalazine Tablets	***Currently in Shortage***
Tacrolimus Capsules	***Currently in Shortage***
Technetium Tc 99m Sulfur Colloid Injection	***Currently in Shortage***
Technetium TC-99M Mebrofenin Injection	***Currently in Shortage***
Technetium Tc99m Succimer Injection (DMSA)	***Currently in Shortage***

Teprotumumab-trbw	***Currently in Shortage***
Thiothixene Capsules	***Currently in Shortage***
Triamcinolone Acetonide Injectable Suspension	***Currently in Shortage***
Triamcinolone Hexacetonide Injectable suspension	***Currently in Shortage***
Trimethobenzamide Hydrochloride Capsules	***Currently in Shortage***
Valproate Sodium Injection	***Currently in Shortage***
Varenicline Tartrate (Chantix) Tablets	***Currently in Shortage***
Vecuronium Bromide for Injection	***Currently in Shortage***
Vitamin A Palmitate (Aquasol A) Injection	***Currently in Shortage***