OKLAHOMA
Health Care Authority

Drug Utilization Review Board

Wednesday,
May 11, 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:
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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 – May 4, 2022

DATE: May 11, 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.

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Enclosed are the following items related to the May 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/Prenatal Vitamin (PNV) Utilization Update – Appendix B

Action Item – Vote to Prior Authorize Releuko™ (Filgrastim-ayow) and Update the Approval Criteria for the Granulocyte Colony-Stimulating Factors (G-CSFs) – Appendix C

Action Item – Vote to Prior Authorize Lampit® (Nifurtimox) – Appendix D

Action Item – Vote to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide) and Update the Approval Criteria for the Growth Hormone Products – Appendix E

Action Item – Vote to Prior Authorize Ponvory™ (Ponesimod) and Update the Approval Criteria for the Multiple Sclerosis Medications – Appendix F

Action Item – Vote to Prior Authorize Brexafemme® (Ibrexafungerp) and Update the Approval Criteria for the Systemic Antifungal Medications – Appendix G

Action Item – Vote to Prior Authorize Zynlonta™ (Loncastuximab Tesirine) and Update the Approval Criteria for the Lymphoma Medications – Appendix H

Annual Review of Lung Cancer Medications and 30-Day Notice to Prior Authorize Exkivity® (Mobocertinib), Lumakras™ (Sotorasib), and Rybrevant™ (Amivantamab-vmjw) – Appendix I

Annual Review of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide) – Appendix J

Annual Review of Nasal Allergy Medications and 30-Day Notice to Prior Authorize Ryaltris® (Mometasone/Olopatadine) – Appendix K

Annual Review of Heart Failure Medications – Appendix L

Annual Review of Anti-Diabetic Medications and 30-Day Notice to Prior Authorize Kerendia® (Finerenone), Rezvoglar™ (Insulin Glargine-aglr), and Semglee® (Insulin Glargine-yfgn) – Appendix M

Annual Review of Muscular Dystrophy Medications – Appendix N

Annual Review of Lumizyme® (Alglucosidase Alfa) and 30-Day Notice to Prior Authorize Nexviazyme® (Avalglucosidase Alfa-ngpt) – Appendix O

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

Future Business

Adjournment

Oklahoma Health Care Authority

Drug Utilization Review Board
(DUR Board)
Meeting – May 11, 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

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

Or join by phone:
Dial: +1-602-753-0140 or +1-669-219-2599
Webinar ID: 952 7560 1667
Passcode: 69395211

Public Comment for Meeting:

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

Items to be presented by Dr. Muchmore, Chairman:

2. **Public Comment Forum**
   A. Acknowledgement of Speakers for Public Comment

Items to be presented by Dr. Muchmore, Chairman:

3. **Action Item – Approval of DUR Board Meeting Minutes – See Appendix A**
   A. April 13, 2022 DUR Board Meeting Minutes
   B. April 13, 2022 DUR Board Recommendations Memorandum

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

4. **Update on Medication Coverage Authorization Unit/Prenatal Vitamin (PNV) Utilization Update – See Appendix B**
   A. Pharmacy Helpdesk Activity for April 2022
   B. Medication Coverage Activity for April 2022
   C. PNV Utilization Update

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

5. **Action Item – Vote to Prior Authorize Releuko™ (Filgrastim-ayow) and Update the Approval Criteria for the Granulocyte Colony-Stimulating Factors (G-CSFs) – See Appendix C**
   A. Market News and Updates
   B. Cost Comparison for Filgrastim Products
   C. College of Pharmacy Recommendations

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

6. **Action Item – Vote to Prior Authorize Lampit® (Nifurtimox) – See Appendix D**

A. Market News and Updates
B. Lampit® (Nifurtimox) Product Summary
C. College of Pharmacy Recommendations

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

7. **Action Item – Vote to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide) and Update the Approval Criteria for the Growth Hormone Products – See Appendix E**

A. Market News and Updates
B. Skytrofa® (Lonapegsomatropin-tcgd) Product Summary
C. Voxzogo™ (Vosoritide) Product Summary
D. College of Pharmacy Recommendations

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

8. **Action Item – Vote to Prior Authorize Ponvory® (Ponesimod) and Update the Approval Criteria for the Multiple Sclerosis Medications – See Appendix F**

A. Market News and Updates
B. Ponvory® (Ponesimod) Product Summary
C. College of Pharmacy Recommendations

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

9. **Action Item – Vote to Prior Authorize Brexafemme® (Ibrexafungerp) and Update the Approval Criteria for the Systemic Antifungal Medications – See Appendix G**

A. Market News and Updates
B. Brexafemme® (Ibrexafungerp) Product Summary
C. College of Pharmacy Recommendations

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

10. **Action Item – Vote to Prior Authorize Zynlonta™ (Loncastuximab Tesirine) and Update the Approval Criteria for the Lymphoma Medications – See Appendix H**

A. Market News and Updates
B. Zynlonta™ (Loncastuximab Tesirine) Product Summary
C. College of Pharmacy Recommendations

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

11. **Annual Review of Lung Cancer Medications and 30-Day Notice to Prior Authorize Exkivity® (Mobocertinib), Lumakras™ (Sotorasib), and Rybrevant™ (Amivantamab-vmjw) – See Appendix I**

A. Introduction
B. Current Prior Authorization Criteria
C. Utilization of Lung Cancer Medications
D. Prior Authorization of Lung Cancer Medications

E. Market News and Updates
F. Product Summaries
G. College of Pharmacy Recommendations
H. Utilization Details of Lung Cancer Medications

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

12. Annual Review of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide) – See Appendix J

A. Current Prior Authorization Criteria
B. Utilization of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide)
C. Prior Authorization of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide)
D. Market News and Updates
E. College of Pharmacy Recommendations
F. Utilization Details of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide)

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

13. Annual Review of Nasal Allergy Medications and 30-Day Notice to Prior Authorize Ryaltris™ (Mometasone/Olopatadine) – See Appendix K

A. Current Prior Authorization Criteria
B. Utilization of Nasal Allergy Medications
C. Prior Authorization of Nasal Allergy Medications
D. Market News and Updates
E. Ryaltris™ (Mometasone/Olopatadine) Product Summary
F. College of Pharmacy Recommendations
G. Utilization Details of Nasal Allergy Medications

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

14. Annual Review of Heart Failure (HF) Medications – See Appendix L

A. Current Prior Authorization Criteria
B. Utilization of HF Medications
C. Prior Authorization of HF Medications
D. Market News and Updates
E. College of Pharmacy Recommendations
F. Utilization Details of HF Medications

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

15. Annual Review of Anti-Diabetic Medications and 30-Day Notice to Prior Authorize Kerendia® (Finerenone), Rezvoglar™ (Insulin Glargine-aglr), and Semglee® (Insulin Glargine-yfgn) – See Appendix M

A. Current Prior Authorization Criteria
B. Utilization of Anti-Diabetic Medications
C. Prior Authorization of Anti-Diabetic Medications
D. Market News and Updates
E. Kerendia® (Finerenone) Product Summary
F. College of Pharmacy Recommendations

G. Utilization Details of Anti-Diabetic Medications

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

16. Annual Review of Muscular Dystrophy Medications – See Appendix N

A. Current Prior Authorization Criteria
B. Utilization of Muscular Dystrophy Medications
C. Prior Authorization of Muscular Dystrophy Medications
D. Market News and Updates
E. College of Pharmacy Recommendations
F. Utilization Details of Muscular Dystrophy Medications

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

17. Annual Review of Lumizyme® (Alglucosidase Alfa) and 30-Day Notice to Prior Authorize Nexviazyme® (Avalglucosidase Alfa-ngpt) – See Appendix O

A. Current Prior Authorization Criteria
B. Utilization of Lumizyme® (Alglucosidase Alfa)
C. Prior Authorization of Lumizyme® (Alglucosidase Alfa)
D. Market News and Updates
E. Nexviazyme® (Avalglucosidase Alfa-ngpt) Product Summary
F. College of Pharmacy Recommendations

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

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

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

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

A. Antiviral Medications
B. Attention-Deficit Hyperactivity Disorder (ADHD) and Narcolepsy Medications
C. Atypical Antipsychotic Medications
D. Various Special Formulations

*Future product and class reviews subject to change.

20. 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 APRIL 13, 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	
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): N/A		

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

Debra Montgomery, D.O.; Medical Director	X	
Traylor Rains; State Medicaid Director		X
Jill Ratterman, D.Ph.; Clinical Pharmacist	X	
Paula Root, M.D.; Senior Medical Director, Interim Chief Medical Officer	X	
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:	
Joe Garcia, AbbVie	Rick Dabner, Alnylam
Gia McLean, Amgen	Nima Nabavi, Amgen
Christopher Dobberpuhl, Ascendis	Tracey Maravilla, Ascendis
Lori Howarth, Bayer	Robert Greely, Biogen
Bryan Steffan, Boehringer-Ingelheim	Emma Selm-Keck, DK Pierce
Vicki Mee, Eversana	Kendal Lopez, Genentech
Rodney Brown, Genentech	Jennifer Davis, Gilead
Heather Higgins, Jazz	Marc Bagby, Lilly
Brandon Ross, Merck	Brent Parker, Merck
Evie Knisely, Novartis	Sarah Sanders, Novartis
Jessica Chardoulias, Novo Nordisk	Gina Heinen, Novo Nordisk
David Prather, Novo Nordisk	John Ford, NS Pharma
Mark Kaiser, Otsuka	Chrystal Mayes, Sanofi
Eric Berthelot, Sobi	Jeff Knappen, Spark Therapeutics
Aaron Austin, Takeda	Annie Huang, Takeda
Raquel Jordan, Takeda	Amy Breen, Teva
Dave Miley, Teva	Julie Kwon, Ultragenyx
J Odell, Ultragenyx	

PRESENT FOR PUBLIC COMMENT:	
Gia McLean, Amgen	

<u>AGENDA ITEM NO. 1:</u> **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

<u>AGENDA ITEM NO. 2:</u> **PUBLIC COMMENT FORUM**

2A: AGENDA ITEM NO. 9 GIA MCLEAN

ACTION: NONE REQUIRED

<u>AGENDA ITEM NO. 3:</u> **APPROVAL OF DUR BOARD MEETING MINUTES**

3A: FEBRUARY 9, 2022 DUR MINUTES – VOTE

Materials included in agenda packet; presented by Dr. Muchmore

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

ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 4:</u> **UPDATE ON MEDICATION COVERAGE AUTHORIZATION UNIT/SPRING 2022 PIPELINE UPDATE**

4A: PHARMACY HELPDESK ACTIVITY FOR FEBRUARY 2022

4B: MEDICATION COVERAGE ACTIVITY FOR FEBRUARY 2022
4C: PHARMACY HELPDESK ACTIVITY FOR MARCH 2022
4D: MEDICATION COVERAGE ACTIVITY FOR MARCH 2022
4E: SPRING 2022 PIPELINE UPDATE
Materials included in agenda packet; presented by Dr. O'Halloran, Dr. Wilson
ACTION: NONE REQUIRED

<u>AGENDA ITEM NO. 5:</u> MEDICATION THERAPY MANAGEMENT (MTM) PROGRAM CALENDAR YEAR 2021 REVIEW
5A: BACKGROUND
5B: WORKFLOW
5C: RESULTS
5D: CASE STUDY
5E: SUMMARY
Materials included in agenda packet; presented by Dr. Smith
ACTION: NONE REQUIRED

<u>AGENDA ITEM NO. 6:</u> VOTE TO PRIOR AUTHORIZE ELEPSIA™ XR [LEVETIRACETAM EXTENDED-RELEASE (ER) TABLET] AND EPRONTIA™ (TOPIRAMATE ORAL SOLUTION)
6A: MARKET NEWS AND UPDATES
6B: ELEPSIA™ (LEVETIRACETAM ER TABLET) PRODUCT SUMMARY
6C: EPRONTIA™ (TOPIRAMATE ORAL SOLUTION) PRODUCT SUMMARY
6D: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Ha
Dr. Muñoz moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 7:</u> VOTE TO PRIOR AUTHORIZE WINLEVI® (CLASCOTERONE 1% CREAM)
7A: MARKET NEWS AND UPDATES
7B: WINLEVI® (CLASCOTERONE 1% CREAM) PRODUCT SUMMARY
7C: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Wilson
Dr. Anderson moved to approve; seconded by Dr. Muñoz
ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 8:</u> VOTE TO PRIOR AUTHROIZE DOJOLVI® (TRIHEPTANOIN)
8A: MARKET NEWS AND UPDATES
8B: DOJOLVI® (TRIHEPTANOIN) PRODUCT SUMMARY
8C: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Wilson
Dr. Mitchell moved to approve; seconded by Dr. Muñoz
ACTION: MOTION CARRIED

<u>AGENDA ITEM NO. 9:</u> VOTE TO PRIOR AUTHORIZE QULIPTA™ (ATOGEPANT) AND TRUDHESA™ (DIHYDROERGOTAMINE NASAL SPRAY) AND UPDATE THE APPROVAL CRITERIA FOR THE ANTI-MIGRAINE MEDICATIONS
9A: MARKET NEWS ANUD UPDATES
9B: QULIPTA™ (ATOGEPANT) PRODUCT SUMMARY
9C: TRUDHESA™ (DIHYDROERGOTAMINE NASAL SPRAY) PRODUCT SUMMARY
9D: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Chandler

Dr. Muñoz moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 10: 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
10A: MARKET NEWS AND UPDATES
10B: PRODUCT SUMMARIES
10C: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Borders
Dr. Anderson moved to approve; seconded by Dr. Muñoz
ACTION: MOTION CARRIED

AGENDA ITEM NO. 11: ANNUAL REVIEW OF HEMOPHILIA MEDICATIONS
11A: CURRENT PRIOR AUTHORIZATION CRITERIA
11B: UTILIZATION OF HEMOPHILIA MEDICATIONS
11C: PRIOR AUTHORIZATION OF HEMOPHILIA MEDICATIONS
11D: MARKET NEWS AND UPDATES
11E: HEMOPHILIA A WITH INHIBITOR TREATMENT
11F: OKLAHOMA HEALTH CARE AUTHORITY RECOMMENDATIONS
11G: UTILIZATION DETAILS OF HEMOPHILIA MEDICATIONS
Materials included in agenda packet; presented by Dr. Ratterman
Dr. Mitchell moved to approve; seconded by Dr. Muñoz
ACTION: MOTION CARRIED

AGENDA ITEM NO. 12: ANNUAL REVIEW OF LYMPHOMA MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE ZYNLONTA® (LONCASTUXIMAB TESIRINE-LPLY)
12A: INTRODUCTION
12B: CURRENT PRIOR AUTHORIZATION CRITERIA
12C: UTILIZATION OF LYMPHOMA MEDICATIONS
12D: PRIOR AUTHORIZATION OF LYMPHOMA MEDICATIONS
12E: MARKET NEWS AND UPDATES
12F: ZYNLONTA® (LONCASTUXIMAB TESIRINE-LPLY) PRODUCT SUMMARY
12G: COLLEGE OF PHARMACY RECOMMENDATIONS
12H: UTILIZATION DETAILS OF LYMPHOMA MEDICATIONS
Materials included in agenda packet; presented by Dr. Borders
ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN MAY

AGENDA ITEM NO. 13: ANNUAL REVIEW OF LUTATHERA® (LUTETIUM LU-177 DOTATATE) AND VITRAKVI® (LAROTRECTINIB)
13A: INTRODUCTION
13B: CURRENT PRIOR AUTHORIZATION CRITERIA
13C: UTILIZATION OF LUTATHERA® (LUTETIUM LU-177 DOTATATE) AND VITRAKVI® (LAROTRECTINIB)
13D: PRIOR AUTHORIZATION OF LUTATHERA® (LUTETIUM LU-177 DOTATATE) AND VITRAKVI® (LAROTRECTINIB)
13E: MARKET NEWS AND UPDATES
13F: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Borders
ACTION: NONE REQUIRED

AGENDA ITEM NO. 14: **ANNUAL REVIEW OF GROWTH HORMONE PRODUCTS AND 30-DAY NOTICE TO PRIOR AUTHORIZE SKYTROFA® (LONAPEGSOMATROPIN-TCGD) AND VOXZOGO™ (VOSORITIDE)**

14A: CURRENT PRIOR AUTHORIZATION CRITERIA
14B: UTILIZATION OF GROWTH HORMONE PRODUCTS
14C: PRIOR AUTHORIZATION OF GROWTH HORMONE PRODUCTS
14D: MARKET NEWS AND UPDATES
14E: SKYTROFA® (LONAPEGSOMATROPIN-TCGD) PRODUCT SUMMARY
14F: VOXZOGO™ (VOSORITIDE) PRODUCT SUMMARY
14G: COLLEGE OF PHARMACY RECOMMENDATIONS
14H: UTILIZATION DETAILS OF GROWTH HORMONE PRODUCTS

Materials included in agenda packet; presented by Dr. Wilson

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

AGENDA ITEM NO. 15: **ANNUAL REVIEW OF GRANULOCYTE COLONY-STIMULATING FACTORS (G-CSFS) AND 30-DAY NOTICE TO PRIOR AUTHORIZE RELEUKO™ (FILGRASTIM-AYOW)**

15A: CURRENT PRIOR AUTHORIZATION CRITERIA
15B: UTILIZATION OF G-CSFS
15C: PRIOR AUTHORIZATION OF G-CSFS
15D: MARKET NEWS AND UPDATES
15E: COLLEGE OF PHARMACY RECOMMENDATIONS
15F: UTILIZATION DETAILS OF G-CSFS

Materials included in agenda packet; presented by Dr. Ha

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

AGENDA ITEM NO. 16: **ANNUAL REVIEW OF ANTI-PARASITIC MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE LAMPIT® (NIFURTIMOX)**

16A: CURRENT PRIOR AUTHORIZATION CRITERIA
16B: UTILIZATION OF ANTI-PARASITIC MEDICATIONS
16C: PRIOR AUTHORIZATION OF ANTI-PARASITIC MEDICATIONS
16D: MARKET NEWS AND UPDATES
16E: LAMPIT® (NIFURTIMOX) PRODUCT SUMMARY
16F: COLLEGE OF PHARMACY RECOMMENDATIONS
16G: UTILIZATION DETAILS OF ANTI-PARASITIC MEDICATIONS

Materials included in agenda packet; presented by Dr. Ha

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

AGENDA ITEM NO. 17: **ANNUAL REVIEW OF SYSTEMIC ANTIFUNGAL MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE BREXAFEMME® (IBREXAFUNGERP)**

17A: CURRENT PRIOR AUTHORIZATION CRITERIA
17B: UTILIZATION OF SYSTEMIC ANTIFUNGAL MEDICATIONS
17C: PRIOR AUTHORIZATION OF SYSTEMIC ANTIFUNGAL MEDICATIONS
17D: MARKET NEWS AND UPDATES
17E: BREXAFEMME® (IBREXAFUNGERP) PRODUCT SUMMARY
17F: COLLEGE OF PHARMCY RECOMMENDATIONS
17G: UTILIZATION DETAILS OF SYSTEMIC ANTIFUNGAL MEDICATIONS

Materials included in agenda packet; presented by Dr. Chandler

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

AGENDA ITEM NO. 18: **ANNUAL REVIEW OF MULTIPLE SCLEROSIS (MS) MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE PONVORY™ (PONESIMOD)**

18A: CURRENT PRIOR AUTHORIZATION CRITERIA
18B: UTILIZATION OF MS MEDICATIONS
18C: PRIOR AUTHORIZATION OF MS MEDICATIONS
18D: MARKET NEWS AND UPDATES
18E: PONVORY™ (PONESIMOD) PRODUCT SUMMARY
18F: COLLEGE OF PHARMACY RECOMMENDATIONS
18G: UTILIZATION DETAILS OF MS MEDICATIONS

Materials included in agenda packet; presented by Dr. O'Halloran
ACTION: NONE REQUIRED; WILL BE AN ACTION ITEM IN MAY

AGENDA ITEM NO. 19: **U.S. FOOD AND DRUG ADMINISTRATION (FDA) AND DRUG ENFORCEMENT ADMINISTATION (DEA) UPDATES**

Materials included in agenda packet; presented by Dr. O'Halloran
ACTION: NONE REQUIRED

AGENDA ITEM NO. 20: **FUTURE BUSINESS* (UPCOMING PRODUCT AND CLASS REVIEWS)**

20A: ANTI-DIABETIC MEDICATIONS
20B: HEART FAILURE MEDICATIONS
20C: LUNG CANCER MEDICATIONS
20D: MUSCULAR DYSTROPHY MEDICATIONS

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

AGENDA ITEM NO. 21: **ADJOURNMENT**

The meeting was adjourned at 5:55pm.

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

Memorandum

Date: April 15, 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 April 13, 2022

Recommendation 1: Spring 2022 Pipeline Update

NO ACTION REQUIRED.

Recommendation 2: Medication Therapy Management (MTM) Program Calendar Year 2021 Review

NO ACTION REQUIRED.

Recommendation 3: Vote to Prior Authorize Elepsia™ XR [Levetiracetam Extended-Release (ER) Tablet] and Eprontia™ (Topiramate Oral Solution)

MOTION CARRIED by unanimous approval.

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.

Recommendation 4: Vote to Prior Authorize Winlevi® (Clascoterone 1% Cream)

MOTION CARRIED by unanimous approval.

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.

Recommendation 5: Vote to Prior Authorize Dojolvi® (Triheptanoin)

MOTION CARRIED by unanimous approval.

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.

Recommendation 6: Vote to Prior Authorize Qulipta™ (Atogepant) and Trudhesa™ (Dihydroergotamine Nasal Spray) and Update the Approval Criteria for the Anti-Migraine Medications

MOTION CARRIED by unanimous approval.

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 Based 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 and new criteria 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

Recommendation 7: 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

MOTION CARRIED by unanimous approval.

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 National Comprehensive Cancer Network (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.

Recommendation 8: Annual Review of Hemophilia Medications

MOTION CARRIED by unanimous approval.

The Oklahoma Health Care Authority recommends the following changes to the current hemophilia A inhibitor treatments approval criteria based on the World Federation of Hemophilia (WFH) and the National Hemophilia Foundation's Medical and Scientific Advisory Council (MASAC) recommendations (changes shown in red):

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® (emicizumab-kxwh) 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® (emicizumab-kxwh) 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® (emicizumab-kxwh) 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.

Recommendation 9: Annual Review of Lymphoma Medications and 30-Day Notice to Prior Authorize Zynlonta® (Loncastuximab Tesirine-lply)

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

Recommendation 10: Annual Review of Lutathera® (Lutetium Lu-177 Dotatate) and Vitrakvi® (Larotrectinib)

NO ACTION REQUIRED.

Recommendation 11: Annual Review of Growth Hormone Products and 30-Day Notice to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide)

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

Recommendation 12: Annual Review of Granulocyte Colony-Stimulating Factors (G-CSFs) and 30-Day Notice to Prior Authorize Releuko™ (Filgrastim-ayow)

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

Recommendation 13: Annual Review of Anti-Parasitic Medications and 30-day Notice to Prior Authorize Lampit® (Nifurtimox)

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

Recommendation 14: Annual Review of Systemic Antifungal Medications and 30-Day Notice to Prior Authorize Brexafemme® (Ibrexafungerp)

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

Recommendation 15: Annual Review of Multiple Sclerosis Medications and 30-Day Notice to Prior Authorize Ponvory™ (Ponesimod)

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

Recommendation 16: U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates

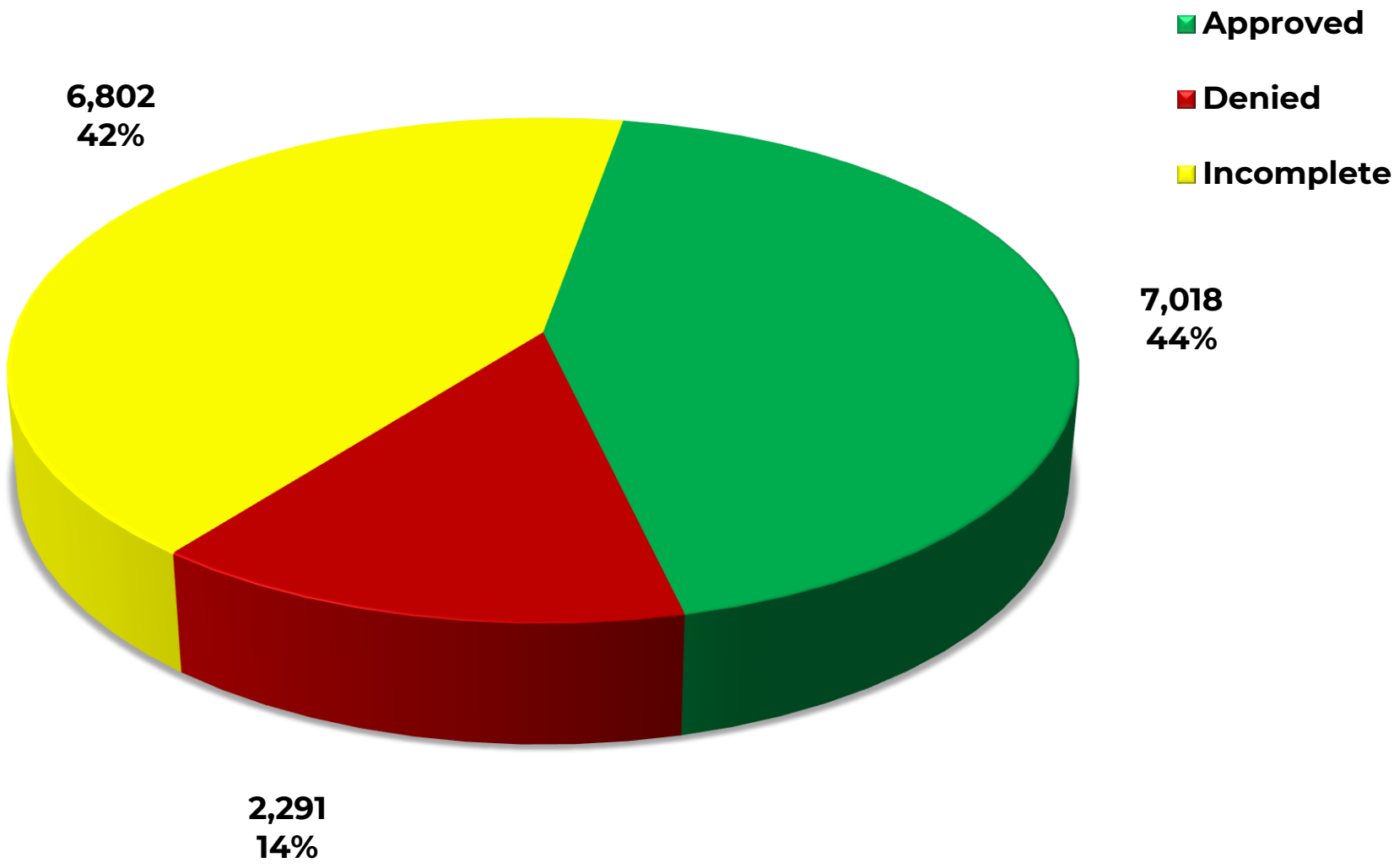
NO ACTION REQUIRED.

Recommendation 17: Future Business

NO ACTION REQUIRED.

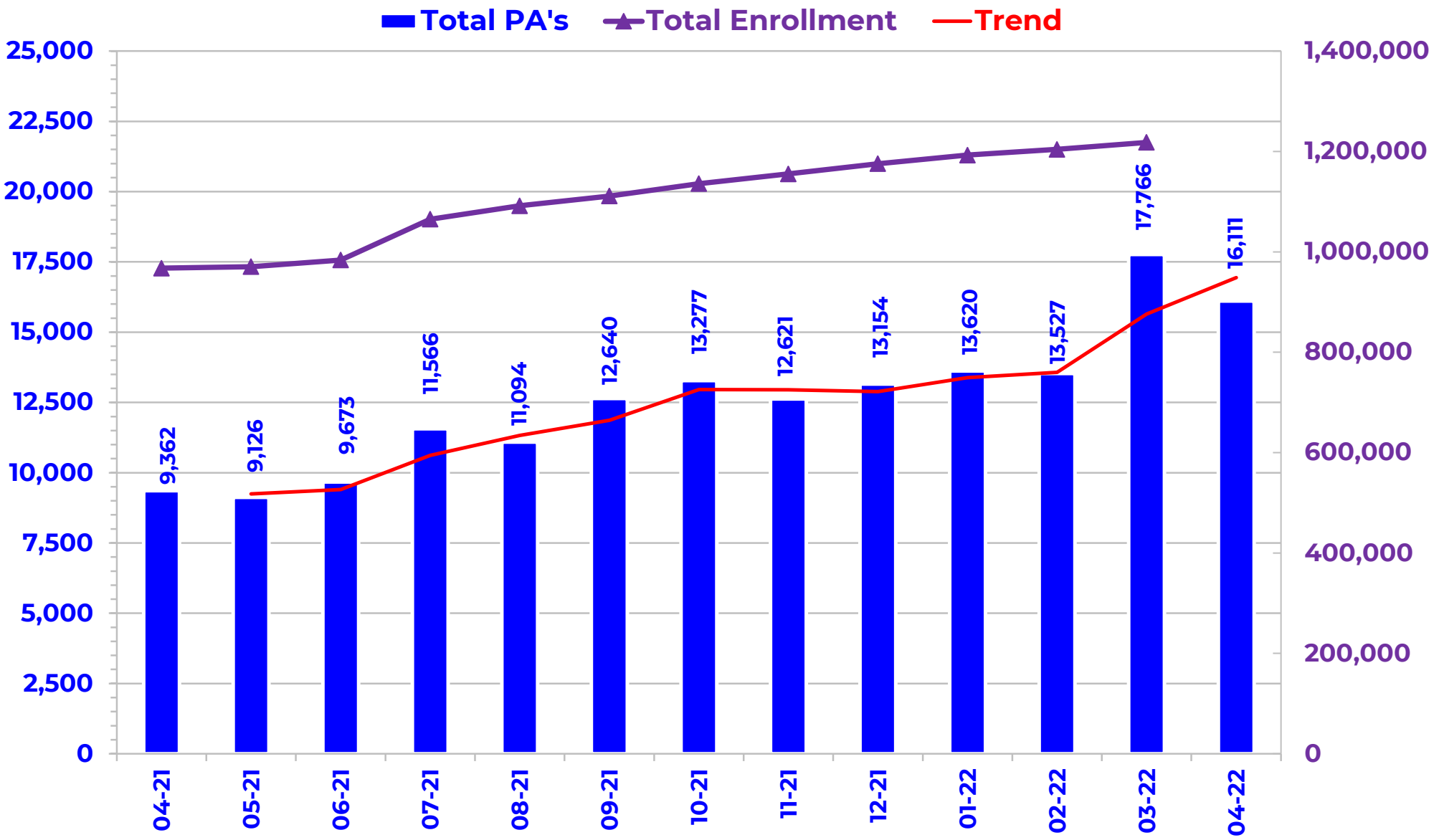
Appendix B

PRIOR AUTHORIZATION ACTIVITY REPORT: APRIL 2022



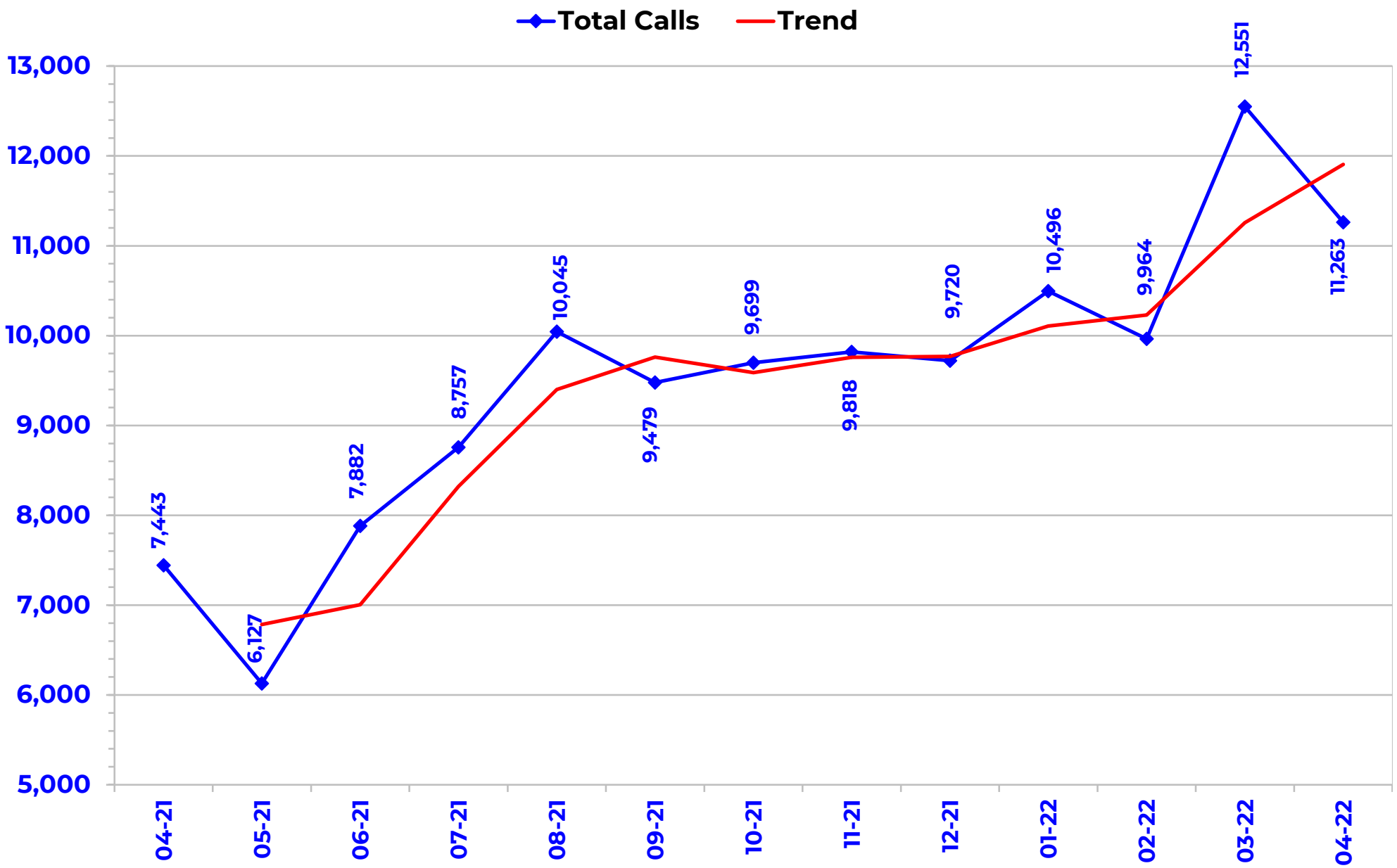
PA totals include approved/denied/incomplete/overrides

PRIOR AUTHORIZATION REPORT: APRIL 2021 – APRIL 2022



PA totals include approved/denied/incomplete/overrides

CALL VOLUME MONTHLY REPORT: APRIL 2021 – APRIL 2022



Prior Authorization Activity

4/1/2022 Through 4/30/2022

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Advair/Symbicort/Dulera	110	30	8	72	357
Analgesic - NonNarcotic	28	1	6	21	176
Analgesic, Narcotic	370	123	42	205	149
Antiasthma	117	35	27	55	295
Antibiotic	83	31	5	47	141
Anticonvulsant	212	85	26	101	320
Antidepressant	440	114	64	262	335
Antidiabetic	1,402	468	248	686	359
Antifungal	15	2	4	9	92
Antigout	18	5	3	10	359
Antihistamine	63	17	11	35	330
Antimalarial Agent	133	99	12	22	343
Antimigraine	573	92	175	306	253
Antineoplastic	270	172	14	84	169
Antiobesity	21	0	21	0	0
Antiparasitic	43	19	3	21	10
Antiparkinsons	15	1	6	8	360
Antiulcers	67	10	15	42	136
Anxiolytic	18	2	2	14	7
Atypical Antipsychotics	603	233	79	291	357
Biologics	417	220	42	155	279
Bladder Control	82	14	27	41	301
Blood Thinners	785	430	34	321	338
Botox	77	48	17	12	311
Buprenorphine Medications	131	45	21	65	77
Calcium Channel Blockers	32	5	8	19	306
Cardiovascular	109	39	18	52	286
Chronic Obstructive Pulmonary Disease	354	67	88	199	322
Constipation/Diarrhea Medications	257	40	72	145	182
Contraceptive	31	8	6	17	323
Dermatological	445	151	127	167	215
Diabetic Supplies	1,159	412	190	557	269
Endocrine & Metabolic Drugs	129	62	19	48	178
Erythropoietin Stimulating Agents	19	8	5	6	111
Estrogen Derivative	17	3	2	12	361
Fibric Acid Derivatives	11	0	1	10	0
Fibromyalgia	19	4	5	10	185
Fish Oils	38	7	8	23	333
Gastrointestinal Agents	229	44	39	146	164

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

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Genitourinary Agents	23	2	5	16	60
Glaucoma	34	10	5	19	219
Growth Hormones	131	95	7	29	145
Hematopoietic Agents	43	20	4	19	209
Hepatitis C	276	167	32	77	9
HFA Rescue Inhalers	18	1	1	16	360
Insomnia	119	11	25	83	136
Insulin	285	86	47	152	351
Miscellaneous Antibiotics	28	8	6	14	13
Multiple Sclerosis	94	49	4	41	198
Muscle Relaxant	66	6	13	47	100
Nasal Allergy	155	21	37	97	161
Neurological Agents	134	48	28	58	224
NSAIDs	54	4	12	38	271
Ocular Allergy	35	3	7	25	87
Ophthalmic	11	2	3	6	190
Ophthalmic Anti-infectives	30	11	3	16	41
Ophthalmic Corticosteroid	11	4	1	6	283
Osteoporosis	39	14	7	18	348
Other*	403	105	61	237	309
Otic Antibiotic	26	1	1	24	9
Pediculicide	10	1	1	8	16
Respiratory Agents	47	24	0	23	265
Smoking Cess.	30	0	25	5	0
Statins	73	8	15	50	106
Stimulant	1,818	1,143	120	555	350
Synagis	10	2	7	1	34
Testosterone	197	46	40	111	340
Thyroid	44	19	6	19	316
Topical Antifungal	62	5	16	41	85
Topical Corticosteroids	107	2	72	33	191
Vitamin	133	22	62	49	191
Pharmacotherapy	47	45	0	2	220
Emergency PAs	0	0	0	0	
Total	**13,535**	**5,131**	**2,173**	**6,231**	

* 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	17	11	2	4	285
Compound	11	8	0	3	13
Cumulative Early Refill	1	0	0	1	0
Diabetic Supplies	3	2	1	0	84
Dosage Change	541	512	0	29	14
High Dose	9	5	1	3	72
Ingredient Duplication	6	3	0	3	12
Lost/Broken Rx	144	129	3	12	15
MAT Override	307	233	5	69	83
NDC vs. Age	422	248	47	127	250
NDC vs. Sex	12	7	1	4	176
Nursing Home Issue	100	94	0	6	14
Opioid MME Limit	121	45	5	71	131
Opioid Quantity	54	43	2	9	153
Other	60	54	2	4	21
Quantity vs. Days Supply	665	426	39	200	250
STBS/STBSM	23	13	3	7	115
Step Therapy Exception	17	7	4	6	260
Stolen	16	13	1	2	22
Third Brand Request	47	34	2	11	24
Overrides Total	**2,576**	**1,887**	**118**	**571**	
Total Regular PAs + Overrides	**16,111**	**7,018**	**2,291**	**6,802**	

Denial Reasons	
Unable to verify required trials.	5,865
Does not meet established criteria.	2,322
Lack required information to process request.	987
Other PA Activity	
Duplicate Requests	1,203
Letters	34,963
No Process	7
Changes to existing PAs	1,257
Helpdesk Initiated Prior Authorizations	1,047
PAs Missing Information	6

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

Prenatal Vitamin Utilization Update

Oklahoma Health Care Authority
May 2022

Introduction[1,2,3]

The use of prenatal vitamins (PNVs) plays a major role in optimal pregnancy outcomes. Deficiencies in folic acid, iron, calcium, and vitamin D can lead to an array of adverse outcomes that can affect both the mother and baby. The increased risk of neural tube defects due to folic acid deficiency has been well documented in the literature. Iron deficiency is the second most common cause of anemia in pregnancy, and several large studies have found correlations between maternal anemia and the risk of preterm birth and low birth weight. Insufficient calcium has been linked to the development of maternal hypertension, which can lead to maternal mortality, fetal growth restriction, and preterm birth. Vitamin D deficiency can lead to pre-eclampsia and increase the risk of babies being born prematurely and small-for-gestational age. The role of PNVs in reducing these possible outcomes cannot be understated.

The College of Pharmacy and the Oklahoma Health Care Authority (OHCA) are engaged in an ongoing effort to increase PNV utilization among pregnant SoonerCare members. PNVs currently have a $0 copay and do not count toward the monthly prescription limit. Prescribers also have the option to select from over 35 different PNVs that are covered without a prior authorization (PA). In June 2020, prescribers and pharmacies received an educational outreach addressing the concerning decrease in PNV utilization in pregnant SoonerCare members. The educational outreach highlighted SoonerCare's preferred PNVs and included NDC numbers to encourage increased prescribing of PNVs.

The College of Pharmacy also incorporates PNV education into its workflow to increase PNV utilization. When a PA request for any pregnancy-related medication is received, as well as any non-PNV medication for a member in the Soon-to-be-Sooners (STBS) program, the member's pharmacy claims history is reviewed for PNV paid claims. If the member does not have a recent paid claim for a PNV, a reminder is included in the PA response to the prescriber and the pharmacy. The STBS program began in April 2008 and provides health care benefits for pregnancy-related medical services for pregnant women who would not otherwise qualify for SoonerCare benefits due to their citizenship status. There is a similar program, the STBS-Maintenance (STBS-M) program, which began in 2014 to provide health care benefits for pregnancy-related medical services for pregnant women who do

not otherwise qualify for SoonerCare; PAs for a member in the STBS-M program are evaluated in a similar manner to review for PNV utilization.

Utilization of PNV: Calendar Year 2021 (CY21)

In CY21, there were a total of 27,602 SoonerCare members with an outcome of delivery, based on mother's paid claims with delivery ICD-10 diagnosis codes, which may include non-live births. Mothers with multiple delivery ICD-10 diagnosis codes occurring on multiple dates were only included once. In CY21, only 26% of these members had at least 1 paid claim for a PNV. Of the 7,295 pregnant members who received a PNV in CY21, 67% of these members had only 1 to 2 fills of a PNV. Although preferred PNVs may be filled for greater than a 30-day supply, this number is very concerning since the maximum benefits of PNVs requires continued use throughout pregnancy. However, it is important to note that PNV utilization may be falsely low due to the large number of over-the-counter (OTC) products available. Data for the use of OTC products in SoonerCare members is not obtainable and is not included in this analysis. Additionally, the analysis does not include whether the member is receiving their PNVs through a non-SoonerCare source (i.e., office samples, Indian Health Services, private insurance, free clinics).

Recommendations

Based on the low percentage of pregnant members utilizing PNV in CY21, further education efforts are warranted. The College of Pharmacy will continue to promote PNV use in pregnant members by continuing educational outreach initiatives through prescriber letters, pharmacy fax blasts, provider and member newsletters, and other platforms as appropriate.

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[1] Oh C, Keats EC, Bhutta ZA. Vitamin and Mineral Supplementation During Pregnancy on Maternal, Birth, Child Health and Development Outcomes in Low- and Middle-Income Countries: A Systematic Review and Meta-Analysis. *Nutrients* 2020; 12(2):491. doi: 10.3390/nu12020491.
[2] Garner C. Nutrition in Pregnancy. *UpToDate*. Available online at: https://www.uptodate.com/contents/nutrition-in-pregnancy. Last revised 03/02/2021. Last accessed 04/21/2022.
[3] Auerbach M, Landy HJ. Anemia in Pregnancy. *UpToDate*. Available online at: https://www.uptodate.com/contents/anemia-in-pregnancy. Last revised 02/05/2021. Last accessed 04/21/2022.

Appendix C

Vote to Prior Authorize Releuko™ (Filgrastim-ayow) and Update the Criteria for the Granulocyte Colony-Stimulating Factors (G-CSFs)

Oklahoma Health Care Authority
May 2022

Market News and Updates[1]

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).

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.

[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 04/27/2022.

Appendix D

Vote to Prior Authorize Lampit® (Nifurtimox)

Oklahoma Health Care Authority
May 2022

Market News and Updates[1]

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 who weigh ≥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 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[2]

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.

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 tablets, and a quantity limit of 225 tablets per 30 days will apply to the 120mg tablets.

[1] 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 04/18/2022.

[2] 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 04/17/2022.

Appendix E

Vote to Prior Authorize Skytrofa® (Lonapegsomatropin-tcgd) and Voxzogo™ (Vosoritide) and Update the Approval Criteria for the Growth Hormone Products

Oklahoma Health Care Authority
May 2022

Market News and Updates[1,2]

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 and older with open epiphyses. 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.

Skytrofa® (Lonapegsomatropin-tcgd) Product Summary[3,4]

Indication(s): Skytrofa® (lonapegsomatropin-tcgd) is a pegylated prodrug of human growth hormone (hGH) 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

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 the 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.

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[5,6]

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.

Contraindication(s): None

Adverse Reactions: The most common adverse reactions (occurring in ≥5% of patients receiving Voxzogo™ 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.

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®
	ᵗSerostim® (somatropin) (EMD Serono) - Vial
	ᵗSkytrofa (lonapegsomatropin-tcgd) (Ascendis) - Cartridge
	ᵗSogroya® (somapacitan-beco) (NovoNordisk) - Pen
	Zomacton® and Zoma-Jet® (somatropin) (Ferring) - Vial, Injection Device
	ᵗZorbtive® (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)
ᵗAdditional 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 diagnosis 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 (or an advanced care practitioner with a supervising physician who is 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, growth velocity (GV) is <2.5cm/year, or member has received renal transplant, 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; 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 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.

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[1] 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 04/27/2022.

[2] 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 04/27/2022.

[3] 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 04/27/2022.

[4] 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.

[5] 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 04/27/2022.

[6] 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 F

Vote to Prior Authorize Ponvory® (Ponesimod) and Update the Approval Criteria for the Multiple Sclerosis Medications

Oklahoma Health Care Authority
May 2022

Market News and Updates[1,2]

New U.S. Food and Drug Administration (FDA) Approval(s) and Indication(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 multiple sclerosis (RMS) to include clinically isolated syndrome (CIS), relapsing-remitting MS (RRMS), and active secondary progressive MS (SPMS). 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®

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.

Ponvory® (Ponesimod) Product Summary[3]

Indication(s): Ponvory® (ponesimod) is a S1P1 modulator 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 and Administration:

- 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, medication history review for current/prior immunosuppressive/immune-modulating therapy, and varicella zoster virus (VZV) antibody test.
- Ponvory® should be initiated with the 14-day titration starter pack, followed by the recommended maintenance dose of 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 and can be taken with or without food.

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

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	$111,463.20[ß]
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.
[ß]Gilenya® 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.
[¥]Mayzent® cost per month and cost per year based on the recommended maintenance dosage of 2mg once daily.
[±]Zeposia® cost per month and cost per year based on the recommended maintenance dose of 0.92mg 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 intolerance to oral aminosalicylates, corticosteroids, immunomodulators (e.g., 6-mercaptopurine,

azathioprine), and a biologic [e.g., tumor necrosis factor (TNF) blocker]. Tier structure applies; and

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

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[1] 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 04/18/2022.

[2] 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.

[3] 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 04/18/2022.

Appendix G

Vote to Prior Authorize Brexafemme® (Ibrexafungerp) and Update the Approval Criteria for the Systemic Antifungal Medications

Oklahoma Health Care Authority
May 2022

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

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 placebo-controlled 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) intravenous (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[5]

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 due to the potential risk of fetal harm.

Contraindication(s):

- Pregnancy
- Hypersensitivity to ibrexafungerp

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. Efficacy was assessed by clinical outcome at the test of cure (TOC) visit. The primary endpoint was a complete clinical response, defined as the complete resolution of signs and symptoms [vulvovaginal signs and symptoms (VSS) score of 0].

- **Trial 1:** 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).
- **Trial 2:** 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).

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 VVC (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.~~

[1] 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 04/20/2022.
[2] 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 04/20/2022.
[3] 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 04/20/2022.
[4] 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 04/20/2022.
[5] 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 04/20/2022.

Appendix H

Vote to Prior Authorize Zynlonta® (Loncastuximab Tesirine-lply) and Update the Approval Criteria for the Lymphoma Medications

Oklahoma Health Care Authority
May 2022

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

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

- **April 2021:** The 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 (LBCL) after 2 or more lines of systemic therapy, including diffuse large B-cell lymphoma (DLBCL) not otherwise specified, DLBCL arising from low grade lymphoma, and high-grade B-cell lymphoma.
- **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 marginal zone lymphoma (MZL) who have received at least 1 anti-CD20-based regimen.
- **April 2022:** The FDA approved an expanded indication for Yescarta® (axicabtagene ciloleucel) to include the treatment of adult patients with LBCL that is refractory to first-line chemoimmunotherapy or relapses within 12 months of first-line chemoimmunotherapy.

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 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.

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[6]

- **Therapeutic Class:** CD19-directed antibody and alkylating agent conjugate
- **Indication(s):** Treatment of adult patients with relapsed or refractory LBCL 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.~~

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[3] 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 04/15/2022.

[4] 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.

[5] 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.

[6] 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 04/15/2022.

Appendix I

Calendar Year 2021 Annual Review of Lung Cancer Medications and 30-Day Notice to Prior Authorize Exkivity® (Mobocertinib), Lumakras™ (Sotorasib), and Rybrevant™ (Amivantamab-vmjw)

Oklahoma Health Care Authority
May 2022

Introduction[1,2,3]

The American Cancer Society estimates approximately 236,740 new lung cancer cases will be diagnosed in 2022. Lung cancer is the leading cause of cancer death, accounting for approximately 25% of all cancer-related deaths among both males and females. Lung cancer is most commonly diagnosed in older individuals with the average age at diagnosis being 70 years. Over 95% of all lung cancer cases are classified as either small cell lung cancer (SCLC) or non-small cell lung cancer (NSCLC). Defining the cell type is essential, as the prognosis and treatment of the 2 types differ substantially. NSCLC is more common than SCLC, with NSCLC accounting for approximately 84% of all lung cancer diagnoses. There are many subtypes of NSCLC including adenocarcinomas, squamous cell carcinomas, and large cell carcinomas. Each subtype falls under the broad term of NSCLC, as the approach to initial treatment of localized disease is similar among the subtypes.

In advanced stages, treatment decisions are guided by the stage of the disease, histology, and molecular features of the tumor. Patient-specific factors, such as performance status and comorbid conditions, are also considered when determining treatment plans. Surgical resection provides the best chance for cure in patients with stage I to II NSCLC and can be used in combination with cisplatin-based systemic chemotherapy and radiation. Chemotherapy or immunotherapy are the treatments of choice for stage III to IV NSCLC. The role of molecularly targeted therapy and immunotherapy has become part of standard-of-care treatment plans in select patients with NSCLC. SCLC differs in that there is no role for surgery in the treatment of this histology. Chemotherapy and radiation are the treatments of choice for SCLC, and immunotherapy is now an option for SCLC extensive stage disease.

Current Prior Authorization Criteria

Criteria for Keytruda® (pembrolizumab), Libtayo® (cemiplimab-rwlc), Mekinist® (trametinib), Opdivo® (nivolumab), Tafinlar® (dabrafenib), Yervoy® (ipilimumab), and Zelboraf® (vemurafenib) for indications other than lung

cancer diagnoses can be found in the December 2021 Drug Utilization Review (DUR) Board packet. These medications and criteria are reviewed annually with the skin cancer medications.

Alecensa® (Alectinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of recurrent or metastatic NSCLC; and
2. Anaplastic lymphoma kinase (ALK) positivity; and
3. First-line or recurrent setting; and
4. As a single agent only.

Alunbrig® (Brigatinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. Anaplastic lymphoma kinase (ALK) positivity.

Cosela™ (Trilaciclib) Approval Criteria [Extensive-Stage Small Cell Lung Cancer (ES-SCLC) Diagnosis]:

1. Diagnosis of ES-SCLC; and
2. Member is undergoing myelosuppressive chemotherapy with 1 of the following:
    a. Platinum (carboplatin or cisplatin) and etoposide-containing regimen; or
    b. Topotecan-containing regimen; and
3. Cosela™ will not be approved for concomitant use with colony-stimulating factors (CSF) [e.g., granulocyte CSF (G-CSF), pegylated G-CSF (peg-G-CSF), granulocyte-macrophage CSF (GM-CSF)] for primary prophylaxis of febrile neutropenia prior to day 1 cycle 1 of chemotherapy.

Cyramza® (Ramucirumab) Approval Criteria [Colorectal Cancer Diagnosis]:

1. Diagnosis of colorectal cancer; and
2. Subsequent therapy for metastatic disease after progression on or after prior therapy with bevacizumab, oxaliplatin, and a fluoropyrimidine; and
3. In combination with an irinotecan-based regimen.

Cyramza® (Ramucirumab) Approval Criteria [Esophageal Cancer Diagnosis]:

1. Diagnosis of unresectable, locally advanced, recurrent, or metastatic esophageal or esophagogastric junction adenocarcinoma; and
2. Karnofsky performance score ≥60%; and
3. As a single agent or in combination with paclitaxel.

Cyramza® (Ramucirumab) Approval Criteria [Gastric Cancer Diagnosis]:

1. Diagnosis of gastric cancer; and

2. Member is not a surgical candidate or has unresectable, locally advanced, recurrent, or metastatic disease; and
3. Karnofsky performance score ≥60%; and
4. As a single agent or in combination with paclitaxel.

Cyramza® (Ramucirumab) Approval Criteria [Hepatocellular Carcinoma (HCC) Diagnosis]:

1. Diagnosis of HCC; and
2. Second-line or greater therapy; and
3. Previously failed sorafenib; and
4. Alpha-fetoprotein concentration ≥400ng/mL; and
5. As a single agent.

Cyramza® (Ramucirumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. First-line in combination with erlotinib; and
    a. Epidermal growth factor receptor (EGFR) exon 19 deletion or exon 21 L858R mutation; or
3. Subsequent therapy for metastatic disease; and
    a. In combination with docetaxel.

Gavreto® (Pralsetinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of NSCLC in adults; and
2. Recurrent, advanced, or metastatic disease; and
3. Rearranged during transfection (RET) fusion-positive tumor.

Gavreto® (Pralsetinib) Approval Criteria [Thyroid Cancer Diagnosis]:

1. Adult and pediatric members 12 years of age and older; and
2. Diagnosis of advanced or metastatic disease with either:
    a. Rearranged during transfection (RET)-mutant medullary thyroid cancer (MTC) requiring systemic therapy; or
    b. RET fusion-positive thyroid cancer requiring systemic therapy and member is radioactive iodine-refractory (if radioactive iodine is appropriate).

Gilotrif® (Afatinib) Approval Criteria [Head and Neck Cancer Diagnosis]:

1. Diagnosis of head and neck cancer; and
2. Disease progression on or after platinum-containing chemotherapy (e.g., cisplatin, carboplatin); and
3. Non-nasopharyngeal cancer must be 1 of the following:
    a. Newly diagnosed T4b, any N, M0 disease, unresectable nodal disease with no metastases, or for members who are unfit for surgery and have a performance status (PS) of 3; or

b. Metastatic (M1) disease at initial presentation, recurrent/persistent disease with distant metastases, or unresectable locoregional recurrence or second primary with prior radiation therapy (RT) and PS of 0 to 2; or
c. Unresectable locoregional recurrence without prior RT and PS of 3; and

4. As a single agent only.

Gilotrif® (Afatinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. As first-line therapy:
   a. Diagnosis of metastatic NSCLC; and
   b. Epidermal growth factor receptor (EGFR) mutation detected; and
   c. As a single agent only.
2. For second-line therapy:
   a. Diagnosis of metastatic NSCLC; and
   b. Progressed following platinum-based chemotherapy; and
   c. As a single agent or in combination with cetuximab in members with a known sensitizing EGFR mutation who are T790M negative.

Imfinzi® (Durvalumab) Approval Criteria [Extensive-Stage Small Cell Lung Cancer (ES-SCLC) Diagnosis]:

1. Diagnosis of ES-SCLC; and
2. In combination with etoposide and either cisplatin or carboplatin followed by single agent maintenance.

Imfinzi® (Durvalumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of stage III NSCLC; and
2. Disease has not progressed following concurrent platinum-based chemotherapy and radiation therapy.

Keytruda® (Pembrolizumab) Approval Criteria [Metastatic Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Opdivo® (nivolumab)]; and
3. Tumor proportion scores for programmed death ligand 1 (PD-L1) expression as follows:
   a. As a single agent, first-line: ≥1%; or
   b. First-line in combination: no expression required; or
   c. As a single agent, second-line: ≥1%; and
4. Member meets 1 of the following:
   a. Previously untreated, metastatic squamous NSCLC in combination with carboplatin and either paclitaxel or nab-paclitaxel; or

b. Previously untreated, metastatic non-squamous NSCLC in combination with pemetrexed and carboplatin; or
c. New diagnosis as first-line therapy (member has not received chemotherapy to treat disease) if:
    i. Tumor does not express sensitizing epidermal growth factor receptor (EGFR) mutations or anaplastic lymphoma kinase (ALK) translocations; or
d. As a single agent for disease progression on or after platinum-containing chemotherapy (e.g., cisplatin, carboplatin):
    i. Members with EGFR-mutation-positive tumors should have disease progression on FDA-approved therapy for these aberrations prior to receiving pembrolizumab. *This does not apply if tumors do not have these mutations*; and
        1. *Examples of drugs for EGFR-mutation-positive tumors: osimertinib, erlotinib, afatinib, or gefitinib; or*
    ii. Members with ALK genomic tumor aberrations should have disease progression on FDA-approved therapy for these aberrations prior to receiving pembrolizumab. *This does not apply if tumors do not have these mutations*; and
        1. *Examples of drugs for ALK-mutation-positive tumors: crizotinib, ceritinib, or alectinib*.

Keytruda® (Pembrolizumab) Approval Criteria [Nonmetastatic Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of stage III nonmetastatic NSCLC; and
2. Ineligible for surgery or definitive chemoradiation; and
3. Tumor proportion scores for programmed death ligand 1 (PD-L1) expression ≥1%; and
4. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Opdivo® (nivolumab)].

Keytruda® (Pembrolizumab) Approval Criteria [Small Cell Lung Cancer (SCLC) Diagnosis]:

1. Diagnosis of metastatic SCLC; and
2. Progressed on or following a platinum-based regimen and at least 1 other regimen; and
3. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Opdivo® (nivolumab)].

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

1. Diagnosis of advanced unresectable or metastatic NSCLC; and
2. High programmed death ligand 1 (PD-L1) expression [tumor proportion score (TPS) ≥50%]; and

3. No epidermal growth factor receptor (EGFR), anaplastic lymphoma kinase (ALK), or *ROS1* mutations.

Lorbrena® (Lorlatinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. Tumor expresses anaplastic lymphoma kinase (ALK) translocation; and
3. As a single agent as first-line therapy; or
4. As a single agent as second-line therapy following disease progression on either alectinib or ceritinib; or
5. As a single agent as third-line or greater therapy following disease progression on crizotinib and 1 other ALK inhibitor (i.e., ceritinib, alectinib).

Mekinist® (Trametinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of refractory or metastatic disease; and
2. BRAF V600E or V600K mutation; and
    a. Trametinib is not indicated for wild-type BRAF NSCLC; and
3. In combination with dabrafenib.

Mvasi® (Bevacizumab-awwb) Approval Criteria*:

1. A patient-specific, clinically significant reason why the member cannot use Avastin® (bevacizumab), which is available without prior authorization, must be provided.
   *Based on the net cost in comparison to Avastin®, Mvasi® is currently available without prior authorization.

Opdivo® (Nivolumab) Approval Criteria [Mesothelioma Diagnosis]:

1. Diagnosis of malignant pleural mesothelioma that cannot be surgically removed; and
2. Used as first-line therapy; and
3. Used in combination with ipilimumab.

Opdivo® (Nivolumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. For first-line therapy for recurrent, advanced, or metastatic disease, meeting the following:
    a. Used in combination with ipilimumab and 2 cycles of platinum-doublet chemotherapy; and
        i. No epidermal growth factor receptor (EGFR) or anaplastic lymphoma kinase (ALK) genomic tumor aberrations; and
        ii. Expresses programmed death ligand 1 (PD-L1) ≥1%; or
2. For second-line therapy for metastatic disease, meeting the following:
    a. Tumor histology is 1 of the following:

i. Adenocarcinoma; or
ii. Squamous cell; or
iii. Large cell; and

b. Disease progression on or after platinum-containing chemotherapy (e.g., cisplatin, carboplatin); and
c. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Keytruda® (pembrolizumab)]; and
d. Used as a single agent; and
e. Dose as follows: 240mg every 2 weeks or 480mg every 4 weeks.

Opdivo® (Nivolumab) Approval Criteria [Small Cell Lung Cancer (SCLC) Diagnosis]:

1. Diagnosis of SCLC; and
2. Member meets 1 of the following:
   a. Disease relapsed within 6 months of initial chemotherapy; or
   b. Disease progression on initial chemotherapy; and
3. As a single agent or in combination with Yervoy® (ipilimumab); and
4. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Keytruda® (pembrolizumab)].

Pemfexy™ (Pemetrexed) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason the member cannot use Alimta® (pemetrexed) must be provided.

Retevmo® (Selpercatinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of recurrent, advanced, or metastatic NSCLC; and
2. Rearranged during transfection (RET) fusion-positive tumor; and
3. As a single agent.

Retevmo® (Selpercatinib) Approval Criteria [Thyroid Cancer Diagnosis]:

1. Adult and pediatric members 12 years of age and older; and
2. As a single agent; and
3. Diagnosis of advanced or metastatic disease with either:
   a. Rearranged during transfection (RET)-mutant medullary thyroid cancer (MTC) requiring systemic therapy; or
   b. RET fusion-positive thyroid cancer requiring systemic therapy and member is radioactive iodine-refractory (if radioactive iodine is appropriate).

Rozlytrek® (Entrectinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. *ROS1*-positive.

Rozlytrek® (Entrectinib) Approval Criteria [Solid Tumor Diagnosis]:

1. Diagnosis of solid tumors; and
2. Member must be 12 years of age or older; and
3. Neurotrophic tyrosine receptor kinase (NTRK) gene fusion without a known acquired resistance mutation; and
4. Metastatic or not a surgical candidate; and
5. Progressed following treatment or have no satisfactory alternative therapy.

Tabrecta® (Capmatinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of recurrent, advanced, or metastatic NSCLC; and
2. Mesenchymal-epithelial transition (MET) exon 14 skipping positive tumor; and
3. As a single agent.

Tafinlar® (Dabrafenib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of refractory or metastatic disease; and
2. BRAF V600E or V600K mutation; and
    a. Not indicated for wild-type BRAF NSCLC; and
3. As a single agent or in combination with Mekinist® (trametinib).

Tagrisso® (Osimertinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. As adjuvant therapy following tumor resection in members with epidermal growth factor receptor (EGFR) exon 19 deletions or exon 21 L858R mutations; or
2. Diagnosis of metastatic NSCLC; and
    a. EGFR T790M mutation-positive disease and following progression on erlotinib, afatinib, or gefitinib for asymptomatic disease, symptomatic brain lesions, or multiple symptomatic systemic lesions; or
    b. First-line treatment of members with EGFR exon 19 deletions or exon 21 L858R mutations.

Tarceva® (Erlotinib) Approval Criteria [Bone Cancer – Chordoma Diagnosis]:

1. Diagnosis of bone cancer – chordoma; and
2. Recurrent disease; and
3. As a single agent only.

Tarceva® (Erlotinib) Approval Criteria [Kidney Cancer Diagnosis]:

1. Diagnosis of kidney cancer; and
2. Non-clear cell type; and

3. Relapsed disease or surgically unresectable stage IV disease; and
4. As a single agent only.

Tarceva® (Erlotinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:
1. Diagnosis of NSCLC; and
2. Recurrent or metastatic disease; and
3. Epidermal growth factor receptor (EGFR) mutation detected; and
4. As a single agent only.

Tarceva® (Erlotinib) Approval Criteria [Pancreatic Adenocarcinoma Diagnosis]:
1. Diagnosis of pancreatic adenocarcinoma; and
2. Locally advanced, unresectable disease or metastatic disease; and
3. In combination with gemcitabine.

Tarceva® (Erlotinib) Approval Criteria [Pancreatic Cancer Diagnosis]:
1. Diagnosis of pancreatic cancer; and
2. Locally advanced unresectable or metastatic disease; and
3. First-line agent only; and
4. In combination with gemcitabine.

Tecentriq® (Atezolizumab) Approval Criteria [Hepatocellular Carcinoma (HCC) Diagnosis]:
1. Diagnosis of advanced unresectable or metastatic disease; and
2. Used in combination with bevacizumab; and
3. Member has not received prior systemic therapy.

Tecentriq® (Atezolizumab) Approval Criteria [Melanoma Diagnosis]:
1. Unresectable or metastatic disease; and
2. BRAF V600 mutation-positive; and
3. In combination with cobimetinib and vemurafenib.

Tecentriq® (Atezolizumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:
1. Diagnosis of Non-Squamous NSCLC:
    a. First-line therapy for metastatic disease; and
    b. The member does not have epidermal growth factor receptor (EGFR), anaplastic lymphoma kinase (ALK), *ROS1*, *BRAF*, MET exon 14 skipping, or rearranged during transfection (RET) mutations; and
    c. Used in combination with bevacizumab, paclitaxel, and carboplatin (maximum of 6 cycles) or in combination with paclitaxel (protein bound) and carboplatin; and
    d. Atezolizumab and bevacizumab may be continued after the above combination in members without disease progression (applies to the bevacizumab/paclitaxel/carboplatin regimen); or

2. Diagnosis of NSCLC:
    a. For first-line therapy for metastatic disease:
        i. As a single agent; and
        ii. The member does not have EGFR, ALK, *ROS1*, *BRAF*, MET exon 14 skipping, or RET mutations; and
        iii. High programmed death ligand-1 (PD-L1) expression determined by 1 of the following:
            1. PD-L1 stained ≥50% of tumor cells (TC≥50%); or
            2. PD-L1 stained tumor-infiltrating immune cells (IC) covering ≥10% of the tumor area (IC≥10%); or
    b. For subsequent therapy for metastatic disease:
        i. As a single agent only; or
3. Diagnosis of stage II or III3A NSCLC; and
    a. Member has undergone resection and completed platinum-based chemotherapy; and
    b. PD-L1 expression of ≥1% of TC.

Tecentriq® (Atezolizumab) Approval Criteria [Small Cell Lung Cancer (SCLC) Diagnosis]:

1. Diagnosis of SCLC; and
2. First-line therapy; and
3. Extensive-stage disease; and
4. In combination with carboplatin and etoposide.

Tecentriq® (Atezolizumab) Approval Criteria [Urothelial Carcinoma Diagnosis]:

1. Diagnosis of locally advanced or metastatic urothelial carcinoma; and
2. Progressed on or following platinum-containing chemotherapy or cisplatin ineligible members.

Tepmetko® (Tepotinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of advanced, metastatic, or unresectable NSCLC; and
2. Mesenchymal-epithelial transition (MET) exon 14 skipping positive tumor; and
3. As a single agent.

Vizimpro® (Dacomitinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. Member has not received prior epidermal growth factor receptor (EGFR) therapy for metastatic disease; and
3. Members must meet 1 of the following:
    a. EGFR exon 19 deletion; or
    b. Exon 21 L858R substitution mutation.

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.

Xalkori® (Crizotinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. First-line or subsequent therapy; and
3. Anaplastic lymphoma kinase (ALK) or *ROS1*-positive; or
4. MET amplification; and
5. As a single agent only.

Xalkori® (Crizotinib) Approval Criteria [Soft Tissue Sarcoma – Inflammatory Myofibroblastic Tumor (IMT) with Anaplastic Lymphoma Kinase (ALK) Translocation Diagnosis]:

1. Diagnosis of soft tissue sarcoma – IMT; and
2. ALK positivity; and
3. As a single agent only.

Yervoy® (Ipilimumab) Approval Criteria [Mesothelioma Diagnosis]:

1. Diagnosis of malignant pleural mesothelioma that cannot be surgically removed; and
2. Used as first-line therapy; and
3. Used in combination with nivolumab.

Yervoy® (Ipilimumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of recurrent, advanced, or metastatic NSCLC; and
    a. Used for first-line therapy and must meet the following:
        i. Used in combination with nivolumab and 2 cycles of platinum-doublet chemotherapy; and
        ii. No epidermal growth factor receptor (EGFR) or anaplastic lymphoma kinase (ALK) genomic tumor aberrations; and
        iii. Expresses programmed death ligand 1 (PD-L1) ≥1%.

Yervoy® (Ipilimumab) Approval Criteria [Small Cell Lung Cancer (SCLC) Diagnosis]:

1. Diagnosis of SCLC; and

2. Member meets 1 of the following:
    a. Disease relapsed within 6 months of initial chemotherapy; or
    b. Disease is progressive on initial chemotherapy; and
3. In combination with Opdivo® (nivolumab).

Zelboraf® (Vemurafenib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Refractory or metastatic disease; and
2. BRAF V600E or V600K mutation; and
    a. Not indicated for wild-type BRAF NSCLC; and
3. As a single agent.

Zepzelca® (Lurbinectedin) Approval Criteria [Small Cell Lung Cancer (SCLC) Diagnosis]:

1. Diagnosis of metastatic SCLC; and
2. Used following disease progression on or after platinum-based chemotherapy.

Zirabev® (Bevacizumab-bvzr) Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use Avastin® (bevacizumab) 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.

Zykadia® (Ceritinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of metastatic NSCLC; and
2. Anaplastic lymphoma kinase (ALK) positivity; and
3. As a single agent only.

Zykadia® (Ceritinib) Approval Criteria [Soft Tissue Sarcoma – Inflammatory Myofibroblastic Tumor (IMT) with Anaplastic Lymphoma Kinase (ALK) Translocation Diagnosis]:

1. Diagnosis of soft tissue sarcoma – IMT; and
2. ALK positivity; and
3. As a single agent only.

Utilization of Lung Cancer Medications: Calendar Year 2021

The following utilization data includes medications indicated for lung cancer; however, the data does not differentiate between lung cancer 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	12	51	$539,779.75	$10,583.92	$352.80	3,165	1,530
2021	20	111	$1,065,414.82	$9,598.33	$320.52	11,060	3,324
% Change	**66.70%**	**117.60%**	**97.40%**	**-9.30%**	**-9.10%**	**249.40%**	**117.30%**
Change	**8**	**60**	**$525,635.07**	**-$985.59**	**-$32.28**	**7,895**	**1,794**

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

Calendar Year Comparison: Medical Claims

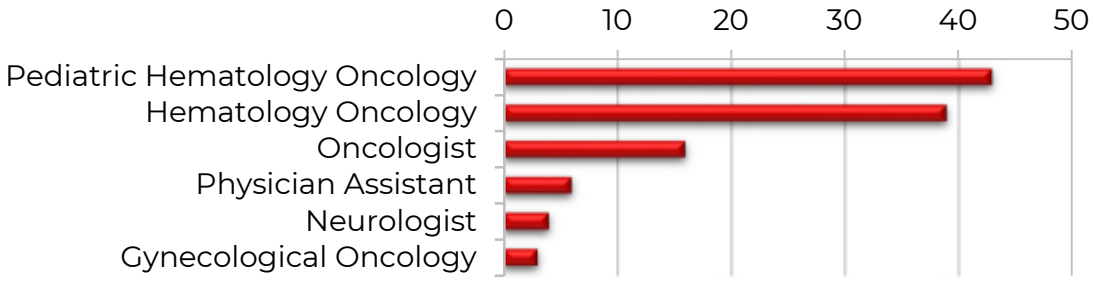
Calendar Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2020	609	2,196	$12,553,905.10	$5,716.71	3.61
2021	889	2,867	$16,546,951.07	$5,771.52	3.22
% Change	**45.98%**	**30.56%**	**31.81%**	**0.96%**	**-10.80%**
Change	**280**	**671**	**$3,993,045.97**	**54.81**	**-0.39**

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

Demographics of Members Utilizing Lung Cancer Medications: Pharmacy Claims

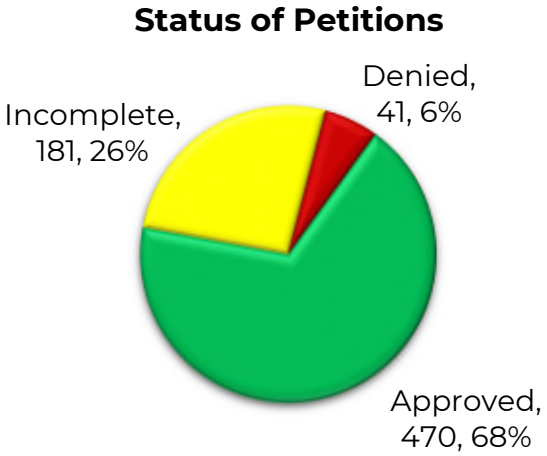
- Due to the limited number of members utilizing lung cancer medications during calendar year 2021, detailed demographic information could not be provided.

Top Prescriber Specialties of Lung Cancer Medications by Number of Claims: Pharmacy Claims



Prior Authorization of Lung Cancer Medications

There were 692 prior authorization requests submitted for lung cancer medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.



Market News and Updates[4,1,5]

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

- **May 2021:** The FDA granted accelerated approval to Rybrevant™ (amivantamab-vmjw) for the treatment of adult patients with locally advanced or metastatic NSCLC with epidermal growth factor receptor (EGFR) exon 20 insertion mutations whose disease has progressed on or after platinum-based chemotherapy.
- **May 2021:** The FDA granted accelerated approval to Lumakras™ (sotorasib), a RAS guanosine triphosphatase (GTPase) family inhibitor, for the treatment of adult patients with *KRAS G12C*-mutated locally advanced or metastatic NSCLC who have received at least 1 prior systemic therapy.
- **September 2021:** The FDA granted accelerated approval to Exkivity® (mobocertinib) for the treatment of adult patients with locally advanced or metastatic NSCLC with EGFR exon 20 insertion mutations whose disease has progressed on or after platinum-based chemotherapy.
- **March 2022:** The FDA approved Opdivo® (nivolumab) with platinum-doublet chemotherapy for adult patients with resectable NSCLC in the neoadjuvant setting.
- **March 2022:** The FDA approved Keytruda® (pembrolizumab) as a single agent for patients with advanced endometrial carcinoma that is microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) who have disease progression following prior systemic therapy in any setting and who are not candidates for curative surgery or radiation.

Guideline Update(s):

- The National Comprehensive Cancer Network (NCCN) guidelines were updated to include the use of Imfinzi® (durvalumab) as consolidation immunotherapy in patients with unresectable stage II/III NSCLC and no

disease progression after definitive concurrent chemoradiation. PACIFIC, a Phase 3 randomized trial, compared adjuvant treatment with durvalumab versus placebo in this patient population. After 4 years, 49.6% of patients who received durvalumab were alive versus 36.3% of patients who received placebo. In addition, 35.3% were alive without progression after 4 years if they had received durvalumab compared with 19.5% of patients who received placebo.

- The criteria for Tagrisso® (osimertinib) for the indication of NSCLC found in the *Recommendations* section of this report were updated to better outline specific mutations where osimertinib shows efficacy. These mutations have been defined in the FDA indication and NCCN guidelines for NSCLC.

Product Summaries[6,7,8]

Exkivity® (Mobocertinib):

- **Therapeutic Class:** Kinase inhibitor
- **Indication(s):** Locally advanced or metastatic NSCLC with epidermal EGFR exon 20 insertion mutations with disease progression on or after platinum-based chemotherapy
- **How Supplied:** 40mg oral capsule
- **Dose:** 160mg [(4) 40mg capsules] once daily
- **Cost:** The Wholesale Acquisition Cost (WAC) is $208.33 per capsule, resulting in a cost per dose of $833.32 and a cost per 30 days of $24,999.60 based on the recommended dosing.

Lumakras™ (Sotorasib):

- **Therapeutic Class:** Inhibitor of the RAS GTPase
- **Indication(s):** *KRAS G12C*-mutated locally advanced or metastatic NSCLC after at least 1 prior systemic therapy
- **How Supplied:** 120mg oral tablets
- **Dose:** 960mg [(8) 120mg tablets] once daily
- **Cost:** The WAC is $76.82 per tablet, resulting in a cost per dose of $614.56 and a cost per 30 days of $18,436.80 based on the recommended dosing.

Rybrevant™ (Amivantamab-vmjw):

- **Therapeutic Class:** Bispecific EGFR-directed and mesenchymal epithelial transition (MET) receptor-directed antibody
- **Indication(s):** Locally advanced or metastatic NSCLC with EGFR exon 20 insertion mutations with disease progression on or after platinum-based chemotherapy
- **How Supplied:** 350mg/7mL (50mg/mL) solution for intravenous (IV) infusion in a single-dose vial

- **Dose:**
  - Dose based on baseline body weight:
    - <u><80kg:</u> 1,050mg (3 vials)
    - <u>≥80kg:</u> 1,400mg (4 vials)
  - Dosing schedule:
    - <u>Weeks 1 to 4:</u> Week 1 split infusion on day 1 and day 2; weeks 2 to 4 once weekly on day 1
    - <u>Week 5 and beyond:</u> Once every 2 weeks
- **Cost:** The WAC is $449.67 per mL resulting in a cost per dose of $12,590.76 for an 80kg adult based on the recommended dosing. The cost of initial dosing for an 80kg adult would be $50,363.04 for the first 4 weeks and $25,181.52 per month thereafter.

Recommendations[9]

The College of Pharmacy recommends the prior authorization of Exkivity® (mobocertinib), Lumakras™ (sotorasib), and Rybrevant™ (amivantamab-vmjw) based on recent FDA approvals with the following criteria (shown in red):

Exkivity® (Mobocertinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of advanced or metastatic NSCLC; and
2. Tumor exhibits an epidermal growth factor receptor (EGFR) exon 20 insertion mutations; and
3. Disease has progressed on or after platinum-based chemotherapy; and
4. As a single agent.

Lumakras™ (Sotorasib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of locally advanced or metastatic NSCLC; and
2. Presence of *KRAS G12C* mutation; and
3. Disease has progressed on at least 1 prior systemic therapy; and
4. As a single agent.

Rybrevant™ (Amivantamab-vmjw) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of locally advanced or metastatic NSCLC; and
2. Tumor exhibits an epidermal growth factor receptor (EGFR) exon 20 insertion mutations; and
3. Disease has progressed on or after platinum-based chemotherapy; and
4. As a single agent.

The College of Pharmacy recommends implementing the prior authorization of Mvasi® (bevacizumab-awwb) with the following updates and recommends updating the approval criteria for Zirabev® (bevacizumab-bvzr) based on net costs (updates shown in red):

Mvasi® (Bevacizumab-awwb) Approval Criteria*:

1. A patient-specific, clinically significant reason why the member cannot use Avastin® (bevacizumab) and Zirabev® (bevacizumab-bvzr), which ~~is~~ are available without prior authorization, 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.
   ~~*Based on the net cost in comparison to Avastin®, Mvasi® is currently available without prior authorization.~~

~~**Zirabev® (Bevacizumab-bvzr) Approval Criteria:**~~

~~1. A patient-specific, clinically significant reason why the member cannot use Avastin® (bevacizumab) 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.

Additionally, the College of Pharmacy recommends updating the approval criteria for Keytruda® (pembrolizumab) and Opdivo® (nivolumab) based on recent FDA approvals (changes noted in red):

Keytruda® (Pembrolizumab) Approval Criteria [Endometrial Cancer Diagnosis]:

1. Member has not previously failed other PD-1 inhibitors [e.g., Opdivo (nivolumab)]; and
2. Disease progression following prior systemic therapy; and
3. Member is not a candidate for curative surgery or radiation; and
4. Used in 1 of the following settings:
   a. In combination with lenvatinib for advanced endometrial cancer that is not microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR); or
   b. As a single agent for advanced endometrial cancer that is MSI-H or dMMR.

Opdivo® (Nivolumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of NSCLC; and

2. For first-line therapy for recurrent, advanced, or metastatic disease, meeting the following:
    a. Used in combination with Yervoy® (ipilimumab) and 2 cycles of platinum-doublet chemotherapy; and
    b. No epidermal growth factor receptor (EGFR) or anaplastic lymphoma kinase (ALK) genomic tumor aberrations; and
    c. Expresses programmed death ligand 1 (PD-L1) ≥1%; or
3. For first-line therapy for resectable disease (>4cm or node positive), meeting the following:
    a. Used in the neoadjuvant setting in combination with platinum-doublet chemotherapy for up to 3 treatment cycles; or
4. For second-line therapy for metastatic disease, meeting the following:
    a. Tumor histology is 1 of the following:
        i. Adenocarcinoma; or
        ii. Squamous cell; or
        iii. Large cell; and
    b. Disease progression on or after platinum-containing chemotherapy (e.g., cisplatin, carboplatin); and
    c. Member has not previously failed other programmed death 1 (PD-1) inhibitors [e.g., Keytruda® (pembrolizumab)]; and
    d. Used as a single agent; and
    e. Dose as follows: 240mg every 2 weeks or 480mg every 4 weeks.

The College of Pharmacy also recommends updating the Opdivo® (nivolumab) criteria for the adjuvant treatment of melanoma to more closely reflect the FDA approval granted to nivolumab for this indication. As shown in red, the criteria now includes all stage III melanoma following complete resection. Please note: the data on patients at low risk of recurrence is continuing to develop and will be reviewed as needed.

Opdivo® (Nivolumab) Approval Criteria [Adjuvant Treatment of Melanoma Diagnosis]:

1. Member has complete resection of melanoma; and
2. Diagnosis of stage III~~B/C~~ melanoma following complete resection; and
3. Member has not previously failed other PD-1 inhibitors [e.g., Keytruda (pembrolizumab)]; and
4. Nivolumab must be used as a single agent; and
5. Dose as follows:
    a. Single agent: 240mg every 2 weeks or 480mg every four weeks; and
    b. Maximum duration of 1 year.

The College of Pharmacy recommends updating the Imfinzi® (durvalumab) and Tagrisso® (osimertinib) criteria based on the NCCN guideline updates (changes shown in red):

Imfinzi® (Durvalumab) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of unresectable stage II or III NSCLC; and
2. Disease has not progressed following concurrent platinum-based chemotherapy and radiation therapy.

Tagrisso® (Osimertinib) Approval Criteria [Non-Small Cell Lung Cancer (NSCLC) Diagnosis]:

1. Diagnosis of NSCLC; and
    a. As adjuvant therapy following tumor resection in members with epidermal growth factor receptor (EGFR) exon 19 deletions or exon 21 L858R mutations; or
2. Diagnosis of metastatic NSCLC; and
    a. EGFR T790M mutation-positive disease ~~and following progression on erlotinib, afatinib, or gefitinib for asymptomatic disease, symptomatic brain lesions, or multiple symptomatic systemic lesions~~; or
    b. ~~First-line treatment of patients with~~ EGFR exon 19 deletions or exon 21 L858R mutations.

Finally, the College of Pharmacy recommends updating the Cosela™ (trilaciclib) criteria to allow prescriber discretion and individualized treatment based on neutropenic fever risk (changes shown in red):

Cosela™ (Trilaciclib) Approval Criteria [Extensive-Stage Small Cell Lung Cancer (ES-SCLC) Diagnosis]:

1. Diagnosis of ES-SCLC; and
2. Member is undergoing myelosuppressive chemotherapy with 1 of the following:
    a. Platinum (carboplatin or cisplatin) and etoposide-containing regimen; or
    b. Topotecan-containing regimen.~~; and~~

~~3. Cosela will not be approved for concomitant use with colony-stimulating factors (CSF) [e.g., granulocyte colony-stimulating factors (G-CSF), pegylated G-CSF (peg-G-CSF), granulocyte-macrophage colony-stimulating factors (GM-CSF)] for primary prophylaxis of febrile neutropenia prior to day 1 cycle 1 of chemotherapy.~~

Utilization Details of Lung Cancer Medications: Calendar Year 2021

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

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
DABRAFENIB PRODUCTS					
TAFINLAR CAP 75MG	35	6	$220,911.07	5.83	$6,311.74
TAFINLAR CAP 50MG	12	2	$54,170.04	6	$4,514.17
SUBTOTAL	**47**	**8**	**$275,081.11**	**5.88**	**$5,852.79**
VEMURAFENIB PRODUCTS					
ZELBORAF TAB 240MG	18	4	$112,310.39	4.5	$6,239.47
SUBTOTAL	**18**	**4**	**$112,310.39**	**4.5**	**$6,239.47**
SOTORASIB PRODUCTS					
LUMAKRAS TAB 120MG	13	2	$232,824.33	6.5	$17,909.56
SUBTOTAL	**13**	**2**	**$232,824.33**	**6.5**	**$17,909.56**
TRAMETINIB PRODUCTS					
MEKINIST TAB 2MG	9	3	$113,509.80	3	$12,612.20
SUBTOTAL	**9**	**3**	**$113,509.80**	**3**	**$12,612.20**
ALECTINIB PRODUCTS					
ALECENSA CAP 150MG	7	2	$111,054.16	3.5	$15,864.88
SUBTOTAL	**7**	**2**	**$111,054.16**	**3.5**	**$15,864.88**
OSIMERTINIB PRODUCTS					
TAGRISSO TAB 80MG	7	2	$106,511.16	3.5	$15,215.88
SUBTOTAL	**7**	**2**	**$106,511.16**	**3.5**	**$15,215.88**
AFATINIB PRODUCTS					
GILOTRIF TAB 20MG	5	1	$50,451.65	5	$10,090.33
GILOTRIF TAB 40MG	1	1	$10,090.33	1	$10,090.33
SUBTOTAL	**6**	**2**	**$60,541.98**	**3**	**$10,090.33**
LORLATINIB PRODUCTS					
LORBRENA TAB 100MG	3	1	$53,126.82	3	$17,708.94
SUBTOTAL	**3**	**1**	**$53,126.82**	**3**	**$17,708.94**
ERLOTINIB PRODUCTS					
ERLOTINIB TAB 150MG	1	1	$455.07	1	$455.07
SUBTOTAL	**1**	**1**	**$455.07**	**1**	**$455.07**
TOTAL	**111**	**20***	**$1,065,414.82**	**5.55**	**$9,598.33**

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

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS+	TOTAL MEMBERS*	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
BEVACIZUMAB J9035	1,322	503	$1,447,888.45	2.63	$1,095.23
PEMBROLIZUMAB J9271	528	138	$6,725,078	3.83	$12,736.89
NIVOLUMAB J9299	244	56	$2,882,586.15	4.36	$11,813.88
BEVACIZUMAB-AWWB Q5107	276	58	$929,912.84	4.76	$3,369.25
ATEZOLIZUMAB J9022	150	49	$1,638,211.68	3.06	$10,921.41

PRODUCT UTILIZED	TOTAL CLAIMS†	TOTAL MEMBERS*	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
PEMETREXED J9305	174	42	$1,147,300.16	4.14	$6,593.68
DURVALUMAB J9173	111	22	$954,462.22	5.05	$8,598.76
IPILIMUMAB J9228	26	12	$494,363.04	2.17	$19,013.96
RAMUCIRUMAB J9308	22	4	$148,306.60	5.5	$6,741.21
LURBINECTEDIN J9223	14	5	$178,841.93	2	$12,774.42
TOTAL	**2,867**	**889**	**$16,546,951.07**	**3.22**	**$5,771.52**

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

[1] National Comprehensive Cancer Network (NCCN). Non-Small Cell Lung Cancer (Version 3.2022). Available online at: https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Last revised 03/16/2022 Last accessed 04/21/2022.
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[3] American Cancer Society. Cancer Facts & Figures 2021. Available online at: https://www.cancer.org/cancer/lung-cancer/about/key-statistics.html. Last accessed 04/21/2022.
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[5] Faivre-Finn C, Vicente D, Kurata T, et al. Four-year Survival with Durvalumab after Chemoradiotherapy in Stage III NSCLC - An Update from the PACIFIC Trial. *J Thorac Oncol* 2021; 16:860-867.
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[8] Rybrevant™ Prescribing Information. Janssen Biotech. Available online at: https://www.janssenlabels.com/package-insert/product-monograph/prescribing-information/RYBREVANT-pi.pdf. Last revised 12/2021. Last accessed 04/19/2022.
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Appendix J

Calendar Year 2021 Annual Review of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide)

Oklahoma Health Care Authority
May 2022

Current Prior Authorization Criteria

Ayvakit™ (Avapritinib) Approval Criteria [Gastrointestinal Stromal Tumor (GIST) Diagnosis]:

1. Diagnosis of unresectable or metastatic GIST in adult members; and
2. Member has a *PDGFRA* exon 18 mutation (including *PDGFRA* D842V mutations).

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.

Bynfezia Pen™ (Octreotide) Approval Criteria [Acromegaly Diagnosis]:

1. Diagnosis of acromegaly; and
2. Documentation of inadequate response to or inability to treat with surgical resection, pituitary irradiation, and bromocriptine mesylate or cabergoline at maximally tolerated doses; and
3. A patient-specific, clinically significant reason why the member cannot use other available short-acting injectable formulations of octreotide must be provided.

Bynfezia Pen™ (Octreotide) Approval Criteria [Metastatic Carcinoid Tumor or Vasoactive Intestinal Peptide-Secreting Tumors (VIPoma) Diagnosis]:

1. Diagnosis of advanced metastatic carcinoid tumor or VIPoma; and
2. Presence of severe diarrhea or flushing; and
3. A patient-specific, clinically significant reason why the member cannot use other available short-acting injectable formulations of octreotide must be provided.

Utilization of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide): Calendar Year 2021

There was no SoonerCare utilization of Ayvakit™ (avapritinib) during calendar year 2021. For Bynfezia Pen™ (octreotide), there was 1 claim for 1 member during calendar year 2021.

Demographics of Members Utilizing Bynfezia Pen™ (Octreotide)

- Due to the limited number of members utilizing Bynfezia Pen™ (octreotide) during calendar year 2021, detailed demographic information could not be provided.

Top Prescriber Specialties of Bynfezia Pen™ (Octreotide) by Number of Claims

- The claim for Bynfezia Pen™ (octreotide) during calendar year 2021 was prescribed by a hematology/oncology specialist.

Prior Authorization of Ayvakit™ (Avapritinib) and Bynfezia Pen™ (Octreotide)

There were no prior authorization requests submitted for Ayvakit™ (avapritinib) or Bynfezia Pen™ (octreotide) during calendar year 2021. The claim for Bynfezia Pen™ previously referenced was from a prior authorization approved in December 2020.

Market News and Updates[1,2]

Anticipated Patent Expiration(s):

- Ayvakit™ (avapritinib): October 2034

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

June 2021*: The FDA approved Ayvakit™ (avapritinib) for the treatment of adult patients with advanced systemic mastocytosis (AdvSM), including patients with aggressive systemic mastocytosis (ASM), systemic mastocytosis with an associated hematological neoplasm (SM-AHN), and mast cell leukemia (MCL). *This indication for Ayvakit™ was reviewed with the Annual Review of the Leukemia Medications at the February 2022 Drug Utilization Review (DUR) Board meeting. The updated prior authorization criteria (available in the *Current Prior Authorization Criteria* section of this report) was subsequently voted on and approved at the April 2022 DUR Board meeting.

Recommendations

The College of Pharmacy does not recommend any changes to the current Ayvakit™ (avapritinib) or Bynfezia Pen™ (octreotide) prior authorization criteria at this time.

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[1] U.S. Food and Drug Administration (FDA). Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations. Available online at: https://www.accessdata.fda.gov/scripts/cder/ob/. Last revised 04/2022. Last accessed 04/15/2022.

[2] U.S. 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 04/06/2022. Last accessed 04/15/2022.

Appendix K

Calendar Year 2021 Annual Review of Nasal Allergy Medications and 30-Day Notice to Prior Authorize Ryaltris™ (Olopatadine/Mometasone) Nasal Spray

Oklahoma Health Care Authority
May 2022

Current Prior Authorization Criteria

Nasal Allergy Medications		
Tier-1	**Tier-2**	**Tier-3**
beclomethasone (Beconase® AQ)	azelastine (Astelin®)	azelastine (Astepro®)
fluticasone (Flonase®)	beclomethasone (Qnasl® 80mcg)	azelastine/fluticasone (Dymista®)
		beclomethasone (Qnasl® 40mcg)
		ciclesonide (Omnaris®, Zetonna®)
		flunisolide (Nasalide®, Nasarel®)
		fluticasone (Veramyst®)
		fluticasone (Xhance®)*
		mometasone (Nasonex®)
		olopatadine (Patanase®)

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).
*Xhance®: Unique criteria applies.

Nasal Allergy Medications Tier-2 Approval Criteria:

1. Member must have failure with all Tier-1 medications defined as no beneficial response after at least 3 weeks use at the maximum recommended dose; or
2. Documented adverse effect or contraindication to all Tier-1 medications; and
3. For members 2 to 4 years of age, the age-appropriate, lower-tiered generic medications must be tried prior to the approval of higher-tiered medications; and
4. Approvals will be for the duration of 3 months, except for members with chronic diseases such as asthma or chronic obstructive pulmonary disease (COPD), in which case authorizations will be for the duration of 1 year.

Nasal Allergy Medications Tier-3 Approval Criteria:

1. All Tier-2 criteria must be met; and
2. Member must have failure with all available Tier-2 medications defined as no beneficial response after at least 3 weeks use at the maximum recommended dose; or
3. Documented adverse effect or contraindication to all Tier-2 medications; and
4. For members 2 to 4 years of age, the age-appropriate, lower-tiered generic medications must be tried prior to the approval of higher-tiered medications; and
5. Approvals will be for the duration of 3 months, except for members with chronic diseases such as asthma or COPD, in which case authorizations will be for the duration of 1 year.

Xhance® (Fluticasone Propionate Nasal Spray) Approval Criteria:

1. An FDA approved diagnosis of nasal polyps; and
2. A patient-specific, clinically significant reason why the member cannot use intranasal fluticasone, budesonide, mometasone, and/or other cost-effective therapeutic equivalent medication(s) must be provided; and
3. Current Tier structure rules will also apply.

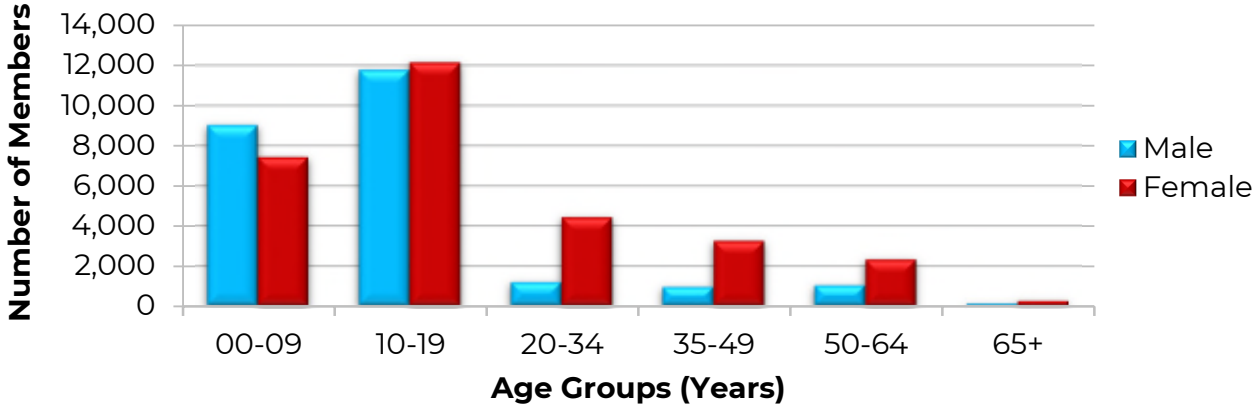
Utilization of Nasal Allergy Medications: Calendar Year 2021

Comparison of Calendar Years

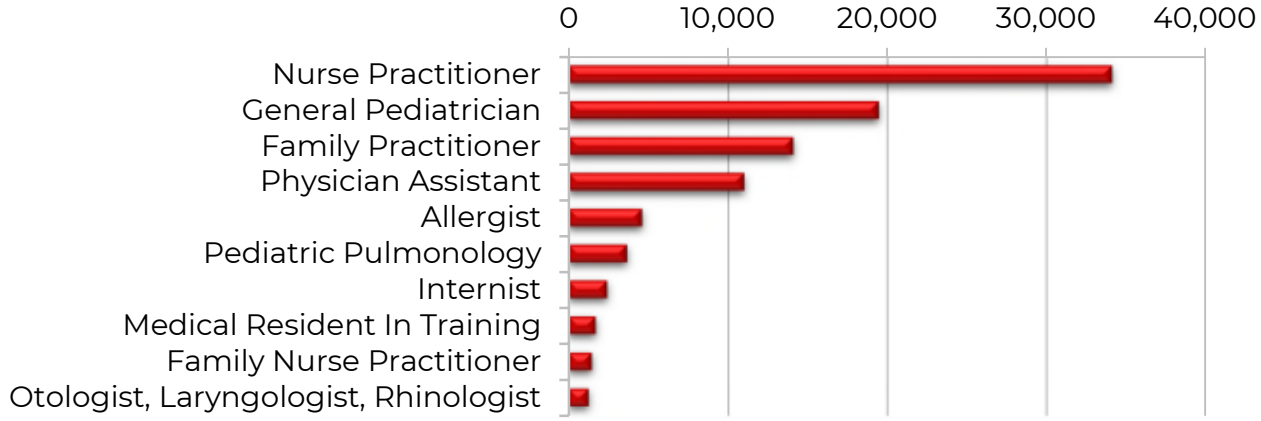
Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	40,818	85,588	$1,687,780.51	$19.72	$0.52	1,386,316	3,277,138
2021	53,708	98,228	$1,907,244.34	$19.42	$0.50	1,589,279	3,840,979
% Change	**31.60%**	**14.80%**	**13.00%**	**-1.50%**	**-3.80%**	**14.60%**	**17.20%**
Change	**12,890**	**12,640**	**$219,463.83**	**-$0.30**	**-$0.02**	**202,963**	**563,841**

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

Demographics of Members Utilizing Nasal Allergy Medications



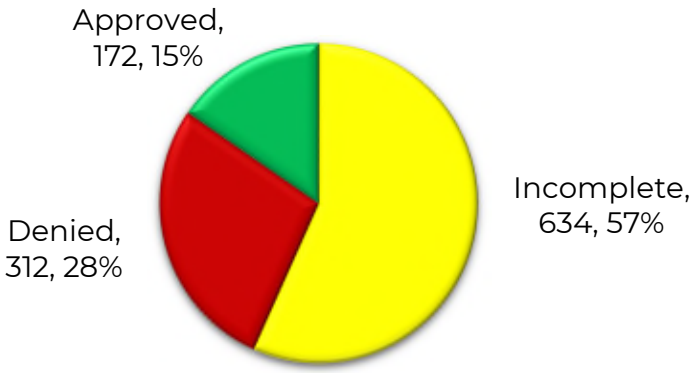
Top Prescriber Specialties of Nasal Allergy Medications by Number of Claims



Prior Authorization of Nasal Allergy Medications

There were 1,118 prior authorization requests submitted for nasal allergy 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 Patent Expiration(s):

- Patanase® (olopatadine): August 2023
- Dymista® (azelastine/fluticasone): August 2026
- Omnaris® (ciclesonide): February 2028
- Zetonna® (ciclesonide): February 2028
- Astepro® (azelastine): June 2028
- Qnasl® (beclomethasone): October 2031
- Ryaltris™ (olopatadine/mometasone): September 2034
- Xhance® (fluticasone): July 2035

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

- **January 2022:** The FDA approved Ryaltris™ (olopatadine/mometasone) nasal spray for the treatment of symptoms of seasonal allergic rhinitis in adult and pediatric patients 12 years of age and older. Ryaltris™ contains a fixed-dose combination of olopatadine, a histamine-1 (H1)-receptor inhibitor, and mometasone, a corticosteroid. Ryaltris™ will be marketed and distributed through Hikma Specialty USA, but a launch date for the product has not yet been announced.

Ryaltris™ (Olopatadine/Mometasone Nasal Spray) Product Summary[3]

Indication(s): Ryaltris™ (olopatadine/mometasone nasal spray) is indicated for the treatment of symptoms of seasonal allergic rhinitis in adult and pediatric patients 12 years of age and older.

How Supplied: Nasal spray containing 665mcg olopatadine hydrochloride and 25mcg mometasone furoate per spray contained in 29g bottles which deliver 240 metered sprays in addition to 6 initial priming sprays

Dosing and Administration:

- Recommended dose is 2 sprays in each nostril twice daily
- Bottle should be shaken well before each use
- Bottle should be primed with 6 sprays before initial use, and may be re-primed with 2 sprays, or until a fine mist appears, if the bottle has not been used for 14 days or more
- Spraying Ryaltris™ into the eyes or mouth should be avoided

Contraindication(s):

- Known hypersensitivity to any ingredients of Rylatris™, including mometasone furoate

Adverse Reactions: The most common adverse reactions (occurring in ≥1% of patients receiving Ryaltris™ and more frequently than in placebo) in clinical studies were dysgeusia (3.0%), epistaxis (1.0%), and nasal discomfort (1.0%).

Efficacy: The efficacy of Ryaltris™ for the treatment of seasonal allergic rhinitis was established in 2 Phase 3 randomized, double-blind, placebo- and active-controlled studies which enrolled a total of 2,352 patients 12 years of age and older (range: 12 to 87 years of age) with seasonal allergic rhinitis. A total of 115 patients in study 1 (10%) and 94 patients in study 2 (8%) were 12 to 17 years of age. Patients were randomized to 1 of 4 treatment groups: Ryaltris™, olopatadine 665mcg nasal spray, mometasone furoate 25mcg nasal spray, or vehicle nasal spray. Patients were treated with 2 sprays per nostril twice daily for 2 weeks of treatment. The primary endpoint in both studies was the change from baseline in average morning and evening subject-reported 12-hour reflective total nasal symptom score (rTNSS) over

the 14-day treatment period. Treatment with Ryaltris™ resulted in statistically significant improvement in rTNSS relative to placebo in both studies. In study 1, the change from baseline in rTNSS was -3.5 in Ryaltris™-treated patients and -2.5 in patients who received vehicle [treatment difference: -1.0; 95% confidence interval (CI): -1.3, -0.6; P<0.05]. In study 2, the change from baseline in rTNSS was -3.5 in Ryaltris™-treated patients and -2.4 in patients who received vehicle (treatment difference: -1.1; 95% CI: -1.5, -0.7; P<0.05). Treatment with Ryaltris™ also resulted in statistically significant improvements in rTNSS relative to olopatadine monotherapy in both studies, and statistically significant improvement in rTNSS relative to mometasone monotherapy in study 2 (but not in study 1).

Cost: Cost information is not yet available for Ryaltris™.

Recommendations

The College of Pharmacy recommends the placement of Ryaltris™ (olopatadine/mometasone) nasal spray into Tier-3 of the nasal allergy medications Product Based Prior Authorization (PBPA) Tier chart.

Additionally, the College of Pharmacy recommends the following changes to the nasal allergy medications PBPA Tier chart based on net costs:

1. Moving Qnasl® (beclomethasone 80mcg) from Tier-2 to Tier-3; and
2. Moving Astelin® (azelastine 137mcg, 0.1%) from Tier-2 to Tier-1; and
3. Moving Astepro® (azelastine 205.5mcg, 0.15%) and Nasonex® (mometasone 50mcg) from Tier-3 to Tier-2.

Nasal Allergy Medications		
Tier-1	**Tier-2**	**Tier-3**
azelastine (Astelin®)	~~**azelastine (Astelin®)**~~	~~**azelastine (Astepro®)**~~
beclomethasone (Beconase® AQ)	**azelastine (Astepro®)**	azelastine/fluticasone (Dymista®)
fluticasone (Flonase®)	~~**beclomethasone (Qnasl® 80mcg)**~~	beclomethasone (Qnasl® **80mcg,** 40mcg)
	mometasone (Nasonex®)	ciclesonide (Omnaris®, Zetonna®)
		flunisolide (Nasalide®,
		fluticasone (Veramyst®)
		fluticasone (Xhance®)*
		~~**mometasone (Nasonex®)**~~
		olopatadine (Patanase®)
		olopatadine/mometasone (Ryaltris™)

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).
*Xhance®: Unique criteria applies.

Utilization Details of Nasal Allergy Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
TIER-1 PRODUCTS						
FLUTICASONE SPR 50MCG	96,302	53,163	$1,456,469.08	$15.12	1.81	76.37%
BECONASE AQ SUS 0.042%	1,394	653	$408,273.79	$292.88	2.13	21.41%
SUBTOTAL	**97,696**	**53,642***	**$1,864,742.87**	**$19.09**	**1.82**	**97.77%**
TIER-2 PRODUCTS						
AZELASTINE SPR 0.1%	327	170	$6,505.26	$19.89	1.92	0.34%
QNASL AER 80MCG	56	15	$13,824.10	$246.86	3.73	0.72%
SUBTOTAL	**383**	**183***	**$20,329.36**	**$53.08**	**2.09**	**1.07%**
TIER-3 PRODUCTS						
AZEL/FLUTIC SPR 137/50MCG	69	14	$9,710.04	$140.73	4.93	0.51%
MOMETASONE SPR 50MCG	31	11	$1,565.92	$50.51	2.82	0.08%
QNASL CHILD SPR 40MCG	18	2	$4,652.34	$258.46	9	0.24%
AZELASTINE SPR 0.15%	18	2	$415.76	$23.10	9	0.02%
XHANCE 93MCG	9	3	$5,296.49	$588.50	3	0.28%
DYMISTA SPR 137/50MCG	2	2	$406.92	$203.46	1	0.02%
OLOPATADINE SPR 0.6%	2	1	$124.64	$62.32	2	0.01%
SUBTOTAL	**149**	**33***	**$22,172.11**	**$148.81**	**4.52**	**1.16%**
TOTAL	**98,228**	**53,708***	**$1,907,244.34**	**$19.42**	**1.83**	**100%**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
AER = aerosol; AQ = aqueous; AZEL/FLUTIC = azelastine/fluticasone; SPR = spray; SUS = suspension

[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 04/2022. Last accessed 04/19/2022.
[2] Glenmark Pharmaceuticals Limited. Glenmark Specialty S.A. (Switzerland) Receives NDA Approval by the United States Food and Drug Administration (FDA) for Ryaltris™ Nasal Spray for the Treatment of Symptoms of Seasonal Allergic Rhinitis in Adults and Pediatric Patients 12 Years of Age and Older. *PR Newswire*. Available online at: https://www.prnewswire.com/news-releases/glenmark-specialty-sa-switzerland-receives-nda-approval-by-the-united-states-food-and-drug-administration-fda-for-ryaltris-nasal-spray-for-the-treatment-of-symptoms-of-seasonal-allergic-rhinitis-in-adults-and-pediatric-pati-301461096.html. Issued 01/14/2022. Last accessed 04/19/2022.
[3] Ryaltris™ (Olopatadine/Mometasone) Prescribing Information. Hikma Specialty USA, Inc. Available online at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/211746s000lbl.pdf. Last revised 01/2022. Last accessed 04/19/2022.

Appendix L

Calendar Year 2021 Annual Review of Heart Failure (HF) Medications

Oklahoma Health Care Authority
May 2022

Current Prior Authorization Criteria

Corlanor® (Ivabradine) Approval Criteria:

1. An FDA approved indication of 1 of the following:
    a. To reduce the risk of hospitalization for worsening heart failure (HF) in adult members with stable, symptomatic chronic HF with reduced left ventricular ejection fraction (LVEF); or
    b. For the treatment of stable, symptomatic HF due to dilated cardiomyopathy (DCM) in members 6 months of age and older; and
2. For a diagnosis of worsening HF in adults:
    a. The prescriber must verify that the member has LVEF ≤35%; and
    b. The prescriber must verify that the member is in sinus rhythm with a resting heart rate ≥70 beats per minute (bpm); and
    c. The member must be on maximal/maximally tolerated doses of beta blockers or have a contraindication to beta blockers; and
3. For a diagnosis of DCM in members 6 months of age or older:
    a. The prescriber must verify that the member has LVEF ≤45%; and
    b. The prescriber must verify that the member is in sinus rhythm with a resting heart rate (HR) as follows:
        i. Age 6 to 12 months, HR ≥105 bpm; or
        ii. Age 1 to 3 years, HR ≥95 bpm; or
        iii. Age 3 to 5 years, HR ≥75 bpm; or
        iv. Age 5 to 18 years, HR ≥70 bpm; and
    c. The prescriber must verify that dose titration will be followed according to package labeling; and
    d. 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. Authorization of Corlanor® solution for members >40kg requires a patient-specific, clinically significant reason why Corlanor® tablets cannot be used; and
5. For Corlanor® tablets, a quantity limit of 60 tablets per 30 days will apply; and
6. For Corlanor® solution, a quantity limit of 112 ampules (4 boxes) per 28 days, or 560mL per 28 days, will apply.

Entresto® (Sacubitril/Valsartan) Approval Criteria:

1. An FDA approved diagnosis of chronic heart failure [New York Heart Association (NYHA) Class II, III, or IV]; and
2. A quantity limit of 60 tablets per 30 days will apply.

Verquvo® (Vericiguat) Approval Criteria:

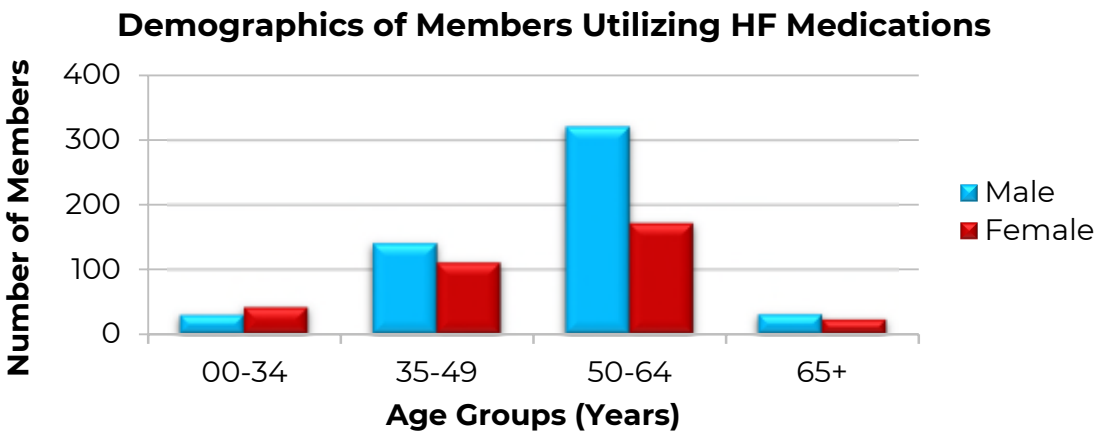
1. An FDA approved indication to reduce the risk of cardiovascular death and hospitalization for heart failure (HF) in adults with all of the following:
   a. Chronic symptomatic HF [New York Heart Association (NYHA) Class II, III, or IV]; and
   b. Reduced left ventricular ejection fraction (LVEF) <45%; and
   c. Already receiving guideline-directed medical therapy for HF, as documented in member's pharmacy claims history; and
2. Member has evidence of worsening HF (decompensation) demonstrated by at least 1 of the following:
   a. Hospitalization for HF within the past 6 months; or
   b. Received outpatient intravenous (IV) diuretics within the past 3 months; and
3. Member must be 18 years of age or older; and
4. Member must not be taking concomitant soluble guanylate cyclase (sGC) stimulators (e.g., riociguat); and
5. Female members of reproductive potential must not be breastfeeding, must have a negative pregnancy test prior to initiation of therapy, and must agree to use effective contraception during treatment and for 1 month after the final dose of Verquvo®; and
6. Prescriber must agree to titrate to the target maintenance dose according to package labeling, as tolerated by the member; and
7. Initial approvals will be for the duration of 6 months. Compliance will be checked for continued approval every 6 months; and
8. A quantity limit of 30 tablets per 30 days will apply.

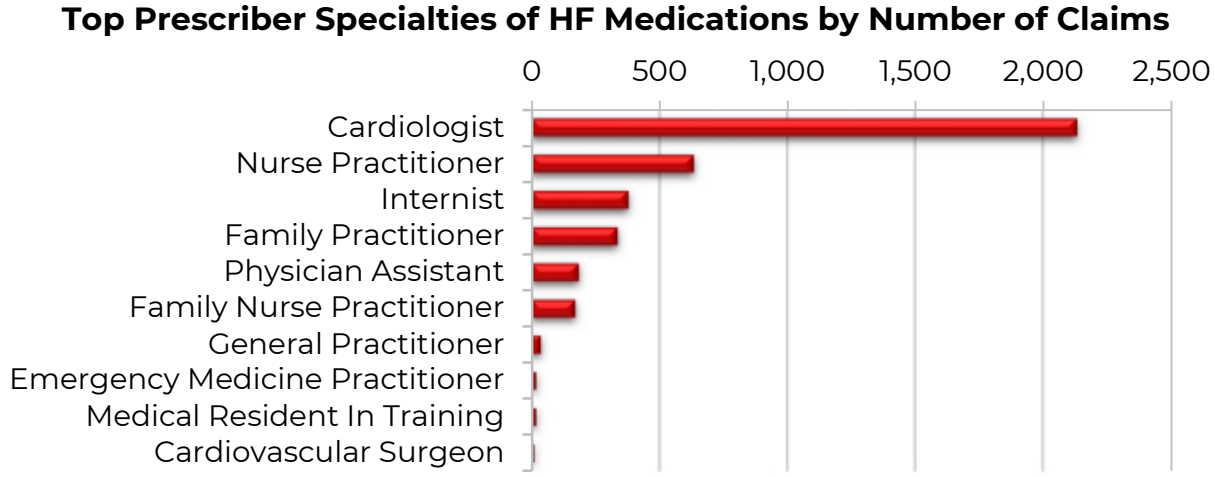
Utilization of HF Medications: Calendar Year 2021

Comparison of Calendar Years

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	512	2,823	$1,452,614.04	$514.56	$17.12	166,829	84,854
2021	863	3,972	$2,158,859.89	$543.52	$17.99	234,215	119,991
% Change	**68.60%**	**40.70%**	**48.60%**	**5.60%**	**5.10%**	**40.40%**	**41.40%**
Change	**351**	**1,149**	**$706,245.85**	**$28.96**	**$0.87**	**67,386**	**35,137**

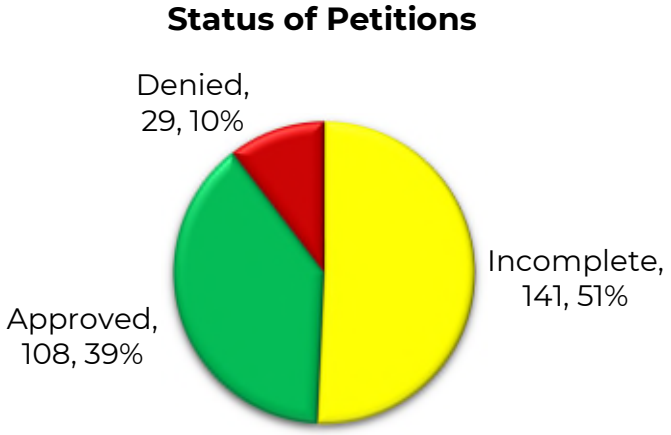
Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.





Prior Authorization of HF Medications

There were 278 prior authorization requests submitted for HF medications during calendar year 2021. The following chart shows the status of the submitted petitions for calendar year 2021.



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

Anticipated Patent Expiration(s):

- Corlanor® (ivabradine oral solution): December 2026
- Corlanor® (ivabradine tablet): June 2027
- Verquvo® (vericiguat tablet): November 2032
- Entresto® (sacubitril/valsartan tablet): May 2036

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

- **August 2021:** The FDA approved Jardiance® (empagliflozin) for a new indication for the treatment of HF in patients with reduced ejection fraction (HFrEF). The approval for this indication was based on data from the Phase 3 EMPEROR-REDUCED study, which evaluated the efficacy of adding empagliflozin 10mg vs. placebo to standard-of-care (SOC) for HF in 3,730 adults with and without type 2 diabetes (T2DM) with New York Heart Association (NYHA) Class II, III, or IV HF and left ventricular ejection fraction (LVEF) ≤40%. The study results demonstrated a relative risk reduction of 25% in the composite primary endpoint [time to cardiovascular (CV) death or hospitalization for HF] relative to placebo [absolute risk reduction (ARR): 5.3%; hazard ratio (HR): 0.75; 95% confidence interval (CI): 0.65, 0.86]. Subsequently, in February 2022, the FDA approved Jardiance® for an additional expanded indication to reduce the risk of CV death and hospitalization for HF in adults with HF. With this approval, Jardiance® can be considered for use in adults with HF regardless of LVEF. This expanded indication was approved based on data from the Phase 3 EMPEROR-PRESERVED study, which evaluated the efficacy of adding empagliflozin 10mg vs. placebo to SOC for HF in 5,988 adults with and without T2DM with NYHA Class II, III, or IV HF and LVEF >40%. The study results demonstrated a relative risk reduction of 21% in the composite primary endpoint (CV death or hospitalization for HF) relative to placebo (ARR: 3.3%; HR: 0.79; 95% CI: 0.69, 0.90). Jardiance® is reviewed annually with the anti-diabetic medications; approval criteria can be found in the May 2022 Drug Utilization Review (DUR) Board packet within the anti-diabetic medications report.

Guideline Updates:

- **April 2022:** The American Heart Association (AHA), American College of Cardiology (ACC), and Heart Failure Society of America (HFSA) published updated guidelines for the management of HF, replacing the previous guidelines from 2013 and the focused update of the guidelines from 2017. Key updates from the 2022 guidelines regarding medication therapy for HF include:

- Guideline-directed medical therapy (GDMT) for HFrEF (LVEF ≤40%) now includes 4 medication classes, with the new addition of sodium-glucose cotransporter-2 (SGLT-2) inhibitors (e.g., dapagliflozin, empagliflozin). Previously, GDMT to reduce morbidity and mortality in HF included renin-angiotensin system inhibition [using an angiotensin receptor-neprilysin inhibitor (ARNI), an angiotensin-converting enzyme inhibitor (ACEI), or an angiotensin II receptor blocker (ARB)], beta blockers (e.g., bisoprolol, carvedilol, sustained-release metoprolol succinate), and mineralocorticoid receptor antagonists (MRAs; e.g., spironolactone, eplerenone).
- SGLT-2 inhibitors are recommended in patients with HFrEF to reduce hospitalization for HF and CV mortality, irrespective of the presence of T2DM.
- SGLT-2 inhibitors are also now recommended in patients with HF with mildly reduced ejection fraction (HFmrEF, or LVEF 41%-49%) and in patients with HF with preserved ejection fraction (HFpEF, or LVEF ≥50%).
- In selected high-risk patients with HFrEF who are already on GDMT and have recent worsening of HF, an oral soluble guanylate cyclase stimulator (e.g., vericiguat) may be considered to reduce HF hospitalization and CV death.

Pipeline:

- **Omecamtiv Mecarbil:** Cytokinetics is evaluating omecamtiv mecarbil for the treatment of HFrEF. Omecamtiv mecarbil is a novel, selective, oral cardiac myosin activator that binds to cardiac myosin heads and helps recruit additional myosin heads to interact with actin during systole, augmenting the impaired contractility associated with HFrEF. The Phase 3 GALACTIC-HF study enrolled patients with NYHA Class II, III, or IV HF and LVEF ≤35% already receiving GDMT who were either currently hospitalized for HF or had an emergency department visit or had been hospitalized for HF within the previous 1 year. In the study, the primary efficacy endpoint (a composite of the first occurrence of a HF event or CV death) occurred in 37% of patients in the omecamtiv mecarbil group and 39.1% of patients in the placebo group (HR: 0.92; 95% CI: 0.86, 0.99; P=0.03), a statistically significant difference. However, the secondary outcome of death from CV causes was not met, occurring in 19.6% of patients in the omecamtiv mecarbil group and 19.4% of patients in the placebo group (HR: 1.01; 95% CI: 0.92, 1.11; P=0.86). In February 2022, Cytokinetics announced the FDA accepted their New Drug Application (NDA) for omecamtiv mecarbil. The Prescription Drug User Fee Act (PDUFA) action date is November 30, 2022.

Recommendations

The College of Pharmacy does not recommend any changes to the current HF medications prior authorization criteria at this time.

Utilization Details of HF Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
SACUBITRIL/VALSARTAN PRODUCTS						
ENTRESTO TAB 24-26MG	1,764	506	$945,143.79	$535.80	3.49	43.78%
ENTRESTO TAB 49-51MG	1,238	296	$683,287.86	$551.93	4.18	31.65%
ENTRESTO TAB 97-103MG	826	176	$456,676.97	$552.88	4.69	21.15%
SUBTOTAL	**3,828**	**841***	**$2,085,108.62**	**$544.70**	**4.55**	**96.58%**
IVABRADINE PRODUCTS						
CORLANOR TAB 5MG	96	22	$48,673.88	$507.02	4.36	2.25%
CORLANOR TAB 7.5MG	37	10	$21,574.12	$583.08	3.7	1.00%
CORLANOR SOL 5MG/5ML	9	3	$2,361.51	$262.39	3	0.11%
SUBTOTAL	**142**	**31***	**$72,609.51**	**$511.33**	**4.58**	**3.36%**
VERICIGUAT PRODUCTS						
VERQUVO TAB 2.5MG	2	2	$1,141.76	$570.88	1	0.05%
SUBTOTAL	**2**	**2***	**$1,141.76**	**$570.88**	**1**	**0.05%**
TOTAL	**3,972**	**863***	**$2,158,859.89**	**$543.52**	**4.6**	**100%**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
SOL = solution; 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/index.cfm. Last revised 04/2022. Last Accessed 04/18/2022.
[2] Boehringer Ingelheim and Eli Lilly and Company. US FDA approves Jardiance® (Empagliflozin) to Treat Adults Living with Heart Failure with Reduced Ejection Fraction. Available online at: https://www.boehringer-ingelheim.us/press-release/us-fda-approves-jardiance-empagliflozin-treat-adults-living-heart-failure-reduced. Issued 08/18/2021. Last accessed 04/18/2022.
[3] Boehringer Ingelheim and Eli Lilly and Company. US FDA approves Jardiance® (Empagliflozin) to Treat Adults with Heart Failure Regardless of Left Ventricular Ejection Fraction. Available online at: https://www.boehringer-ingelheim.us/press-release/us-fda-approves-jardiance-empagliflozin-treat-adults-heart-failure-regardless-left. Issued 02/24/2022. Last accessed 04/18/2022.
[4] Heidenreich PA, Bozkurt B, Aguilar D, et al. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation* 2022; Online ahead of print. doi: 10.1161/CIR.0000000000001063
[5] Cytokinetics, Inc. Pipeline: Omecamtiv Mecarbil. Available online at: https://cytokinetics.com/omecamtiv-mecarbil/. Last accessed 04/18/2022.
[6] Cytokinetics, Inc. Cytokinetics Announces FDA Acceptance of New Drug Application for Omecamtiv Mecarbil for the Treatment of Heart Failure with Reduced Ejection Fraction. Available online at: https://ir.cytokinetics.com/news-releases/news-release-details/cytokinetics-announces-fda-acceptance-new-drug-application. Issued 02/04/2022. Last accessed 04/18/2022.
[7] Teerlink JR, Diaz R, Felker GM, et al. Cardiac Myosin Activation with Omecamtiv Mecarbil in Systolic Heart Failure. *N Engl J Med* 2021; 384(2):105-116.

Appendix M

Calendar Year 2021 Annual Review of Anti-Diabetic Medications and 30-Day Notice to Prior Authorize Kerendia® (Finerenone), Rezvoglar™ (Insulin Glargine-aglr), and Semglee® (Insulin Glargine-yfgn)

Oklahoma Health Care Authority
May 2022

Current Prior Authorization Criteria

Anti-Diabetic Medications*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
Alpha-Glucosidase Inhibitors			
acarbose (Precose®)		miglitol (Glyset®)	
Amylinomimetics			
			pramlintide (Symlin®)
Biguanides			
metformin (Glucophage®)			metformin ER (Fortamet®, Glumetza®)
metformin SR (Glucophage XR®)			metformin soln (Riomet®)
metformin/ glipizide (Metaglip®)			metformin ER susp (Riomet ER™)
metformin/ glyburide (Glucovance®)			
DPP-4 Inhibitors			
	linagliptin (Tradjenta®)	alogliptin (Nesina®)	linagliptin/metformin ER (Jentadueto® XR)
	linagliptin/ metformin (Jentadueto®)	alogliptin/ metformin (Kazano®)	
	sitagliptin (Januvia®)	alogliptin/ pioglitazone (Oseni®)	
	sitagliptin/ metformin (Janumet®)	saxagliptin (Onglyza®)	
	sitagliptin/ metformin ER (Janumet XR®)	saxagliptin/ metformin (Kombiglyze®, Kombiglyze XR®)	

Anti-Diabetic Medications*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
DPP-4 Inhibitors/SGLT-2 Inhibitors			
	empagliflozin/ linagliptin (Glyxambi®)	dapagliflozin/ saxagliptin (Qtern®)	
		ertugliflozin/ sitagliptin (Steglujan®)	
Dopamine Agonists			
		bromocriptine (Cycloset®)	
Glinides			
repaglinide (Prandin®)	nateglinide (Starlix®)		
	repaglinide/ metformin (Prandimet®)		
GLP-1 Agonists			
	dulaglutide (Trulicity®)	semaglutide (Ozempic®)	exenatide ER autoinjector (Bydureon BCise®)
	exenatide (Byetta®)		lixisenatide (Adlyxin®)
	liraglutide (Victoza®)		semaglutide (Rybelsus®)
GLP-1 Agonists/Insulin			
		insulin degludec/ liraglutide (Xultophy® 100/3.6)+	
		insulin glargine/ lixisenatide (Soliqua® 100/33)+	
SGLT-2 Inhibitors			
	dapagliflozin (Farxiga®)	canagliflozin (Invokana®)	canagliflozin/ metformin ER (Invokamet® XR)
	dapagliflozin/ metformin ER (Xigduo® XR)	canagliflozin/ metformin (Invokamet®)	
	empagliflozin (Jardiance®)	ertugliflozin (Steglatro®)	
	empagliflozin/ metformin (Synjardy®)	ertugliflozin/ metformin (Segluromet®)	
	empagliflozin/ metformin ER (Synjardy® XR)		
SGLT-2 Inhibitors/DPP-4 Inhibitors/Biguanides			

Anti-Diabetic Medications*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
	empagliflozin/ linagliptin/ metformin ER (Trijardy® XR)		dapagliflozin/ saxagliptin/ metformin ER (Qternmet® XR)
Sulfonylureas			
chlorpropamide (Diabinese®)			
glimepiride (Amaryl®)			
glipizide (Glucotrol®)			
glipizide SR (Glucotrol XL®)			
glyburide (Diabeta®)			
glyburide micronized (Micronase®)			
tolbutamide (Orinase®)			
Thiazolidinediones			
pioglitazone (Actos®)		pioglitazone/ glimepiride (Duetact®)	
		pioglitazone/ metformin (Actoplus Met®, Actoplus Met XR®)	
		rosiglitazone (Avandia®)	
		rosiglitazone/ glimepiride (Avandaryl®)	
		rosiglitazone/ metformin (Avandamet®)	

*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).
⁺Unique criteria applies.
DPP-4 = dipeptidyl peptidase-4; ER = extended-release; GLP-1 = glucagon-like peptide-1; PA = prior authorization; SGLT-2 = sodium-glucose cotransporter-2; soln = solution; SR = sustained-release; susp = suspension

Anti-Diabetic Medications Tier-2 Approval Criteria:

1. A trial of 1 Tier-1 medication (must include a trial of metformin titrated up to maximum dose), or a patient-specific, clinically significant reason why a Tier-1 medication is not appropriate must be provided.

2. For initiation with dual or triple therapy, additional Tier-2 medications may be approved based on current American Association of Clinical Endocrinologists (AACE) or American Diabetes Association (ADA) guidelines.
3. A clinical exception will apply for medications with a unique FDA approved indication not covered by all Tier-1 medications. Tier structure rules for unique FDA approved indications will apply.

Anti-Diabetic Medications Tier-3 Approval Criteria:

1. Member must have tried 1 Tier-2 medication in the same category and have a documented clinical reason why the Tier-2 medication is not appropriate (for Tier-3 medications that do not have a similar category in Tier-2, a medication from any category in Tier-2 may be used).
2. A clinical exception will apply for medications with a unique FDA approved indication not covered by all Tier-1 and Tier-2 medications. Tier structure rules for unique FDA approved indications will apply.

Anti-Diabetic Medications Special Prior Authorization (PA) Approval Criteria:

1. Member must be currently stabilized on the requested product or have attempted at least 3 other categories of Tier-2 or Tier-3 medications, or have a documented clinical reason why the requested product is necessary for the member; and
2. Use of Invokamet® XR [canagliflozin/metformin extended-release (ER)] or Jentadueto® XR (linagliptin/metformin ER) will require a patient-specific, clinically significant reason why the member cannot take the immediate-release formulation(s); and
3. Use of Adlyxin® (lixisenatide), Bydureon BCise® (exenatide ER autoinjector pen), or Rybelsus® (semaglutide) will require a patient-specific, clinically significant reason (other than convenience) why the member cannot use all available lower-tiered glucagon-like peptide 1 (GLP-1) receptor agonists.

Admelog® (Insulin Lispro), Insulin Lispro U-100 (Generic Humalog U-100), and Lyumjev® U-100 (Insulin Lispro-aabc 100 Units/mL) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Humalog® (the brand formulation of Humalog® is preferred).

Afrezza® (Insulin Human Inhalation Powder) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus (DM); and
2. Member must be 18 years of age or older; and
3. A patient-specific, clinically significant reason why other rapid-acting injectable insulins are not appropriate must be provided; and

4. For the diagnosis of type 1 DM, the member must use Afrezza® with a long-acting insulin; and
5. The member must not smoke or have chronic lung disease such as asthma or chronic obstructive pulmonary disease (COPD).

Basaglar® (Insulin Glargine) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) or Levemir® (insulin detemir) must be provided.

Fiasp® (Insulin Aspart) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use NovoLog® (insulin aspart) must be provided.

Humalog® KwikPen® U-200 (Insulin Lispro 200 Units/mL) and Lyumjev® KwikPen U-200 (Insulin Lispro-aabc 200 Units/mL) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. Authorization of the 200 units/mL strength requires a patient-specific, clinically significant reason why the member cannot use the 100 unit/mL strength (the brand formulation of Humalog® U-100 is preferred).

Humulin® R U-500 Vials (Insulin Human 500 Units/mL) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use the Humulin® R U-500 KwikPen® (insulin human 500 units/mL), which is available without prior authorization, must be provided.

Ryzodeg® (Insulin Degludec/Insulin Aspart) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) or Levemir® (insulin detemir) with NovoLog® (insulin aspart) must be provided.

Soliqua® 100/33 (Insulin Glargine/Lixisenatide) Approval Criteria:

1. An FDA approved diagnosis of type 2 diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) with an alternative glucagon-like peptide 1 (GLP-1) receptor agonist must be provided; and
3. Current Tier-3 criteria will apply.

Toujeo® (Insulin Glargine) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and

2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) must be provided, and the member must be using a minimum of 100 units of Lantus® (insulin glargine) per day.

Tresiba® (Insulin Degludec) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) or Levemir® (insulin detemir) must be provided.

Xultophy® 100/3.6 (Insulin Degludec/Liraglutide) Approval Criteria:

1. An FDA approved diagnosis of type 2 diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) with Victoza® (liraglutide) must be provided; and
3. Current Tier-3 criteria will apply.

Utilization of Anti-Diabetic Medications: Calendar Year 2021

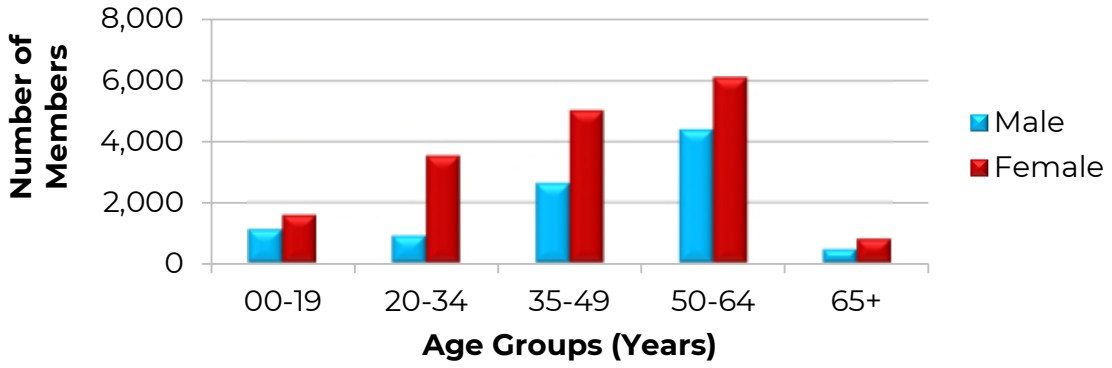
Comparison of Calendar Years

Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	17,572	127,177	$49,910,177.93	$392.45	$8.91	6,686,319	5,599,068
2021	26,467	156,073	$64,258,232.93	$411.72	$8.73	8,833,046	7,356,515
% Change	**50.6%**	**22.7%**	**28.7%**	**4.9%**	**-2.0%**	**32.1%**	**31.4%**
Change	**8,895**	**28,896**	**$14,348,055.00**	**$19.27**	**-$0.18**	**2,146,727**	**1,757,447**

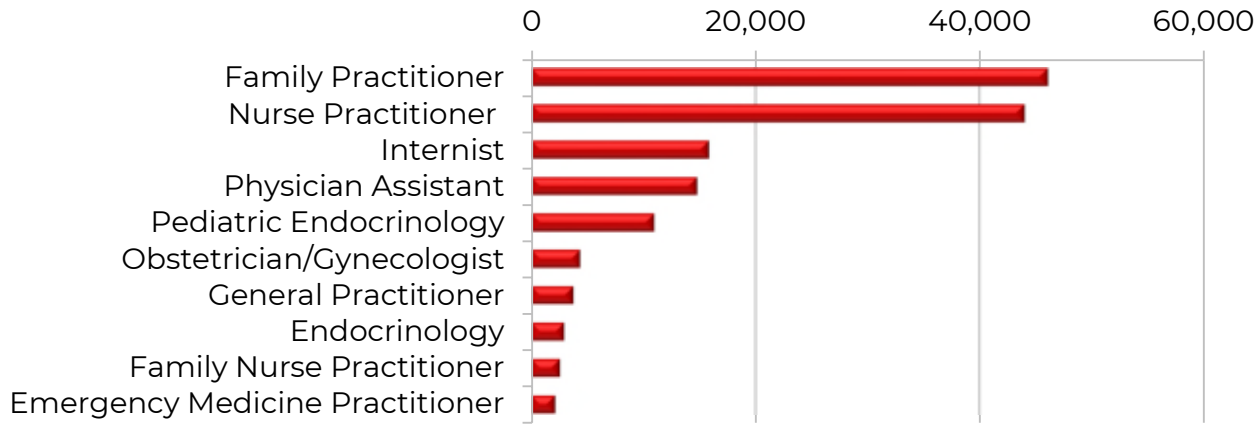
Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.

- Please note: The anti-diabetic medications are a supplementally rebated class of medications. Supplemental rebates are not reflected in the data in this report; therefore, costs included in this report do not reflect net costs.

Demographics of Members Utilizing Anti-Diabetic Medications



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



Prior Authorization of Anti-Diabetic Medications

There were 10,705 prior authorization requests submitted for anti-diabetic medications during calendar year 2021. Of the 10,705 total prior authorization requests submitted, 7,464 were for non-insulin anti-diabetic medications and 3,241 were for insulin products. Computer edits are in place to detect lower tiered non-insulin medications in a member's recent claims history and generate automated prior authorizations where possible. The following chart shows the status of the submitted petitions for calendar year 2021.

Status of Petitions

Market News and Updates[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17]

Anticipated Patent Expiration(s):

- Riomet® (metformin oral solution): August 2021
- Kombiglyze® XR [saxagliptin/metformin extended-release (ER) tablet]: July 2025
- Januvia® (sitagliptin tablet): May 2027
- Janumet® XR (sitagliptin/metformin ER tablet): May 2027

- Onglyza® (saxagliptin tablet): November 2028
- Janumet® (sitagliptin/metformin tablet): January 2029
- Actoplus Met® (pioglitazone/metformin tablet): February 2029
- Invokamet® (canagliflozin/metformin tablet): February 2029
- Invokamet® XR (canagliflozin/metformin ER tablet): February 2029
- Qtern® (dapagliflozin/saxagliptin tablet): December 2029
- Farxiga® (dapagliflozin tablet): May 2030
- Jentadueto® (linagliptin/metformin tablet): June 2030
- Steglatro® (ertugliflozin tablet): July 2030
- Bydureon BCise® (exenatide ER auto-injector): October 2030
- Steglujan® (ertugliflozin/sitagliptin tablet): October 2030
- Segluromet® (ertugliflozin/metformin tablet): October 2030
- Xigduo® XR (dapagliflozin/metformin ER tablet): November 2030
- Tradjenta® (linagliptin tablet): March 2031
- Invokana® (canagliflozin tablet): May 2031
- Cycloset® (bromocriptine tablet): April 2032
- Jentadueto XR® (linagliptin/metformin ER tablet): March 2033
- Ozempic® (semaglutide injection): June 2033
- Adlyxin® (lixisenatide injection): March 2034
- Synjardy® (empagliflozin/metformin tablet): April 2034
- Rybelsus® (semaglutide tablet): May 2034
- Glyxambi® (empagliflozin/linagliptin tablet): June 2034
- Synjardy® XR (empagliflozin/metformin ER tablet): June 2034
- Trijardy® XR (empagliflozin/linagliptin/metformin ER tablet): June 2034
- Jardiance® (empagliflozin tablet): June 2034
- Riomet ER™ (metformin ER oral suspension): May 2035
- Victoza® (liraglutide injection): July 2037

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

- **April 2021:** The FDA approved Farxiga® (dapagliflozin) to reduce the risk of sustained estimated glomerular filtration rate (eGFR) decline, end stage kidney disease (ESKD), cardiovascular (CV) death, and hospitalization for heart failure (HF) in adults with chronic kidney disease (CKD) at risk of progression. The approval was based on positive results from the DAPA-CKD Phase 3 trial that was granted priority review designation earlier in 2021. The trial showed that Farxiga® [in addition to standard of care treatment with an angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB)] reduced the relative risk of worsening of renal function, onset of ESKD, or risk of CV or renal death by 39%, the primary composite endpoint, compared to placebo ($P<0.0001$) in patients with CKD stages 2-4 and elevated urinary albumin excretion. The absolute risk reduction (ARR) was 5.3% over the median time in study of 2.4 years. Farxiga® is currently in a

Phase 3 trial for patients without type 2 diabetes mellitus (T2DM) following an acute myocardial infarction (MI).

- **July 2021:** The FDA approved Kerendia® (finerenone), a first-in-class non-steroidal mineralocorticoid receptor antagonist (MRA) indicated to reduce the risk of sustained eGFR decline, kidney failure, CV death, non-fatal MI, and hospitalization for HF in adult patients with CKD associated with T2DM. The approval is based on the results of the Phase 3 FIDELIO-DKD trial data that demonstrated positive kidney and CV outcomes in patients with CKD associated with T2DM. The randomized, double-blind, placebo-controlled trial included 5,674 patients who were randomly assigned to receive either Kerendia® or placebo. The study compared the 2 groups for the number of patients whose disease progressed to a composite endpoint that included at least a 40% reduction in kidney function, progression to kidney failure, or kidney death. Results showed that 504 of the 2,833 patients who received Kerendia® had at least 1 of the events in the composite endpoint compared to 600 of the 2,841 patients who received placebo [hazard ratio (HR): 0.82; 95% confidence interval (CI): 0.73, 0.93; P=0.001].
- **July 2021:** Bydureon BCise® (exenatide ER), once-weekly injectable suspension has been approved in the United States for the treatment of T2DM to improve glycemic control in pediatric patients 10 years of age and older as an adjunct to diet and exercise. The approval by the FDA is the first regulatory approval for a once-weekly glucagon-like peptide-1 receptor agonist (GLP-1 RA) in this population, supported by the positive results of the BCB114 Phase 3 trial in children with T2DM 10 to 17 years of age. It was a 24-week, randomized, double-blind, placebo-controlled Phase 3 trial with a 28-week open-label extension. Patients with T2DM treated with diet and exercise alone or in combination with a stable dose of oral antidiabetic agents and/or insulin were randomized to receive exenatide ER 2mg or placebo. The primary efficacy endpoint of the Phase 3 trial was change in glycated hemoglobin A1c (HbA1c) from baseline to week 24. Results demonstrated that patients administered exenatide ER achieved a significantly greater mean change in HbA1c from baseline compared to placebo (-0.25% vs. +0.45%, respectively; P<0.05). Overall, the adverse reactions observed in this pediatric population were consistent with that observed in the adult population. Safety and effectiveness of exenatide ER have not been established in pediatric patients younger than 10 years of age.
- **July 2021:** Semglee® (insulin glargine-yfgn), first interchangeable biosimilar insulin product in the United States, was approved by the FDA as both biosimilar to, and interchangeable with, its reference product Lantus® (insulin glargine). This approval is based on evidence that showed the products are highly similar and that there are no

clinically meaningful differences between Semglee® and Lantus® in terms of safety, purity, and potency. Semglee® can be expected to produce the same clinical result as Lantus® in any given patient, and the risks in terms of safety or diminished efficacy of switching between Semglee® and Lantus® are not greater than the risk of using Lantus® without such switching.

- **August 2021:** Jardiance® was approved by the FDA to reduce the risk of CV death and hospitalizations for HF in adults with HF with reduced ejection fraction (HFrEF). This approval is based on results from the EMPEROR-Reduced Phase 3 trial, which investigated the effect of adding Jardiance® 10mg versus placebo to standard of care in adults with and without T2DM who had HF (NYHA II, III, or IV) and left ventricular ejection fraction (LVEF) ≤40%. Patients were randomized to once daily Jardiance® 10mg or placebo, in addition to treatment with guideline-directed HF therapy. The composite primary endpoint was defined as time to first event of CV death or hospitalization for HF. Jardiance® significantly reduced the relative risk of the primary composite endpoint by 25% (ARR: 5.3%; HR: 0.75; 95% CI: 0.65, 0.86) versus placebo. These results were seen regardless of background HF standard of care treatments.
- **December 2021:** The FDA has approved Eli Lilly's biosimilar version of insulin glargine, Rezvoglar™ KwikPen. This is the second long-acting insulin glargine biosimilar approved by the FDA. Rezvoglar™ is not approved for interchangeability with Lantus® because Semglee®, the first insulin glargine biosimilar approved, has 1 year exclusivity from first commercial marketing before another interchangeable biosimilar to Lantus® may be approved.
- **February 2022:** The FDA has expanded the approval of Jardiance® to reduce the risk of CV death and hospitalization for HF in adults with HFrEF to those with HF regardless of EF. This approval is based on results from the landmark EMPEROR-Preserved Phase 3, randomized, double-blind trial in adults with and without T2DM. The trial investigated the effect of Jardiance® 10mg compared to placebo once daily, both in addition to standard of care therapy, in adults with HF with LVEF >40%. In the trial, Jardiance® demonstrated a 21% relative risk reduction (ARR: 3.3%; HR: 0.79; 95% CI: 0.69, 0.90) for the composite primary endpoint of CV death or hospitalization for HF. In both EMPEROR-Preserved and EMPEROR-Reduced, the benefit was generally consistent across LVEF subgroups.
- **March 2022:** The FDA approved a 2mg dose of Ozempic® (semaglutide) injection, a once-weekly GLP-1 RA analog. Ozempic® will now be available in 3 therapeutic doses of 0.5mg, 1mg, and 2mg, to help patients with T2DM reach their HbA1c goal, now including those with a higher HbA1c who have been unable to meet their HbA1c target. In the

SUSTAIN FORTE trial, patients with an average starting HbA1c of 8.9% treated with Ozempic® 2mg achieved a statistically significant and superior reduction in blood glucose of 2.1% at week 40 compared to 1.9% with Ozempic® 1mg (P<0.01). The most common adverse events were gastrointestinal and occurred more frequently among patients receiving Ozempic® 2mg (34.0%) vs. Ozempic® 1mg (30.8%).

Guideline Update(s):

- **American Diabetes Association (ADA) Guideline Update:** The ADA released the *Standards of Medical Care in Diabetes 2022*, which provides the latest in comprehensive, evidence-based recommendations for the diagnosis and treatment of children and adults with type 1 diabetes mellitus (T1DM), T2DM, or gestational diabetes; strategies for the prevention or delay of T2DM; and therapeutic approaches that can reduce complications, mitigate CV and renal risk, and improve health outcomes. Some notable updates and additions include: guidance on first-line therapy determined by co-morbidities, screening beginning at 35 years of age for all people, changes to gestational diabetes recommendations regarding when to test and in whom to test, and updated recommendations on technology selection based on individual and caregiver considerations, ongoing education on use of devices, continued access to devices across payers, support of students using devices in school settings, use of telehealth visits, and early initiation of technology.

News:

- **September 2021:** Eli Lilly will lower the list price of insulin lispro injection in the United States by an additional 40% effective January 1, 2022, bringing the list price down to 2008 levels. The new list price will apply to all Lilly's non-branded insulins, including insulin lispro injection, a lower list-priced alternative to Humalog® U-100. The new lower list price is the latest among numerous options that can reduce out-of-pocket costs for Lilly insulin at United States retail pharmacies. Patients using any Lilly insulin – including insulin lispro injection – can fill their monthly prescription for $35 through the Lilly Insulin Value Program for people with commercial insurance or who are uninsured, and the Senior Savings Model for seniors in participating Medicare Part D plans. Lilly's numerous affordability solutions, combined with insurance coverage, have lowered the average monthly out-of-pocket cost for a prescription of Lilly insulin (regardless of the number of vials or pens) to $28.05, a 27% decrease over the past 4 years. In addition to lowering the list price of insulin lispro injection, Lilly will keep other affordability programs in place for patients using Lilly insulins.

- **March 2022:** The EMPA-KIDNEY trial will end early due to clear positive efficacy in adults with CKD. As the largest sodium-glucose cotransporter-2 (SGLT-2) inhibitor trial in CKD to date, EMPA-KIDNEY is evaluating the efficacy and safety of empagliflozin in adults with CKD who are frequently seen in clinical practice but who have been under-represented in previous SGLT-2 inhibitor trials, therefore addressing a critical unmet need. It is a multinational randomized, double-blind, placebo-controlled clinical trial, designed to evaluate the effect of empagliflozin on kidney disease progression and CV mortality risk. Full results have yet to be released and will be presented at an upcoming medical congress.

Pipeline:

- **Insulin Icodec:** Two new Phase 2 studies show the investigational once-weekly basal insulin icodec, a novel, long-acting insulin analog, by Novo Nordisk was comparable in efficacy and safety to once-daily insulin glargine U-100. Insulin icodec binds to albumin to create a circulating depot with a 196-hour half-life. The once-weekly injection is designed to cover an individual's basal insulin requirements for a full week with steady insulin release. Because of its concentrated formulation of 700 units/mL, its injection volume is equivalent to that of daily glargine U-100. A Phase 2, randomized, double-blind trial was completed where patients were randomized to weekly insulin icodec plus daily placebo or daily insulin glargine U-100 plus weekly placebo. The primary endpoint, change in HbA1c from baseline to week 26, dropped 1.33% points with icodec and 1.15% points with glargine, which was not significantly different (P=0.08). Insulin icodec Phase 3 trials are currently ongoing.
- **Tirzepatide:** In October 2021, Eli Lilly submitted a New Drug Application to the FDA for tirzepatide for the treatment of adults with T2DM. Tirzepatide is an investigational once-weekly dual glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 RA that integrates the actions of both incretins into a single molecule, representing a new class of medicines being studied for the treatment of T2DM. The safety and efficacy of tirzepatide has been studied in the SURPASS Phase 3 clinical trial program that has enrolled more than 20,000 patients with T2DM consisting of 5 primary clinical trials. A decision from the FDA is expected in late May 2022.

Kerendia® (Finerenone) Product Summary[18]

Indication(s): Kerendia® is a non-steroidal MRA indicated to reduce the risk of sustained eGFR decline, ESKD, CV death, non-fatal MI, and hospitalization for HF in adult patients with CKD associated with T2DM

How Supplied: 10mg and 20mg oral tablets

Dosing:

- Serum potassium and eGFR levels should be measured prior to initiation of Kerendia®
- Recommended starting dose is 10mg or 20mg orally once daily based on eGFR and serum potassium thresholds
- Doses can be increased after 4 weeks to the target dose of 20mg once daily, based on eGFR and serum potassium thresholds
- Kerendia® can be taken with or without food

Mechanism of Action: Finerenone is a non-steroidal, selective MRA which is activated by aldosterone and cortisol and regulates gene transcription. Finerenone blocks MR mediated sodium reabsorption and MR overactivation in both epithelial (e.g., kidney) and nonepithelial (e.g., heart, blood vessels) tissues. MR overactivation is thought to contribute to fibrosis and inflammation. Finerenone has a high potency and selectivity for the MR and has no relevant affinity for androgen, progesterone, estrogen, and glucocorticoid receptors.

Contraindication(s):

- Concomitant use with strong CYP3A4 inhibitors
- Patients with adrenal insufficiency

Safety:

- Hyperkalemia: The risk for developing hyperkalemia increases with decreasing kidney function and is greater in patients with higher baseline potassium levels or other risk factors of hyperkalemia. Serum potassium and eGFR should be measured in all patients before initiation of treatment with Kerendia® and then dosed accordingly. Treatment with Kerendia® should not be initiated if serum potassium is >5mEq/L. Serum potassium should be measured periodically during treatment and the dose should be adjusted accordingly.
- Pregnancy: There is no available data on Kerendia® use in pregnancy to evaluate for a drug-associated risk of major birth defects, miscarriage or adverse maternal or fetal outcomes. Animal studies have shown developmental toxicity at exposures about 4 times those expected in humans.
- Lactation: There is no data on the presence of finerenone or its metabolite in human milk, the effects on the breastfed infant, or the effects of the drug on milk production. In a pre- and postnatal developmental toxicity study in rats, increased pup mortality and lower pup weight were observed at about 4 times the $AUC_{unbound}$ expected in humans. These findings suggest that finerenone is present in rat milk. Because of the potential risk to breastfed infants from exposure to Kerendia®, patients should avoid breastfeeding during treatment and for 1 day after discontinuing treatment.

- Pediatric Use: The safety and efficacy of Kerendia® have not been established in patients younger than 18 years of age.
- Hepatic Impairment: Kerendia® should be avoided in patients with severe hepatic impairment. No dosage adjustments are recommended in patients with mild or moderate hepatic impairment.

Adverse Reactions: The most common adverse reactions reported in clinical trials (incidence ≥1%) were hyperkalemia, hypotension, and hyponatremia.

Efficacy: The safety and efficacy of finerenone were evaluated in a randomized, double-blind, placebo-controlled, Phase 3 trial in 5,674 patients with CKD associated with T2DM. Patients were randomized 1:1 to receive either finerenone or placebo at doses of 10mg or 20mg based on eGFR. An increase to 20mg was encouraged after 1 month, provided that serum potassium level was ≤4.8mmol/L and eGFR was stable.

- Primary Endpoint: The primary endpoint was the first occurrence of the composite endpoint of kidney failure, sustained decrease of eGFR ≥40% from baseline for ≥4 weeks, or renal death. This endpoint was assessed in a time-to-event analysis.
- Results: Over a 2.6 year period, the primary composite outcomes were significantly lower in the finerenone group vs. placebo, 17.8% vs 21.1%, respectively (504 of 2,833 patients vs. 600 of 2,841 patients; HR: 0.82; 95% CI: 0.73, 0.93; P=0.001). Based on the absolute risk reduction of 3.4% after 3 years, the number needed to treat to prevent 1 primary outcome event was 29.

Cost Comparison:

Product	Cost Per Unit	Cost Per Month*	Cost Per Year*
Jardiance® (empagliflozin) 25mg tablet	$18.33	$549.90	$6,598.80
Kerendia® (finerenone) 20mg tablet	**$18.17**	**$545.10**	**$6,541.20**
Invokana® (canagliflozin) 300mg tablet	$18.15	$544.50	$6,534.00
Farxiga® (dapagliflozin) 10mg tablet	$17.76	$532.80	$6,393.60

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 and cost per year are based on 1 tablet daily.

Insulin Glargine Cost Comparison

Product	Cost Per mL
Lantus® (insulin glargine) U-100 syringe	$27.23
Lantus® (insulin glargine) U-100 vial	$27.22
Semglee® (insulin glargine-YFGN) U-100 syringe	**$26.94**
Semglee® (insulin glargine-YFGN) U-100 vial	**$25.83**

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).
Currently there is no cost information available for Rezvoglar™ (insulin glargine-aglr).

Recommendations

The College of Pharmacy recommends the prior authorization of Kerendia® (finerenone) with the following criteria:

Kerendia® (Finerenone) Approval Criteria:

1. An FDA approved diagnosis to reduce the risk of sustained estimated glomerular filtration rate (eGFR) decline, end stage kidney disease, cardiovascular death, non-fatal myocardial infarction, and hospitalization for heart failure in adult members with chronic kidney disease (CKD) associated with type 2 diabetes mellitus (T2DM); and
2. Member must be receiving a maximum tolerated dose of an angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) or have a contraindication to use; and
3. A patient specific, clinically significant reason why the member cannot use a sodium-glucose cotransporter-2 (SGLT-2) inhibitor must be provided; and
4. Member must not be receiving concomitant treatment with strong CYP3A4 inhibitors (e.g., itraconazole, ketoconazole, ritonavir); and
5. Member must not have adrenal insufficiency; and
6. Member must not have severe hepatic impairment (Child Pugh C); and
7. Prescriber must measure serum potassium and eGFR prior to initiation of Kerendia®; and
8. Prescriber must verify serum potassium is not >5.0mEq/L prior to treatment initiation with Kerendia®; and
9. Prescriber must agree to monitor serum potassium levels 4 weeks after a dose adjustment and throughout treatment and adjust the dose accordingly per package labeling; and
10. Initial authorization will be for 4 weeks, after which time serum potassium levels will be required for continued approval; and
11. A quantity limit of 30 tablets per 30 days will apply. The member's eGFR should be provided for initiation of treatment to ensure the correct recommended dose per package labeling. The following initial dose will be approved based on eGFR:
    a. Kerendia® 10mg once daily in members with eGFR 25 to <60mL/min/1.73m^2; or
    b. Kerendia® 20mg once daily in members with eGFR ≥60mL/min/1.73m^2.

Additionally, the College of Pharmacy recommends the prior authorization of Rezvoglar™ (insulin glargine-aglr) and Semglee® (insulin glargine-yfgn) with the following criteria:

Rezvoglar™ (Insulin Glargine-aglr) and Semglee® (Insulin Glargine-yfgn) Approval Criteria:

1. An FDA approved diagnosis of diabetes mellitus; and
2. A patient-specific, clinically significant reason why the member cannot use Lantus® (insulin glargine) or Levemir® (insulin detemir) 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.

Finally, the College of Pharmacy recommends updating the anti-diabetic medications Tier-2 approval criteria to reflect the current guideline recommendations (changes shown in red):

Anti-Diabetic Medications Tier-2 Approval Criteria:

1. A trial at least 3 months in duration (unless intolerable adverse effects) ~~of 1 Tier-1 medication (must include a trial~~ of metformin titrated up to maximum tolerated dose~~)~~ or a patient-specific, clinically significant reason why a 3-month trial of metformin titrated up to maximum tolerated dose ~~Tier-1 medication~~ is not appropriate must be provided.
2. For initiation with dual or triple therapy, additional Tier-2 medications may be approved based on current American Association of Clinical Endocrinologists (AACE) or American Diabetes Association (ADA) guidelines.
3. A clinical exception will apply for medications with a unique FDA approved indication not covered by all Tier-1 medications. Tier structure rules for unique FDA approved indications will apply.

Utilization Details of Non-Insulin Anti-Diabetic Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
ALPHA-GLUCOSIDASE INHIBITOR PRODUCTS					
ACARBOSE TAB 25MG	93	30	$2,455.62	3.1	$26.40
ACARBOSE TAB 100MG	31	10	$1,417.83	3.1	$45.74
ACARBOSE TAB 50MG	27	11	$707.52	2.45	$26.20
SUBTOTAL	**151**	**51**	**$4,580.97**	**2.96**	**$30.34**
BIGUANIDE PRODUCTS					
METFORMIN TAB 500MG	21,893	8,366	$215,351.08	2.62	$9.84
METFORMIN TAB 1000MG	15,209	5,547	$158,101.47	2.74	$10.40
METFORMIN TAB 500MG ER	8,321	3,377	$90,869.93	2.46	$10.92
METFORMIN TAB 850MG	941	347	$9,579.42	2.71	$10.18
METFORMIN TAB 750MG ER	697	322	$8,791.88	2.16	$12.61
METFORMIN SOL 500MG/5ML	60	12	$23,271.00	5	$387.85

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
METFORMIN ER TAB 1000MG	10	2	$1,359.63	5	$135.96
METFORMIN TAB 1000 ER	6	2	$3,224.52	3	$537.42
SUBTOTAL	**47,137**	**17,975**	**$510,548.93**	**2.62**	**$10.83**
DPP-4 INHIBITOR PRODUCTS					
JANUVIA TAB 100MG	3,036	872	$2,655,832.95	3.48	$874.78
TRADJENTA TAB 5MG	1,374	244	$642,752.43	5.63	$467.80
JANUVIA TAB 50MG	681	206	$606,221.32	3.31	$890.19
JANUVIA TAB 25MG	246	92	$188,213.32	2.67	$765.09
ONGLYZA TAB 5MG	124	19	$77,048.77	6.53	$621.36
ALOGLIPTIN TAB 25MG	28	4	$6,118.18	7	$218.51
ALOGLIPTIN TAB 12.5MG	4	1	$298.16	4	$74.54
ALOGLIPTIN TAB 6.25MG	1	1	$475.54	1	$475.54
ONGLYZA TAB 2.5MG	1	1	$1,327.15	1	$1,327.15
SUBTOTAL	**5,495**	**1,440**	**$4,178,287.82**	**3.82**	**$760.38**
DPP-4 INHIBITOR/BIGUANIDE COMBINATION PRODUCTS					
JANUMET TAB 50-1000MG	866	251	$715,655.11	3.45	$826.39
JANUMET XR TAB 100-1000MG	249	60	$192,221.29	4.15	$771.97
JANUMET XR TAB 50-1000MG	244	71	$182,621.34	3.44	$748.45
JANUMET TAB 50-500MG	105	38	$92,722.82	2.76	$883.07
JENTADUETO TAB 2.5-1000MG	69	33	$55,814.91	2.09	$808.91
JANUMET XR TAB 50-500MG	19	6	$7,286.65	3.17	$383.51
JENTADUETO TAB 2.5-500MG	17	2	$9,849.85	8.5	$579.40
JENTADUETO TAB 2.5-850MG	4	1	$5,625.16	4	$1,406.29
SUBTOTAL	**1,573**	**462**	**$1,261,797.13**	**3.40**	**$802.16**
DPP-4 INHIBITOR/TZD COMBINATION PRODUCTS					
ALOG/PIOG TAB 25-30MG	4	1	$2,369.64	4	$592.41
SUBTOTAL	**4**	**1**	**$2,369.64**	**4**	**$592.41**
GLINIDE PRODUCTS					
NATEGLINIDE TAB 120MG	38	9	$1,481.99	4.22	$39.00
REPAGLINIDE TAB 1MG	36	10	$889.20	3.6	$24.70
NATEGLINIDE TAB 60MG	36	11	$1,331.48	3.27	$36.99
REPAGLINIDE TAB 2MG	12	4	$297.12	3	$24.76
REPAGLINIDE TAB 0.5MG	3	1	$66.93	3	$22.31
SUBTOTAL	**125**	**35**	**$4,066.72**	**3.57**	**$32.53**
GLP-1 AGONIST PRODUCTS					
VICTOZA INJ 18MG/3ML	4,385	1,097	$4,527,691.64	4	$1,032.54
TRULICITY INJ 1.5MG/0.5ML	3,118	964	$3,186,591.14	3.23	$1,022.00
TRULICITY INJ 0.75MG/0.5ML	2,706	1,007	$2,621,380.56	2.69	$968.73
TRULICITY INJ 3MG/0.5ML	850	324	$922,494.83	2.62	$1,085.29
OZEMPIC INJ 2MG/1.5ML	678	220	$551,146.70	3.08	$812.90
OZEMPIC INJ 4MG/3ML	465	135	$383,256.40	3.44	$824.21

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
TRULICITY INJ 4.5MG/0.5ML	300	110	$350,047.29	2.73	$1,166.82
OZEMPIC INJ 2MG/1.5ML	244	73	$193,188.30	3.34	$791.76
BYDUREON PEN INJ 2MG	209	90	$172,128.92	2.32	$823.58
RYBELSUS TAB 14MG	113	23	$92,124.34	4.91	$815.26
RYBELSUS TAB 7MG	100	25	$79,968.15	4	$799.68
RYBELSUS TAB 3MG	49	25	$39,118.23	1.96	$798.33
BYETTA INJ 10MCG	35	8	$26,410.20	4.38	$754.58
BYDUREON BC INJ 2MG/0.85ML	32	4	$23,508.20	8	$734.63
BYETTA INJ 5MCG	21	13	$18,825.58	1.62	$896.46
SUBTOTAL	**13,305**	**4,118**	**$13,187,880.48**	**3.23**	**$991.20**
GLP-1 AGONIST/INSULIN COMBINATION PRODUCTS					
SOLIQUA INJ 100/33	97	17	$67,663.44	5.71	$697.56
XULTOPHY INJ 100/3.6	48	13	$51,247.37	3.69	$1,067.65
SUBTOTAL	**145**	**30**	**$118,910.81**	**4.83**	**$820.07**
SGLT-2 INHIBITOR PRODUCTS					
JARDIANCE TAB 25MG	2,646	886	$2,686,909.63	2.99	$1,015.46
JARDIANCE TAB 10MG	1,994	736	$1,751,556.64	2.71	$878.41
FARXIGA TAB 10MG	1,372	465	$1,205,624.37	2.95	$878.73
FARXIGA TAB 5MG	508	211	$431,424.57	2.41	$849.26
INVOKANA TAB 300MG	184	44	$180,164.16	4.18	$979.15
INVOKANA TAB 100MG	129	41	$113,657.63	3.15	$881.07
STEGLATRO TAB 15MG	35	5	$10,726.43	7	$306.47
SUBTOTAL	**6,868**	**2388**	**$6,380,063.43**	**2.88**	**$928.96**
SGLT-2 INHIBITOR/BIGUANIDE COMBINATION PRODUCTS					
XIGDUO XR TAB 10-1000MG	184	44	$135,319.48	4.18	$735.43
SYNJARDY XR TAB 25-1000MG	141	49	$134,135.40	2.88	$951.31
SYNJARDY TAB 12.5-1000MG	112	35	$97,433.06	3.2	$869.94
XIGDUO XR TAB 5-1000MG	109	38	$74,646.60	2.87	$684.83
SYNJARDY TAB 5-1000MG	56	18	$47,149.55	3.11	$841.96
SYNJARDY XR TAB 10-1000MG	39	13	$33,418.84	3	$856.89
SYNJARDY XR TAB 12.5-1000MG	32	14	$23,037.45	2.29	$719.92
INVOKAMET TAB 150-1000MG	26	5	$15,455.93	5.2	$594.46
SYNJARDY TAB 5-500MG	16	3	$14,874.95	5.33	$929.68
XIGDUO XR TAB 10-500MG	15	6	$12,904.07	2.5	$860.27
SEGLUROMET TAB 2.5-1000MG	13	2	$2,039.24	6.5	$156.86
SYNJARDY XR TAB 5-1000MG	12	4	$7,431.83	3	$619.32
SYNJARDY TAB 12.5-500MG	12	5	$7,285.89	2.4	$607.16
XIGDUO XR TAB 2.5-1000MG	10	3	$5,201.38	3.33	$520.14
KOMBIGLYZE XR TAB 5-1000MG	7	1	$5,316.18	7	$759.45
INVOKAMET XR TAB 150-1000MG	5	1	$2,649.94	5	$529.99
INVOKAMET XR TAB 50-1000MG	4	1	$6,279.88	4	$1,569.97

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
INVOKAMET TAB 50-1000MG	3	2	$2,907.75	1.5	$969.25
SEGLUROMET TAB 7.5-1000MG	2	1	$609.46	2	$304.73
XIGDUO XR TAB 5-500MG	1	1	$514.78	1	$514.78
INVOKAMET TAB 50-500MG	1	1	$1,574.98	1	$1,574.98
SUBTOTAL	**800**	**247**	**$630,186.64**	**3.24**	**$787.73**
SULFONYLUREA PRODUCTS					
GLIPIZIDE TAB 10MG	2,898	1,073	$30,526.15	2.7	$10.53
GLIPIZIDE TAB 5MG	2,636	1,070	$25,529.21	2.46	$9.68
GLYBURIDE TAB 5MG	1,911	603	$29,538.52	3.17	$15.46
GLIMEPIRIDE TAB 4MG	1,356	491	$15,904.08	2.76	$11.73
GLIPIZIDE ER TAB 10MG	1,043	414	$23,398.15	2.52	$22.43
GLIMEPIRIDE TAB 2MG	931	375	$10,168.24	2.48	$10.92
GLIPIZIDE ER TAB 5MG	821	347	$13,581.52	2.37	$16.54
GLIPIZIDE ER TAB 2.5MG	411	165	$6,986.88	2.49	$17.00
GLYBURIDE TAB 2.5MG	410	164	$6,074.46	2.5	$14.82
GLIMEPIRIDE TAB 1MG	391	163	$3,887.32	2.4	$9.94
GLYBURIDE TAB 1.25MG	69	29	$904.97	2.38	$13.12
GLIPIZIDE XL TAB 10MG	46	27	$1,026.07	1.7	$22.31
GLYBURIDE MCR TAB 3MG	42	10	$671.22	4.2	$15.98
GLIPIZIDE XL TAB 5MG	40	21	$611.74	1.9	$15.29
GLYBURIDE MCR TAB 6MG	13	5	$173.56	2.6	$13.35
GLIPIZIDE XL TAB 2.5MG	10	5	$137.48	2	$13.75
GLYBURIDE MCR TAB 1.5MG	2	2	$34.74	1	$17.37
SUBTOTAL	**13,030**	**4,964**	**$169,154.31**	**2.62**	**$12.98**
SULFONYLUREA/BIGUANIDE COMBINATION PRODUCTS					
GLYB/METFORMIN TAB 5-500MG	152	43	$2,348.60	3.53	$15.45
GLIP/METFORMIN TAB 5-500MG	96	32	$3,084.69	3	$32.13
GLYB/METFORMIN TAB 2.5-500MG	46	17	$761.32	2.71	$16.55
GLIP/METFORMIN TAB 2.5-500MG	16	8	$552.00	2	$34.50
SUBTOTAL	**310**	**100**	**$6,746.61**	**3.10**	**$21.76**
SGLT-2 INHIBITOR/DPP-4 INHIBITOR COMBINATION PRODUCTS					
GLYXAMBI TAB 25-5MG	152	26	$79,019.20	5.85	$519.86
GLYXAMBI TAB 10-5MG	61	12	$29,254.02	5.08	$479.57
STEGLUJAN TAB 5-100MG	21	3	$11,212.71	7	$533.94
STEGLUJAN TAB 15-100MG	3	1	$1,612.41	3	$537.47
SUBTOTAL	**237**	**42**	**$121,098.34**	**5.64**	**$510.96**
TZD PRODUCTS					
PIOGLITAZONE TAB 30MG	1,370	505	$22,275.23	2.71	$16.26
PIOGLITAZONE TAB 15MG	1,032	418	$14,810.37	2.47	$14.35
PIOGLITAZONE TAB 45MG	709	224	$11,967.40	3.17	$16.88
AVANDIA TAB 4MG	2	1	$700.58	2	$350.29

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
SUBTOTAL	**3,113**	**1148**	**$49,753.58**	**2.71**	**$15.98**
TZD/BIGUANIDE COMBINATION PRODUCTS					
PIOG/MET TAB 15-850MG	43	6	$1,967.47	7.17	$45.76
PIOG/MET TAB 15-500MG	5	1	$211.19	5	$42.24
SUBTOTAL	**48**	**7**	**$2,178.66**	**6.86**	**$45.39**
SGLT-2/DPP-4 INHIBITOR/BIGUANIDE COMBINATION PRODUCTS					
TRIJARDY XR TAB 25-5-1000MG	12	1	$6,408.07	12	$534.01
SUBTOTAL	**12**	**1**	**$6,408.07**	**12**	**$534.01**
TOTAL	**92,353**	**20,769***	**$26,634,032.14**	**4.45**	**$288.39**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members
ALOG = alogliptin; DPP-4 = dipeptidyl peptidase-4; ER, XL, XR = extended-release; GLIP = glipizide; GLP-1 = glucagon-like peptide 1; GLYB = glyburide; INJ = injection; MCR = micronized; MET = metformin; PIOG = pioglitazone; SGLT-2 = sodium-glucose cotransporter-2; SOL = solution; TZD = thiazolidinedione; TAB = tablet; U = unit

Utilization Details of Insulin Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	UNITS/ DAY	COST/ CLAIM
INSULIN ASPART PRODUCTS					
NOVOLOG INJ FLEXPEN	5,115	1,819	$3,653,703.75	0.55	$714.31
INSULIN ASPART INJ FLEXPEN	4,049	1,532	$1,615,891.50	0.52	$399.08
NOVOLOG INJ 100/ML	2,658	642	$1,693,071.54	0.75	$636.97
INSULIN ASPART INJ 100/ML	1,428	453	$529,680.31	0.73	$370.92
NOVOLOG INJ PENFILL	361	79	$190,469.58	0.48	$527.62
FIASP FLEX INJ TOUCH	180	37	$115,577.29	0.61	$642.10
NOVOLOG INJ RELION	171	93	$33,186.18	0.71	$194.07
INSULIN ASP INJ PENFILL	89	28	$29,659.42	0.5	$333.25
FIASP PENFILL INJ U-100	20	6	$11,691.53	0.52	$584.58
FIASP INJ 100/ML	18	4	$9,012.76	0.5	$500.71
SUBTOTAL	**14,089**	**4,693**	**$7,881,943.86**	**0.59**	**$559.44**
INSULIN ASPART/NPH COMBINATION PRODUCTS					
NOVOLOG MIX INJ FLEXPEN	470	144	$435,263.77	0.71	$926.09
INS ASP PROT INJ FLEXPEN	133	38	$76,676.99	0.82	$576.52
NOVOLOG MIX INJ 70/30	117	31	$97,854.27	0.88	$836.36
NOVOLOG MIX INJ FLEX RELION	47	25	$6,827.96	0.69	$145.28
INSULIN ASPART INJ 70/30	30	14	$6,716.38	0.37	$223.88
NOVOLOG RELION INJ 70/30	13	7	$1,352.72	0.44	$104.06
SUBTOTAL	**810**	**259**	**$624,692.09**	**0.73**	**$771.22**
INSULIN DEGLUDEC PRODUCTS					
TRESIBA FLEX INJ 200UNIT	1,023	236	$956,038.39	0.39	$934.54
TRESIBA FLEX INJ 100UNIT	964	260	$517,391.46	0.35	$536.71
TRESIBA INJ 100UNIT	8	3	$4,959.82	0.34	$619.98

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	UNITS/ DAY	COST/ CLAIM
SUBTOTAL	**1,995**	**499**	**$1,478,389.67**	**0.37**	**$741.05**
INSULIN DETEMIR PRODUCTS					
LEVEMIR INJ FLEXTOUCH	7,378	2,340	$4,680,604.22	0.48	$634.40
LEVEMIR INJ	2,093	620	$1,118,392.43	0.51	$534.35
SUBTOTAL	**9,471**	**2,960**	**$5,798,996.65**	**0.48**	**$612.29**
INSULIN GLARGINE PRODUCTS					
LANTUS SOLOS INJ 100/ML	16,709	5,169	$9,716,141.41	0.45	$581.49
LANTUS INJ 100/ML	4,395	1,275	$2,314,254.28	0.55	$526.57
TOUJEO SOLO INJ 300IU/ML	340	69	$274,459.66	0.29	$807.23
SEMGLEE INJ 100U/ML	305	96	$41,325.09	0.38	$135.49
SEMGLEE SOL 100U/ML	295	58	$48,881.68	0.56	$165.70
TOUJEO MAX INJ 300IU/ML	194	43	$218,201.21	0.48	$1,124.75
BASAGLAR INJ 100UNIT	99	25	$41,296.01	0.5	$417.13
INSULIN GLAR INJ 100U/ML	17	17	$2,409.70	0.37	$141.75
INSULIN GLAR SOL 100U/ML	3	3	$420.83	0.28	$140.28
SUBTOTAL	**22,357**	**6,755**	**$12,657,389.87**	**0.46**	**$566.15**
INSULIN GLULISINE PRODUCTS					
APIDRA INJ SOLOSTAR	243	86	$212,145.54	0.5	$873.03
APIDRA INJ U-100	56	20	$25,538.33	0.55	$456.04
SUBTOTAL	**299**	**106**	**$237,683.87**	**0.51**	**$794.93**
INSULIN LISPRO PRODUCTS					
HUMALOG KWIK INJ 100/ML	5,295	1,754	$3,951,028.29	0.56	$746.18
HUMALOG INJ 100/ML	3,212	769	$2,018,865.69	0.75	$628.54
HUMALOG JR INJ 100/ML	628	166	$357,588.13	0.45	$569.41
INSULIN LISP INJ JUNIOR	322	93	$97,948.62	0.47	$304.19
HUMALOG KWIK INJ 200/ML	235	45	$366,221.94	0.82	$1,558.39
HUMALOG INJ 100/ML	234	47	$159,928.65	0.7	$683.46
INSULIN LISP INJ 100/ML	23	7	$25,934.58	1.78	$1,127.59
LYUMJEV KWIK INJ 100UT/ML	6	3	$3,622.66	0.35	$603.78
LYUMJEV INJ 100UT/ML	3	1	$1,670.43	0.61	$556.81
ADMELOG SOLO INJ 100U/ML	1	1	$263.88	0.5	$263.88
SUBTOTAL	**9,959**	**2,886**	**$6,983,072.87**	**0.61**	**$701.18**
INSULIN LISPRO/NPH COMBINATION PRODUCTS					
HUMALOG MIX INJ 75/25 KWIK	118	29	$116,870.74	0.76	$990.43
HUMALOG MIX SUS 75/25	58	11	$33,298.78	0.54	$574.12
INSULIN LISP INJ PROT	14	5	$4,577.45	0.64	$326.96
HUMALOG MIX INJ 50/50 KWIK	8	6	$3,435.24	0.22	$429.41
HUMALOG MIX INJ 50/50	1	1	$281.10	0.06	$281.10
SUBTOTAL	**199**	**52**	**$158,463.31**	**0.64**	**$796.30**
NPH (N) INSULIN PRODUCTS					
HUMULIN N INJ U-100	380	139	$107,015.46	0.54	$281.62

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	UNITS/ DAY	COST/ CLAIM
NOVOLIN N INJ U-100	312	110	$83,191.49	0.53	$266.64
NOVOLIN N INJ RELION	256	91	$12,716.20	0.55	$49.67
HUMULIN N INJ U-100 KWIK	242	125	$143,333.97	0.46	$592.29
NOVOLIN N INJ 100 UNIT	232	110	$40,208.94	0.41	$173.31
SUBTOTAL	**1,422**	**575**	**$386,466.06**	**0.50**	**$271.78**
REGULAR (R) INSULIN PRODUCTS					
HUMULIN R INJ U-100	588	183	$158,205.80	0.56	$269.06
HUMULIN R INJ U-500	405	78	$560,215.88	0.5	$1,383.25
NOVOLIN R INJ U-100	340	138	$75,488.19	0.45	$222.02
NOVOLIN R INJ RELION	274	94	$19,574.56	0.63	$71.44
NOVOLIN R INJ 100 UNIT	141	62	$41,316.88	0.47	$293.03
HUMULIN R INJ U-500	39	6	$54,966.26	0.54	$1,409.39
AFREZZA POW 4-8-12	1	1	$1,522.16	6	$1,522.16
SUBTOTAL	**1,788**	**562**	**$911,289.73**	**0.53**	**$509.67**
R/N INSULIN COMBINATION PRODUCTS					
NOVOLIN INJ 70/30	308	117	$113,332.23	0.7	$367.96
HUMULIN INJ 70/30	297	80	$117,866.63	0.78	$396.86
NOVOLIN 70/30 INJ RELION	267	94	$21,384.62	0.72	$80.09
HUMULIN INJ 70/30 KWIK	231	74	$185,809.57	0.7	$804.37
NOVOLIN INJ 70/30 FLEX	228	85	$67,419.76	0.66	$295.70
SUBTOTAL	**1,331**	**450**	**$505,812.81**	**0.71**	**$380.02**
TOTAL	**63,720**	**10,849***	**$37,624,200.79**	**0.52**	**$590.46**

Costs do not reflect rebated prices or net costs.
*Total number of unduplicated utilizing members.
ASP = aspart; FLEX = FlexPen; GLAR = glargine; INJ = injection; INS = insulin; JR = junior; KWIK = KwikPen; LISP = lispro; POW = powder; PROT = protamine; SOL = solution; SUS = suspension; U = units

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Appendix N

Calendar Year 2021 Annual Review of Muscular Dystrophy Medications

Oklahoma Health Care Authority
May 2022

Current Prior Authorization Criteria

Amondys 45™ (Casimersen), Exondys 51® (Eteplirsen), Viltepso® (Viltolarsen), and Vyondys 53™ (Golodirsen) Approval Criteria:

1. An FDA approved diagnosis of Duchenne muscular dystrophy (DMD); and
2. Member must have a confirmed mutation of the *DMD* gene that is amenable to exon skipping for the requested medication (results of genetic testing must be submitted); and
3. Must be prescribed by a neurologist or specialist with expertise in the treatment of DMD (or an advanced care practitioner with a supervising physician who is a neurologist or specialist with expertise in the treatment of DMD); and
4. Prescriber must verify the member's renal function will be appropriately assessed prior to initiation of therapy and monitored during treatment; and
5. Member must be on a stable dose of a corticosteroid (at least 3 months in duration) or a patient-specific, clinically significant reason why corticosteroids are not appropriate for the member must be provided; and
6. A baseline assessment must be provided using at least 1 of the following exams as functionally appropriate:
   a. 6-minute walk test (6MWT); or
   b. Forced vital capacity percent predicted (FVCpp); and
7. The requested exon-skipping therapy will not be approved for concurrent use with any other exon-skipping therapies for DMD; and
8. Initial authorizations will be for the duration of 6 months, at which time the prescriber must verify the member is responding to the medication as demonstrated by clinically significant improvement or maintenance of function from pretreatment baseline status using the same exam as performed at baseline assessment; and
9. Subsequent approvals will be for the duration of 1 year. For yearly approvals, the prescriber must verify the member is responding to the medication as demonstrated by clinically significant improvement or maintenance of function from pretreatment baseline status using the same exam as performed at baseline assessment; and

10. 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.

Emflaza® (Deflazacort) Approval Criteria:

1. An FDA approved diagnosis of Duchenne muscular dystrophy (DMD); and
2. Member must be 2 years of age or older; and
3. Emflaza® must be prescribed by, or in consultation with, a prescriber who specializes in the treatment of DMD; and
4. Member must have a minimum 6-month trial of prednisone that resulted in inadequate effects or intolerable adverse effects that are not expected to occur with Emflaza®; and
5. A patient-specific, clinically significant reason why the member cannot use prednisone even when the tablets are crushed must be provided; and
6. Patients already established on deflazacort via the ACCESS DMD Program must also document a patient-specific, clinically significant reason why the member cannot use prednisone even when the tablets are crushed; and
7. For Emflaza® suspension, a patient-specific, clinically significant reason why the member cannot use the tablet formulation in the place of oral suspension even when the tablets are crushed must be provided; and
8. Prescriber must verify the member has had a baseline eye examination; and
9. The member's recent weight must be provided in order to authorize the appropriate amount of drug required according to package labeling; and
10. For the tablets, a quantity limit of 30 tablets per 30 days will apply and for the suspension, a quantity limit of 39mL (3 bottles) per 30 days will apply. Quantity limit override requests will be approved as appropriate based on the member's recent weight taken within the last 30 days.

Utilization of Muscular Dystrophy Medications: Calendar Year 2021

Comparison of Calendar Years

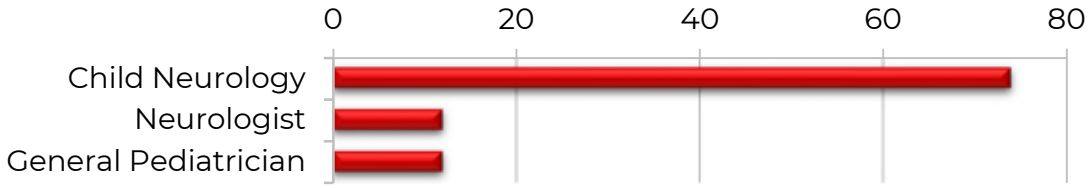
Calendar Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2020	5	45	$2,070,002.97	$46,000.07	$1,646.78	2,818	1,257
2021	9	98	$6,478,027.59	$66,102.32	$2,353.08	8,476	2,753
% Change	**80.00%**	**117.80%**	**212.90%**	**43.70%**	**42.90%**	**200.80%**	**119.00%**
Change	**4**	**53**	**$4,408,024.62**	**$20,102.25**	**$706.30**	**5,658**	**1,496**

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

Demographics of Members Utilizing Muscular Dystrophy Medications

- Due to the limited number of members utilizing muscular dystrophy medications during calendar year 2021, detailed demographic information could not be provided.

Top Prescriber Specialties of Muscular Dystrophy Medications by Number of Claims



Prior Authorization of Muscular Dystrophy Medications

There were 34 prior authorization requests submitted for muscular dystrophy 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):

- Vyondys 53™ (golodirsen injection): June 2025
- Amondys 45™ (casimersen injection): November 2030
- Viltepso® (viltolarsen injection): August 2031
- Exondys 51® (eteplirsen injection): March 2034

News:

- **January 2021:** Using an advanced gene editing technology called CRISPR, scientists at the University of Texas Southwestern have been able to stop the progression of Duchenne muscular dystrophy (DMD) in animals and human cells. This approach could lead to a

treatment for DMD and inform the treatment of other inherited diseases. CRISPRs are "clusters of regularly interspaced short palindromic repeats", that is, the building blocks of DNA separated by DNA fragments between the repeated sequences. Using the Cas9 protein to "slice" through specific sections of DNA, CRISPR can disable a malfunctioning gene or insert new genes to restore function. By injecting a virus that contains the CRISPR components, a molecular GPS device can be deployed to direct Cas9 to the specific region of the gene to be edited. Following editing of the mutated gene, dystrophin gene expression can resume. Thousands of mutations causing DMD have been identified. With this method, a new gene editing strategy for every patient with a new mutation is not needed, as multiple mutations can be corrected with a consolidated approach. Longer term studies are needed to measure whether dystrophin levels remain stable and to ensure the gene edits do not have adverse side effects.

Pipeline:

- **Givinostat:** Givinostat is an 'HDAC inhibitor' in that it blocks enzymes called histone deacetylases (HDACs), which are involved in turning genes 'on' and 'off' within cells and can reduce muscle regeneration in DMD. By inhibiting HDAC activity, givinostat may help to activate muscle repair mechanisms to increase muscle fiber regeneration, reduce inflammation, and reduce fibrosis. A Phase 2 clinical study to evaluate the safety and the potential of givinostat as a treatment for DMD has been completed. A Phase 3 study is ongoing in the United States, Canada, and Europe.
- **Pamrevlumab:** Pamrevlumab (FG-3019) targets connective tissue growth factor (CTGF), which promotes muscle fibrosis and reduces the ability of damaged muscle cells to repair. Pamrevlumab binds to CTGF and may prevent this cascade. It is thought that treatment with pamrevlumab may slow the loss of muscle function in patients with DMD. A Phase 3 study for pamrevlumab is actively recruiting.
- **PF-06939926:** PF-06939926 is an investigational, recombinant adeno-associated virus serotype 9 (AAV9) carrying a shortened version of the dystrophin gene (mini-dystrophin). Because the human dystrophin gene is too large to fit in the AAV9 capsid, a mini-dystrophin was developed that may help retain muscle function similar to that of a patient with a more mild disease, such as Becker muscular dystrophy. A Phase 3 study is currently recruiting globally. In October 2020, PF-06939926 received Fast Track designation from the FDA. It also has previously received Orphan Drug and Rare Pediatric Disease designations from the FDA.

- **Tamoxifen:** Tamoxifen is a selective estrogen receptor modulator (SERM) used to treat estrogen-dependent breast cancer and also shows antioxidant actions and regulatory roles in calcium homeostasis. In a mouse model of DMD, oral tamoxifen significantly improved muscle strength and reduced muscle fatigue. A multicenter, randomized, double-blind, placebo-controlled Phase 3 trial to demonstrate the safety and efficacy of tamoxifen over placebo in pediatric patients with DMD is currently in progress. After completion of the double-blind phase, an open-label extension of the study will be offered to all patients.
- **Translarna® (Ataluren):** Translarna® is being studied for use in patients with nonsense mutations in the dystrophin gene, which prematurely stop the production of a normal dystrophin protein and lead to a shortened and nonfunctional dystrophin protein. Translarna® works in these patients by enabling the protein-making apparatus in cells to move past the nonsense mutation, allowing the cells to produce a functional dystrophin protein. In August 2014, Translarna® received marketing authorization in the European Union for the treatment of nonsense mutation DMD in ambulatory patients 5 years of age and older, representing the first-ever treatment approved for the underlying cause of the disease. The manufacturer, PTC Therapeutics, has engaged in dialogue with the U.S. Food and Drug Administration (FDA) regarding a path forward to bring Translarna® to patients in the United States. A Phase 3 study is currently actively recruiting around the world. Two studies to evaluate dystrophin levels in nonsense mutation patients (both Translarna®-treated and untreated) have also begun recruiting.

Recommendations

The College of Pharmacy does not recommend any changes to the current muscular dystrophy medications prior authorization criteria at this time.

Utilization Details of Muscular Dystrophy Medications: Calendar Year 2021

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER
VYONDYS 53 INJ 100MG/2ML	63	5	$4,141,518.83	$65,738.39	12.6
AMONDYS 45 INJ 50MG/ML	17	2	$2,208,165.97	$129,892.12	8.5
EMFLAZA TAB 30MG	17	2	$116,875.25	$6,875.01	8.5
EMFLAZA TAB 36MG	1	1	$11,467.54	$11,467.54	1
TOTAL	**98**	**9***	**$6,478,027.59**	**$66,102.32**	**10.89**

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

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Appendix O

Calendar Year 2021 Annual Review of Lumizyme® (Alglucosidase Alfa) and 30-Day Notice to Prior Authorize Nexviazyme® (Avalglucosidase Alfa-ngpt)

Oklahoma Health Care Authority
May 2022

Current Prior Authorization Criteria

Lumizyme® (Alglucosidase Alfa) Infantile-Onset Approval Criteria:

1. An FDA approved diagnosis of infantile-onset Pompe disease [acid alpha-glucosidase (GAA) deficiency]; and
2. Documentation of diagnosis confirmation of GAA enzyme deficiency through specific genetic laboratory test(s); and
3. Lumizyme® must be prescribed by a geneticist or a physician that specializes in the treatment of Pompe disease and/or inherited genetic disorders; and
4. Member's weight must be provided and have been taken within the last 4 weeks to ensure accurate dosing.

Lumizyme® (Alglucosidase Alfa) Late-Onset (Non-Infantile) Approval Criteria:

1. An FDA approved diagnosis of late-onset (non-infantile) Pompe disease [acid alpha-glucosidase (GAA) deficiency]; and
2. Documentation of diagnosis confirmation of GAA enzyme deficiency through specific genetic laboratory test(s); and
3. Provider must document presence of symptoms of Pompe disease; and
4. Lumizyme® must be prescribed by a geneticist or a physician that specializes in the treatment of Pompe disease and/or inherited genetic disorders; and
5. Member's weight must be provided and have been taken within the last 4 weeks to ensure accurate dosing; and
6. Initial approval will be for the duration of 6 months, at which time compliance and information regarding efficacy, such as improvement or stabilization in forced vital capacity (FVC) and/or 6-minute walk test (6MWT), will be required for continued approval. Subsequent authorizations will be for the duration of 1 year.

Utilization of Lumizyme® (Alglucosidase Alfa): Calendar Year 2021

Calendar Year 2021: Medical Claims

Calendar Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2021	1	46	$524,657.55	$11,405.60	46

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

Prior Authorization of Lumizyme® (Alglucosidase Alfa)

There were no prior authorization requests submitted for Lumizyme® (alglucosidase alfa) during calendar year 2021.

Market News and Updates[1]

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

- **August 2021:** The FDA approved Nexviazyme® (avalglucosidase alfa-ngpt) for the treatment of patients 1 year of age and older with late-onset Pompe disease (LOPD). Patients with this rare genetic disorder have an enzyme deficiency that leads to an accumulation of glycogen in skeletal and heart muscles that can lead to premature death due to respiratory or heart failure. The approval of Nexviazyme® was based on a Phase 3 study comparing this product with Lumizyme® (alglucosidase alfa), another enzyme replacement therapy used for Pompe disease. In the study, patients treated with Nexviazyme® had improved lung function similar to the improvement seen with patients treated with Lumizyme®. Common adverse reactions reported in the study include headache, fatigue, nausea, arthralgia, and myalgia.

Nexviazyme® (Avalglucosidase Alfa-ngpt) Product Summary[2]

Indication(s): Nexviazyme® is a hydrolytic lysosomal glycogen-specific enzyme indicated for the treatment of patients 1 year of age and older with LOPD.

Boxed Warning: Severe hypersensitivity reactions, infusion-associated reactions (IARs), and risk of acute cardiorespiratory failure in susceptible patients

- If any of these reactions occur, Nexviazyme® should be discontinued immediately and appropriate medical treatment should be initiated.
- Patients susceptible to fluid volume overload, or those with acute underlying respiratory illness or compromised cardiac or respiratory function, may be at risk of serious exacerbation of their cardiac or respiratory status during infusion of the medication.

How Supplied: Single-dose vial (SDV) containing 100mg of avalglucosidase alfa-ngpt as a lyophilized powder

Dosing:

- ≥30kg: The recommended dosage is 20mg/kg (actual body weight) via intravenous (IV) infusion every 2 weeks
- <30kg: The recommended dosage is 40mg/kg (actual body weight) via IV infusion every 2 weeks
- Antihistamines, antipyretics, and/or corticosteroids should be administered prior to infusion to reduce the risk of IARs.

Mechanism of Action: Patients with Pompe disease have a deficiency of the lysosomal enzyme acid alpha-glucosidase (GAA), which results in intralysosomal accumulation of glycogen in various tissues. Nexviazyme® provides an exogenous source of GAA to break down glycogen.

Contraindication(s): None

Use in Specific Populations:

- Pregnancy: There is insufficient data to evaluate the drug associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. However, available data from post marketing reports on alglucosidase alfa use in pregnant women have not identified a drug-associated risk of adverse pregnancy outcomes.
- Pediatric Use: The safety and efficacy of Nexviazyme® was established in pediatric patients 1 year of age and older.
- Geriatric Use: Clinical studies of Nexviazyme® included 17 patients 65 years of age and older.

Adverse Reactions: The most common adverse reactions reported in clinical studies (incidence ≥5%) were headache, fatigue, diarrhea, nausea, arthralgia, dizziness, myalgia, pruritus, vomiting, dyspnea, erythema, paresthesia, and urticaria.

Efficacy: The safety and efficacy of avalglucosidase alfa-ngpt were assessed in a Phase 3, randomized, double-blind study comparing avalglucosidase alfa-ngpt to alglucosidase alfa in 100 treatment-naïve patients with LOPD. Patients were randomized 1:1 to receive either 20mg/kg of avalglucosidase alfa-ngpt or alglucosidase alfa once every 2 weeks.

- Primary Endpoint: The primary endpoint was the change in forced vital capacity (FVC) in the upright position from baseline to week 49.
- Secondary Endpoint: The key secondary endpoint of this study was a change in total distance walked in 6 minutes (6MWT) from baseline to week 49.
- Results: At week 49, the least squares (LS) mean change in FVC (% predicted) for patients treated with avalglucosidase alfa-ngpt and

alglucosidase alfa was 2.9% and 0.5%, respectively. For the 6MWT, the LS mean change for patients treated with avalglucosidase alfa-ngpt and alglucosidase alfa was 32.2% and 2.2%, respectively. Avalglucosidase alfa-ngpt was shown to be non-inferior to alglucosidase alfa with a noninferiority margin of 1.1% (P=0.0074). Statistical superiority of avalglucosidase alfa-ngpt over alglucosidase alfa was not achieved (P=0.06).

Cost Comparison:

Product	Cost Per Vial	Cost Per Month*
Nexviazyme® (avalglucosidase alfa-ngpt) 100mg SDV	**$1,714.90**	**$20,578.80**
Lumizyme® (alglucosidase alfa) 50mg SDV	$840.64	$20,175.36

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 recommended dosage of 20mg/kg every 2 weeks for a 30kg patient.
SDV = single-dose vial

Recommendations

The College of Pharmacy recommends the prior authorization of Nexviazyme® (avalglucosidase alfa-ngpt) with the following criteria:

Nexviazyme® (Avalglucosidase Alfa-ngpt) Approval Criteria:

1. An FDA approved diagnosis of late-onset (non-infantile) Pompe disease [acid alpha-glucosidase (GAA) deficiency]; and
2. Documentation of diagnosis confirmation of GAA enzyme deficiency through specific genetic laboratory test(s); and
3. Prescriber must document presence of symptoms of Pompe disease; and
4. Nexviazyme® must be prescribed by a geneticist or a physician that specializes in the treatment of Pompe disease and/or inherited genetic disorders; and
5. Member's weight must be provided and have been taken within the last 4 weeks to ensure accurate dosing; and
6. Initial approval will be for the duration of 6 months, at which time compliance and information regarding efficacy, such as improvement or stabilization in forced vital capacity (FVC) and/or 6-minute walk test (6MWT), will be required for continued approval. Subsequent authorizations will be for the duration of 1 year.

[1] U.S. Food and Drug Administration (FDA). FDA Approves New Treatment for Pompe Disease. Available online at: https://www.fda.gov/news-events/press-announcements/fda-approves-new-treatment-pompe-disease. Issued 08/06/2021. Last accessed 04/06/2022.
[2] Nexviazyme® (Avalglucosidase Alfa-ngp) Prescribing Information. Genzyme Corporation. Available online at: https://products.sanofi.us/nexviazyme/nexviazyme.pdf. Last revised 08/2021. Last accessed 04/17/2022.

Appendix P

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: April 25, 2022

Coronavirus (COVID-19) Update: FDA Approves First COVID-19 Treatment for Young Children

The FDA expanded the approval of the COVID-19 treatment Veklury® (remdesivir) to include pediatric patients 28 days of age and older weighing ≥3kg with positive results of direct SARS-CoV-2 viral testing, who are hospitalized or not hospitalized, have mild-to-moderate COVID-19, and are at high risk for progression to severe COVID-19, including hospitalization or death.

Veklury® is not a substitute for vaccination in individuals for whom COVID-19 vaccination and booster doses are recommended. The FDA has approved 2 vaccines, and 3 vaccines are available for emergency use, to prevent COVID-19 and the serious clinical outcomes associated with COVID-19, including hospitalization and death. The FDA urges the public to get vaccinated and receive a booster when eligible.

Given the similar course of COVID-19 disease in adults and pediatric patients, the approval of Veklury® in certain pediatric patients is supported by efficacy results from the Phase 3 clinical study in adults. Information on the study in adults can be found in the FDA-approved drug labeling for Veklury®. This approval is also supported by a Phase 2/3, single-arm, open-label clinical study of 53 pediatric patients at least 28 days of age and weighing ≥3kg with confirmed SARS-CoV-2 infection and mild, moderate, or severe COVID-19. Patients in this pediatric Phase 2/3 study received Veklury® for up to 10 days. The safety and pharmacokinetic results from the Phase 2/3 study in pediatric patients were similar to those in adults.

The only approved dosage form is Veklury® for injection. Possible side effects of Veklury® include increased levels of liver enzymes, allergic reactions, changes in blood pressure and heart rate, low blood oxygen level, fever, shortness of breath, wheezing, swelling (e.g., lips, around eyes, under the skin), rash, nausea, sweating, or shivering.

FDA NEWS RELEASE

For Immediate Release: April 20, 2022

FDA Considers New Approach to Improve Safe Disposal of Prescription Opioid Analgesics, Decrease Unnecessary Exposure to Unused Medication

The FDA announced it is seeking public comment on a potential change that would require opioid analgesics used in outpatient settings to be dispensed with prepaid mail-back envelopes and that pharmacists provide patient education on safe disposal of opioids. This potential modification to the existing Opioid Analgesic Risk Evaluation and Mitigation Strategy (REMS) would provide a convenient, additional disposal option for patients beyond those already available such as flushing, commercially available in-home disposal products, collection kiosks, and takeback events.

Patients commonly report having unused opioid analgesics following surgical procedures, thereby creating unfortunate opportunities for nonmedical use, accidental exposure, overdose and potentially increasing new cases of opioid addiction. Since many

Americans gain access to opioids for the first time through friends or relatives who have unused opioids, requiring a mail-back envelope be provided with each prescription could reduce the amount of unused opioid analgesics in patients' homes. Data show educating patients about disposal options may increase the disposal rate of unused opioids and that providing a disposal option along with education could further increase that rate.

Mail-back envelopes have several favorable characteristics. They do not require patients to mix medications with water, chemicals, or other substances nor use other common at-home disposal techniques. Opioid analgesics sent back to DEA-registered facilities in mail-back envelopes do not enter the water supply and landfills (instead, they are incinerated). The nondescript mail-back envelopes provided would be postage paid, offering patients a free disposal option. Additionally, there are long-standing regulations and policies in place to ensure that mail-back envelopes are fit for that purpose and can safely and securely transport unused medicines from the patient's home to the location where they will be destroyed.

The change under consideration underscores the agency's efforts to address the dynamic facets of the opioid crisis and supports the U.S. Department of Health and Human Services (HHS) Overdose Prevention Strategy, which focuses on 4 priority areas: primary prevention, harm reduction, evidence-based treatment, and recovery support.

The FDA is accepting public comments from interested parties, including patients, patient advocates, health care professionals, academics, researchers, the pharmaceutical industry and other government entities until June 21, 2022; however, comments are welcome at any time.

FDA NEWS RELEASE

For Immediate Release: April 14, 2022

Coronavirus (COVID-19) Update: FDA Authorizes First COVID-19 Diagnostic Test Using Breath Samples

The FDA issued an emergency use authorization (EUA) for the first COVID-19 diagnostic test that detects chemical compounds in breath samples associated with a SARS-CoV-2 infection. The test can be performed in environments where the patient specimen is both collected and analyzed, such as doctor's offices, hospitals, and mobile testing sites, using an instrument about the size of a piece of carry-on luggage. The test is performed by a qualified, trained operator under the supervision of a health care provider licensed or authorized by state law to prescribe tests and can provide results in less than 3 minutes.

The performance of the InspectIR COVID-19 Breathalyzer was validated in a large study of 2,409 individuals, including those with and without symptoms. In the study, the test was shown to have 91.2% sensitivity and 99.3% specificity. The study also showed that, in a population with only 4.2% of individuals who are positive for the virus, the test had a negative predictive value of 99.6%, meaning that people who receive a negative test result are likely truly negative in areas of low disease prevalence. The test performed with similar sensitivity in a follow-up clinical study focused on the omicron variant.

The InspectIR COVID-19 Breathalyzer uses a technique called gas chromatography gas mass-spectrometry (GC-MS) to separate and identify chemical mixtures and rapidly detect 5 volatile organic compounds (VOCs) associated with SARS-CoV-2 infection in exhaled breath. When the InspectIR COVID-19 Breathalyzer detects the presence of VOC markers of SARS-CoV-2, a presumptive (unconfirmed) positive test result is returned and should be confirmed with a molecular test. Negative results should be considered in the context of a patient's recent exposures, history, and the presence of clinical signs and

symptoms consistent with COVID-19, as they do not rule out SARS-CoV-2 infection and should not be used as the sole basis for treatment or patient management decisions, including infection control decisions.

InspectIR expects to be able to produce approximately 100 instruments per week, which can each be used to evaluate approximately 160 samples per day. At this level of production, testing capacity using the InspectIR COVID-19 Breathalyzer is expected to increase by approximately 64,000 samples per month.

FDA NEWS RELEASE

For Immediate Release: April 13, 2022

FDA Takes Important Steps to Increase Racial and Ethnic Diversity in Clinical Trials

The FDA issued a new draft guidance to industry for developing plans to enroll more participants from underrepresented racial and ethnic populations in the United States into clinical trials, expanding on the FDA's previous guidance for industry to improve clinical trial diversity.

Despite having a disproportionate burden for certain diseases, racial and ethnic minorities are frequently underrepresented in biomedical research. Clinical trials provide a crucial base of evidence for evaluating whether a medical product is safe and effective; therefore, enrollment in clinical trials should reflect the diversity of the population that is ultimately going to use the treatment. It is known that biological differences exist in how people respond to certain therapies. For example, variations in genetic coding can make a treatment more or less toxic for one racial or ethnic group than another. These variations can also make drugs like antidepressants and blood-pressure medications less effective for certain groups.

This draft guidance, "Diversity Plans to Improve Enrollment of Participants from Underrepresented Racial and Ethnic Subgroups in Clinical Trials," recommends that sponsors of medical products develop and submit a Race and Ethnicity Diversity Plan to the FDA early in clinical development, based on a framework outlined in the guidance.

Barriers to participation among racial and ethnic groups may include mistrust of the clinical research system due to historical abuses, aspects of the trial design such as inadequate recruitment and retention efforts, frequency of study visits, time and resource constraints for participants, transportation, and participation conflicting with caregiver or family responsibilities. In addition, language and cultural differences, health literacy, religion, limited access within the health care system, and a lack of awareness and knowledge about what a clinical trial is and what it means to participate may impact clinical trial participation among racial and ethnic minority populations.

The FDA remains committed to increasing enrollment of diverse populations in medical product and drug development and will continue to engage with federal partners, medical product manufacturers, health care professionals, and health advocates to reach this important goal.

To support the FDA's efforts to advance diverse participation, the Office of Minority Health and Health Equity created the "Diversity in Clinical Trials Initiative," which includes an ongoing public education and outreach campaign to help address some of the barriers preventing diverse groups from participating in clinical trials. Barriers to participation are addressed through a variety of culturally and linguistically tailored strategies, tools, and resources such as: educational materials in multiple languages, a dedicated webpage with public service announcements and videos, social media outreach, and ongoing stakeholder engagement, collaborations, and partnerships.

In February 2022, the Biden Administration revived the Cancer Moonshot initiative to further expand cancer prevention, detection, research, and patient care efforts across the federal government. The FDA Commissioner serves as a member of the White House Cancer Cabinet, comprised of departmental agencies and components organized to develop a unified strategy in the fight against the disease. One of the goals of the Cancer Moonshot is to address inequities in access to cancer screening, diagnostics, and treatment across race, gender, region, and resources. The FDA's guidance on increasing diversity in clinical trials are aligned with the Cancer Moonshot goals.

The draft guidance was developed by the Oncology Center of Excellence's Project Equity, which aims to ensure that the data submitted to the FDA for approval of oncology medical products adequately reflects the demographic representation of participants for whom the medical products are intended. As this guidance applies to all medical products, the Center for Drug Evaluation and Research, the Center for Biologics Evaluation and Research, and the Center for Devices and Radiological Health also contributed to this collaborative effort.

FDA NEWS RELEASE

For Immediate Release: April 12, 2022

FDA and DEA Warn Online Pharmacies Illegally Selling Adderall® to Consumers

The FDA and the DEA recently issued joint warning letters to operators of 2 websites illegally selling Schedule II stimulants, including amphetamine drug products marketed as Adderall®. These websites sell Adderall® online without a prescription, which places consumers at risk.

Adderall® is an FDA-approved prescription drug that has a high potential for abuse and addiction and should only be used under the supervision of a licensed health care professional. This joint action demonstrates the federal government's ongoing commitment to reduce the public health danger posed by drugs illegally sold online.

Illegally marketed prescription drugs pose significant risks to consumers who purchase those products. Consumers who buy prescription drugs from unsafe online pharmacies may put their health at risk because the products, while being marketed as authentic, may be counterfeit, contaminated, expired, or otherwise harmful.

The warning letters were issued to Premiumlightssupplier.com and Kubapharm.com. Consumers should dispose of unused medicine from these websites and not purchase or use prescription drugs sold from these websites without a prescription. The FDA urges consumers to obtain prescription drugs from state-licensed pharmacies or physicians located in the United States, where the FDA and state authorities can assure the quality of drug manufacturing, packaging, distribution, and labeling.

As noted in the warning letters, these websites sell amphetamine drug products, including Adderall®, that are misbranded in violation of the Federal Food, Drug, and Cosmetic Act. The website operators also violate the Ryan Haight Online Pharmacy Act (RHA) by failing to register their online pharmacies with the DEA despite knowingly or intentionally advertising the sale of controlled substances. The RHA has, among other provisions, requirements that must be met for controlled substances to be legally distributed and dispensed via the internet. For example, an entity must be registered with the DEA to specifically dispense controlled substances; none of these are currently registered with the DEA to dispense or distribute controlled substances online.

Current Drug Shortages Index (as of April 26, 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***
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***