OKLAHOMA
Health Care Authority

Drug Utilization Review Board

OHCA Webinar
Wednesday,
September 9, 2020
4:00pm

OHCA Webinar

Register for the meeting using the following website address:
https://odot.webex.com/odot/onstage/g.php?MTID=ea903ae9549435eecc589a619e6d9cfc3

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 – September 9, 2020

DATE: August 25, 2020

NOTE: In response to COVID-19, the September 2020 meeting will be held via OHCA webinar at 4:00pm. Please register for the meeting using the following website address: https://odot.webex.com/odot/onstage/g.php?MTID=ea903ae9549435eecc589a619e6d9cfc3

Enclosed are the following items related to the September 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 Medication Coverage Authorization Unit/Academic Detailing Program Update – Appendix B

Action Item – Vote to Prior Authorize Tramadol 100mg Tablet – Appendix C

Action Item – Vote to Prior Authorize Koselugo™ (Selumetinib), Pemazyre™ (Pemigatinib), and Qinlock™ (Ripretinib) – Appendix D

Annual Review of Breast Cancer Medications and 30-Day Notice to Prior Authorize Enhertu® (Fam-Trastuzumab Deruxtecan-nxki), Phesgo™ (Pertuzumab/Trastuzumab/Hyaluronidase-zzxf), Trodelvy™ (Sacituzumab Govitecan-hziy), and Tukysa™ (Tucatinib) – Appendix E

Annual Review of Prostate Cancer Medications and 30-Day Notice to Prior Authorize Rubraca® (Rucaparib) – Appendix F

Annual Review of Sickle Cell Disease (SCD) Medications and 30-Day Notice to Prior Authorize Adakveo® (Crizanlizumab-tmca), Oxbryta® (Voxelotor), and Reblozyl® (Luspatercept-aamt) – Appendix G

Annual Review of Synagis® (Palivizumab) – Appendix H

Annual Review of Givlaari® (Givosiran) and Scenesse® (Afamelanotide) – Appendix I

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

Future Business

Adjournment

Oklahoma Health Care Authority

Drug Utilization Review Board
(DUR Board)
Meeting – September 9, 2020 @ 4:00pm

OHCA Webinar
Register for the meeting here:
https://odot.webex.com/odot/onstage/g.php?MTID=ea903ae9549435eecc589a619e6d9cfc3

AGENDA

Discussion and Action on the Following Items:

Items to be presented by Dr. Muchmore, Chairman:

1. Call to Order

A. Roll Call – Dr. Skrepnek

Telephone Conference Participants

DUR Board Members:

Dr. Stephen Anderson –	participating via Webex Teleconference
Dr. Jennifer de los Angeles –	participating via Webex Teleconference
Ms. Jennifer Boyett –	participating via Webex Teleconference
Dr. Markita Broyles –	participating via Webex Teleconference
Dr. Theresa Garton –	participating via Webex Teleconference
Dr. Megan Hanner –	participating via Webex Teleconference
Dr. Lynn Mitchell –	participating via Webex Teleconference
Dr. John Muchmore –	participating via Webex Teleconference
Dr. Lee Muñoz –	participating via Webex Teleconference
Dr. James Osborne –	participating via Webex Teleconference

Public Access to Meeting via Webex:

Register at:
https://odot.webex.com/odot/onstage/g.php?MTID=ea903ae9549435eecc589a619e6d9cfc3

Or join by phone:

Dial: +1-415-655-0002

Event number: 133 711 6718
Event password: 20200909

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 www.okhca.org/DUR 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.

Items to be presented by Dr. Muchmore, Chairman:

2. Public Comment Forum

A. Acknowledgment 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. July 8, 2020 DUR Minutes – Vote
B. July 8, 2020 DUR Recommendations Memorandum

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

4. Update on Medication Coverage Authorization Unit/Academic Detailing Program Update – See Appendix B

A. Pharmacy Helpdesk Activity for July 2020
B. Medication Coverage Activity for July 2020
C. Pharmacy Helpdesk Activity for August 2020
D. Medication Coverage Activity for August 2020
E. Academic Detailing Program Update

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

5. Action Item – Vote to Prior Authorize Tramadol 100mg Tablet – See Appendix C

A. Introduction
B. College of Pharmacy Recommendations

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

6. Action Item – Vote to Prior Authorize Koselugo™ (Selumetinib), Pemazyre™ (Pemigatinib), and Qinlock™ (Ripretinib) – See Appendix D

A. Introduction
B. Product Summaries
C. Recommendations

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

7. Annual Review of Breast Cancer Medications and 30-Day Notice to Prior Authorize Enhertu® (Fam-Trastuzumab Deruxtecan-nxki), Phesgo™ (Pertuzumab/Trastuzumab/ Hyaluronidase-zzxf), Trodelvy™ (Sacituzumab Govitecan), and Tukysa™ (Tucatinib) – See Appendix E

A. Introduction
B. Current Prior Authorization Criteria
C. Utilization of Breast Cancer Medications
D. Prior Authorization of Breast Cancer Medications
E. Market News and Updates
F. Product Summaries
G. Recommendations
H. Utilization Details of Breast Cancer Medications

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

8. Annual Review of Prostate Cancer Medications and 30-Day Notice to Prior Authorize Rubraca® (Rucaparib) – See Appendix F

A. Introduction
B. Current Prior Authorization Criteria
C. Utilization of Prostate Cancer Medications
D. Prior Authorization of Prostate Cancer Medications
E. Market News and Updates
F. Rubraca® (Rucaparib) Product Summary
G. Recommendations
H. Utilization Details of Prostate Cancer Medications

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

9. Annual Review of Sickle Cell Disease (SCD) Medications and 30-Day Notice to Prior Authorize Adakveo® (Crizanlizumab-tmca), Oxbryta® (Voxelotor), and Reblozyl® (Luspatercept-aamt) – See Appendix G

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

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

10. Annual Review of Synagis® (Palivizumab) – See Appendix H

A. Current Prior Authorization Criteria
B. Utilization of Synagis® (Palivizumab)
C. Prior Authorization of Synagis® (Palivizumab)
D. Season Comparison
E. Market News and Updates
F. College of Pharmacy Recommendations

Non-Presentation; Questions Only:

11. Annual Review of Givlaari® (Givosiran) and Scenesse® (Afamelanotide) – See Appendix I

A. Introduction
B. Current Prior Authorization Criteria
C. Utilization of Givlaari® (Givosiran) and Scenesse® (Afamelanotide)
D. Prior Authorization of Givlaari® (Givosiran) and Scenesse® (Afamelanotide)
E. Market News and Updates
F. College of Pharmacy Recommendations
G. Utilization Details of Givlaari® (Givosiran) and Scenesse® (Afamelanotide)

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

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

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

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

A. Cystic Fibrosis Medications
B. Hepatitis C Medications
C. Spinal Muscular Atrophy (SMA) Medications
D. Ovarian Cancer Medications

**Future business subject to change.*

14. Adjournment

Appendix A

OKLAHOMA HEALTH CARE AUTHORITY
DRUG UTILIZATION REVIEW BOARD MEETING
MINUTES OF MEETING OF JULY 8, 2020

BOARD MEMBERS:	PRESENT	ABSENT
Stephen Anderson, Pharm.D.		x
Jennifer de los Angeles, Pharm.D., BCOP		x
Jennifer Boyett, MHS; PA-C	x	
Markita Broyles, D.Ph.; MBA	x	
Theresa Garton, M.D.	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	
Rebekah Bargewell; Administrative Assistant		x
Wendi Chandler, Pharm.D.; Clinical Pharmacist	x	
Andrew Craig; Database Analyst	x	
Lisa Daniel, Pharm.D.; Pharmacy Resident		
Karen Egesdal, D.Ph.; SMAC-ProDUR Coordinator/OHCA Liaison	x	
Erin Ford, Pharm.D.; Clinical Pharmacist		x
Mark Fuelling; Client Support Analyst	x	
Thomas Ha, Pharm.D.; Clinical Pharmacist	x	
Katrina Harris, Pharm.D.; Clinical Pharmacist		x
Robert Klatt, Pharm.D.; Clinical Pharmacist	x	
Amy Miller; Operations Coordinator	x	
Brandy Nawaz, Pharm.D.; Clinical Pharmacist	x	
Karen O'Neill, Pharm.D.; Clinical Pharmacist		x
Wynn Phung, Pharm.D.; Clinical Pharmacist		x
Leslie Robinson, D.Ph.; Pharmacy PA Coordinator		x
Vickie Sams, CPhT.; Quality/Training Coordinator		x
Grant H. Skrepnek, Ph.D.; Associate Professor; Interim Director	x	
Regan Smith, Pharm.D.; Clinical Pharmacist	x	
Ashley Teel, Pharm.D.; Clinical Pharmacist	x	
Brian Thomas, Pharm.D.; Clinical Pharmacist		x
Jacquelyn Travers, Pharm.D.; Practice Facilitating Pharmacist	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 State Medicaid Director; Chief Operating Officer		x
Ellen Buettner, Chief of Staff		x
Kevin Corbett, C.P.A.; Chief Executive Officer		x
Terry Cothran, D.Ph.; Pharmacy Director	x	
Susan Eads, J.D.; Director of Litigation	x	
Stacey Hale; Drug Rebate Manager	x	
Michael Herndon, D.O.; Chief Medical Officer		x
Paula Root, M.D.; Medical Director	x	
Jill Ratterman, D.Ph.; Clinical Pharmacist	x	
Nathan Valentine, M.D.; Senior Medical Director	x	
Kerri Wade; Pharmacy Operations Manager	x	

OTHERS PRESENT:	
Bart Vleugels, ODOT	Marc Parker, Sunovion
Janie Huff, Tricida	Thomas Nunn, OMES
Charles Collins, Sanofi	Eric Gardner, Vertex Pharmaceuticals
Wendy Borgersen, Red Hill Biopharma	Terry McCurren, Otsuka
Aaron Shaw, Boehringer Ingelheim	Brenda Nunnally, AstraZeneca
Bethany Holderread, Mercer	D.R. McCale, Akcea Therapeutics
Clint Degner, Novartis	Roger Grotzinger, BMS
James Chapman, AbbVie	Gina Heinen, Novo Nordisk
Todd Dickerson, Jazz Pharmaceuticals	Shellie Keast, Mercer
Audrey Rattan, Alkermes	Rhonda Clark, Indivior
John Omick, GBT	Brent Hildebrand, Gilead
Evie Knisely, Novartis	Dana Mennen, DK Pierce
Hudson Brown, Red Hill Biopharma	Shelley Thompson, Alkermes
David Large, Biohaven Pharmaceuticals	Ronald Cain, Pfizer
Jim Dunlap, Dunlap Consultants	Kristi Kemp, Allergan
Brian Maves, Pfizer	E. Selm, DK Pierce
Chris Voyiatt, ITCI	Rick Dabner, Alnylam
Jeff Mussack, Otsuka	

PRESENT FOR PUBLIC COMMENT:	
Wendy Borgersen	Red Hill Biopharma
Shelley Thompson	Alkermes

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

1A: ROLL CALL

Dr. Muchmore called the meeting to order. Roll call by Dr. Skrepnek established the presence of a quorum.

ACTION: NONE REQUIRED

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

2A: AGENDA ITEM NO. 7 WENDY BORGERSEN

2B: AGENDA ITEM NO. 12 SHELLEY THOMPSON

ACTION: NONE REQUIRED

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

3A: JUNE 10, 2020 DUR MINUTES – VOTE

3B: JUNE 10, 2020 DUR RECOMMENDATIONS MEMORANDUM

Materials included in agenda packet; presented by Dr. Muchmore
Dr. Muñoz moved to approve; seconded by Dr. Boyett
ACTION: MOTION CARRIED

AGENDA ITEM NO. 4: UPDATE ON MEDICATION COVERAGE AUTHORIZATION UNIT/CHRONIC MEDICATION ADHERENCE PROGRAM UPDATE
4A: PHARMACY HELPDESK ACTIVITY FOR JUNE 2020
4B: MEDICATION COVERAGE ACTIVITY FOR JUNE 2020
4C: CHRONIC MEDICATION ADHERENCE PROGRAM UPDATE
Materials included in agenda packet; presented by Dr. Nawaz, Dr. Adams
ACTION: NONE REQUIRED

AGENDA ITEM NO. 5: VOTE TO PRIOR AUTHORIZE WAKIX® (PITOLISANT)
5A: INTRODUCTION
5B: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Adams
Dr. Muñoz moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 6: VOTE TO PRIOR AUTHORIZE SECUADO® (ASENAPINE TRANSDERMAL SYSTEM) AND CAPLYTA™ (LUMATEPERONE CAPSULE)
6A: INTRODUCTION
6B: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Nawaz
Dr. Garton moved to approve; seconded by Dr. Broyles
ACTION: MOTION CARRIED

AGENDA ITEM NO. 7: VOTE TO PRIOR AUTHORIZE ABSORICA LD™ (ISOTRETINOIN CAPSULE), AMZEEQ™ (MINOCYCLINE 4% TOPICAL FOAM), APRIZIO PAK™ (LIDOCAINE/PRILOCAINE 2.5%/2.5% KIT), CALDOLOR® (IBUPROFEN INJECTION), EXSERVAN™ (RILUZOLE ORAL FILM), METRONIDAZOLE 1% GEL, NORITATE® (METRONIDAZOLE 1% CREAM), PROCYSBI® [CYSTEAMINE DELAYED-RELEASE (DR) GRANULE], PYRIDOSTIGMINE 30MG TABLET, QUZYTTIR™ (CETIRIZINE INJECTION), RELAFEN™ DS (NABUMETONE TABLET), SLYND™ (DROSPIRENONE TABLET), TALICIA® (OMEPRAZOLE/AMOXICILLIN/ RIFABUTIN CAPSULE), AND TIROSINT® (LEVOTHYROXINE CAPSULE)
7A: INTRODUCTION
7B: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Chandler
Dr. Muchmore recommended additional criteria for Tirosint® to address dosing and member compliance with levothyroxine tablets.
Dr. Garton moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 8: VOTE TO PRIOR AUTHORIZE ILUVIEN® (FLUOCINOLONE INTRAVITREAL IMPLANT), OZURDEX® (DEXAMETHASONE INTRAVITREAL IMPLANT), AND RETISERT® (FLUOCINOLONE INTRAVITREAL IMPLANT)
8A: INTRODUCTION
8B: COST COMPARISON
8C: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; presented by Dr. Adams
Dr. Broyles moved to approve; seconded by Dr. Garton
ACTION: MOTION CARRIED

AGENDA ITEM NO. 9: VOTE TO PRIOR AUTHORIZE ISTURISA® (OSILODROSTAT)
9A: INTRODUCTION
9B: COLLEGE OF PHARMACY RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Adams
Dr. Broyles recommended additional criteria for Isturisa® to include a reason why the member cannot take ketoconazole tablets which is an off-label use, but is included in treatment guidelines as a 2nd line option after surgery.
Dr. Garton moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 10: 30-DAY NOTICE TO PRIOR AUTHORIZE KOSELUGO™ (SELUMETINIB), PEMAZYRE™ (PEMIGATINIB), AND QINLOCK™ (RIPRETINIB)
10A. INTRODUCTION
10B. MARKET NEWS AND UPDATES
10C. PRODUCT SUMMARIES
10D. RECOMMENDATIONS
Materials included in agenda packet; presented by Dr. Borders
ACTION: NONE REQUIRED

AGENDA ITEM NO. 11: ANNUAL REVIEW OF TOPICAL CORTICOSTEROIDS
11A. CURRENT PRIOR AUTHORIZATION CRITERIA
11B. UTILIZATION OF TOPICAL CORTICOSTEROIDS
11C. PRIOR AUTHORIZATION OF TOPICAL CORTICOSTEROIDS
11D. MARKET NEWS AND UPDATES
11E. COLLEGE OF PHARMACY RECOMMENDATIONS
11F. UTILIZATION DETAILS OF TOPICAL CORTICOSTEROIDS
Materials included in agenda packet; presented by Dr. Nawaz
Dr. Garton moved to approve; seconded by Dr. Mitchell
ACTION: MOTION CARRIED

AGENDA ITEM NO. 12: ANNUAL REVIEW OF OPIOID ANALGESICS AND OPIOID MEDICATION ASSISTED TREATMENT (MAT) MEDICATIONS AND 30-DAY NOTICE TO PRIOR AUTHORIZE TRAMADOL 100MG TABLET
12A. CURRENT PRIOR AUTHORIZATION CRITERIA
12B. MEDICAID DRUG REBATE PROGRAM
12C. UTILIZATION OF OPIOID ANALGESICS AND MAT MEDICATIONS
12D. PRIOR AUTHORIZATION OF OPIOID ANALGESICS AND MAT MEDICATIONS
12E. MARKET NEWS AND UPDATES
12F. COLLEGE OF PHARMACY RECOMMENDATIONS
12G. UTILIZATION DETAILS OF OPIOID ANALGESICS
12H. UTILIZATION DETAILS OF MAT MEDICATIONS
Materials included in agenda packet; presented by Dr. Adams
ACTION: NONE REQUIRED

AGENDA ITEM NO. 13: **ANNUAL REVIEW OF AMYLOIDOSIS MEDICATIONS**

13A: CURRENT PRIOR AUTHORIZATION CRITERIA
13B: UTILIZATION OF AMYLOIDOSIS MEDICATIONS
13C: PRIOR AUTHORIZATION OF AMYLOIDOSIS MEDICATIONS
13D: MARKET NEWS AND UPDATES
13E: COLLEGE OF PHARMACY RECOMMENDATIONS

Materials included in agenda packet; Non-presentation; Questions only
ACTION: NONE REQUIRED

AGENDA ITEM NO. 14: **U.S. FOOD AND DRUG ADMINISTRATION (FDA) AND DRUG ENFORCEMENT ADMINISTRATION (DEA) UPDATES**

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

AGENDA ITEM NO. 15: **FUTURE BUSINESS* (UPCOMING PRODUCT AND CLASS REVIEWS)**

15A: SYNAGIS® (PALIVIZUMAB)
15B: SICKLE CELL DISEASE (SCD) MEDICATIONS AND BETA THALASSEMIA MEDICATIONS
15C: BREAST CANCER MEDICATIONS
15D: PROSTATE CANCER MEDICATIONS

**Future business subject to change.*
Materials included in agenda packet; Non-presentation; Questions only
ACTION: NONE REQUIRED

AGENDA ITEM NO. 16: **ADJOURNMENT**

The meeting was adjourned at 5:06pm.

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

Memorandum

Date: July 9, 2020

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

From: Wendi Chandler, Pharm.D.
Clinical Pharmacist
Pharmacy Management Consultants

Subject: Drug Utilization Review (DUR) Board Recommendations from Meeting of July 8, 2020

Recommendation 1: Chronic Medication Adherence Program Update

NO ACTION REQUIRED.

Recommendation 2: Vote to Prior Authorize Wakix® (Pitolisant)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends following changes to the Attention-Deficit/Hyperactivity Disorder (ADHD) and Narcolepsy Medications Product Based Prior Authorization (PBPA) category (changes noted in red in the following Tier chart and approval criteria; only criteria and Tier chart with changes are listed):

1. The prior authorization of Wakix® (pitolisant) in the Narcolepsy Medications category
    a. Criteria similar to the current approval criteria for Sunosi™ (solriamfetol) and Xyrem® (sodium oxybate) will apply

2. Moving methylphenidate oral solution to Tier-1 in the ADHD Medications Tier chart based on cost
    a. The brand formulation of Methylin® oral solution will no longer be preferred over the generic formulation
    b. An age restriction of 10 years and younger will apply; members older than 10 years of age will require a patient-specific, clinically significant reason why a special formulation product is needed

ADHD Medications			
Methylphenidate Medications			
Tier-1*	**Tier-2***	**Tier-3***	**Special PA**
Short-Acting			
dexmethylphenidate tab (Focalin®)			methylphenidate ~~**soln and**~~ chew tab (Methylin®)
methylphenidate tab **and soln** (Methylin®)			
methylphenidate tab (Ritalin®)			
Long-Acting			
dexmethylphenidate ER cap (Focalin XR®) brand name only	dexmethylphenidate ER cap (generic Focalin XR®)	methylphenidate ER cap (Adhansia XR™)	methylphenidate ER ODT (Cotempla XR-ODT®)
methylphenidate ER cap (Aptensio XR®)	methylphenidate ER susp (Quillivant XR®)	methylphenidate ER cap (Jornay PM®)	methylphenidate ER patch (Daytrana®)
methylphenidate ER cap (Metadate CD®)		methylphenidate 72mg ER tab	
methylphenidate ER cap (Ritalin LA®)		methylphenidate ER tab (Concerta®)	
methylphenidate ER chew tab (QuilliChew ER®)		methylphenidate ER tab (Metadate ER®)	
		methylphenidate ER tab (Methylin ER®)	
		methylphenidate ER tab (Ritalin SR®)	

*Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), or Wholesale Acquisition Costs (WAC) if NADAC unavailable. Placement of products shown in blue is based on net cost after rebates, and products may be moved to a higher tier if the net cost changes in comparison to other available products.
ADHD = attention-deficit/hyperactivity disorder; PA = prior authorization; ER = extended-release; cap = capsule; tab = tablet; ODT = orally disintegrating tablet; chew tab = chewable tablet; soln = solution; susp = suspension

ADHD Medications Special Prior Authorization (PA) Approval Criteria:

1. Desoxyn®, Dexedrine®, Dexedrine Spansules®, Evekeo®, ProCentra®, and Zenzedi® Approval Criteria:
    a. A covered diagnosis; and

b. A patient-specific, clinically significant reason why the member cannot use all other available stimulant medications must be provided.

2. Adzenys XR-ODT®, Adzenys ER™, Cotempla XR-ODT®, Daytrana®, Dyanavel® XR, and Evekeo ODT™ Approval Criteria:
   a. A covered diagnosis; and
   b. A patient-specific, clinically significant reason why the member cannot use all other available formulations of stimulant medications that can be used for members who cannot swallow capsules or tablets must be provided; and
   c. An age restriction of 10 years and younger will apply. Members older than 10 years of age will require a patient-specific, clinically significant reason why a special formulation product is needed.
3. Methylin® Chewable Tablets ~~and Solution~~ Approval Criteria:
   a. A covered diagnosis; and
   b. A patient-specific, clinically significant reason why the member cannot use methylphenidate immediate-release tablets or oral solution must be provided; and
   ~~c. Use of Methylin® chewable tablets or generic Methylin® solution will require a patient-specific, clinically significant reason why the member cannot use the brand formulation of Methylin® solution (brand name Methylin® solution is the preferred product); and~~
   d. An age restriction of 10 years and younger will apply. Members older than 10 years of age will require a patient-specific, clinically significant reason why a special formulation product is needed.
4. Mydayis® Approval Criteria:
   a. A covered diagnosis; and
   b. Member must be 13 years of age or older; and
   c. A patient-specific, clinically significant reason why the member cannot use all other available stimulant medications must be provided.

ADHD Medications Additional Criteria:

1. Doses exceeding 1.5 times the FDA maximum dose are not covered.
2. Prior authorization is required for all tiers for members older than 20 years of age and for members younger than 5 years of age. All prior authorization requests for members younger than 5 years of age must be reviewed by an Oklahoma Health Care Authority (OHCA)-contracted psychiatrist.
3. For Methylin® oral solution, an age restriction of 10 years and younger will apply. Members older than 10 years of age will require a patient-specific, clinically significant reason why a special formulation product is needed.
4. Vyvanse® (Lisdexamfetamine) Approval Criteria [Binge Eating Disorder (BED) Diagnosis]:
   a. An FDA approved diagnosis of moderate-to-severe BED; and

b. Member must be 18 years of age or older; and
c. Vyvanse® for the diagnosis of BED must be prescribed by a psychiatrist; and
d. Authorizations will not be granted for the purpose of weight loss without the diagnosis of BED or for the diagnosis of obesity alone. The safety and effectiveness of Vyvanse® for the treatment of obesity have not been established; and
e. A quantity limit of 30 capsules or chewable tablets per 30 days will apply; and
f. Initial approvals will be for the duration of 3 months. Continued authorization will require prescriber documentation of improved response/effectiveness of Vyvanse®.

Narcolepsy Medications Approval Criteria:

1. An FDA approved diagnosis; and
2. Use of Nuvigil® (armodafinil) requires a patient-specific, clinically significant reason why the member cannot use stimulant medications to improve wakefulness during the daytime; and
   a. Nuvigil® is brand name preferred due to net cost after rebates; however, brand name preferred status may be removed if the net cost changes and brand name is more costly than generic; and
3. Use of Provigil® (modafinil) requires a previously failed trial (within the last 180 days) with Nuvigil® and a patient-specific, clinically significant reason why the member cannot use stimulant medications to improve wakefulness during the daytime; and
4. Use of Sunosi™ (solriamfetol), Wakix® (pitolisant), or Xyrem® (sodium oxybate) requires previously failed trials (within the last 180 days) with Tier-1 and Tier-2 stimulants from different chemical categories, Provigil®, and Nuvigil®, unless contraindicated, that did not yield adequate results; and
5. The diagnosis of obstructive sleep apnea requires concurrent treatment for the obstructive sleep apnea; and
6. The diagnosis of shift work sleep disorder requires the member's work schedule to be included with the prior authorization request.

Recommendation 3: Vote to Prior Authorize Secuado® (Asenapine Transdermal System) and Caplyta™ (Lumateperone Capsule)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the placement of Secuado® (asenapine transdermal system) and Caplyta™ (lumateperone capsule) into Tier-3 of the Atypical Antipsychotic Medications Product Based Prior Authorization (PBPA) Tier chart. Current Tier-3 criteria will apply, and

Secuado® will also require additional criteria (changes shown in red in the following Tier chart and Tier-3 Approval Criteria):

Atypical Antipsychotic Medications*		
Tier-1	**Tier-2**	**Tier-3**
aripiprazole (Abilify®)¥	asenapine (Saphris®)	aripiprazole tablets with sensor (Abilify MyCite®)~
aripiprazole IM inj (Abilify Maintena®)	lurasidone (Latuda®)	**asenapine transdermal system (Secuado®)+**
aripiprazole lauroxil IM inj (Aristada®)		brexpiprazole (Rexulti®)
aripiprazole lauroxil IM inj (Aristada Initio®)		cariprazine (Vraylar®)
clozapine (Clozaril®)◊		clozapine (Fazaclo®)+
olanzapine (Zyprexa®)		clozapine oral susp (Versacloz®)+
paliperidone IM inj (Invega Sustenna®)		iloperidone (Fanapt®)
paliperidone IM inj (Invega Trinza®)**		**lumateperone (Caplyta™)**
quetiapine (Seroquel®)		olanzapine/fluoxetine (Symbyax®)^
quetiapine ER (Seroquel XR®)		paliperidone (Invega®)
risperidone (Risperdal®)		
risperidone IM inj (Risperdal Consta®)		
risperidone ER sub-Q inj (Perseris™)		
ziprasidone (Geodon®)		

ER = extended-release; IM = intramuscular; inj = injection; susp = suspension; sub-Q = subcutaneous
*Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), or Wholesale Acquisition Costs (WAC) if NADAC unavailable. Placement of products shown in blue is based on net cost after rebates, and products may be moved to a higher tier if the net cost changes in comparison to other available products.
¥Aripiprazole (Abilify®) orally disintegrating tablet (ODT) is considered a special formulation and requires a patient-specific, clinically significant reason why a special formulation product is needed in place of the regular tablet formulation.
◊Clozapine does not count towards a Tier-1 trial.
**Use of Invega Trinza® requires members to have been adequately treated with the 1-month paliperidone ER injection (Invega Sustenna®) for at least 4 months.
~Unique criteria applies to Abilify MyCite® (aripiprazole tablets with sensor).
+Unique criteria applies in addition to tier trial requirements.
^In addition to the Tier-3 criteria requirements, approval of olanzapine/fluoxetine (Symbyax®) requires a patient-specific, clinically significant reason why the member cannot use olanzapine and fluoxetine as individual components.

Atypical Antipsychotic Medications Tier-3 Approval Criteria:

1. A Tier-1 trial at least 14 days in duration, titrated to recommended dose, which did not yield adequate response or resulted in intolerable adverse effects; and

a. Clozapine does not count towards a Tier-1 trial; and
2. Trials of all oral Tier-2 medications, at least 14 days in duration each, titrated to recommended dose, that did not yield adequate response or resulted in intolerable adverse effects; or
3. A manual prior authorization may be submitted for consideration of a Tier-3 medication when the member has had at least 4 trials of Tier-1 and Tier-2 medications (2 trials must be from Tier-1) that did not yield an adequate response or resulted in intolerable adverse effects; and
4. Use of Versacloz® (clozapine oral suspension) and Fazaclo® (clozapine orally disintegrating tablet) requires a patient-specific, clinically significant reason why the member cannot use the oral tablet formulation; and
5. Use of Secuado® (asenapine transdermal system) requires a patient-specific, clinically significant reason why the member cannot use the oral sublingual tablet formulation. Tier structure rules continue to apply.

Recommendation 4: Vote to Prior Authorize Absorica LD™ (Isotretinoin Capsule), Amzeeq™ (Minocycline 4% Topical Foam), Aprizio Pak™ (Lidocaine/Prilocaine 2.5%/2.5% Kit), Caldolor® (Ibuprofen Injection), Exservan™ (Riluzole Oral Film), Metronidazole 1% Gel, Noritate® (Metronidazole 1% Cream), Procysbi® [Cysteamine Delayed-Release (DR) Granule], Pyridostigmine 30mg Tablet, Quzyttir™ (Cetirizine Injection), Relafen™ DS (Nabumetone Tablet), Slynd™ (Drospirenone Tablet), Talicia® (Omeprazole/Amoxicillin/Rifabutin Capsule), and Tirosint® (Levothyroxine Capsule)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to current Various Special Formulations approval criteria based on cost and product availability (changes shown in red):

1. Adding erythromycin 2% swabs to the current erythromycin 2% topical gel approval criteria based on Wholesale Acquisition Cost (WAC); and
2. Removing the potassium chloride 25mEq packet (Klor-Con®, Epiklor®) approval criteria based on product discontinuation.

~~**Erythromycin 2% Swabs Approval Criteria:**~~

~~1. Approval consideration requires a trial of erythromycin 2% topical solution or gel.~~

Erythromycin 2% Swabs and 2% Topical Gel Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use erythromycin 2% topical solution must be provided.

~~**Potassium Chloride 25mEq Packet (Klor-Con®, Epiklor®) Approval Criteria:**~~

~~1. A patient-specific, clinically significant reason why the member cannot use other non-prior authorized formulations of potassium chloride must be provided.~~

Additionally, the College of Pharmacy recommends the prior authorization of Absorica LD™ (isotretinoin capsule) with the addition of an upper age limit shown in red to be consistent with other acne products, Amzeeq™ (minocycline 4% topical foam), and Aprizio Pak™ (lidocaine/prilocaine 2.5%/2.5% kit) with the following criteria:

Absorica LD™ (Isotretinoin Capsule) Approval Criteria:

1. An FDA approved diagnosis of severe recalcitrant nodular acne in non-pregnant patients 12 years of age and older with multiple inflammatory nodules with a diameter of 5mm or greater; and
2. Absorica LD™ is not covered for members older than 20 years of age; and
3. Prescriber must verify member is enrolled in the iPLEDGE REMS program; and
4. Prescriber must verify lipid profile and liver function tests will be monitored prior to initiation of Absorica LD™ and at regular intervals during treatment in accordance with the prescribing information; and
5. A patient-specific, clinically significant reason why the member cannot use other isotretinoin capsules available without prior authorization must be provided; and
6. A recent patient weight must be provided on the prior authorization request in order to authorize the appropriate amount of medication according to drug labeling.

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

1. An FDA approved indication of inflammatory lesions of non-nodular, moderate-to-severe acne vulgaris; and
2. Member must be 9 years of age or older; and
3. Amzeeq™ is not covered for members older than 20 years of age; and
4. A patient-specific, clinically significant reason why the member cannot use erythromycin 2% topical solution or clindamycin 1% topical solution, which are available without prior authorization, must be provided; and
5. A quantity limit of 30 grams per 30 days will apply.

Aprizio Pak™ (Lidocaine/Prilocaine 2.5%/2.5% Kit) Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use the standard formulation of lidocaine/prilocaine 2.5%/2.5% cream, which is available without prior authorization, must be provided.

Additionally, the College of Pharmacy recommends the placement of Caldolor® (ibuprofen injection) and Relafen™ DS (nabumetone tablet) into

the Special Prior Authorization (PA) Tier of the Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) Product Based Prior Authorization (PBPA) category. Current Special PA criteria will apply. The proposed changes are shown in red in the following NSAIDs Tier Chart:

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)		
Tier-1	**Tier-2**	**Special PA**
celecoxib (Celebrex®) 50mg, 100mg, & 200mg caps	diclofenac potassium (Cataflam®)	celecoxib (Celebrex®) 400mg caps
diclofenac epolamine (Flector® Patch) - brand name preferred	diclofenac sodium/ misoprostol (Arthrotec®)	diclofenac (Zorvolex®)
diclofenac ER (Voltaren® XR)	diclofenac sodium (Voltaren®) 25mg tabs	diclofenac potassium (Cambia®) powder pack
diclofenac sodium (Voltaren®) 50mg & 75mg tabs	etodolac (Lodine®) 200mg & 300mg caps	diclofenac potassium (Zipsor®) caps
diclofenac sodium 1% (Voltaren® Gel)	etodolac ER (Lodine® XL)	diclofenac sodium (Dyloject™)
etodolac (Lodine®) 400mg & 500mg tabs	naproxen sodium (Anaprox®) 275mg & 550mg tabs	diclofenac sodium (Pennsaid®) topical drops
flurbiprofen (Ansaid®)	oxaprozin (Daypro®)	fenoprofen (Nalfon®)
ibuprofen (Motrin®)	piroxicam (Feldene®)	**ibuprofen injection (Caldolor®)**
indomethacin IR capsules (Indocin® 25 & 50mg only)	tolmetin (Tolectin®)	ibuprofen/famotidine (Duexis®)
ketoprofen (Orudis®)		indomethacin (Indocin®) susp & ER caps
meloxicam (Mobic®)		indomethacin (Tivorbex®)
nabumetone (Relafen®)		ketoprofen ER (Oruvail®)
naproxen (Naprosyn®)		ketorolac tromethamine (Sprix®) nasal spray
naproxen EC (Naprosyn®)		meclofenamate (Meclomen®)
sulindac (Clinoril®)		mefenamic acid (Ponstel®)
		meloxicam (Vivlodex®) caps
		meloxicam orally disintegrating tablet (Qmiiz ODT™)
		nabumetone 1,000mg (Relafen™ DS)
		naproxen sodium ER (Naprelan®)
		naproxen/esomeprazole (Vimovo®)

ER = extended-release; EC = enteric coated; caps = capsules; tabs = tablets; susp = suspension;
IR = immediate-release; PA = prior authorization
Tier structure based on supplemental rebate participation, and/or National Average Drug Acquisition Costs (NADAC), or Wholesale Acquisition Costs (WAC) if NADAC unavailable.

NSAIDs Special Prior Authorization (PA) Approval Criteria:

1. A unique indication for which a Tier-1 or Tier-2 medication is not appropriate; or
2. Previous use of at least 2 Tier-1 NSAID products (from different product lines); and
3. A patient-specific, clinically-significant reason why a special formulation is needed over a Tier-1 product must be provided.
4. Additionally, use of Tivorbex™ will require a patient-specific, clinically significant reason why the member cannot use all other available generic indomethacin products.
5. Additionally, use of Celebrex® (celecoxib) 400mg capsules will require a diagnosis of Familial Adenomatous Polyposis (FAP) and a patient-specific, clinically significant reason why the member cannot use 2 celecoxib 200mg capsules to achieve a 400mg dose.

The College of Pharmacy also recommends the addition of Exservan™ (riluzole oral film) to the current Tiglutik® (riluzole oral suspension) approval criteria and the addition of Procysbi® (cysteamine DR granule) to the current Procysbi® (cysteamine DR capsule) approval criteria (proposed changes shown in red):

Exservan™ (Riluzole Oral Film) and Tiglutik® (Riluzole Oral Suspension) Approval Criteria:

1. An FDA approved indication for the treatment of amyotrophic lateral sclerosis (ALS); and
2. A patient-specific, clinically significant reason why the member cannot use riluzole tablets, even when tablets are crushed, must be provided; and
3. A quantity limit of 20mL per day or 600mL per 30 days will apply for Tiglutik®; and
4. A quantity limit of 2 films per day or 60 films per 30 days will apply for Exservan™.

Procysbi® (Cysteamine Bitartrate) Delayed-Release Capsule and Granule Approval Criteria:

1. An FDA approved diagnosis of nephropathic cystinosis; and
2. A patient-specific, clinically significant reason why the member cannot use the short-acting formulation Cystagon® (cysteamine bitartrate) must be provided; and
3. Use of Procysbi® granules will require a patient-specific, clinically significant reason why the member cannot use the capsule formulation of Procysbi®.

Further, the College of Pharmacy recommends the prior authorization of metronidazole 1% gel and Noritate® (metronidazole 1% cream) with the

addition of an upper age limit shown in red to be consistent with other rosacea products with the following criteria:

Metronidazole 1% Gel Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use metronidazole 0.75% gel, which is available without prior authorization, must be provided; and
2. Metronidazole 1% gel is not covered for members older than 20 years of age.

Noritate® (Metronidazole 1% Cream) Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use metronidazole 0.75% cream, which is available without prior authorization, must be provided; and
2. Noritate® is not covered for members older than 20 years of age.

The College of Pharmacy also recommends the prior authorization of pyridostigmine 30mg tablet, Quzyttir™ (cetirizine injection), Slynd™ (drospirenone tablet), and Talicia® (omeprazole/amoxicillin/rifabutin capsule) with the following criteria:

Pyridostigmine 30mg Tablet Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use pyridostigmine 60mg tablets, which are available without prior authorization, must be provided.

Quzyttir™ (Cetirizine Injection) Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use an oral formulation of cetirizine (e.g., tablets, oral solution) must be provided.

Slynd™ (Drospirenone Tablet) Approval Criteria:

1. A patient-specific, clinically significant reason why the member cannot use alternative formulations of hormonal contraceptives, which are available without a prior authorization, must be provided.

Talicia® (Omeprazole/Amoxicillin/Rifabutin Capsule) Approval Criteria:

1. An FDA approved diagnosis; and
2. A patient-specific, clinically significant reason why the member cannot use the individual components of other triple-therapy treatments approved for the same diagnosis (e.g., omeprazole, amoxicillin, and clarithromycin), which are available without prior authorization, must be provided; and
3. A quantity limit of 168 capsules per 14 days will apply.

Finally, the College of Pharmacy recommends adding Tirosint® (levothyroxine capsule) to the current Tirosint®-SOL (levothyroxine oral solution) approval criteria (proposed changes are shown in red, including the addition of #3 and

#4 based on recommendations from the DUR Board at the July DUR meeting):

Tirosint® (Levothyroxine Capsule) and Tirosint®-SOL (Levothyroxine Oral Solution) Approval Criteria:

1. An FDA approved diagnosis of 1 of the following:
   a. Hypothyroidism: As replacement therapy in primary (thyroidal), secondary (pituitary), and tertiary (hypothalamic) congenital or acquired hypothyroidism; or
   b. Pituitary Thyrotropin (Thyroid-Stimulating Hormone, TSH) Suppression: As an adjunct to surgery and radioiodine therapy in the management of thyrotropin-dependent well-differentiated thyroid cancer; and
2. A patient-specific, clinically significant reason why the member cannot use all other formulations of levothyroxine must be provided. For the oral solution, a reason why the member cannot use the levothyroxine tablet formulation, even when the tablets are crushed, must be provided; and
3. Prescriber must verify member has been compliant with levothyroxine tablets at a maximum dose for at least 8 weeks; and
4. Prescriber must verify that member has not been able to achieve normal thyroid lab levels despite maximum dosing and compliance with levothyroxine tablets.

Recommendation 5: Vote to Prior Authorize Iluvien® (Fluocinolone Intravitreal Implant), Ozurdex® (Dexamethasone Intravitreal Implant), and Retisert® (Fluocinolone Intravitreal Implant)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Iluvien® (fluocinolone intravitreal implant), Ozurdex® (dexamethasone intravitreal implant), and Retisert® (fluocinolone intravitreal implant) with the following criteria:

Iluvien® (Fluocinolone Intravitreal Implant) Approval Criteria:

1. An FDA approved diagnosis of diabetic macular edema (DME) in patients who have been previously treated with a course of corticosteroids and did not have a clinically significant rise in intraocular pressure; and
2. Iluvien® must be administered by an ophthalmologist; and
3. Prescriber must verify that the member will be monitored for increased intraocular pressure, endophthalmitis, and cataract development; and

4. A patient-specific, clinically significant reason why the member requires Iluvien® in place of corticosteroid ophthalmic preparations, such as solution or suspension, must be provided; and
5. A quantity limit of 1 implant per eye every 36 months will apply.

Ozurdex® (Dexamethasone Intravitreal Implant) Approval Criteria:

1. An FDA approved indication of 1 of the following:
   a. The treatment of macular edema following branch retinal vein occlusion (BRVO) or central retinal vein occlusion (CRVO); or
   b. The treatment of non-infectious uveitis affecting the posterior segment of the eye; or
   c. The treatment of diabetic macular edema; and
2. Ozurdex® must be administered by an ophthalmologist; and
3. Prescriber must verify that the member will be monitored for increased intraocular pressure, endophthalmitis, and cataract development; and
4. Prescriber must agree to periodically monitor the integrity of the implant by visual inspection; and
5. A patient-specific, clinically significant reason why the member requires Ozurdex® in place of corticosteroid ophthalmic preparations, such as solution or suspension, must be provided; and
6. A quantity limit of 1 implant per eye every 3 months will apply.

Retisert® (Fluocinolone Intravitreal Implant) Approval Criteria:

1. An FDA approved diagnosis of chronic, non-infectious posterior uveitis; and
2. Retisert® must be administered by an ophthalmologist; and
3. Prescriber must verify that the member will be monitored for increased intraocular pressure, endophthalmitis, and cataract development; and
4. Prescriber must agree to periodically monitor the integrity of the implant by visual inspection; and
5. A patient-specific, clinically significant reason why the member requires Retisert® in place of corticosteroid ophthalmic preparations, such as solution or suspension, must be provided; and
6. A patient-specific, clinically significant reason why the member requires Retisert® in place of Ozurdex® or Yutiq™ must be provided; and
7. A quantity limit of 1 implant per eye every 30 months will apply.

Additionally, the College of Pharmacy recommends the following changes to the current Dextenza® (dexamethasone ophthalmic insert) and Yutiq™ (fluocinolone intravitreal implant) approval criteria based on the new FDA approved indication(s) for Dextenza® and based on the net cost of Yutiq™ (changes shown in red):

Dextenza® (Dexamethasone Ophthalmic Insert) Approval Criteria:

1. An FDA approved indication of the treatment of ocular inflammation and pain following ophthalmic surgery; and

2. Prescriber must verify that Dextenza® will be placed by a physician immediately following ophthalmic surgery; and
3. Date of ophthalmic surgery must be provided; and
4. A patient-specific, clinically significant reason why corticosteroid ophthalmic preparations, such as solution or suspension, typically used following ophthalmic surgery are not appropriate for the member must be provided; and
5. A quantity limit of 1 insert per eye every 30 days will apply.

Yutiq™ (Fluocinolone Intravitreal Implant) Approval Criteria:

1. An FDA approved diagnosis of chronic, non-infectious uveitis affecting the posterior segment of the eye; and
2. Yutiq™ must be administered by an ophthalmologist; and
3. Prescriber must verify that the member will be monitored for increased intraocular pressure and cataract development; and
4. A patient-specific, clinically significant reason why the member requires Yutiq™ in place of corticosteroid ophthalmic preparations, such as solution or suspension, must be provided; and
5. A patient-specific, clinically significant reason why the member requires Yutiq™ in place of Ozurdex® must be provided; and
6. A quantity limit of 1 implant per eye every 36 months will apply.

Recommendation 6: Vote to Prior Authorize Isturisa® (Osilodrostat)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the prior authorization of Isturisa® (osilodrostat) with the following criteria (changes noted in red based on recommendations from the DUR Board at the July DUR meeting):

Isturisa® (Osilodrostat) Approval Criteria:

1. An FDA approved indication for the treatment of adult patients with Cushing's disease for whom pituitary surgery is not an option or has not been curative; and
2. Member must be 18 years of age or older; and
3. Prescriber must document that the member has had an inadequate response to pituitary surgery or is not a candidate for pituitary surgery; and
4. Prescriber must verify that hypokalemia and hypomagnesemia are corrected prior to starting Isturisa®; and
5. Prescriber must agree to perform and monitor electrocardiogram (ECG) at baseline, 1 week after treatment initiation, and as clinically indicated thereafter; and
6. Prescriber must verify that dose titration will be followed according to package labeling; and

7. For female members, prescriber must verify that the member is not breastfeeding; and
8. Isturisa® must be prescribed by, or in consultation with, an endocrinologist (or be an advanced care practitioner with a supervising physician who is an endocrinologist); and
9. A patient-specific, clinically significant reason why the member cannot use ketoconazole tablets must be provided; and
10. Initial authorizations will be for the duration of 3 months after which time, compliance and 24-hour urine free cortisol levels within the normal range (to demonstrate the effectiveness of this medication) will be required for continued approval. Subsequent approvals will be for the duration of 1 year and will require the prescriber to verify the member is still not a candidate for pituitary surgery.

Recommendation 7: 30-Day Notice to Prior Authorize Koselugo™ (Selumetinib), Pemazyre™ (Pemigatinib), and Qinlock™ (Ripretinib)

NO ACTION REQUIRED.

Recommendation 8: Annual Review of Topical Corticosteroids

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to the current Topical Corticosteroids Product Based Prior Authorization (PBPA) Tier chart (changes shown in red):

- Placement of Halog® (halcinonide 0.1% solution) into Tier-2 of the medium-high to medium potency Topical Corticosteroids PBPA Tier chart based on net cost; current Tier-2 criteria will apply
- Updating the Tier-3 ultra-high to high potency Topical Corticosteroids PBPA Tier chart to include Tovet™, an AB-rated generic of Olux-E®

Topical Corticosteroids					
Tier-1		**Tier-2**		**Tier-3**	
Ultra-High to High Potency					
augmented betamethasone dipropionate 0.05% (**Diprolene AF®**)	**C,G**	amcinonide 0.1%	**C,L**	clobetasol propionate 0.025% (**Impoyz®**)	**C**
clobetasol propionate 0.05% (**Temovate®**)	**C,L,O, So**	augmented betamethasone dipropionate 0.05% (**Diprolene®**)	**L,O**	clobetasol propionate 0.05% (**Clobex®**)	**Sh,Spr**

Topical Corticosteroids					
Tier-1		**Tier-2**		**Tier-3**	
fluocinonide 0.05%	**C,O,So**	betamethasone dipropionate 0.05% (**Diprosone®**)	**C,O**	clobetasol propionate 0.05% (**Olux®, Olux-E®, Tovet™**)	**F**
halobetasol propionate 0.05% (**Ultravate®**)	**C**	clobetasol propionate 0.05% (**Clobex®**)	**L**	desoximetasone 0.25% (**Topicort®**)	**C,O,Spr**
		clobetasol propionate 0.05% (**Temovate®**)	**G**	diflorasone diacetate 0.05% (**Apexicon®**)	**C,O**
		desoximetasone 0.05% (**Topicort®**)	**G**	diflorasone diacetate 0.05% (**Apexicon E®**)	**C**
		fluocinonide 0.05%	**G**	halobetasol propionate 0.01% (**Bryhali®**)	**L**
		fluocinonide 0.1% (**Vanos®**)	**C**	halobetasol propionate 0.05% (**Lexette™**)	**F**
		flurandrenolide tape 0.05% (**Cordran®**)	**Tape**		
		halcinonide 0.1% (**Halog®**)	**C,O, So**		
		halobetasol propionate 0.05% (**Ultravate®**)	**L,O**		
		halobetasol propionate/lactic acid 0.05%/10% (**Ultravate X®**)	**C**		
Medium-High to Medium Potency					
betamethasone dipropionate 0.05%	**L**	betamethasone dipropionate/calcipotriene 0.064%/0.005% (**Taclonex®**)	**O,Spr Sus**	betamethasone dipropionate 0.05% (**Sernivo®**)	**Spr**
betamethasone valerate 0.1% (**Beta-Val®**)	**C,O,L**	betamethasone valerate 0.12% (**Luxiq®**)	**F**	hydrocortisone valerate 0.2% (**Westcort®**)	**C,O**
fluticasone propionate 0.05% (**Cutivate®**)	**C,O**	calcipotriene/ betamethasone dipropionate 0.064%/0.005% (**Enstilar® Foam**)	**F**		
mometasone furoate 0.1% (**Elocon®**)	**C,L,O, So**	clocortolone pivalate 0.1% (**Cloderm®**)	**C**		

Topical Corticosteroids					
Tier-1		**Tier-2**		**Tier-3**	
triamcinolone acetonide 0.025%	**O**	desoximetasone 0.05% (**Topicort LP®**)	**C,O**		
triamcinolone acetonide 0.1%	**C,L,O**	fluocinolone acetonide 0.025% (**Synalar®**)	**C,O**		
triamcinolone acetonide 0.5%	**C,O**	fluocinonide emollient 0.05% (**Lidex E®**)	**C**		
		flurandrenolide 0.05%	**C,L,O**		
		fluticasone propionate 0.05% (**Cutivate®**)	**L**		
		hydrocortisone butyrate 0.1%	**C,L,O, So**		
		hydrocortisone probutate 0.1% (**Pandel®**)	**C**		
		prednicarbate 0.1% (**Dermatop®**)	**C,O**		
		triamcinolone acetonide 0.147mg/g (**Kenalog®**)	**Spr**		
		triamcinolone acetonide 0.05% (**Trianex®**)	**O**		
Low Potency					
desonide 0.05% (**Desonate®**)	**G**	alclometasone dipropionate 0.05% (**Aclovate®**)	**C,O**	fluocinolone acetonide 0.01% (**Derma-Smoothe®; Derma-Smoothe FS®**)	**Oil**
fluocinolone acetonide 0.01% (**Capex®**)	**Sh**	desonide 0.05% (**Verdeso®**)	**F**	desonide 0.05%	**L**
hydrocortisone acetate 1%	**C,O**	fluocinolone acetonide 0.01% (**Synalar®**)	**C,So**	desonide emollient 0.05%	**C,O**
hydrocortisone acetate 2.5%	**C,L,O**	hydrocortisone 2.5% (**Texacort®**)	**So**		
hydrocortisone/urea 1%/10% (**U-Cort®**)	**C**	hydrocortisone/pramoxine 1%/1% (**Pramosone®**)	**C,L**		
triamcinolone acetonide 0.025%	**C,L**				

C = Cream; O = Ointment; L = Lotion; G = Gel; Sh = Shampoo; So = Solution; Spr = Spray; Sus = Suspension; F = Foam

Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC) or Wholesale Acquisition Costs (WAC) if NADAC unavailable.

Tier-2 Topical Corticosteroids Approval Criteria:

1. Documented trials of all Tier-1 topical corticosteroids of similar potency in the past 30 days that did not yield adequate relief; and
2. If Tier-1 trials are completed and do not yield adequate relief, a patient-specific, clinically significant reason for requesting a Tier-2 in the same

potency instead of trying a higher potency medication must be provided; and
3. When the same medication is available in Tier-1, a patient-specific, clinically significant reason must be provided for using a special dosage formulation of that medication in Tier-2 (e.g., foams, shampoos, sprays, kits); and
4. Topical corticosteroid kits require tier trials and a patient-specific, clinically significant reason for use of the kit over other standard formulations.

Recommendation 9: Annual Review of Opioid Analgesics and Opioid Medication Assisted Treatment (MAT) Medications and 30-Day Notice to Prior Authorize Tramadol 100mg Tablet

NO ACTION REQUIRED.

Recommendation 10: Annual Review of Amyloidosis Medications

NO ACTION REQUIRED.

Recommendation 11: U.S. Food and Drug Administration (FDA) and Drug Enforcement Administration (DEA) Updates

NO ACTION REQUIRED.

Recommendation 12: Future Business

NO ACTION REQUIRED.

Appendix B

Academic Detailing Program Update

Oklahoma Health Care Authority
September 2020

Background[1]

The Oklahoma Health Care Authority (OHCA) is responsible for controlling costs of state-purchased health care while assuring that standards of care are met as part of a progressive system. Combining standards of care with the most current peer-reviewed studies and presenting these in an unbiased, independent, evidence-based manner is known as Academic Detailing (AD). AD programs link prescribers with an educator resulting in improved patient health and cost outcomes. While not specifically designed to be a tool of cost containment, traditionally AD programs save $2 for every dollar spent.

In July 2015, under the direction of the OHCA, Pharmacy Management Consultants (PMC) developed an AD program to improve implementation of published guidelines and standards of care. PMC clinical pharmacists analyzed prescription claims data to determine initial AD topics, and a clinical pharmacist received specialized AD training through the National Resource Center for Academic Detailing (NaRCAD). In November 2015, PMC assisted the OHCA in securing ongoing grant funding for the AD program through the Health Service Initiative under the Children's Health Insurance Program (CHIP). AD visits began in January 2016 and topics have included treatment of acute and chronic conditions, preventive care, and specialized technical training related to the delivery of pharmacy services.

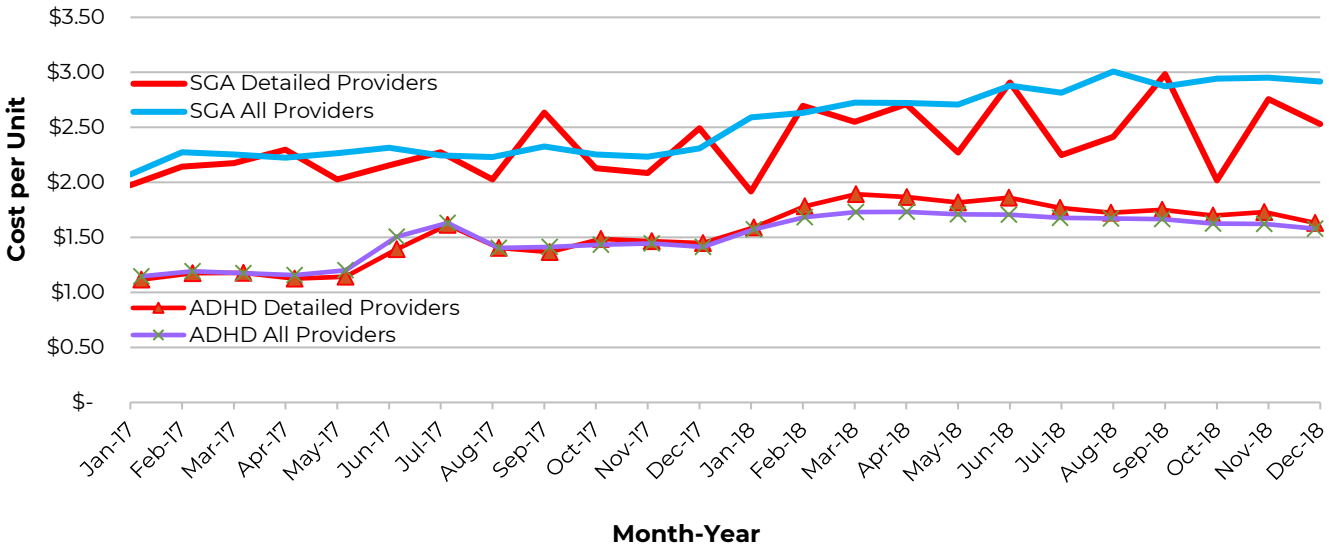
For each topic, the PMC-AD pharmacist prepares educational materials in consultation with NaRCAD and offers the program to selected providers. Educational materials include the following:

- Clinical treatment guidelines
- Provider resources
- Patient and parent resources
- Diagnostic and treatment tools
- Topic-specific continuing medical education (CME) course listings
- Drug alerts and statements from the U.S. Food and Drug Administration (FDA)
- National quality measures [e.g., Healthcare Effectiveness Data and Information Set (HEDIS)]
- OHCA Product Based Prior Authorization (PBPA) coverage criteria

To date, AD services have been provided to 796 health care providers and/or their administrative staff. Cost savings to the OHCA in the amount of

$211,850.75 have been previously reported. This amount is inclusive of all federal and supplemental rebates for the 6 month pre- and post-AD time periods following detailing on the treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) and on the use of second generation/atypical antipsychotic medications (SGAs) for pediatric SoonerCare members. The concurrent prescribing trend for detailed and non-detailed prescribers for these medications is shown in Figure 1. The slight increase in ADHD prescribing in February 2018 coincides with changes in SGA prescribing. At that time, cost per unit (e.g., tablet, capsule) for ADHD prescribing by detailed providers increased by approximately 8% while cost per unit for SGA prescribing by detailed providers declined by approximately 39%. Since 14% of patients covered by Medicaid and receiving SGAs have been shown to have ADHD as their only diagnosis, this concurrent change potentially represents a shift to more clinically appropriate treatment of ADHD.[2]

Figure 1: SGA and ADHD Medication Cost per Unit by Month (Rebated)



SGA = second generation/atypical antipsychotic medication
ADHD = attention-deficit/hyperactivity disorder

Current Topic: Treatment of Upper Respiratory Infections (URI)

The American Academy of Pediatrics (AAP) has stated that "Management of the common cold, non-specific URI, acute cough illness, and acute bronchitis should focus on symptomatic relief. Antibiotics should not be prescribed for these conditions." However, antibiotics continue to be prescribed for these conditions during more than 1 in 5 pediatric ambulatory care physician visits.[3] This prescribing trend served as the rationale for the third AD topic: Upper

Respiratory Infections – Improving Symptom Management and Antibiotic Use.

Data from paid SoonerCare pharmacy claims were used to identify providers whose prescribing patterns differed significantly from their peers. SoonerCare prescribing data used for comparison included ≥3 of the following criteria:

- Having ≥50% increase in their antibiotic (ABX) claims from 2016 to 2017
- During 2017, having ≥50% more ABX claims than their same specialty peers (e.g., general practitioner, physician assistant)
- Being 1 of the 50 highest volume prescribers of ABX during 2017
- Being 1 of the 200 highest volume prescribers during both 2016 and 2017
- Making a request for ABX-AD during previous topic visits

Guidelines from the Infectious Diseases Society of America (IDSA), the American Academy of Family Physicians (AAFP), the Centers of Disease Control and Prevention (CDC), and the AAP served as the source material for development of the ABX-AD curriculum. ABX-AD materials included the following information:

- Frequency and severity of adverse drug events associated with ABX usage
- Symptomatic treatment of URI
- Parent preferences regarding desired communication surrounding ABX usage
- Impact of vaccination rates on ABX usage
- Value of shared decision making (SDM) and SDM implementation tools for initiating ABX treatment
- Appropriate choice of ABX agent when antibacterial treatment is clinically indicated
- National quality measures for outpatient ABX prescribing
- Parent, provider, and CME resources

ABX-AD services were delivered by the PMC-AD pharmacist. Providers in co-practice with identified providers were also eligible to receive AD services. In total, 149 providers received ABX-AD services. ABX prescribing patterns were shared with providers on request.

Results: Treatment of Upper Respiratory Infections

Inappropriate Prescribing:

Potentially inappropriate ABX prescribing has been assessed for all detailed providers and separately for those meeting criteria as described above. Providers receiving AD, regardless of criteria status, reduced their pediatric ABX claims by 17.14% and reduced their use of non-first-line ABX agents by 16.34%. The ABX-AD outcomes for detailed providers meeting criteria are

shown in Figure 2. Outcomes are reported as an annual average per provider during the 5-year pre-AD period and as a 1-year average per provider during the post-AD period.

Figure 2: Changes in Academic Detailing Outcomes				
AD Providers (N=43)				
	Pre-AD	**Post-AD**	**Change***	**% Change***
Prescribing Patterns				
ABX Claims	204.7	161.5	**-43.2**	**-21.1%**
ABX Costs	$6,547	$4,215	**-$2,332**	**-35.6%**
First-Line ABX Claims	84.1	61.4	**-22.7**	**-27.0%**
Non-First-Line ABX Claims	120.6	100.2	**-20.4**	**-16.9%**
Prescribing Appropriateness				
Always	50.4	33.1	**-17.3**	**-35.3%**
Sometimes	27.8	25.3	**-2.5**	**-9.0%**
Never	167.8	139.3	**-28.5**	**-17.0%**
Health Care Utilization				
Hospital Stays	0.95	0.47	**-0.48**	**-50.5%**
Length of Stay (Days)	5.15	2.42	**-2.73**	**-53.0%**
ED Visits	15.7	1.60	**-14.1**	**-89.8%**

*Negative indicates improvement.
Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC) or Wholesale Acquisition Costs (WAC) if NADAC unavailable.
AD = Academic detailing; N = Number of providers; ABX = antibiotic; ED = Emergency department

Outcomes for detailed providers were assessed by 3 separate measures. The first measure addressed the use of all ABX agents. Overall, detailed providers reduced their pediatric ABX claims, their use of first-line agents, and their use of non-first-line agents. Recommended first-line agents for URI include amoxicillin, amoxicillin/clavulanate, and penicillin.[4] Unlike ADHD and SGA medications, the relatively small cost of ABX agents precludes this drug class from maintaining a significant presence within the Product Based Prior Authorization (PBPA) program. Total drug cost savings of $2,332 resulted from ABX-AD.

The second measure addressed the appropriateness of ABX usage. Appropriateness was determined as always, sometimes, or never appropriate based on ICD-9 and ICD-10 diagnostic codes and with methods consistent with published literature.[5] In some cases, members had >1 infection; therefore, the ABX prescribed may have simultaneously met >1 appropriateness category.

The third outcome measure addressed non-ambulatory health care service utilization within the 14 days after an initial ABX prescription claim. In the pre-AD period, these 43 providers cared for SoonerCare members who completed an average of 675 emergency department (ED) visits per year, with a total annual cost of $739,909. In the post-AD period, the members of these

providers completed a total of 69 ED visits, with a total annual cost of $75,404. Total ED annual cost savings of $664,505 resulted from ABX-AD.

In the pre-AD period, these providers cared for members who completed an average 42 hospital stays per year, with a total annual cost of $330,885. In the post-AD period, the members of these providers completed a total of 20 hospital stays, with a total cost of $163,701. Total hospitalization annual cost savings of $167,184 resulted from ABX-AD.

Estimated cost savings were based on national averages for ED and hospitalization costs as described by the Medical Expenditure Panel Survey (MEPS). Average cost was $1,096 per ED visit and $8,100 per pediatric hospital stay for Medicaid patients.[6]

Across all parameters, ABX-AD providers decreased their ABX prescribing and health care utilization. Total annual cost savings of $834,021, or nearly $20,000 per provider, resulted from ABX-AD.

Provider Satisfaction

Provider satisfaction continues to remain very high as measured by post-visit satisfaction surveys. Providers meeting comparison criteria and those in co-practice were given satisfaction surveys in order to determine their acceptance of the program and to predict the likelihood of participation in future AD topics. Participants in the detailing sessions were given a 1 page survey and survey results are shown in Figure 3. To date, only 4 providers have been excluded due to an unwillingness to participate. Other reasons for exclusion of targeted providers included the following:

- No longer treating the targeted disease or medication class
- Retired, moved out of state, or inactive license
- No longer treating pediatric members
- No longer treating SoonerCare members

Figure 3: Provider Satisfaction

The information provided was:	**% choosing agree or strongly agree**
Easily understood	97.65%
Clearly presented	99.22%
Evidence-based	99.22%
Based on the information, I intend to:	**% choosing agree or strongly agree**
Make practice changes as a result	83.59%
Recommend this program to colleagues	91.4%
Participate in future topics	90.63%

Academic Meeting Presentation(s)

Since July 2016, the PMC-AD program leaders have been invited to present program outcomes and breakout sessions at the International Conference on Academic Detailing, the Academy of Managed Care Pharmacy (AMCP), and the American Drug Utilization Review Society (ADURS). Additionally, a poster presentation featuring ADHD-AD results was awarded a silver ribbon at the Nexus 2017 meeting of AMCP. The chair of the PMC-AD program is also currently 1 of 9 national training facilitators for NaRCAD.

Summary

As a result of AD interventions, medication costs, prior authorization submissions, inappropriate prescribing, and health care utilization costs have all been reduced substantially. Prescription data was analyzed using rebated and non-rebated data, pre-and post-detailing patterns for individual providers, and federal fiscal year and calendar year comparisons. Each analysis shows improvements following delivery of AD services.

Providers report satisfaction with the program and intend to participate in future topics. The AD program is well received by providers. Targeted providers have fulfilled their stated intentions to make practice changes as prompted by the AD sessions. Continued implementation and expansion of the PMC-AD program is expected to increase delivery of evidence-based health care and reduce health care costs to the OHCA.

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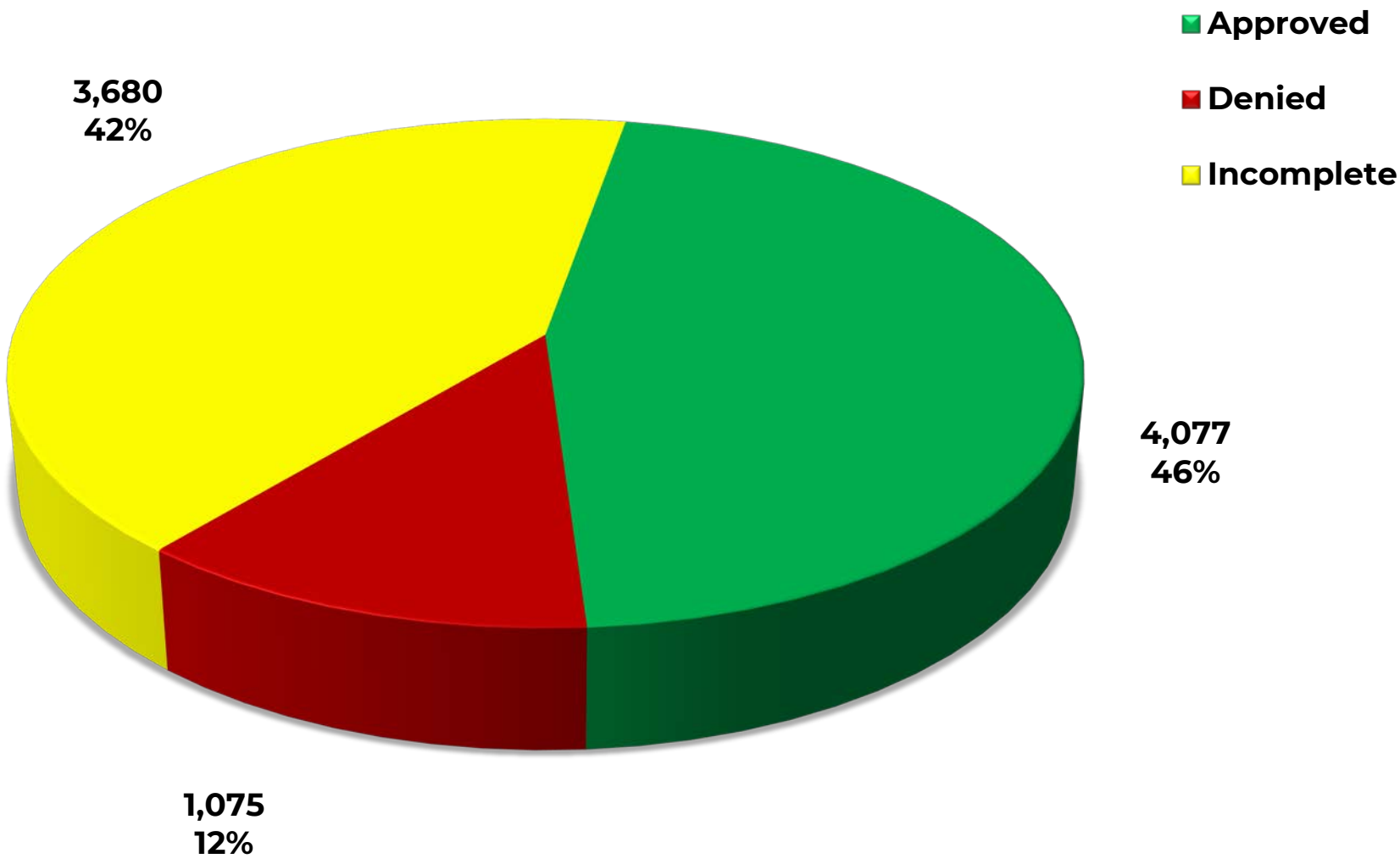
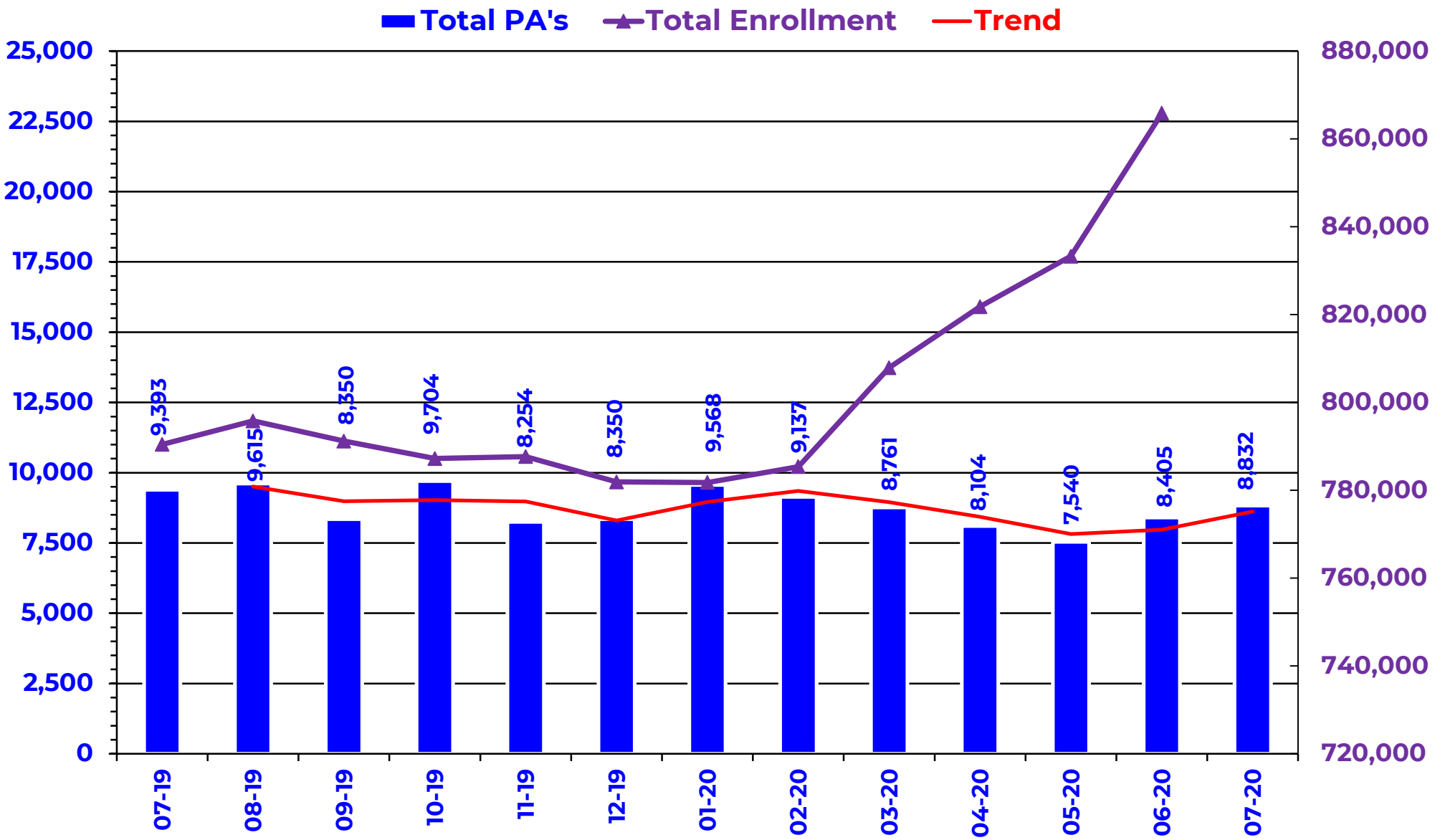
[1] Soumerai SB, et al. Economic and Policy Analysis of University-Based Drug "Detailing." *Medical Care* 1986; 24(4):313-331.
[2] Matone, M., et al. The Relationship Between Mental Health Diagnosis and Treatment with Second-Generation Antipsychotics Over Time: A National Study of U.S. Medicaid-enrolled Children. *Health Serv Res* 2012; 47(5):1836-60.
[3] Hersh AL, et al. Principles of Judicious Antibiotic Prescribing for Upper Respiratory Tract Infections in Pediatrics. *Pediatrics* 2013; 132(6):1146-1154.
[4] Hersh AL, et al. Frequency of First-line Antibiotic Selection Among US Ambulatory Care Visits for Otitis Media, Sinusitis, and Pharyngitis. *JAMA Intern Med* 2016; 176(12):1870-1872.
[5] Chua KP, et al. Appropriateness of Outpatient Antibiotic Prescribing Among Privately Insured US Patients: ICD-10-CM Based Cross Sectional Study. *BMJ* 2019; 364:k5092.
[6] Healthcare Cost and Utilization Project (HCUP). Available online at: https://www.hcup-us.ahrq.gov. Last revised 08/06/2020. Last accessed on 08/21/2020.

PRIOR AUTHORIZATION ACTIVITY REPORT: JULY 2020



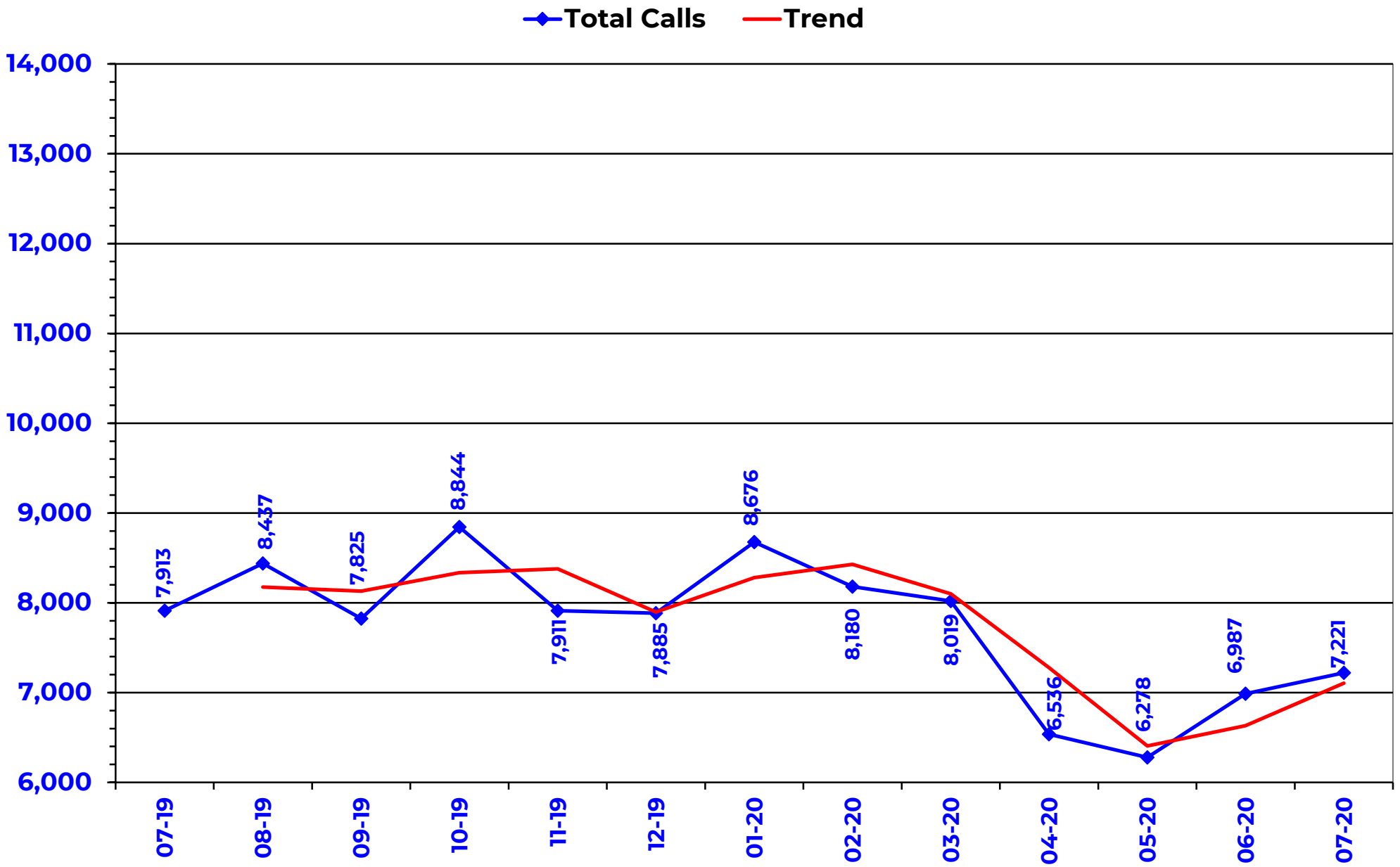
PA totals include approved/denied/incomplete/overrides

PRIOR AUTHORIZATION REPORT: JULY 2019 – JULY 2020



PA totals include approved/denied/incomplete/overrides

CALL VOLUME MONTHLY REPORT:
JULY 2019 – JULY 2020



Prior Authorization Activity

7/1/2020 Through 7/31/2020

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
ACE Inhibitors	12	4	2	6	358
Advair/Symbicort/Dulera	80	4	10	66	359
Analgesic - NonNarcotic	20	1	5	14	358
Analgesic, Narcotic	334	132	29	173	167
Antiasthma	62	22	12	28	286
Antibiotic	31	18	0	13	247
Anticonvulsant	192	84	15	93	297
Antidepressant	191	48	24	119	325
Antidiabetic	291	89	44	158	350
Antihemophilic Factor	22	13	1	8	146
Antihistamine	29	2	9	18	360
Antimalarial Agent	23	9	0	14	244
Antimigraine	179	29	58	92	225
Antineoplastic	134	87	9	38	182
Antiparasitic	10	1	0	9	24
Antiulcers	83	24	10	49	84
Anxiolytic	25	4	2	19	253
Atypical Antipsychotics	277	116	37	124	345
Biologics	165	87	16	62	273
Bladder Control	35	2	19	14	360
Blood Thinners	314	171	15	128	334
Botox	54	44	6	4	320
Buprenorphine Medications	75	8	9	58	71
Calcium Channel Blockers	21	0	5	16	0
Cardiovascular	80	34	7	39	318
Chronic Obstructive Pulmonary Disease	174	42	44	88	330
Constipation/Diarrhea Medications	153	21	44	88	241
Contraceptive	25	13	3	9	357
Dermatological	400	111	99	190	119
Diabetic Supplies	762	388	81	293	217
Endocrine & Metabolic Drugs	85	54	6	25	179
Erythropoietin Stimulating Agents	25	15	3	7	99
Fibromyalgia	22	3	5	14	133
Fish Oils	24	5	8	11	358
Gastrointestinal Agents	122	34	13	75	188
Genitourinary Agents	19	8	2	9	63
Glaucoma	15	2	0	13	185
Growth Hormones	146	103	9	34	126
Hematopoietic Agents	19	10	1	8	274
Hepatitis C	110	73	11	26	10
HFA Rescue Inhalers	21	2	1	18	113
Insomnia	44	3	9	32	177
Insulin	194	52	29	113	325
Multiple Sclerosis	60	28	6	26	224
Muscle Relaxant	50	3	14	33	247
Nasal Allergy	72	12	26	34	177
Neurological Agents	95	43	11	41	246
Nsaids	38	1	13	24	358
Ocular Allergy	25	4	6	15	86
Ophthalmic Anti-infectives	13	2	1	10	10
Osteoporosis	16	6	3	7	279
Other*	311	81	54	176	285
Otic Antibiotic	39	10	3	26	12

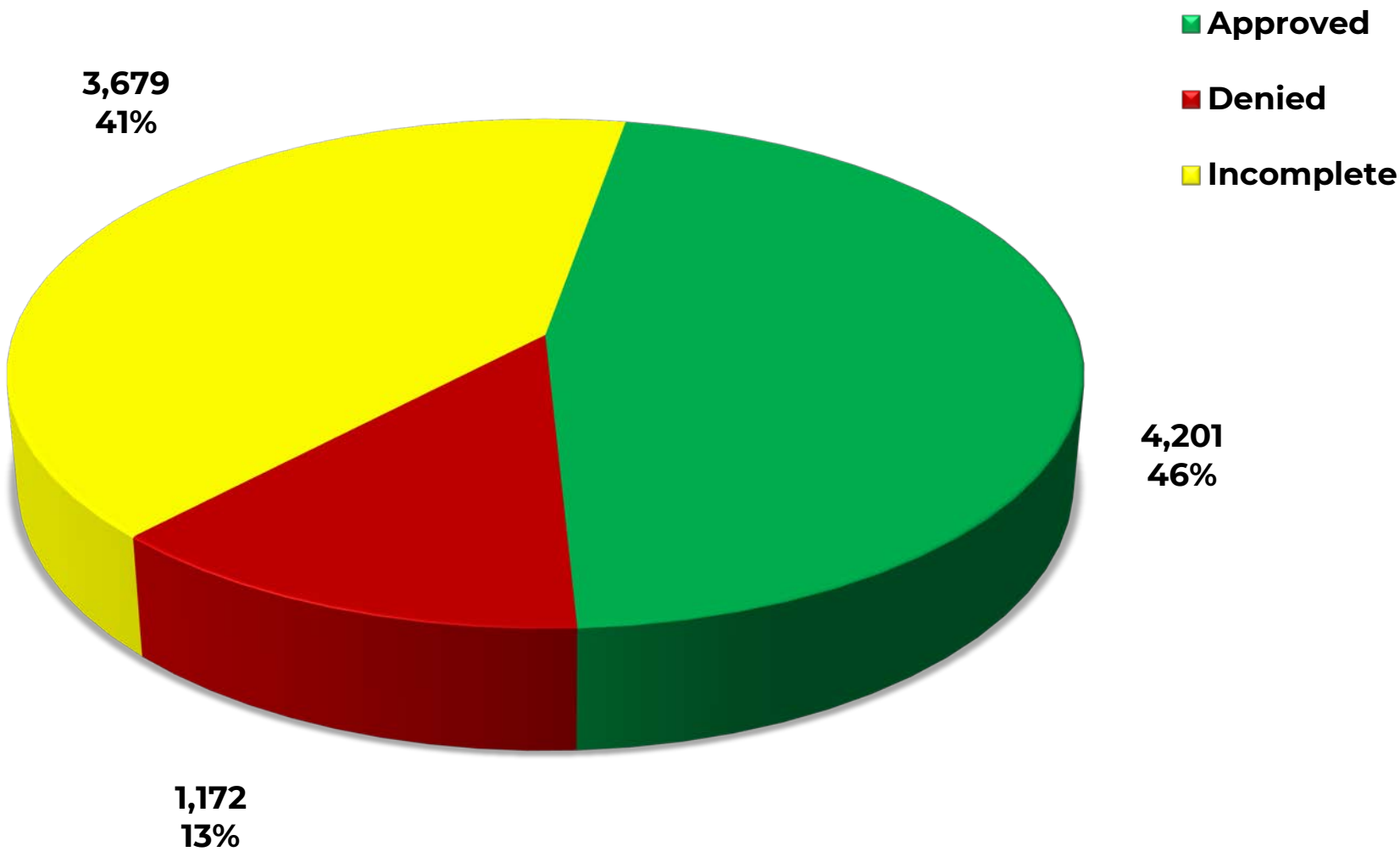
* Includes any therapeutic category with less than 10 prior authorizations for the month.

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Pediculicide	21	5	3	13	12
Respiratory Agents	43	26	2	15	154
Statins	21	7	5	9	203
Stimulant	639	300	70	269	351
Testosterone	51	15	13	23	302
Topical Antifungal	31	9	4	18	53
Topical Corticosteroids	69	1	30	38	87
Vitamin	78	21	40	17	225
Pharmacotherapy	182	154	1	27	302
Emergency PAs	0	0	0	0	
Total	**6,953**	**2,700**	**1,017**	**3,236**	
Overrides					
Brand	42	18	1	23	289
Compound	14	14	0	0	100
Diabetic Supplies	20	19	0	1	143
Dosage Change	327	308	0	19	15
High Dose	3	3	0	0	177
Ingredient Duplication	6	4	1	1	17
Lost/Broken Rx	113	103	6	4	20
MAT Override	284	212	4	68	55
NDC vs Age	280	187	19	74	231
NDC vs Sex	7	6	0	1	105
Nursing Home Issue	41	38	0	3	11
Opioid MME Limit	99	42	2	55	134
Opioid Quantity	44	35	3	6	148
Other	43	36	0	7	12
Quantity vs. Days Supply	502	309	17	176	240
STBS/STBSM	15	12	2	1	74
Stolen	18	14	2	2	19
Third Brand Request	20	16	1	3	10
Wrong D.S. on Previous Rx	1	1	0	0	97
Overrides Total	**1,879**	**1,377**	**58**	**444**	
Total Regular PAs + Overrides	**8,832**	**4,077**	**1,075**	**3,680**	

Denial Reasons	
Unable to verify required trials.	2,962
Does not meet established criteria.	1,106
Lack required information to process request.	687
Other PA Activity	
Duplicate Requests	776
Letters	14,995
No Process	5
Changes to existing PAs	741
Helpdesk Initiated Prior Authorizations	772
PAs Missing Information	26

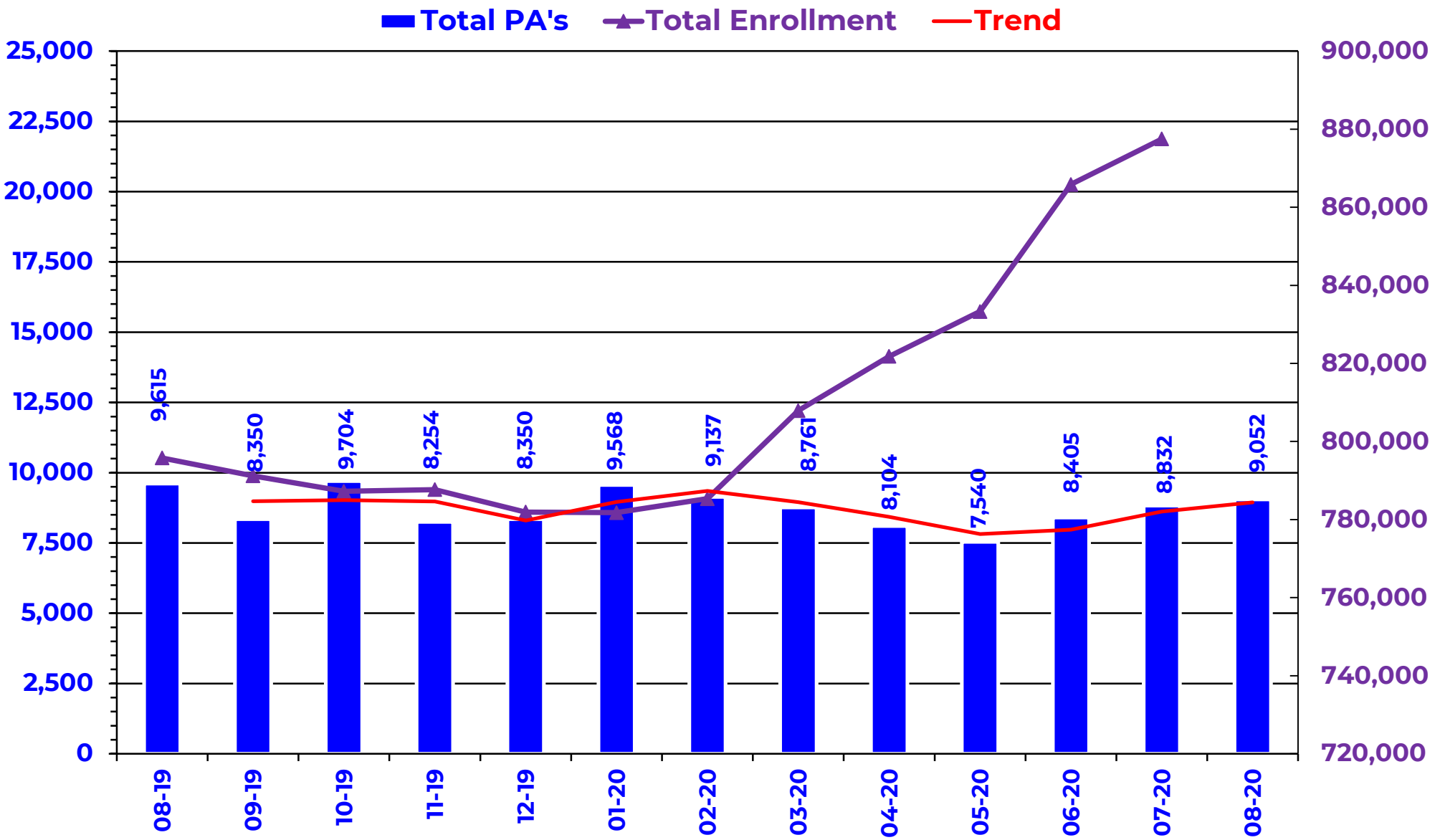
* Includes any therapeutic category with less than 10 prior authorizations for the month.

PRIOR AUTHORIZATION ACTIVITY REPORT: AUGUST 2020



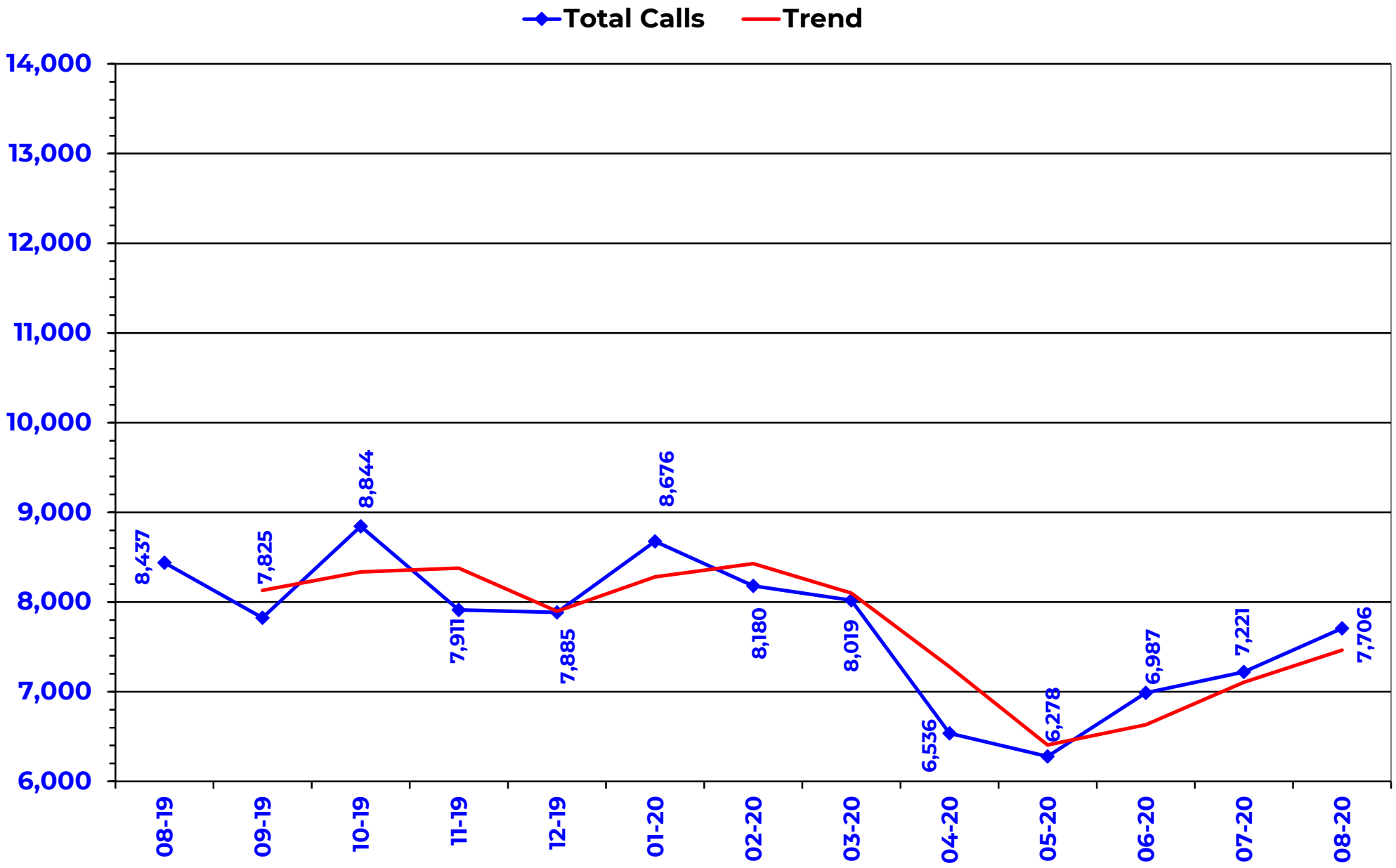
PA totals include approved/denied/incomplete/overrides

PRIOR AUTHORIZATION REPORT: AUGUST 2019 – AUGUST 2020



PA totals include approved/denied/incomplete/overrides

CALL VOLUME MONTHLY REPORT:
AUGUST 2019 – AUGUST 2020



Prior Authorization Activity

8/1/2020 Through 8/31/2020

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Advair/Symbicort/Dulera	79	6	9	64	358
Analgesic - NonNarcotic	23	0	5	18	0
Analgesic, Narcotic	330	100	51	179	156
Antiasthma	64	19	23	22	241
Antibiotic	35	19	3	13	309
Anticonvulsant	174	76	9	89	324
Antidepressant	179	34	25	120	333
Antidiabetic	332	95	60	177	348
Antihemophilic Factor	21	13	0	8	251
Antihistamine	27	10	7	10	331
Antimigraine	207	40	82	85	204
Antineoplastic	127	81	13	33	168
Antiulcers	70	14	20	36	99
Anxiolytic	13	0	3	10	0
Atypical Antipsychotics	255	122	18	115	350
Biologics	158	82	27	49	308
Bladder Control	46	5	14	27	302
Blood Thinners	318	200	13	105	333
Botox	62	39	17	6	340
Buprenorphine Medications	66	10	4	52	58
Calcium Channel Blockers	13	5	0	8	184
Cardiovascular	66	35	5	26	304
Cephalosporins	13	6	0	7	81
Chronic Obstructive Pulmonary Disease	183	41	42	100	339
Constipation/Diarrhea Medications	170	31	40	99	281
Contraceptive	28	10	4	14	356
Corticosteroid	12	1	5	6	27
Dermatological	430	108	127	195	109
Diabetic Supplies	749	368	78	303	206
Diuretic	11	7	0	4	190
Endocrine & Metabolic Drugs	91	56	1	34	155
Erythropoietin Stimulating Agents	10	7	1	2	95
Fibromyalgia	18	6	2	10	359
Fish Oils	14	1	6	7	360
Gastrointestinal Agents	143	43	29	71	181
Genitourinary Agents	18	13	3	2	146
Glaucoma	17	3	2	12	184
Growth Hormones	135	103	8	24	141
Hematopoietic Agents	26	14	1	11	203
Hepatitis C	97	65	8	24	10
HFA Rescue Inhalers	17	2	1	14	204
Insomnia	33	4	6	23	174
Insulin	155	59	23	73	333
Miscellaneous Antibiotics	21	2	5	14	18
Multiple Sclerosis	57	27	3	27	223
Muscle Relaxant	54	5	14	35	36
Nasal Allergy	70	13	18	39	150
Neurological Agents	108	43	16	49	259
NSAIDs	27	0	9	18	0
Ocular Allergy	25	0	8	17	0
Ophthalmic Anti-infectives	19	2	0	17	6
Osteoporosis	24	11	5	8	357

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

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Other*	279	63	60	156	282
Otic Antibiotic	30	4	3	23	10
Pediculicide	13	1	3	9	7
Respiratory Agents	59	33	0	26	203
Statins	23	5	7	11	155
Stimulant	832	426	67	339	349
Testosterone	44	13	8	23	344
Thyroid	11	4	2	5	343
Topical Antifungal	25	6	6	13	101
Topical Corticosteroids	80	0	43	37	0
Vitamin	72	18	33	21	107
Pharmacotherapy	98	89	0	9	263
Emergency PAs	1	1	0	0	
Total	**7,007**	**2,719**	**1,105**	**3,183**	
Overrides					
Brand	53	34	1	18	302
Compound	17	12	0	5	41
Cumulative Early Refill	1	1	0	0	180
Diabetic Supplies	14	11	1	2	125
Dosage Change	377	346	2	29	16
High Dose	3	3	0	0	181
Ingredient Duplication	5	2	0	3	19
Lost/Broken Rx	116	110	2	4	15
MAT Override	332	241	2	89	65
NDC vs Age	328	203	29	96	231
NDC vs Sex	14	9	1	4	76
Nursing Home Issue	49	49	0	0	13
Opioid MME Limit	111	45	4	62	134
Opioid Quantity	31	25	2	4	168
Other*	42	30	4	8	17
Quantity vs. Days Supply	494	317	17	160	249
STBS/STBSM	17	11	2	4	143
Stolen	18	14	0	4	13
Third Brand Request	23	19	0	4	21
Overrides Total	**2,045**	**1,482**	**67**	**496**	
Total Regular PAs + Overrides	**9,052**	**4,201**	**1,172**	**3,679**	

Denial Reasons	
Unable to verify required trials.	3,011
Does not meet established criteria.	1,192
Lack required information to process request.	641
Other PA Activity	
Duplicate Requests	787
Letters	14,977
No Process	6
Changes to existing PAs	663
Helpdesk Initiated Prior Authorizations	857
PAs Missing Information	36

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

Appendix C

Vote to Prior Authorize Tramadol 100mg Tablet

Oklahoma Health Care Authority
September 2020

Introduction[1]

- **Tramadol 100mg immediate-release (IR) tablet** was approved by the U.S. Food and Drug Administration (FDA) in June 2019 through an Abbreviated New Drug Application (ANDA). The Wholesale Acquisition Cost (WAC) of tramadol 100mg IR tablets is $1.44 per IR tablet. At a comparatively lower cost, the National Average Drug Acquisition Cost (NADAC) of tramadol 50mg IR tablets (generic Ultram®) is $0.02 per IR tablet, or $0.04 per 100mg dose.

Recommendations

The College of Pharmacy recommends the placement of tramadol 100mg tablets into the Short-Acting Special Prior Authorization (PA) category of the Opioid Analgesics Product Based Prior Authorization (PBPA) Tier chart based on cost with the following criteria (changes noted in red in the following Tier chart and approval criteria; only the criteria and Tier chart with changes are listed):

- A patient-specific, clinically significant reason why the member cannot use 2 tramadol 50mg tablets to achieve a 100mg dose must be provided
- An age restriction will apply for members younger than 12 years of age; authorization will require patient-specific, clinically significant information supporting the use of tramadol despite the medication being contraindicated for the member's age

Opioid Analgesics*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
Short-Acting			
APAP/butalbital/ caff/codeine cap (Fioricet® with Codeine)	oxymorphone IR tab (Opana®)	benzhydrocodone/ APAP tab (Apadaz®)	levorphanol tab
ASA/butalbital/caff/ codeine cap (Fiorinal® with Codeine)	tapentadol IR tab (Nucynta®)	dihydrocodeine/ APAP/caff cap (Trezix®)	**tramadol 100mg tab**

Opioid Analgesics*			
Tier-1	**Tier-2**	**Tier-3**	**Special PA**
Short-Acting			
codeine tab		hydrocodone/ APAP oral soln (Zamicet®, Liquicet®)	
codeine/APAP (Tylenol® with Codeine)		hydrocodone/ APAP tab (Xodol®)	
dihydrocodone/ ASA/caff cap (Synalgos-DC®)		oxycodone/APAP tab (Primlev™, Xolox®)	
hydrocodone/ APAP tab (Norco®)		oxycodone tab (Oxaydo®)	
hydrocodone/IBU tab (Vicoprofen®, Ibudone®, Reprexain™)		oxycodone tab (Oxecta®)	
hydromorphone tab (Dilaudid®)		oxycodone tab (RoxyBond™)	
morphine IR tab (MSIR®)			
oxycodone/APAP tab (Percocet®)			***Oncology Only:***
oxycodone/ASA tab (Percodan®)			fentanyl buccal film (Onsolis®)
oxycodone/IBU tab (Combunox™)			fentanyl buccal tab (Fentora®)
oxycodone IR cap (Oxy IR®)			fentanyl nasal spray (Lazanda®)
oxycodone IR tab (Roxicodone®)			fentanyl SL spray (Subsys®)
tramadol/APAP tab (Ultracet®)			fentanyl SL tab (Abstral®)
tramadol tab (Ultram®)			fentanyl transmucosal lozenge (Actiq®)

*Tier structure based on supplemental rebate participation and/or National Average Drug Acquisition Costs (NADAC), or Wholesale Acquisition Costs (WAC) if NADAC unavailable.
PA = prior authorization; IR = immediate-release; cap = capsule; tab = tablet; soln = solution; SL = sublingual; APAP = acetaminophen; ASA = aspirin; caff = caffeine; IBU = ibuprofen

Opioid Analgesics Special Prior Authorization (PA) Approval Criteria:

1. Abstral®, Actiq®, Fentora®, Lazanda®, Onsolis®, and Subsys® are approved for oncology-related diagnoses only.

2. Unique Strengths of Hydrocodone/Acetaminophen (APAP) Approval Criteria:
    a. A patient-specific, clinically significant reason why the member cannot use generic Norco® (hydrocodone/APAP 5/325mg, 7.5/325mg, or 10/325mg) must be provided.
3. ConZip® [Tramadol Extended-Release (ER) Capsule] Approval Criteria:
    a. A patient-specific, clinically significant reason why the member cannot use the ER tablet formulation must be provided. Tier structure rules apply.
4. Xartemis® XR (Oxycodone/APAP ER Tablet) Approval Criteria:
    a. An acute pain condition requiring around-the-clock opioid treatment; and
    b. A patient-specific, clinically significant reason must be provided for all of the following:
        i. Why the member cannot use any other opioid medication for treatment of acute pain; and
        ii. Why the member requires a long-acting medication for an acute pain condition; and
        iii. Why the member cannot use Oxycontin® (oxycodone ER) and over-the-counter (OTC) APAP individual products in place of this combination product; and
    c. A quantity limit of 4 tablets per day will apply with a maximum approval duration of 10 days; and
    d. The member must not exceed 3,250mg of APAP per day from all sources; and
    e. Tier structure rules still apply.
5. Levorphanol Tablet Approval Criteria:
    a. A patient-specific, clinically significant reason why the member cannot use alternative treatment options for pain (e.g., non-opioid analgesics, lower-tiered opioid analgesics) must be provided.
6. Tramadol 100mg Tablet Approval Criteria:
    a. A patient-specific, clinically significant reason why the member cannot use 2 tramadol 50mg tablets to achieve a 100mg dose must be provided; and
    b. An age restriction will apply for members younger than 12 years of age. For members younger than 12 years of age, the provider must submit patient-specific, clinically significant information supporting the use of tramadol despite the medication being contraindicated for the member's age.

[1] Drugs@FDA: FDA-Approved Drugs. Tramadol 100mg Tablet Abbreviated New Drug Application (ANDA) 208708 Approval. Available online at: https://www.accessdata.fda.gov/scripts/cder/daf/index.cfm. Issued 06/28/2019. Last accessed 08/20/2020.

Appendix D

Vote to Prior Authorize Koselugo™ (Selumetinib), Pemazyre™ (Pemigatinib), and Qinlock™ (Ripretinib)

Oklahoma Health Care Authority
September 2020

Introduction[1]

- **April 2020:** The U.S. Food and Drug Administration (FDA) approved Koselugo™ (selumetinib) for the treatment of pediatric patients, 2 years of age and older, with neurofibromatosis type 1 (NF1) who have symptomatic, inoperable plexiform neurofibromas (PN).
- **April 2020:** The FDA approved Pemazyre™ (pemigatinib) for the treatment of adults with previously treated, unresectable locally advanced or metastatic cholangiocarcinoma with a fibroblast growth factor receptor 2 (FGFR2) fusion or other rearrangement.
- **May 2020:** The FDA approved Qinlock™ (ripretinib) for the treatment of adult patients with advanced gastrointestinal stromal tumors (GIST) who have received prior treatment with 3 or more kinase inhibitors, including imatinib.

Product Summaries[2,3,4]

Koselugo™ (Selumetinib):

- **Therapeutic Class:** Kinase inhibitor
- **Indication(s):** Treatment of pediatric patients, 2 years of age and older, with NF1 who have symptomatic, inoperable PN
- **How Supplied:** 10mg and 25mg oral capsules
- **Dose:** 25mg/m^2 twice daily on an empty stomach; dose should be reduced to 20mg/m^2 twice daily for moderate hepatic impairment (Child-Pugh B)
- **Cost:** Wholesale Acquisition Cost (WAC) is $72.70 per 10mg capsule and $181.75 per 25mg capsule, resulting in a cost of $10,905 per 30 days for a patient requiring 25mg twice daily

Pemazyre™ (Pemigatinib):

- **Therapeutic Class:** Kinase inhibitor
- **Indication(s):** Treatment of adults with previously treated, unresectable locally advanced or metastatic cholangiocarcinoma with a FGFR2 fusion or other rearrangement
- **How Supplied:** 4.5mg, 9mg, and 13.5mg oral tablets

- **Dose:** 13.5mg once daily for 14 consecutive days followed by 7 days off therapy in 21-day cycles; alternative strengths available for dose reductions/modifications if adverse reactions occur
- **Cost:** WAC of $1,214.29 per tablet for all available strengths (4.5mg, 9mg, and 13.5mg), resulting in a cost of $17,000.06 per 21-day cycle based on the recommended dose of 13.5mg once daily for 14 days

Qinlock™ (Ripretinib):
- **Therapeutic Class:** Kinase inhibitor
- **Indication(s):** Treatment of adult patients with advanced GIST who have received prior treatment with 3 or more kinase inhibitors, including imatinib
- **How Supplied:** 50mg oral tablets
- **Dose:** 150mg once daily with or without food
- **Cost:** WAC of $355.56 per 50mg tablet, resulting in a cost of $32,000.40 per 30 days based on the recommended dose of 150mg once daily

Recommendations

- The prior authorization of Koselugo™ (selumetinib), Pemazyre™ (pemigatinib), and Qinlock™ (ripretinib) with the following criteria listed in red:
- Based on discussion by the Drug Utilization Review (DUR) Board at the July DUR Board meeting, the approval criteria for Koselugo™ has been updated to remove the age restriction due to the rarity of the disease

Koselugo™ (Selumetinib) Approval Criteria [Neurofibromatosis Type 1 (NF1) Diagnosis]:

1. ~~Member meets all of the following:~~
   a. ~~Pediatric patients 2 years of age and older; and~~
   b. Diagnosis of NF1 with symptomatic, inoperable plexiform neurofibromas.

Pemazyre™ (Pemigatinib) Approval Criteria [Cholangiocarcinoma Diagnosis]:

1. Diagnosis of unresectable locally advanced or metastatic cholangiocarcinoma; and
2. Must have failed 1 or more prior therapies; and
3. Disease is positive for a fibroblast growth factor receptor 2 (FGFR2) fusion or other FGFR rearrangement.

Qinlock™ (Ripretinib) Approval Criteria [Gastrointestinal Stromal Tumor (GIST) Diagnosis]:

1. Diagnosis of advanced GIST; and
2. Previously received ≥3 kinase inhibitors, including imatinib; and
3. Used as a single-agent.

[1] U.S. Food and Drug Administration (FDA). Hematology/Oncology (Cancer) Approvals & Safety Notifications. Available online at: https://www.fda.gov/drugs/resources-information-approved-drugs/hematologyoncology-cancer-approvals-safety-notifications. Last revised 08/06/2020. Last accessed 08/17/2020.
[2] Koselugo™ Prescribing Information. AstraZeneca. Available online at: https://www.azpicentral.com/koselugo/koselugo.pdf#page=1. Last revised 05/2020. Last accessed 08/17/2020.
[3] Pemazyre™ Prescribing Information. Incyte Corporation. Available online at: https://www.pemazyre.com/pdf/prescribing-information.pdf. Last revised 04/2020. Last accessed 08/17/2020.
[4] Qinlock™ Prescribing Information. Deciphera Pharmaceuticals. Available online at: https://www.qinlockhcp.com/content/files/prescribing-information.pdf. Last revised 05/2020. Last accessed 08/17/2020.

Appendix E

Fiscal Year 2020 Annual Review of Breast Cancer Medications and 30-Day Notice to Prior Authorize Enhertu® (Fam-Trastuzumab Deruxtecan-nxki), Phesgo™ (Pertuzumab/Trastuzumab/Hyaluronidase-zzxf), Trodelvy™ (Sacituzumab Govitecan-hziy), and Tukysa™ (Tucatinib)

Oklahoma Health Care Authority
September 2020

Introduction[1,2,3,4]

According to the National Cancer Institute, in 2020, there will be an estimated 276,480 new cases of breast cancer, making it the second most common cancer diagnosed in women in the United States after skin cancer. Additionally, it is estimated there will be 42,170 breast cancer deaths in 2020. The most common type of breast cancer is ductal carcinoma, which begins in the cells of the ducts. Breast cancer can also begin in the cells of the lobules and in other tissues in the breast. Invasive breast cancer is breast cancer that has spread from where it began in the ducts or lobules to surrounding tissues. About 8 of 10 invasive breast cancers are invasive ductal carcinomas. There are several different types of treatments available for patients with breast cancer, including surgery, radiation, hormone therapy, and traditional chemotherapy. Additionally, targeted therapy using drugs or other substances to identify and attack specific cancer cells without harming normal cells is being used. Types of targeted therapy used for breast cancer include monoclonal antibodies, tyrosine kinase inhibitors, cyclin-dependent kinase inhibitors, mammalian target of rapamycin (mTOR) inhibitors, and poly [adenosine diphosphate (ADP)-ribose] polymerase (PARP) inhibitors. Additionally, biosimilar agents for use in breast cancer have been approved by the U.S. Food and Drug Administration (FDA) in recent years.

Use of evidence-based expert consensus guidelines is imperative in the treatment of cancers. The National Comprehensive Cancer Network (NCCN) Compendium contains authoritative, scientifically derived information designed to support decision making about the appropriate use of drugs and biologics in patients with cancer. These evidence-based guidelines should be used for optimal outcomes of cancer patients.

Current Prior Authorization Criteria

Approval criteria for Tecentriq® (atezolizumab) for indications other than breast cancer diagnoses can be found in the April 2020 Drug Utilization Review (DUR) Board packet. Atezolizumab approval criteria are reviewed annually with the lung cancer medications.

Afinitor® (Everolimus) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of advanced breast cancer; and
2. Human epidermal growth factor receptor 2 (HER2)-negative; and
3. Hormone receptor (HR) positive; and
4. Used in combination with exemestane, fulvestrant, or tamoxifen; and
5. Member must have failed treatment with, have a contraindication to, or be intolerant to letrozole or anastrozole.

Afinitor® (Everolimus) Approval Criteria [Neuroendocrine Tumors (NET) of Pancreatic Origin (PNET) or of Gastrointestinal or Lung Origin Diagnosis]:

1. Diagnosis of unresectable, locally advanced, or metastatic NET of pancreatic (PNET), gastrointestinal, or lung origin; and
2. Progressive disease from a previous treatment.

Afinitor® (Everolimus) Approval Criteria [Renal Cell Carcinoma (RCC) Diagnosis]:

1. Diagnosis of advanced RCC; and
2. Failure of treatment with sunitinib or sorafenib; and
3. Everolimus may also be approved to be used in combination with lenvatinib for advanced RCC.

Afinitor® (Everolimus) Approval Criteria [Renal Angiomyolipoma (AML) and Tuberous Sclerosis Complex (TSC) Diagnosis]:

1. Diagnosis of AML and TSC; and
2. Not requiring immediate surgery; and
3. Used in pediatric and adult members 1 year of age and older.

Afinitor® (Everolimus) Approval Criteria [Subependymal Giant Cell Astrocytoma (SEGA) with Tuberous Sclerosis Complex (TSC) Diagnosis]:

1. Diagnosis of SEGA with TSC; and
2. Requires therapeutic intervention but cannot be curatively resected.

Afinitor® (Everolimus) Approval Criteria [Tuberous Sclerosis Complex (TSC)-Associated Partial-Onset Seizures Diagnosis]:

1. Diagnosis of TSC-associated partial-onset seizures; and
2. Initial prescription must be written by a neurologist or neuro-oncologist; and
3. Failure of ≥3 other medications commonly used for seizures; and
4. Must be used as adjunctive treatment; and

5. The member must not be taking any P-gp and strong CYP3A4 inhibitors (e.g., ketoconazole, itraconazole, ritonavir, clarithromycin) concurrently with Afinitor®; and
6. The member must not be taking St. John's wort concurrently with Afinitor®; and
7. The prescriber must verify that Afinitor® trough levels and adverse reactions (e.g., non-infectious pneumonitis, stomatitis, hyperglycemia, dyslipidemia, thrombocytopenia, neutropenia, febrile neutropenia) will be monitored, and dosing changes or discontinuations will correspond with recommendations in the drug labeling; and
8. Verification from the prescriber that female members are not pregnant and will use contraception while receiving Afinitor® therapy and for 8 weeks after the last dose of Afinitor® and that male members with female partners of reproductive potential will use contraception while receiving Afinitor® therapy and for 4 weeks after the last dose of Afinitor®; and
9. The member's recent body surface area (BSA) 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 the duration of 3 months. For continuation, the prescriber must include information regarding improved response/effectiveness of the medication.

Halaven® (Eribulin) Approval Criteria [Recurrent or Metastatic Breast Cancer Diagnosis]:

1. Diagnosis of recurrent or metastatic breast cancer; and
2. Previously received ≥2 chemotherapeutic regimens for the treatment of metastatic disease. Prior therapy should have included an anthracycline and a taxane in either the adjuvant or metastatic setting; or
3. In combination with trastuzumab for human epidermal growth factor receptor 2 (HER2)-positive disease that is:
    a. Hormone receptor (HR) negative; or
    b. HR positive with or without endocrine therapy; or
4. As a single-agent for HER2-negative disease that is:
    a. HR negative; or
    b. HR positive with visceral crisis or endocrine therapy refractory.

Halaven® (Eribulin) Approval Criteria [Liposarcoma Diagnosis]:

1. Diagnosis of unresectable or metastatic liposarcoma; and
2. Previously received an anthracycline-containing chemotherapy regimen.

Herzuma® (Trastuzumab-pkrb), Kanjinti™ (Trastuzumab-anns), Ogivri™ (Trastuzumab-dkst), Ontruzant® (Trastuzumab-dttb), and Trazimera™ (Trastuzumab-qyyp) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of human epidermal growth factor receptor 2 (HER2)-positive breast cancer; and
2. A patient-specific, clinically significant reason why the member cannot use Herceptin® (trastuzumab) must be provided.

Ibrance® (Palbociclib) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of advanced, metastatic, hormone receptor (HR) positive, human epidermal growth factor receptor 2 (HER2)-negative breast cancer; and
2. In combination with:
    a. Letrozole as initial endocrine-based therapy in postmenopausal women; or
    b. Fulvestrant in women with disease progression following endocrine therapy; or
    c. An aromatase inhibitor or fulvestrant in male patients.

Ixempra® (Ixabepilone) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of metastatic or locally advanced breast cancer; and
2. Usage as either:
    a. In combination with capecitabine after failure of an anthracycline and a taxane (must have failed combination taxane and anthracycline therapy unless anthracyclines not indicated); or
    b. Monotherapy after failure of an anthracycline, a taxane, and capecitabine.

Kadcyla® (Ado-Trastuzumab) Approval Criteria [Early Stage or Locally Advanced Breast Cancer Diagnosis]:

1. Diagnosis of early stage or locally advanced breast cancer; and
2. Human epidermal growth factor receptor 2 (HER2)-positive; and
3. Used as adjuvant treatment in members with residual invasive disease after neoadjuvant therapy with taxane and trastuzumab-based treatment; and
4. Maximum duration of a total of 14 cycles.

Kadcyla® (Ado-Trastuzumab) Approval Criteria [Metastatic Breast Cancer Diagnosis]:

1. Diagnosis of metastatic breast cancer; and
2. Human epidermal growth factor receptor 2 (HER2)-positive; and
3. Previously received trastuzumab and a taxane, separately or in combination; and
4. Members should also have either:
    a. Received prior therapy for metastatic disease; or

b. Developed disease recurrence during or within 6 months of completing adjuvant therapy.

Kanjinti™ (Trastuzumab-anns), Ogivri™ (Trastuzumab-dkst), Ontruzant® (Trastuzumab-dttb), and Trazimera™ (Trastuzumab-qyyp) Approval Criteria [Metastatic Gastric or Gastroesophageal Junction Adenocarcinoma Diagnosis]:

1. Diagnosis of human epidermal growth factor receptor 2 (HER2)-positive metastatic gastric or gastroesophageal junction adenocarcinoma; and
2. A patient-specific, clinically significant reason why the member cannot use Herceptin® (trastuzumab) must be provided.

Kisqali® (Ribociclib) Approval Criteria [Breast Cancer Diagnosis]:

1. Hormone receptor (HR) positive; and
2. Human epidermal growth factor receptor 2 (HER2)-negative; and
3. If used in combination with an aromatase inhibitor:
   a. Diagnosis of advanced or metastatic breast cancer, initial therapy; or
4. If used in combination with fulvestrant:
   a. Diagnosis of advanced or metastatic breast cancer, as initial endocrine-based therapy or following disease progression on endocrine therapy; and
   b. Must be used in postmenopausal women only.

Kisqali® Femara® Co-Pack (Ribociclib/Letrozole) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of advanced or metastatic breast cancer, initial therapy; and
2. Hormone receptor (HR) positive; and
3. Human epidermal growth factor receptor 2 (HER2)-negative.

Lynparza® (Olaparib) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of metastatic breast cancer; and
2. Progression on previous chemotherapy in any setting; and
3. Human epidermal growth factor receptor 2 (HER2)-negative; and
4. Positive test for a germline BRCA-mutation (*gBRCAm*); and
5. Members with hormone receptor (HR) positive disease must have failed prior endocrine therapy or are considered to not be a candidate for endocrine therapy.

Lynparza® (Olaparib) Approval Criteria [Ovarian Cancer Diagnosis]:

1. **Treatment of Advanced Recurrent/Refractory Ovarian Cancer:**
   a. Diagnosis of deleterious or suspected deleterious germline BRCA mutated (*gBRCAm*), advanced ovarian cancer; and

b. Previous treatment with ≥3 prior lines of chemotherapy. Prior chemotherapy regimens should be documented on the prior authorization request; and
c. A quantity limit based on FDA approved dosing will apply; or

2. Maintenance Treatment of Advanced Ovarian Cancer:

a. The member must be in complete or partial response to first-line platinum based chemotherapy; and
    i. Diagnosis of deleterious or suspected deleterious *gBRCAm*, advanced ovarian cancer; or
b. Complete or partial response to second-line or greater platinum-based based chemotherapy (no mutation required); and
c. A quantity limit based on FDA approved dosing will apply.

Lynparza® (Olaparib) Approval Criteria [Maintenance Treatment Diagnosis]:

1. Used for maintenance treatment of adult patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in complete or partial response to platinum-based chemotherapy; and
2. Completed therapy with a platinum agent in the prior 8 weeks; and
3. A quantity limit based on FDA approved dosing will apply.

Nerlynx® (Neratinib) Approval Criteria [Breast Cancer Diagnosis]:

1. For adjuvant treatment in early-stage breast cancer; and
2. Human epidermal growth factor receptor 2 (HER2)-positive breast cancer; and
3. Neratinib must be used to follow adjuvant trastuzumab-based therapy.

Perjeta® (Pertuzumab) Approval Criteria [Breast Cancer Diagnosis]:

1. Human epidermal growth factor receptor 2 (HER2)-positive; and
2. Used in 1 of the following settings:
    a. Metastatic breast cancer who have not received prior anti-HER2 therapy or chemotherapy for metastatic disease:
        i. Used in combination with trastuzumab and docetaxel; or
    b. Neoadjuvant treatment of members with locally advanced, inflammatory, or early stage breast cancer (either >2cm in diameter or node positive):
        i. Used in combination with trastuzumab and docetaxel (neoadjuvant treatment may also contain other agents in addition to trastuzumab and docetaxel); or
    c. Adjuvant systemic therapy for members with node positive, HER2-positive tumors or members with high-risk node negative tumors [tumor >1cm; tumor 0.5 to 1cm with histologic or nuclear grade 3; estrogen receptor (ER)/progesterone receptor (PR) negative; or younger than 35 years of age]:

i. Used in combination with trastuzumab and paclitaxel following doxorubicin/cyclophosphamide (AC); or
ii. Used in combination with trastuzumab and docetaxel following AC; or
iii. Used in combination with docetaxel/carboplatin/trastuzumab (TCH).

Piqray® (Alpelisib) Approval Criteria [Breast Cancer Diagnosis]:
1. Diagnosis of advanced or metastatic breast cancer that has progressed on or after an endocrine-based regimen in men or in postmenopausal women; and
2. Hormone receptor (HR) positive, human epidermal growth factor receptor 2 (HER2)-negative; and
3. PIK3CA-mutated; and
4. In combination with fulvestrant.

Talzenna® (Talazoparib) Approval Criteria [Breast Cancer Diagnosis]:
1. Diagnosis of recurrent or metastatic breast cancer; and
2. Human epidermal growth factor receptor 2 (HER2)-negative; and
3. Presence of BRCA1/BRCA2-germline mutated disease; and
4. Disease is hormone receptor (HR) negative or is HR positive and endocrine therapy refractory; and
5. Patient has symptomatic visceral disease; and
6. Must be used as a single-agent.

Tecentriq® (Atezolizumab) Approval Criteria [Breast Cancer Diagnosis]:
1. Unresectable locally advanced or metastatic triple-negative breast cancer; and
2. Used in combination with nab-paclitaxel (Abraxane®); and
3. Positive expression of programmed death ligand-1 (PD-L1); and
4. Member has not failed other immunotherapy(ies).

Tykerb® (Lapatinib) Approval Criteria [Breast Cancer Diagnosis]:
1. Diagnosis of metastatic or recurrent breast cancer; and
2. Human epidermal growth factor receptor 2 (HER2)-positive; and
3. Lapatinib must be used in combination with 1 of the following:
   a. Trastuzumab; or
   b. Capecitabine; or
   c. An aromatase inhibitor (e.g., exemestane, letrozole, anastrozole) if also estrogen receptor (ER) positive.

Verzenio® (Abemaciclib) Approval Criteria [Breast Cancer Diagnosis]:
1. Used in 1 of the following settings:
   a. In combination with an aromatase inhibitor as initial endocrine-based therapy for postmenopausal women; or

b. In combination with fulvestrant with disease progression following endocrine therapy in advanced or metastatic breast cancer; or
c. As monotherapy for disease progression following endocrine therapy and prior chemotherapy in metastatic breast cancer; and

2. All the following criteria must be present:
   a. Advanced or metastatic breast cancer; and
   b. Progressed after endocrine therapy when used with fulvestrant or as initial therapy in combination with an aromatase inhibitor; and
   c. Hormone receptor (HR) positive; and
   d. Human epidermal growth factor receptor 2 (HER2)-negative.

Utilization of Breast Cancer Medications: Fiscal Year 2020

Fiscal Year Comparison: Pharmacy Claims

Fiscal Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2019	64	439	$5,717,701.45	$13,024.38	$461.29	17,444	12,395
2020	74	513	$7,758,164.18	$15,123.13	$551.05	17,938	14,079
% Change	**15.60%**	**16.90%**	**35.70%**	**16.10%**	**19.50%**	**2.80%**	**13.60%**
Change	**10**	**74**	**$2,040,462.73**	**$2,098.75**	**$89.76**	**494**	**1,684**

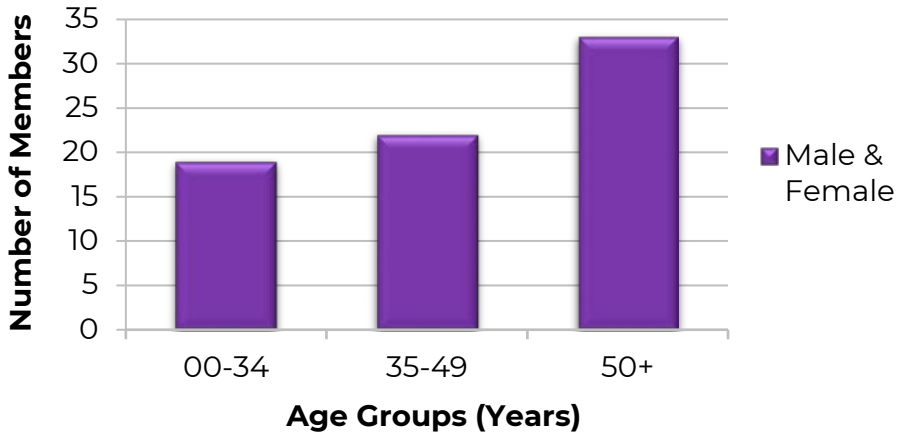
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2019 = 07/01/2018 to 06/30/2019; Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Fiscal Year Comparison: Medical Claims

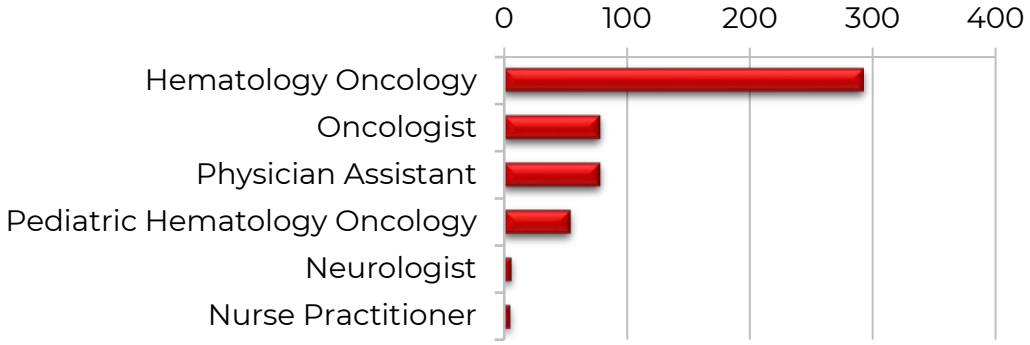
Fiscal Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Total Units
2019	84	462	$3,059,903.43	$6,623.17	161,240
2020	115	682	$6,511,719.05	$9,547.98	212,355
% Change	**36.90%**	**47.62%**	**112.81%**	**44.16%**	**31.70%**
Change	**31**	**220**	**$3,451,815.62**	**$2,924.81**	**51,115**

*Total number of unduplicated members.
†Total number of unduplicated claims.
Costs do not reflect rebated prices or net costs.
Please note: Some members may be utilizing medications concomitantly.
Fiscal Year 2019 = 07/01/2018 to 06/30/2019; Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Demographics of Members Utilizing Breast Cancer Medications: Pharmacy Claims



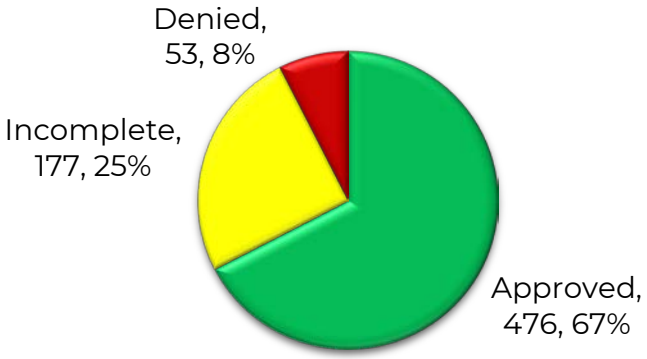
Top Prescriber Specialties of Breast Cancer Medications By Number of Claims: Pharmacy Claims



Prior Authorization of Breast Cancer Medications

There were 706 prior authorization requests submitted for breast cancer medications during fiscal year 2020. The following chart shows the status of the submitted petitions for fiscal year 2020.

Status of Petitions



Market News and Updates[5,6,7,8]

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

- **May 2019:** The FDA approved Herzuma® (trastuzumab-pkrb), a biosimilar to Herceptin® (trastuzumab), in combination with cisplatin and capecitabine or 5-fluorouracil for the treatment of patients with human epidermal growth factor receptor 2 (HER2)-positive metastatic gastric or gastroesophageal junction adenocarcinoma who have not received prior treatment for metastatic disease, and for adjuvant treatment of HER2-positive and node positive or node negative [estrogen receptor (ER)/progesterone receptor (PR) negative or with 1 high risk feature] breast cancer as a single agent following multi-modality anthracycline based therapy. With these approvals, Herzuma® now has all of the same indications as Herceptin®.
- **December 2019:** A poster session presented at the San Antonio Breast Cancer Symposium provided information to support the use of pertuzumab and trastuzumab in combination with paclitaxel for HER2-positive metastatic breast cancer (MBC). Most clinical studies investigating the efficacy and safety of pertuzumab and trastuzumab used docetaxel as the taxane. A retrospective cohort study, using the nationwide Flatiron Health Electronic Health Record (EHR)-derived de-identified database, was conducted and the findings determined that paclitaxel used with pertuzumab and trastuzumab is highly active and well tolerated and may be an effective alternative to docetaxel-based combination therapy. These findings are consistent with a Phase 3b study (PERUSE) that was designed to assess the safety and efficacy of investigator-selected taxane with pertuzumab and trastuzumab in HER2-positive MBC. Preliminary findings suggested that paclitaxel appeared to be a valid alternative to docetaxel, offering similar progression-free survival and overall response rate with a predictable safety profile.
- **December 2019:** The FDA granted accelerated approval to Enhertu® (fam-trastuzumab deruxtecan-nxki) for the treatment of patients with unresectable or HER2-positive MBC who have received ≥2 prior anti-HER2-based regimens in the metastatic setting.
- **December 2019:** The FDA approved Lynparza® (olaparib) for the maintenance treatment of adult patients with deleterious or suspected deleterious germline BRCA-mutated (*gBRCAm*) metastatic pancreatic adenocarcinoma whose disease has not progressed on at least 16 weeks of a first-line platinum-based chemotherapy regimen.
- **February 2020:** The FDA approved Nerlynx® (neratinib) in combination with capecitabine for the treatment of adult patients with advanced or

HER2-positive MBC who have received ≥2 prior anti-HER2-based regimens in the metastatic setting.

- **April 2020:** The FDA approved Tukysa™ (tucatinib) in combination with trastuzumab and capecitabine, for the treatment of adult patients with advanced unresectable or HER2-positive MBC, including patients with brain metastases, who have received ≥1 prior anti-HER2-based regimen(s) in the metastatic setting.
- **April 2020:** The FDA approved Trodelvy™ (sacituzumab govitecan-hziy) for the treatment of adult patients with triple-negative MBC who received ≥2 prior therapies for metastatic disease.
- **May 2020:** The FDA approved an expanded indication for Lynparza® (olaparib) to include its use in combination with bevacizumab for first-line maintenance treatment of adult patients with advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in complete or partial response to first-line platinum-based chemotherapy and whose cancer is associated with homologous recombination deficiency positive status defined by either a deleterious or suspected deleterious BRCA mutation and/or genomic instability.
- **May 2020:** The FDA approved Tecentriq® (atezolizumab) for the first-line treatment of adult patients with metastatic non-small cell lung cancer (NSCLC) whose tumors have high programmed death ligand-1 (PD-L1) expression [PD-L1 stained ≥50% of tumor cells (TC ≥50%) or PD-L1 stained tumor-infiltrating immune cells (IC) covering ≥10% of the tumor area (IC≥10%)], with no EGFR or ALK genomic tumor aberrations.
- **May 2020[+]:** The FDA approved Lynparza® (olaparib) for the treatment of adult patients with deleterious or suspected deleterious germline or somatic homologous recombination repair (HRR) gene-mutated metastatic castration-resistant prostate cancer (mCRPC), who have progressed following prior treatment with enzalutamide or abiraterone.
- **May 2020:** The FDA approved Tecentriq® (atezolizumab) in combination with bevacizumab for the treatment of patients with unresectable or metastatic hepatocellular carcinoma (HCC) who have not received prior systemic therapy.
- **June 2020:** The FDA approved Phesgo™, a new fixed-dose combination of pertuzumab, trastuzumab, and hyaluronidase–zzxf, for the treatment of HER2-positive breast cancer.

[+] The product summary and recommendations for Lynparza® for the indication of mCRPC will be provided in the Fiscal Year 2020 Annual Review of Prostate Medications report, which is also being presented at the September 2020 DUR Board meeting.

Product Summaries[9,10,11,12]

Enhertu® (Fam-Trastuzumab Deruxtecan-nxki):

- **Therapeutic Class:** HER2-directed antibody and topoisomerase inhibitor conjugate
- **Indication(s):** Treatment of adult patients with unresectable or HER2-positive MBC who have received ≥2 prior anti-HER2-based regimens in the metastatic setting
- **How Supplied:** 100mg lyophilized powder for reconstitution in single-dose vials (SDVs)
- **Dose:** 5.4mg/kg given as an intravenous (IV) infusion once every 3 weeks (21-day cycle)
- **Cost:** Wholesale Acquisition Cost (WAC) of $2,295.97 per vial; cost will vary due to weight-based dosing

Phesgo™ (Pertuzumab/Trastuzumab/Hyaluronidase-zzxf):

- **Therapeutic Class:** Combination of HER2/neu receptor antagonists (pertuzumab and trastuzumab) and an endoglycosidase (hyaluronidase)
- **Indication(s):**
  - In combination with chemotherapy:
    - Neoadjuvant treatment of patients with HER2-positive, locally advanced, inflammatory, or early stage breast cancer
    - Adjuvant treatment of patients with HER2-positive early breast cancer at high risk of recurrence
  - In combination with docetaxel:
    - Treatment of HER2-positive MBC who have not received prior anti-HER2 therapy or chemotherapy for metastatic disease
- **How Supplied:**
  - 1,200mg pertuzumab/600mg trastuzumab/30,000 units hyaluronidase/15mL (80mg/40mg/2,000 units/mL) solution in SDVs
  - 600mg pertuzumab/600mg trastuzumab/20,000 units hyaluronidase/10mL (60mg/60mg/2,000 units/mL) solution in SDVs
- **Dose:** Phesgo™ has different dosage and administration instructions than IV pertuzumab and trastuzumab products:
  - Initial dose: 1,200mg/600mg/30,000 units administered subcutaneously (sub-Q)
  - Maintenance dose: After the initial dose, 600mg/600mg/20,000 units administered sub-Q every 3 weeks
    - Neoadjuvant: Every 3 weeks with chemotherapy by IV infusion preoperatively for 3 to 6 cycles
    - Adjuvant: Every 3 weeks with chemotherapy by IV infusion postoperatively for a total of 1 year (up to 18 cycles)
    - MBC: Every 3 weeks with docetaxel by IV infusion every 3 weeks until disease progression or unmanageable toxicity

- **Cost:** WAC of $12,706.95 per 1,200mg/600mg/30,000 units/15mL vial; WAC of $8,471.00 per 600mg/600mg/20,000 units/10mL vial; cost will vary based on indication

Trodelvy™ (Sacituzumab Govitecan-hziy):

- **Therapeutic Class:** Trophoblast cell-surface antigen-2 (TROP-2)-directed antibody and topoisomerase inhibitor conjugate
- **Indication(s):** Treatment of adult patients with triple-negative MBC who have received ≥2 prior therapies for metastatic disease
- **How Supplied:** 180mg lyophilized powder for reconstitution in SDVs
- **Dose:** 10mg/kg once weekly via IV infusion on days 1 and 8 of continuous 21-day treatment cycles
- **Cost:** WAC of $2,012.50 per vial; cost will vary due to weight-based dosing

Tukysa™ (Tucatinib):

- **Therapeutic Class:** Kinase inhibitor
- **Indication(s):** Use in combination with trastuzumab and capecitabine for treatment of adult patients with advanced unresectable or HER2-positive MBC, including patients with brain metastases
- **How Supplied:** 50mg and 150mg oral tablets
- **Dose:** 300mg [(2) 150mg tablets] taken orally twice daily; 50mg strength available for dose reductions/modifications
- **Cost:** WAC of $76.67 per 50mg tablet and $154.17 per 150mg tablet, resulting in a cost per 30 days of $18,500.40 based on the recommended dosing of 300mg [(2) 150mg tablets] twice daily

Recommendations

- The prior authorization of Enhertu® (fam-trastuzumab deruxtecan-nxki), Phesgo™ (pertuzumab/trastuzumab/hyaluronidase-zzxf), Trodelvy™ (sacituzumab govitecan-hziy), and Tukysa™ (tucatinib) with the following criteria listed in red:

Enhertu® (Fam-Trastuzumab Deruxtecan-nxki) Approval Criteria [Breast Cancer Diagnosis]:

1. Adult patients with unresectable or metastatic human epidermal growth factor receptor 2 (HER2)-positive breast cancer; and
2. Member has received ≥2 prior anti-HER2-based regimens in the metastatic setting.

Phesgo™ (Pertuzumab/Trastuzumab/Hyaluronidase-zzxf) Approval Criteria [Breast Cancer Diagnosis]:

1. Human epidermal growth factor receptor 2 (HER2)-positive disease; and
2. Used in 1 of the following settings:

a. Neoadjuvant treatment of members with locally advanced, inflammatory, or early stage breast cancer; or
b. Adjuvant treatment of members with early breast cancer; or
c. In combination with docetaxel for members with metastatic disease.

Trodelvy™ (Sacituzumab Govitecan-hziy) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of triple-negative breast cancer; and
2. Metastatic disease; and
3. Member must have received ≥2 therapies for metastatic disease.

Tukysa™ (Tucatinib) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of advanced unresectable or metastatic breast cancer; and
2. Used in combination with trastuzumab and capecitabine; and
3. Disease is human epidermal growth factor receptor 2 (HER2)-positive; and
4. Following progression of ≥1 prior anti-HER2 regimen(s) in the metastatic setting.

- Update the current Herzuma® (trastuzumab-pkrb), Lynparza® (olaparib), Nerlynx® (neratinib), Perjeta® (pertuzumab), and Tecentriq® (atezolizumab) prior authorization criteria based on new FDA approved indications (changes noted in red in the following approval criteria; only criteria with changes are listed):

Herzuma® (Trastuzumab-pkrb), Kanjinti™ (Trastuzumab-anns), Ogivri™ (Trastuzumab-dkst), Ontruzant® (Trastuzumab-dttb), and Trazimera™ (Trastuzumab-qyyp) Approval Criteria [Metastatic Gastric or Gastroesophageal Junction Adenocarcinoma Diagnosis]:

1. Diagnosis of human epidermal growth factor receptor 2 (HER2)-positive metastatic gastric or gastroesophageal junction adenocarcinoma; and
2. A patient-specific, clinically significant reason why the member cannot use Herceptin® (trastuzumab) must be provided.

Lynparza® (Olaparib) Approval Criteria [Breast Cancer Diagnosis]:

1. Diagnosis of metastatic breast cancer; and
2. Member must have shown progression on previous chemotherapy in any setting; and
3. ~~Human epidermal growth factor receptor 2 (HER2) negative; and~~
4. Positive test for a germline BRCA-mutation (*gBRCAm*); and
5. Members with hormone receptor (HR) positive disease must have failed prior endocrine therapy or are not considered to be a candidate for endocrine therapy.

Lynparza® (Olaparib) Approval Criteria [Pancreatic Cancer Diagnosis]:

1. A diagnosis of metastatic pancreatic adenocarcinoma with known germline BRCA1/BRCA2 mutation; and
2. Maintenance therapy as a single-agent; and
3. In members who have not progressed on at least 16 weeks of a first-line platinum-based chemotherapy regimen.

Lynparza® (Olaparib) Approval Criteria [Ovarian Cancer Diagnosis]:

1. **Treatment of Advanced Recurrent/Refractory Ovarian Cancer:**
   a. Diagnosis of deleterious or suspected deleterious germline BRCA-mutated (*gBRCAm*), advanced ovarian cancer; and
   b. Previous treatment with ≥~~3~~ 2 prior lines of chemotherapy (prior chemotherapy regimens should be documented on the prior authorization request); and
   c. A quantity limit based on FDA approved dosing will apply; or
2. **Maintenance Treatment of Advanced Ovarian Cancer:**
   a. ~~Member~~ Disease must be in complete or partial response to ~~first-line platinum-based~~ primary chemotherapy; and
      i. Used as a single agent in members with a diagnosis of deleterious or suspected deleterious *gBRCAm* or somatic BRCA-mutated (*sBRCAm*), advanced ovarian cancer; or
      ii. Used in combination with bevacizumab following a primary therapy regimen that included bevacizumab; or
   b. Complete or partial response to second-line or greater platinum-based based chemotherapy (no mutation required); and
   c. A quantity limit based on FDA approved dosing will apply.

Nerlynx® (Neratinib) Approval Criteria [Recurrent or Metastatic Breast Cancer Diagnosis]:

1. Diagnosis of recurrent or metastatic breast cancer; and
2. Member must have human epidermal growth factor receptor 2 (HER2)-positive breast cancer; and
3. Used in combination with capecitabine; or
4. Used in combination with capecitabine or paclitaxel if brain metastases are present.

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

1. Diagnosis of 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 Non-Small Cell Lung Cancer (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 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. Used as a single agent; and
        ii. The member does not have epidermal growth factor receptor (EGFR), anaplastic lymphoma kinase (ALK), ROS1, BRAF, MET exon 14 skipping mutation, 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. Used as a single-agent only.

Perjeta® (Pertuzumab) Approval Criteria [Breast Cancer Diagnosis]:

1. Human epidermal growth factor receptor 2 (HER2)-positive; and
2. Used in 1 of the following settings:
    a. Metastatic breast cancer who have not received prior anti-HER2 therapy or chemotherapy for metastatic disease:
        i. Used in combination with trastuzumab and docetaxel; or
    b. Neoadjuvant treatment of members with locally advanced, inflammatory, or early stage breast cancer (either >2cm in diameter or node positive):
        i. Used in combination with trastuzumab and docetaxel or paclitaxel (neoadjuvant treatment may also contain other agents in addition to trastuzumab and docetaxel or paclitaxel); or
    c. Adjuvant systemic therapy for members with node positive, HER2-positive tumors or members with high-risk node negative tumors

[tumor >1cm; tumor 0.5 to 1cm with histologic or nuclear grade 3; estrogen receptor (ER)/progesterone receptor (PR) negative; or younger than 35 years of age]:

i. Used in combination with trastuzumab and paclitaxel following doxorubicin/cyclophosphamide (AC); or
ii. Used in combination with trastuzumab and docetaxel following AC; or
iii. Used in combination with docetaxel/carboplatin/trastuzumab (TCH).

Utilization Details of Breast Cancer Medications: Fiscal Year 2020

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
PALBOCICLIB PRODUCTS					
IBRANCE CAP 125MG	139	26	$1,689,981.30	5.35	$12,158.14
IBRANCE CAP 100MG	78	14	$948,614.09	5.57	$12,161.72
IBRANCE CAP 75MG	39	5	$405,267.07	7.8	$10,391.46
IBRANCE TAB 125MG	7	5	$87,209.46	1.4	$12,458.49
IBRANCE TAB 100MG	6	4	$68,683.47	1.5	$11,447.25
IBRANCE TAB 75MG	2	1	$24,913.56	2	$12,456.78
SUBTOTAL	**271**	**55**	**$3,224,668.95**	**4.93**	**$11,899.15**
EVEROLIMUS PRODUCTS					
AFINITOR TAB 10MG	35	10	$550,094.64	3.5	$15,716.99
AFINITOR DIS TAB 3MG	27	5	$890,676.04	5.4	$32,988.00
AFINITOR TAB 5MG	22	6	$392,901.54	3.67	$17,859.16
AFINITOR DIS TAB 2MG	22	6	$388,827.51	3.67	$17,673.98
AFINITOR DIS TAB 5MG	20	3	$864,094.55	6.67	$43,204.73
AFINITOR TAB 7.5MG	17	3	$267,204.26	5.67	$15,717.90
EVEROLIMUS TAB 2.5MG	6	2	$66,552.79	3	$11,092.13
AFINITOR TAB 2.5MG	6	3	$88,230.00	2	$14,705.00
EVEROLIMUS TAB 7.5MG	5	1	$62,883.90	5	$12,576.78
EVEROLIMUS TAB 5MG	2	2	$12,576.78	1	$6,288.39
SUBTOTAL	**162**	**41**	**$3,584,042.01**	**3.95**	**$22,123.72**
ABEMACICLIB PRODUCTS					
VERZENIO TAB 150MG	37	8	$444,722.60	4.63	$12,019.53
VERZENIO TAB 200MG	6	1	$36,853.26	6	$6,142.21
SUBTOTAL	**43**	**9**	**$481,575.86**	**4.78**	**$11,199.44**
RIBOCICLIB PRODUCTS					
KISQALI FEMARA CO-PACK	24	2	$309,084.93	12	$12,878.54
KISQALI TAB 400MG	4	1	$40,197.54	4	$10,049.39
SUBTOTAL	**28**	**3**	**$349,282.47**	**9.33**	**$12,474.37**
LAPATINIB PRODUCTS					
TYKERB TAB 250MG	3	1	$19,035.93	3	$6,345.31

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
SUBTOTAL	**3**	**1**	**$19,035.93**	**3**	**$6,345.31**
TUCATINIB PRODUCTS					
TUKYSA TAB 150MG	3	2	$55,526.23	1.5	$18,508.74
SUBTOTAL	**3**	**2**	**$55,526.23**	**1.5**	**$18,508.74**
NERATINIB PRODUCTS					
NERLYNX TAB 40MG	2	1	$27,668.82	2	$13,834.41
SUBTOTAL	**2**	**1**	**$27,668.82**	**2**	**$13,834.41**
ALPELISIB PRODUCTS					
PIQRAY TAB 300MG	1	1	$16,363.91	1	$16,363.91
SUBTOTAL	**1**	**1**	**$16,363.91**	**1**	**$16,363.91**
TOTAL	**513**	**74***	**$7,758,164.18**	**6.93**	**$15,123.13**

TAB = tablet; CAP = capsule; DIS = Disperz (oral tablet for suspension)
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS⁺	TOTAL MEMBERS*	TOTAL COST	COST/ CLAIM
J9355 TRASTUZUMAB INJ	416	71	$2,554,726.64	$6,141.17
J9306 PERTUZUMAB INJ	294	53	$1,852,319.08	$6,300.41
J9022 ATEZOLIZUMAB INJ	135	29	$1,246,531.08	$9,233.56
J9354 ADO-TRASTUZUMAB INJ	68	13	$681,269.53	$10,018.67
J9179 ERIBULIN MESYLATE INJ	46	7	$141,990.52	$3,086.75
J9207 IXABEPILONE INJ	4	1	$34,882.20	$8,720.55
TOTAL	**682⁺**	**115***	**$6,511,719.05**	**$9,547.98**

INJ = injection
⁺Total number of unduplicated claims.
*Total number of unduplicated members.
Please note: Some members may be utilizing medications concomitantly.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020

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Appendix F

Fiscal Year 2020 Annual Review of Prostate Cancer Medications and 30-Day Notice to Prior Authorize Rubraca® (Rucaparib)

Oklahoma Health Care Authority
September 2020

Introduction[1,2,3]

According to the National Cancer Institute, in 2020, an estimated 191,930 men will be diagnosed with prostate cancer, making prostate cancer approximately 10.6% of all new cancer cases in the United States. Additionally, it is estimated there will be 33,330 prostate cancer deaths in 2020. Prostate cancer is the second leading cause of cancer death in men. The incidence of prostate cancer is closely correlated with trends in screening practices. Prostate specific antigen (PSA) is a protein produced by cells of the prostate gland, and elevations in PSA levels may indicate prostate cancer. PSA has been used as a screening marker for prostate cancer over the last 3 decades with its peak utilization occurring in the early 1990s and gradually declining since that time. Following the same trend, the incidence rates of prostate cancer were highest in 1992 and have slowly decreased from that date. Physicians have reduced recommending generalized PSA screening for the average risk male, primarily because the mortality associated with prostate cancer is very low with an estimated 98% survival at 5 years. Early detection of prostate cancer can lead to overtreatment of cancers that do not impact life expectancy. This may result in unwarranted side effects, reduced quality of life, and increased cost. Prostate cancer detection and progression models estimate that 23% to 42% of all screen-detected cancers are overtreated.

The most common type of prostate cancer is adenocarcinoma, which accounts for 99% of tumors in the prostate. Sarcomas, transitional, small, and squamous cell carcinomas are rare. The treatment principles for prostate cancer have largely remained the same over the past 50 years with surgery, radiation, and androgen deprivation therapy (ADT) making up the main components of therapy. Androgens, the most common of which is testosterone, promote the growth of prostate cancers. ADT involves medications that reduce the body's level of androgens or surgery to remove the testicles (orchiectomy), which ultimately can decrease and slow the growth of prostate cancers. Early stage (stage I and II localized) prostate cancer is typically treated with either surgery, radiation therapy, or active surveillance. Stage III prostate cancer treatment often involves a combination of radiation therapy with ADT and surgery. ADT is usually recommended for initial treatment of men with metastatic (stage IV) prostate cancer and is

often combined with chemotherapy. Other treatment strategies for advanced prostate cancer include immunotherapy and radiation. Advanced prostate cancer is incurable but treatment can help to control the tumor burden for long periods of time.

Current Prior Authorization Criteria

Erleada® (Apalutamide) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of non-metastatic CRPC; and
2. Castration-resistant or disease progression while on androgen deprivation therapy (ADT); and
3. Prostate specific antigen doubling time of ≤10 months; and
4. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy.

Erleada® (Apalutamide) Approval Criteria [Castration-Sensitive Prostate Cancer (CSPC) Diagnosis]:

1. Diagnosis of metastatic CSPC; and
2. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy.

Nubeqa® (Darolutamide) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of non-metastatic CRPC; and
2. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy.

Jevtana® (Cabazitaxel) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of metastatic CRPC; and
2. Previous treatment with a docetaxel-containing regimen; and
3. Used in combination with prednisone.

Provenge® (Sipuleucel-T) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of metastatic CRPC; and
2. Asymptomatic or minimally symptomatic; and
3. No hepatic metastases; and
4. Life expectancy of >6 months.

Xofigo® (Radium-223 Dichloride) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of metastatic CRPC; and
2. Symptomatic bone metastases; and
3. No known visceral metastatic disease; and

4. Prescriber must verify radium-223 dichloride will not be used in combination with chemotherapy; and
5. Absolute neutrophil count ≥1.5 x 10^9/L, platelet count ≥100 x 10^9/L, and hemoglobin ≥10g/dL; and
6. Approvals will be for the duration of 3 months at which time additional authorization may be granted if the prescriber documents the following:
    a. Member has not shown evidence of progressive disease while on radium-223 dichloride therapy; and
    b. Member must have an absolute neutrophil count ≥1 x 10^9/L and platelet count ≥100 x 10^9/L (radium-223 dichloride should be delayed 6 to 8 weeks otherwise).

Xtandi® (Enzalutamide) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of CRPC.

Yonsa® (Abiraterone Acetate) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of metastatic CRPC; and
2. Abiraterone must be used in combination with a corticosteroid; and
3. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy.

Zytiga® (Abiraterone) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of metastatic CRPC; and
2. Abiraterone must be used in combination with a corticosteroid; and
3. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy.

Zytiga® (Abiraterone) Approval Criteria [Castration-Sensitive Prostate Cancer (CSPC) Diagnosis]:

1. Diagnosis of metastatic, high-risk, CSPC; and
2. Abiraterone must be used in combination with a corticosteroid.

Utilization of Prostate Cancer Medications: Fiscal Year 2020

Fiscal Year Comparison: Pharmacy Claims

Fiscal Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2019	15	81	$886,786.67	$10,947.98	$364.93	7,650	2,430
2020	14	78	$757,056.81	$9,705.86	$323.53	7,080	2,340
% Change	**-6.70%**	**-3.70%**	**-14.60%**	**-11.30%**	**-11.30%**	**-7.50%**	**-3.70%**
Change	**-1**	**-3**	**-$129,729.86**	**-$1,242.12**	**-$41.40**	**-570**	**-90**

*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2019 = 07/01/2018 to 06/30/2019; Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Fiscal Year Comparison: Medical Claims

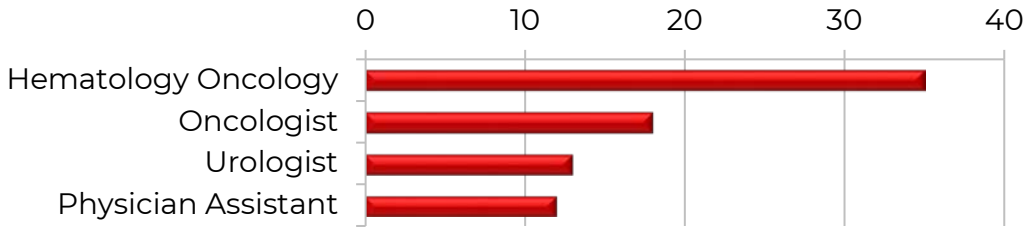
Fiscal Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Total Units
2019	2	15	$153,897.04	$10,259.80	1,600
2020	6	33	$432,849.10	$13,116.64	2,478
% Change	**200.00%**	**120.00%**	**181.26%**	**27.84%**	**54.88%**
Change	**4**	**18**	**$278,952.06**	**$2,856.84**	**878**

*Total number of unduplicated members.
†Total number of unduplicated claims.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2019 = 07/01/2018 to 06/30/2019; Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Demographics of Members Utilizing Prostate Cancer Medications: Pharmacy Claims

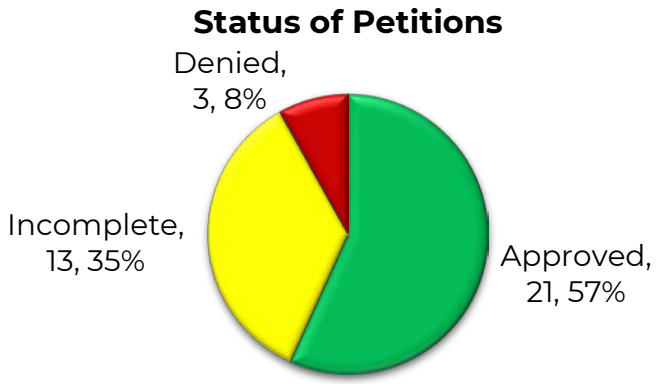
- Due to the small number of members utilizing prostate cancer medications during fiscal year 2020, detailed demographic information could not be provided. All members were male and 50 years of age or older.

Top Prescriber Specialties of Prostate Cancer Medications By Number of Claims: Pharmacy Claims



Prior Authorization of Prostate Cancer Medications

There were 37 prior authorization requests submitted for prostate cancer medications during fiscal year 2020. The following chart shows the status of the submitted petitions for fiscal year 2020.



Market News and Updates[4]

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

- **December 2019:** The FDA approved Xtandi® (enzalutamide) for the treatment of patients with metastatic, castration-sensitive prostate cancer (mCSPC). Xtandi® was previously approved by the FDA for the treatment of patients with castration-resistant prostate cancer (CRPC).
- **May 2020[+]:** The FDA approved Lynparza® (olaparib) for the treatment of adult patients with deleterious or suspected deleterious germline or somatic homologous recombination repair (HRR) gene-mutated metastatic CRPC (mCRPC), who have progressed following prior treatment with enzalutamide or abiraterone.
- **May 2020:** The FDA granted accelerated approval to Rubraca® (rucaparib) for the treatment of patients with deleterious BRCA mutation (germline and/or somatic)-mCRPC who have been treated with androgen receptor-directed therapy and a taxane-based chemotherapy.

[+] Other new indications for Lynparza® (olaparib) are included in the Fiscal Year 2020 Annual Review of Breast Cancer Medications report, which is also being presented at the September 2020 Drug Utilization Review (DUR) Board meeting.

Rubraca® (Rucaparib) Product Summary[5]

Rubraca® (Rucaparib):

- **Therapeutic Class:** Poly [adenosine diphosphate (ADP)-ribose] polymerase (PARP) inhibitor
- **Indication(s):**
  - Maintenance treatment of adult patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to platinum-based chemotherapy

    - Treatment of adult patients with a deleterious BRCA mutation (germline and/or somatic)-associated epithelial ovarian, fallopian tube, or primary peritoneal cancer who have been treated with ≥2 chemotherapies
    - Treatment of adult patients with a deleterious BRCA mutation (germline and/or somatic)-associated mCRPC who have been treated with androgen receptor-directed therapy and a taxane-based chemotherapy
- **How Supplied:** 200mg, 250mg, and 300mg oral tablets
- **Dose:** 600mg orally twice daily
    - For treatment of mCRPC, patients should also receive concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or should have had bilateral orchiectomy
- **Cost:** The Wholesale Acquisition Cost (WAC) is $139.18 per tablet, regardless of strength, resulting in a monthly cost of $16,701.60 at the recommended dosing of 600mg [(2) 300mg tablets] twice daily

Recommendations

- The prior authorization of Rubraca® (rucaparib) with the following criteria listed in red:

Rubraca® (Rucaparib) Approval Criteria [Ovarian Cancer Diagnosis]:

1. **Treatment of Advanced Recurrent/Refractory Ovarian Cancer:**
    a. Diagnosis of recurrent or refractory disease; and
    b. Previous treatment with ≥2 prior lines of chemotherapy (prior chemotherapy regimens should be documented on the prior authorization request); and
    c. Disease is associated with a deleterious or suspected deleterious BRCA mutation; and
    d. Used as a single agent; or
2. **Maintenance Treatment of Advanced Ovarian Cancer:**
    a. Diagnosis of advanced or recurrent ovarian, fallopian tube, or primary peritoneal cancer; and
    b. Disease must be in complete or partial response to platinum-based chemotherapy; and
    c. Used as a single agent.

Rubraca® (Rucaparib) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]:

1. Diagnosis of metastatic CRPC; and
2. Member must have failed previous first-line therapy; and
3. Used as a single-agent except for the following:
    a. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy; and

4. Disease must be positive for a mutation in BRCA1 or BRCA2.

- Update the current Lynparza® (olaparib) and Xtandi® (enzalutamide) prior authorization criteria based on new FDA approved indications (changes noted in red in the following approval criteria; only criteria with changes are listed):

Lynparza® (Olaparib) Approval Criteria [Castration-Resistant Prostate Cancer (CRPC) Diagnosis]⁺:

1. Diagnosis of metastatic CRPC; and
2. Members must have failed previous first-line therapy; and
3. Used as a single-agent except for the following:
   a. Concomitant treatment with a gonadotropin-releasing hormone (GnRH) analog or prior history of bilateral orchiectomy; and
4. Disease must be positive for a mutation in a homologous recombination gene.

Xtandi® (Enzalutamide) Approval Criteria [Castration-Sensitive Prostate Cancer (CSPC) Diagnosis]:

1. Diagnosis of metastatic CSPC.

⁺Other new indications for Lynparza® (olaparib) are included in the Fiscal Year 2020 Annual Review of Breast Cancer Medications report, which is also being presented at the September 2020 DUR Board meeting.

Utilization Details of Prostate Cancer Medications: Fiscal Year 2020

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM
ABIRATERONE PRODUCTS					
ZYTIGA TAB 500MG	38	5	$414,034.40	7.6	$10,895.64
ABIRATERONE TAB 250MG	12	2	$15,205.10	6	$1,267.09
YONSA TAB 125MG	1	1	$9,492.68	1	$9,492.68
SUBTOTAL	**51**	**8**	**$438,732.18**	**6.4**	**$8,602.59**
ENZALUTAMIDE PRODUCTS					
XTANDI CAP 40MG	27	7	$318,324.63	3.86	$11,789.80
SUBTOTAL	**27**	**7**	**$318,324.63**	**3.86**	**$11,789.80**
TOTAL	**78**	**14***	**$757,056.81**	**5.57**	**$9,705.86**

TAB = tablet; CAP = capsule
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS[+]	TOTAL MEMBERS*	TOTAL COST	COST/ CLAIM
J9043 CABAZITAXEL INJECTION	33	6	$432,849.10	$13,116.64
TOTAL	**33[+]**	**6***	**$432,849.10**	**$13,116.64**

[+]Total number of unduplicated claims.
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020

[1] National Cancer Institute. SEER Cancer Statistics. Available online at: https://seer.cancer.gov/statfacts/html/prost.html. Last accessed 08/18/2020.
[2] Draisma G, Etzioni R, Tsodikov A, et al. Lead Time and Overdiagnosis in Prostate-Specific Antigen Screening: Importance of Methods and Context. *J Natl Cancer Inst* 2009; 101(6):374-83.
[3] National Comprehensive Cancer Network (NCCN). *NCCN Clinical Practice Guidelines in Oncology (Prostate Cancer)*. Version 4.2019. Available online at: https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf. Last accessed 08/18/2020.
[4] U.S. Food and Drug Administration (FDA). Hematology/Oncology (Cancer) Approvals & Safety Notifications. Available online at: https://www.fda.gov/drugs/resources-information-approved-drugs/hematologyoncology-cancer-approvals-safety-notifications. Last revised 08/03/2020. Last accessed 08/04/2020.
[5] Rubraca® Prescribing Information. Clovis Oncology, Inc. Available online at: https://clovisoncology.com/pdfs/RubracaUSPI.pdf. Last revised 05/2020. Last accessed 08/05/2020.

Appendix G

Fiscal Year 2020 Annual Review of Sickle Cell Disease (SCD) Medications and 30-Day Notice to Prior Authorize Adakveo® (Crizanlizumab-tmca), Oxbryta® (Voxelotor), and Reblozyl® (Luspatercept-aamt)

Oklahoma Health Care Authority
September 2020

Introduction[1,2,3,4,5]

Sickle cell disease (SCD) is an inherited blood disorder in which the red blood cells (RBCs) are abnormally shaped in a crescent or "sickle" shape, which restricts the flow in blood vessels and limits oxygen delivery to the body's tissues, leading to severe pain and organ damage. It is also characterized by severe chronic inflammation that results in vaso-occlusive crises (VOCs) where patients experience episodes of extreme pain and organ damage. According to the Centers for Disease Control and Prevention (CDC), SCD affects approximately 100,000 Americans. The disease occurs most often in African-Americans, where 1 out of every 365 babies born have the disease.

Beta thalassemia, also known as Cooley's anemia, is an inherited blood disorder that reduces the production of hemoglobin (Hb). In patients with beta thalassemia, low levels of Hb lead to a lack of oxygen in many parts of the body and lead to anemia, which can cause pale skin, weakness, fatigue and more serious complications. Supportive treatment for patients with beta thalassemia often consists of lifelong regimens of chronic blood transfusions for survival and treatment for iron overload due to the transfusions. Patients with beta thalassemia are also at an increased risk of developing abnormal blood clots.

Myelodysplastic syndromes (MDS) are a group of closely related blood cancers characterized by ineffective production of healthy RBCs, white blood cells, and platelets, which can lead to anemia and frequent or severe infections. People with MDS who develop anemia often require regular blood transfusions to increase the number of healthy RBCs in circulation. Frequent transfusions are associated with an increased risk of iron overload, transfusion reactions, and infections.

Current Prior Authorization Criteria

Endari™ (L-Glutamine) Approval Criteria:

1. An FDA approved diagnosis of sickle cell disease (SCD); and
2. Member must be 5 years of age or older; and

3. A trial of hydroxyurea or a patient-specific, clinically significant reason why hydroxyurea is not appropriate for the member must be provided; and
4. Endari™ must be prescribed by, or in consultation with, a hematologist or a specialist with expertise in treatment of SCD (or an advanced care practitioner with a supervising physician who is a hematologist or specialist with expertise in treating SCD); and
5. 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
6. Initial approvals will be for a duration of 6 months. Reauthorization may be granted if the prescriber documents the member is responding well to treatment.

Siklos® (Hydroxyurea Tablets) Approval Criteria:

1. An FDA approved indication of sickle cell anemia; and
2. Member must be 2 years of age or older; and
3. Member must have a history of moderate-to-severe, painful crises; and
4. A trial of hydroxyurea capsules or a patient-specific, clinically significant reason why hydroxyurea capsules are not appropriate for the member must be provided; and
5. Prescriber must agree to monitor blood counts every 2 weeks throughout therapy; and
6. Prescriber must agree to monitor the member for the development of secondary malignancies; and
7. Female members must not be pregnant and must have a negative pregnancy test prior to therapy initiation; and
8. Male and female members of reproductive potential must be willing to use effective contraception during and after treatment with Siklos® for at least 6 months after therapy; and
9. Initial approvals will be for the duration of 12 months. Reauthorization may be granted if the prescriber documents the member is responding well to treatment.

Utilization of SCD Medications: Fiscal Year 2020

The following utilization data includes SCD medications (e.g., hydroxyurea capsules) used for all diagnoses and does not differentiate between SCD and other diagnoses, for which use may be appropriate.

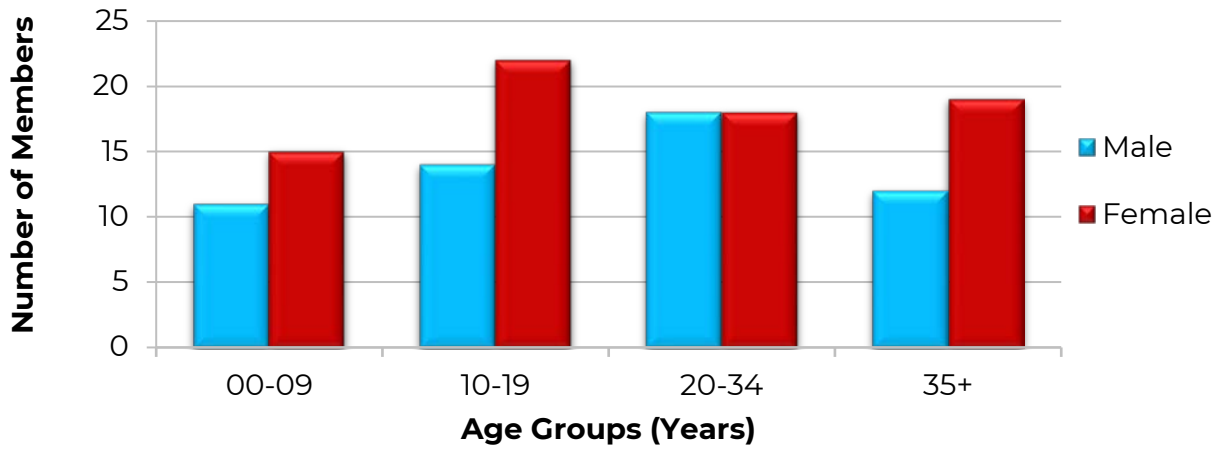
Comparison of Fiscal Years: Pharmacy Claims

Fiscal Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2019	125	594	$19,414.75	$32.68	$1.09	50,179	17,755
2020	129	632	$143,377.77	$226.86	$7.11	44,168	20,170
% Change	**3.20%**	**6.40%**	**638.50%**	**594.20%**	**552.30%**	**-12.00%**	**13.60%**
Change	**4**	**38**	**$123,963.02**	**$194.18**	**$6.02**	**-6,011**	**2,415**

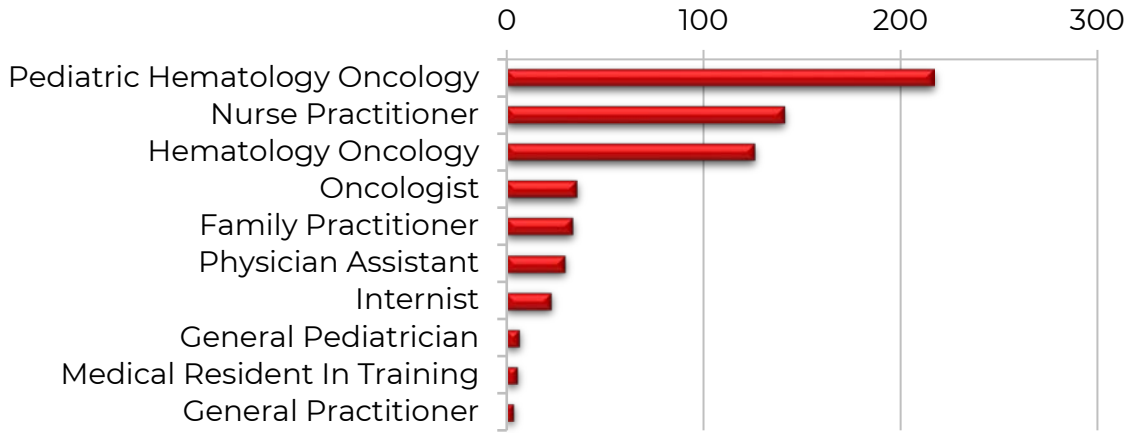
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2019 = 07/01/2018 to 06/30/2019; Fiscal Year 2020 = 07/01/2019 to 06/30/2020

- SoonerCare fiscal year 2020 medical claims for SCD medications can be found at the end of this report.

Demographics of Members Utilizing SCD Medications: Pharmacy Claims

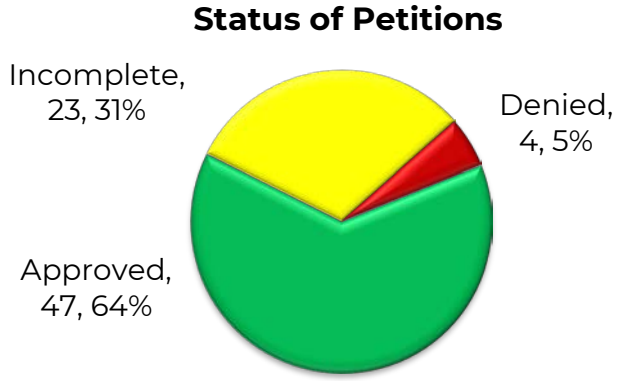


Top Prescriber Specialties of SCD Medications by Number of Claims: Pharmacy Claims



Prior Authorization of SCD Medications

There were 74 prior authorization requests submitted for SCD medications during fiscal year 2020. The following chart shows the status of the submitted petitions for fiscal year 2020.



Market News and Updates[6,7,8,9,10,11,12,13,14,15,16,17]

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

- **November 2019:** The FDA approved Adakveo® (crizanlizumab-tmca) to reduce the frequency of VOCs in adults and in pediatric patients 16 years of age and older with SCD. Crizanlizumab is a first-in-class monoclonal antibody that binds to P-selectin, a cell adhesion protein that plays a central role in the multicellular interactions that can lead to vaso-occlusion in SCD. Crizanlizumab is given by intravenous (IV) infusion. The FDA granted Adakveo® Priority Review, Breakthrough Therapy, and Orphan Drug designations.
- **November 2019:** The FDA granted accelerated approval to Oxbryta® (voxelotor) for the treatment of SCD in adults and in pediatric patients 12 years of age and older. Voxelotor is an oral, once-daily therapy for patients with SCD and is an Hb S (HbS) polymerization inhibitor that works by increasing Hb's affinity for oxygen. Oxbryta® was approved by the FDA through an accelerated approval process based on increase in Hb, and post-marketing studies to evaluate additional evidence of clinical benefit are required by the FDA. HOPE-KIDS-1 is an ongoing study in pediatric patients with SCD 9 months to 17 years of age. A post-approval confirmatory efficacy study, HOPE-KIDS-2, is also ongoing in pediatric patients 2 to 15 years of age with SCD and is measuring the mean change in transcranial doppler (TCD) flow velocity to evaluate reduction in stroke risk as the primary endpoint. Additional studies include a dose escalation study evaluating the safety and tolerability of voxelotor at daily doses of 1,500 to 3,000mg in SCD patients 18 years of age and older and a planned Phase 4 study, ActiVe, evaluating daily

physical activity in SCD patients 12 years of age and older. The FDA granted Oxbryta® Breakthrough Therapy, Fast Track, Orphan Drug, and Rare Pediatric Disease designations for the treatment of patients with SCD.

- **November 2019:** The FDA approved Reblozyl® (luspatercept-aamt) for the treatment of anemia in adult patients with beta thalassemia who require regular RBC transfusions. Then in April 2020, the FDA approved Reblozyl® for a second indication, for the treatment of anemia failing an erythropoiesis stimulating agent (ESA) and requiring 2 or more RBC units over 8 weeks in adult patients with very low-to-intermediate risk MDS with ring sideroblasts (MDS-RS) or with myelodysplastic/ myeloproliferative neoplasm with ring sideroblasts and thrombocytosis (MDS/MPN-RS-T). Luspatercept is not indicated for use as a substitute for RBC transfusions in patients who require immediate correction of anemia. The FDA granted Reblozyl® Orphan Drug and Fast Track designations.

Pipeline:

- **Rivipansel:** In August 2019, Pfizer announced that the Phase 3 Rivipansel: Evaluating Safety, Efficacy, and Time to Discharge (RESET) pivotal study did not meet its primary or key secondary efficacy endpoints. The study's objective was to evaluate the efficacy and safety of rivipansel in patients 6 years of age and older with SCD who were hospitalized for a VOC and required treatment with IV opioids. Rivipansel binds to all 3 members of the selectin family (E-, P-, and L-selectin). The primary endpoint was time to readiness-for-discharge and the key secondary efficacy endpoints were time-to-discharge, cumulative IV opioid consumption, and time to discontinuation of IV opioids. In June 2020, a post hoc analysis of the Phase 3 RESET study showed that patients treated with rivipansel experienced statistically significant improvements in the primary endpoint of time to readiness-for-discharge within approximately 26 hours of the onset of pain in their acute VOC compared to placebo. This analysis and new biomarker data will be presented at the September 2020 meeting of the Foundation for Sickle Cell Disease Research (FSCDR). GlycoMimetics plans on exploring a path forward for the use of rivipansel in treating acute VOC in SCD.
- **Uproleselan (GMI-1687):** Uproleselan is a highly targeted potent E-selectin antagonist that has demonstrated bioavailability by subcutaneous (sub-Q) administration in preclinical studies. An abstract containing data on uproleselan has been accepted for an oral presentation at the September 2020 FSCDR meeting. The abstract includes data from a preclinical model showing the drug candidate's potential as a sub-Q administered treatment for VOC.

- **LentiGlobin™ Gene Therapy:** In June 2020, BlueBird Bio announced that new data from its ongoing Phase 1/2 HGB-206 study of investigational LentiGlobin™ gene therapy for adult and adolescent patients with SCD showed a near-complete reduction of serious VOCs and acute chest syndrome (ACS). This data is being presented at the Virtual Edition of the 25th European Hematology Association (EHA25) Annual Congress. LentiGlobin™ is a single-dose therapy for SCD that adds functional copies of a modified form of the β-globin gene, $\beta^{A\text{-}T87Q}$-globin gene, into a patient's hematopoietic stem cells. Once these precursors differentiate, their RBCs start producing a modified version of Hb, HbA^{T87Q}. The Phase 1/2 HGB-206 study was designed to evaluate the safety and effectiveness of LentiGlobin™ in approximately 50 patients, ages 12 to 50 years, with severe SCD. Patients had to have experienced at least 4 severe VOCs in the 2 years prior to enrollment. As of March 2020, a total of 34 patients, 7 in group A, 2 in group B, and 25 in group C had received the therapy. In groups A and B, patients' hematopoietic stem cells were extracted from the bone marrow, while in group C they were extracted from the blood. An enhanced treatment protocol designed to increase the therapy's efficiency was used for group C. Previous results from groups A and B up to 3 years after treatment showed that LentiGlobin™ resulted in sustained levels of functional hemoglobin (anti-sickling HbA^{T87Q}) in more than 70% of RBCs and reduced the frequency of VOCs and ACS. Newly presented data included patients in group C (followed for a median of 12.1 months and up to 24.8 months); results showed that all group C patients became free from regular blood transfusions. Patients remained off transfusions at 3 months post-treatment, and no serious VOCs or ACS were reported among patients with ≥6 months of data. LentiGlobin™ led to a 99.5% mean reduction in the annual rate of such events among 14 patients with a median of 8 events in the 2 years prior to treatment. Also, median levels of HbA^{T87Q} were maintained, contributing to ≥40% of total Hb (up to 60% of defective Hb). At the last visit, levels of HbA^{T87Q} ranged from 2.7–9.4g/dL and levels of total Hb from 9.6–16.2g/dL. LentiGlobin™ for the treatment of SCD has received Orphan Drug and Regenerative Medicine Advanced Therapy designations from the FDA. The clinical data package required to support a Biologics Licensing Application (BLA) submission to the FDA for LentiGlobin™ for SCD will be based on data from a portion of patients in the HGB-206 study group C that have already been treated. The planned BLA submission will be based on an analysis using complete resolution of severe VOCs as the primary endpoint with at least 18 months of follow-up post-treatment with LentiGlobin™ for SCD. Bluebird Bio anticipates additional guidance from the FDA regarding the commercial manufacturing process, including the development of a suspension lentiviral vector, and the

company announced in a May 2020 press release that it plans to seek an accelerated approval and expects to submit the BLA for SCD in the second half of 2021. LentiGlobin™ is also being evaluated for transfusion-dependent beta thalassemia (TDT) in ongoing Phase 3 studies and a long-term follow-up study. The FDA granted Orphan Drug and Breakthrough Therapy designations to LentiGlobin™ for the treatment of TDT.

- **CTX001:** CTX001 is an investigational therapy that Vertex Pharmaceuticals and CRISPR Therapeutics are developing to treat inherited disorders of Hb including SCD and beta thalassemia. CTX001 uses gene-editing technology to make a genetic change to increase the production of fetal hemoglobin (HbF) in patients' RBC. HbF is a form of Hb that exists naturally in newborn babies. The body later replaces it with the adult form of Hb. In some adults, HbF persists and provides protection for people with SCD and beta thalassemia. For CTX001, researchers first collect a patient's hematopoietic stem cells, then they genetically modify these cells in the laboratory so they are able to produce high levels of HbF. Finally, they reintroduce them into the patient's body, where they will produce large amounts of RBCs containing HbF. A Phase 1/2 clinical study called CLIMB-SCD-121 was started in November 2018 to investigate the use of CTX001 in SCD. The open-label, multi-site, single-dose study is recruiting 45 patients, ages 18 to 35 years, with severe SCD in the United States, Canada, Belgium, Germany, and Italy. Researchers will give participants a single IV infusion of CTX001. They will monitor the safety and effectiveness of the treatment for 6 months to 2 years. Researchers reported preliminary results for the first patient in November 2019. Before treatment, the patient averaged 7 VOCs per year. At 4 months after treatment, they were free of VOCs and had Hb levels of 11.3g/dL. The estimated completion date of the study is May 2022.

Adakveo® (Crizanlizumab-tmca) Product Summary[18,19]

Indication(s): Adakveo® (crizanlizumab-tmca) is a selectin blocker indicated to reduce the frequency of VOCs in adults and in pediatric patients 16 years of age and older with SCD.

Dosing:

- Adakveo® (crizanlizumab-tmca) is supplied as an injection solution in a 100mg/10mL single-dose vial (SDV).
- Crizanlizumab should be administered as 5mg/kg (based on actual body weight) by IV infusion over a period of 30 minutes at week 0, week 2, and every 4 weeks thereafter. Crizanlizumab should be prepared and administered by a health care professional.

- If a dose is missed, crizanlizumab should be administered as soon as possible.
    - If crizanlizumab is administered within 2 weeks after the missed dose, the dosing should continue according to the patient's original schedule.
    - If crizanlizumab is administered >2 weeks after the missed dose, the patient should continue dosing every 4 weeks thereafter.
- Crizanlizumab may be given with or without hydroxyurea.

Mechanism of Action: Crizanlizumab-tmca is a humanized IgG2 kappa monoclonal antibody that binds to P-selectin and blocks interactions with its ligands including P-selectin glycoprotein ligand 1. Binding P-selectin on the surface of the activated endothelium and platelets blocks interactions between endothelial cells, platelets, red blood cells, and leukocytes.

Contraindication(s): None.

Safety:

- **Infusion-Related Reactions:** In the SUSTAIN clinical study, infusion-related reactions (defined as occurring within 24 hours of infusion) were observed in 2 (3%) patients treated with crizanlizumab 5mg/kg. Patients should be monitored for signs and symptoms of infusion-related reactions, which may include fever, chills, nausea, vomiting, fatigue, dizziness, pruritus, urticaria, sweating, shortness of breath, or wheezing. For severe reactions, the crizanlizumab infusion should be discontinued and appropriate medical care should be instituted.
- **Laboratory Test Interference:** Interference with automated platelet counts (platelet clumping) has been observed following administration of crizanlizumab, in particular, when blood samples were collected in tubes containing ethylenediaminetetraacetic acid (EDTA). Mitigation strategies are recommended.
- **Pregnancy:** Crizanlizumab may cause fetal harm. Based on data from animal studies, crizanlizumab has the potential to cause fetal harm when administered to a pregnant woman. In an animal reproduction study, IV administration of crizanlizumab to pregnant cynomolgus monkeys from the onset of organogenesis through delivery resulted in non-dose related increased fetal loss (abortions/stillbirths) at doses approximately 2.8 times the exposure at the recommended clinical dose at 5mg/kg/dose once every 4 weeks. There are insufficient human data on crizanlizumab use in pregnant women to evaluate for a drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. Pregnant women should be advised of the potential risk of crizanlizumab to a fetus. Crizanlizumab should only be used during pregnancy if the expected benefit to the patient justifies the potential risk to the fetus.

Adverse Reactions: The most common adverse reactions (incidence >10%) following administration of crizanlizumab were nausea, arthralgia, back pain, and pyrexia.

Efficacy: The efficacy of crizanlizumab was established in SUSTAIN, a 52-week randomized, placebo-controlled, double-blind study in 198 patients with SCD. Patients with any genotype of SCD and history of 2 to 10 VOCs in the previous 12 months were eligible for the study. Patients were randomized to crizanlizumab 5mg/kg (N=67), crizanlizumab 2.5mg/kg (N=66), or placebo (N=65) administered over a period of 30 minutes by IV infusion on week 0, week 2, and every 4 weeks thereafter for a treatment duration of 52 weeks. A total of 63% of patients randomized to crizanlizumab 5mg/kg and 62% of patients randomized to placebo that were on hydroxyurea for ≥6 months and on a stabilized dose for ≥3 months prior to the study continued hydroxyurea throughout the study. Patients received crizanlizumab (with or without hydroxyurea) and were allowed to receive occasional transfusions and pain medications [i.e., acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), and opioids] on an as needed basis. The primary endpoint was the annual rate of VOCs leading to a health care visit.

- Patients who received crizanlizumab 5mg/kg had a lower median annual rate of VOCs vs. patients who received placebo (1.63 vs. 2.98; P=0.010).
- Crizanlizumab 2.5mg/kg was not statistically different from placebo in pain crises reduction.
- A total of 36% of patients treated with crizanlizumab 5mg/kg did not experience a VOC vs. 17% of placebo-treated patients during the study period. The median time to first VOC from randomization was 4.1 months in the crizanlizumab 5mg/kg arm vs. 1.4 months in the placebo arm.
- Reduction of sickle cell-related pain crises was demonstrated in patients on the 5mg/kg dose irrespective of hydroxyurea use or genotype. The efficacy of crizanlizumab beyond 52 weeks has not been studied.

Cost Comparison:

Medication	Cost Per Unit	Cost Per Dose	Cost Per Year
Adakveo® (crizanlizumab-tmca) 100mg/10mL SDV	**$235.71**	**$7,071.30***	**$98,998.20***
Droxia® (hydroxyurea) 300mg capsule	$0.73	$5.11±	$1,839.60±

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC) or Wholesale Acquisition Costs (WAC) if NADAC unavailable.
Unit = mL or capsule; SDV = single-dose vial
*Adakveo® dose based on 5mg/kg/dose for a 60kg patient, dosed at week 0, week 2, and every 4 weeks thereafter (14 doses in the first year).
±Droxia® dose based on 35mg/kg/day for a 60kg patient.

Oxbryta® (Voxelotor) Product Summary[20,21,22]

Indication(s): Oxbryta® (voxelotor) is an HbS polymerization inhibitor indicated for the treatment of SCD in adults and pediatric patients 12 years of age and older.

- This indication was FDA approved under accelerated approval based on increase in Hb. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory studies.

Dosing:

- Oxbryta® (voxelotor) is supplied as a 500mg oral tablet.
- The recommended dose of Oxbryta® is 1,500mg [(3) 500mg tablets] orally once daily with or without food.
- The recommended dose of Oxbryta® for patients with severe hepatic impairment (Child Pugh C) is 1,000mg [(2) 500mg tablets] orally once daily with or without food.

Mechanism of Action: Voxelotor is an HbS polymerization inhibitor that binds to HbS with a 1:1 stoichiometry and exhibits preferential partitioning to RBCs. By increasing the affinity of Hb for oxygen, voxelotor demonstrates dose-dependent inhibition of HbS polymerization. Nonclinical studies suggest that voxelotor may inhibit RBC sickling, improve RBC deformability, and reduce whole blood viscosity.

Contraindication(s):

- Prior drug hypersensitivity to voxelotor or excipients.

Safety:

- **Hypersensitivity Reactions:** Serious hypersensitivity reactions after administration of voxelotor have occurred in 1% of patients treated. Clinical manifestations may include generalized rash, urticaria, mild shortness of breath, mild facial swelling, and eosinophilia. If hypersensitivity reactions occur, voxelotor should be discontinued and appropriate medical therapy should be administered. Voxelotor should not be reinitiated in patients who experienced these symptoms with previous use.
- **Laboratory Test Interference:** Voxelotor administration may interfere with measurement of Hb subtypes (HbA, HbS, and HbF) by high-performance liquid chromatography (HPLC). If precise quantitation of Hb species is required, chromatography should be performed when the patient is not receiving voxelotor therapy.
- **Lactation:** Patients should be advised not to breastfeed while taking voxelotor. There are no data on the presence of voxelotor in human milk, the effects on the breastfed child, or the effects on milk production. Voxelotor was detected in milk in lactating rats. Plasma

concentrations of voxelotor in pregnant rats were higher than the concentration in milk. When a drug is present in animal milk, it is likely the drug will be present in human milk. Because of the potential for serious adverse reactions in the breastfed child, including changes in the hematopoietic system, patients should be advised that breastfeeding is not recommended during treatment with voxelotor and for at least 2 weeks after the last dose.

Drug Interactions:

- **Sensitive CYP3A4 Substrates:** Co-administration of voxelotor with sensitive CYP3A4 substrates with a narrow therapeutic index should be avoided.
- **Strong CYP3A4 Inhibitors or Fluconazole:** Co-administration of voxelotor with strong CYP3A4 inhibitors or fluconazole should be avoided. If unavoidable, the dose of voxelotor should be reduced.
- **Strong or Moderate CYP3A4 Inducers:** Co-administration of voxelotor with strong or moderate CYP3A4 inducers should be avoided. If unavoidable, the dose of voxelotor should be increased.

Adverse Reactions: The most common adverse reactions (incidence >10%) in patients treated with voxelotor were headache, diarrhea, abdominal pain, nausea, fatigue, rash, and pyrexia.

Efficacy: The efficacy of Oxbryta® was established in the HOPE study, a randomized, double-blind, placebo-controlled study in 274 patients with SCD. Patients received daily voxelotor 1,500mg (N=90), voxelotor 900mg (N=92), or placebo (N=92). Patients were included in the study if they had 1 to 10 VOC event(s) within 12 months prior to enrollment and baseline Hb ≥5.5 to ≤10.5g/dL. A total of 42% of patients (N=115) had 1 VOC event and 58% (N=159) had 2 to 10 VOC events within 12 months prior to enrollment. Of the patients included in the study, 65% were receiving background hydroxyurea therapy (patients on a stable dose of hydroxyurea for ≥90 days were allowed to continue hydroxyurea therapy throughout the study). The study excluded patients who received RBC transfusions within 60 days or erythropoietin within 28 days of enrollment, had renal insufficiency or uncontrolled liver disease, or were pregnant or lactating. Efficacy was based on Hb response rate defined as an Hb increase of >1.0g/dL from baseline to week 24 in patients treated with voxelotor 1,500 mg vs. placebo.

- The response rate for voxelotor 1,500mg was 51.1% (46/90) vs. 6.5% (6/92) in the placebo group (P<0.001).
- The annualized adjusted incidence rate of vaso-occlusive events (the number of crises per person-year) was measured as a secondary endpoint and was 2.77 in the Oxbryta® 1,500mg group, 2.76 in the Oxbryta® 900mg group, and 3.19 in the placebo group. There was no

statistically significant difference in annualized rate of vaso-occlusive events found between either dose of voxelotor and placebo.
- Oxbryta® was approved by the FDA through an accelerated approval process based on increase in Hb, and post-marketing studies to evaluate additional evidence of clinical benefit are required by the FDA.

Cost Comparison:

Medication	Cost Per Unit	Cost Per Dose	Cost Per Year
Oxbryta® (voxelotor) 500mg tablet	**$115.74**	**$347.22***	**$124,999.20***
Droxia® (hydroxyurea) 300mg capsule	$0.73	$5.11±	$1,839.60±

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC) or Wholesale Acquisition Costs (WAC) if NADAC unavailable.
Unit = tablet or capsule
*Oxbryta® dose based on 1,500mg once daily.
±Droxia® dose based on 35mg/kg/day for a 60kg patient.

Reblozyl® (Luspatercept-aamt) Product Summary[23,24,25]

Indication(s): Reblozyl® (luspatercept-aamt) is an erythroid maturation agent indicated for the treatment of:
- Anemia in adult patients with beta thalassemia who require regular RBC transfusions
- Anemia failing an ESA and requiring 2 or more RBC units over 8 weeks in adult patients with very low-to-intermediate risk MDS-RS or with MDS/MPN-RS-T

Limitation(s) of Use: Reblozyl® is not indicated for use as a substitute for RBC transfusions in patients who require immediate correction of anemia.

Dosing:
- Reblozyl® is supplied as a lyophilized powder for reconstitution for injection in 2 strengths: 25mg and 75mg SDVs. Luspatercept should be reconstituted and administered by a health care professional.
- Prior to each dose of luspatercept, the patient's Hb and transfusion record should be assessed and reviewed. If an RBC transfusion occurred prior to dosing, the pre-transfusion Hb should be used for dose evaluation.
- The recommended starting dose of luspatercept is 1mg/kg once every 3 weeks by sub-Q injection.
- The luspatercept dose should be titrated based on responses according the Reblozyl® *Prescribing Information*. The dose should not be increased more frequently than every 6 weeks.
- **Beta Thalassemia Dose Titration:**
  - If a patient does not achieve a reduction in RBC transfusion burden after 2 consecutive doses (6 weeks) at the 1mg/kg starting dose, the

luspatercept dose may be increased to 1.25mg/kg. The dose should not be increased beyond the maximum dose of 1.25mg/kg.

- **MDS Dose Titration:**
  - If the patient is not RBC transfusion-free after at least 2 consecutive doses (6 weeks) at the 1mg/kg starting dose, the luspatercept dose may be increased to 1.33mg/kg.
  - If a patient is not RBC transfusion-free after at least 2 consecutive doses (6 weeks) at the 1.33mg/kg dose level, the luspatercept dose may be increased to 1.75mg/kg. The dose should not be increased more frequently than every 6 weeks (2 doses) or beyond the maximum dose of 1.75mg/kg.
- Luspatercept should be discontinued if the patient does not experience a decrease in transfusion burden after 9 weeks of treatment (administration of 3 doses) at the maximum dose level or if unacceptable toxicity occurs at any time.
- Treatment with luspatercept should be interrupted for adverse reactions as described in the Reblozyl® *Prescribing Information*.
- If a planned administration of luspatercept is delayed or missed, luspatercept should be administered as soon as possible and dosing should be continued as prescribed, with at least 3 weeks between doses.
- In the absence of transfusions, if Hb increase is >2g/dL within 3 weeks or the pre-dose Hb is ≥11.5g/dL, the luspatercept dose should be reduced or treatment with luspatercept should be interrupted as described in the Reblozyl® *Prescribing Information*.

Mechanism of Action: Luspatercept is a recombinant fusion protein that binds several endogenous transforming growth factor (TGF)-β superfamily ligands, thereby diminishing Smad2/3 signaling. Luspatercept promoted erythroid maturation through differentiation of late-stage erythroid precursors (normoblasts) in mice. In models of beta thalassemia and MDS, luspatercept decreased abnormally elevated Smad2/3 signaling and improved hematology parameters associated with ineffective erythropoiesis in mice.

Contraindication(s): None.

Safety:

- **Thrombosis/Thromboembolism:** There is an increased risk of thrombosis/thromboembolism in patients with beta thalassemia. Patients should be monitored for signs and symptoms of thromboembolic events and appropriate treatment should be instituted promptly.

- **Hypertension:** Blood pressure (BP) should be monitored during treatment with luspatercept. Antihypertensive treatment should be initiated if necessary.
- **Embryo-Fetal Toxicity:** Luspatercept may cause feta harm. Females of reproductive potential should be advised of the potential risk of luspatercept to a fetus and should be counseled on the use of effective contraception.

Adverse Reactions: The most common (>10%) adverse reactions in patients treated with luspatercept were fatigue, headache, musculoskeletal pain, arthralgia, dizziness/vertigo, nausea, diarrhea, cough, abdominal pain, dyspnea, and hypersensitivity.

Efficacy:

- **Beta Thalassemia:** The efficacy of luspatercept was established in the BELIEVE study, a randomized, double-blind, placebo-controlled study in 336 patients with beta thalassemia requiring RBC transfusions (6 to 24 RBC units per 24 weeks) with no transfusion-free period >35 days. Patients were randomized 2:1 to luspatercept (N=224) or placebo (N=112) administered sub-Q once every 3 weeks as long as a reduction in transfusion requirement was observed or until unacceptable toxicity. All patients were eligible to receive best supportive care, which included RBC transfusions; iron-chelating agents; use of antibiotic, antiviral, and antifungal therapy; and/or nutritional support, as needed. The BELIEVE study excluded patients with a diagnosis of HbS/β-thalassemia or isolated alpha (α)-thalassemia (e.g., HbH) or who had major organ damage (liver disease, heart disease, lung disease, or renal insufficiency). Patients with recent deep vein thrombosis (DVT), stroke, or recent use of ESA, immunosuppressant, or hydroxyurea therapy were also excluded. The primary endpoint was the proportion of patients achieving RBC transfusion burden reduction (≥33% reduction from baseline) with a reduction of at least 2 RBC units from week 13 to week 24.
    - In the luspatercept arm, 21.4% of patients met the primary endpoint during weeks 13 to 24 vs. 4.5% in the placebo arm [risk difference: 17.0; 95% confidence interval (CI): 10.4, 23.6; P<0.0001].
- **MDS:** The efficacy of luspatercept for MDS was established in the MEDALIST study, a randomized, double-blind, placebo-controlled study in 229 patients with International Prognostic Scoring System-Revised (IPSS-R) of very low, low, or intermediate-risk MDS-RS and who require RBC transfusions (≥2 RBC units over 8 weeks). For eligibility, patients were required to have had an inadequate response to prior treatment with an ESA, be intolerant of ESAs, or were ESA naïve and unlikely to respond due to endogenous serum erythropoietin >200U/L and had no

prior treatment with disease modifying agents. The MEDALIST study excluded patients with deletion 5q (del 5q), white blood cell count >13Gi/L, neutrophils <0.5Gi/L, platelets <50Gi/L, or with prior use of a disease modifying agent for treatment of MDS. Patients were randomized 2:1 to luspatercept (N=153) or placebo (N=76), and all patients received best supportive care, which included RBC transfusions as needed. Randomization was stratified by baseline RBC transfusion burden and baseline IPSS-R. Treatment was started at 1mg/kg sub-Q every 3 weeks; the dose could be increased after completion of the first 2 cycles if the patient had at least 1 RBC transfusion in the prior 6 weeks. Dose level increases were allowed twice (to 1.33mg/kg and to 1.75mg/kg). Doses were held and subsequently reduced for adverse reactions, reduced if the Hb increased by ≥2g/dL from the prior cycle, and held if the pre-dose Hb was ≥11.5g/dL. The primary endpoint was the proportion of patients who were RBC transfusion independent, defined as the absence of any RBC transfusion during any consecutive 8-week period occurring entirely within weeks 1 through 24. Patients with a decrease in transfusion requirement or increase in Hb could continue on blinded study drug thereafter until unacceptable toxicity, loss of efficacy, or disease progression.

- The primary endpoint of the absence of any RBC transfusion during any consecutive 8-week period occurring within week 1 through week 24 was met in 37.9% and 13.2% of patients receiving luspatercept and placebo, respectively (common risk difference: 24.6; 95% CI: 14.5, 34.6; P<0.0001).
- The absence of RBC transfusion during any consecutive 12-week period occurring during weeks 1 to 24 or during weeks 1 to 48 did not meet statistical significance.

Cost Comparison:

Medication	Cost Per Unit	Cost Per Year
Reblozyl® (luspatercept-aamt) 75mg SDV	**$10,323.53+**	**$175,500.01+**
Procrit® (epoetin alpha) 40,000 units/mL	$1,069.00*	$111,176.00*

Costs do not reflect rebated prices or net costs. Costs based on National Average Drug Acquisition Costs (NADAC) or Wholesale Acquisition Costs (WAC) if NADAC unavailable.
Unit = vial or mL; SDV = single-dose vial
+Reblozyl® dose based on starting dose of 1mg/kg for a 75kg patient every 3 weeks.
*Procrit® dose based on a maximum on 80,000 units once weekly.

Recommendations

The College of Pharmacy recommends the prior authorization of Adakveo® (crizanlizumab-tmca), Oxbryta™ (voxelotor), and Reblozyl® (luspatercept-aamt) with the following criteria:

Adakveo® (Crizanlizumab-tmca) Approval Criteria:

1. An FDA approved indication to reduce the frequency of vaso-occlusive crises (VOCs) in adult patients and pediatric patients 16 years of age and older with sickle cell disease (SCD); and
2. Member must have a history of VOCs; and
3. Adakveo® must be prescribed by, or in consultation with, a hematologist or a specialist with expertise in treatment of SCD (or an advanced care practitioner with a supervising physician who is a hematologist or specialist with expertise in treating SCD); and
4. Prescriber must verify Adakveo® will be administered by a trained health care provider. The prior authorization request must indicate how Adakveo® will be administered; and
    a. Adakveo® must be shipped via cold chain supply to the facility where the member is scheduled to receive treatment; or
    b. Adakveo® must be shipped via cold chain supply to the member's home and administered by a home health provider and the member or member's caregiver must be trained on the proper storage of Adakveo®; and
5. A recent (within the last 3 months) weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
6. Approval quantities will be dependent on the member's weight and will include loading doses at week 0 and 2, then subsequent doses every 4 weeks in accordance with package labeling; and
7. Initial approvals will be for the duration of 3 months. Subsequent approvals will be for 1 year if the prescriber documents the member is responding well to treatment.

Oxbryta™ (Voxelotor) Approval Criteria:

1. An FDA approved indication for the treatment of sickle cell disease (SCD) in patients 12 years of age and older; and
2. Member must have a history of vaso-occlusive crises (VOCs); and
3. Member must have baseline hemoglobin ≥5.5 to ≤10.5g/dL; and
4. Oxbryta™ must be prescribed by, or in consultation with, a hematologist or a specialist with expertise in treatment of SCD (or an advanced care practitioner with a supervising physician who is a hematologist or specialist with expertise in treating SCD); and
5. The member must not be taking concomitant strong CYP3A4 inhibitors (e.g., fluconazole, ketoconazole) or the prescriber must verify the dose of Oxbryta™ will be reduced during concomitant use according to package labeling; and
6. Prescriber must verify that the dose of Oxbryta™ will be reduced in accordance with package labeling for members with severe hepatic impairment; and

7. The member must not be taking concomitant strong or moderate CYP3A4 inducers (e.g., rifampin) or the prescriber must verify the dose of Oxbryta™ will be adjusted during concomitant use according to package labeling; and
8. A quantity limit of 3 tablets per day will apply; and
9. Initial approvals will be for the duration of 6 months. Subsequent approvals will be for 1 year if the prescriber documents the member is responding well to treatment.

Reblozyl® (Luspatercept-aamt) Approval Criteria [Beta Thalassemia Diagnosis]:

1. An FDA approved indication for the treatment of adult patients with beta thalassemia who require regular red blood cell (RBC) transfusions; and
2. Member must require regular RBC transfusions (no transfusion free period >35 days during the prior 6 month period); and
3. Reblozyl® must be prescribed by, or in consultation with, a hematologist or a specialist with expertise in treatment of beta thalassemia (or an advanced care practitioner with a supervising physician who is a hematologist or specialist with expertise in treating beta thalassemia); and
4. The prescriber must verify the member's hemoglobin will be monitored prior to each Reblozyl® administration; and
5. Prescriber must verify Reblozyl® will be administered by a trained health care provider; and
6. A recent (within the last 3 months) weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
7. Approval quantities will be dependent on member weight and every 3 week dosing in accordance with package labeling; and
8. Initial approvals will be for the duration of 4 months. Further approvals will not be granted if the member does not experience a decrease in transfusion burden after 9 weeks of treatment (administration of 3 doses) at the maximum dose of 1.25mg/kg (allows for initial dosing of 6 weeks at 1mg/kg). Subsequent approvals will be for 1 year if the prescriber documents the member is responding well to treatment.

Reblozyl® (Luspatercept-aamt) Approval Criteria [Myelodysplastic Syndromes (MDS) Diagnosis]:

1. An FDA approved indication for the treatment of adult patients with very low-to-intermediate risk MDS with ring sideroblasts (MDS-RS) or myelodysplastic/myeloproliferative neoplasm with ring sideroblasts and thrombocytosis (MDS/MPN-RS-T) with anemia failing an

erythropoiesis stimulating agent (ESA) and requiring ≥2 red blood cell (RBC) units over 8 weeks; and
2. Member must have had an inadequate response to prior treatment with an ESA, be intolerant of ESAs, or have a serum erythropoietin level >200U/L; and
3. Member must not have had prior use of a disease modifying agent for the treatment of MDS; and
4. Prescriber must verify the member does not have deletion 5q (del 5q); and
5. Complete blood counts (CBC) and verification that levels are acceptable to the prescriber and in accordance with package labeling; and
6. Reblozyl® must be prescribed by, or in consultation with, a hematologist, oncologist, or a specialist with expertise in treatment of MDS (or an advanced care practitioner with a supervising physician who is a hematologist, oncologist, or specialist with expertise in treating MDS); and
7. The prescriber must verify the member's hemoglobin will be monitored prior to each Reblozyl® administration; and
8. Prescriber must verify Reblozyl® will be administered by a trained health care provider; and
9. A recent (within the last 3 months) 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. Approval quantities will be dependent on member weight and every 3 week dosing in accordance with package labeling; and
11. Initial approvals will be for the duration of 6 months. Further approvals will not be granted if the member does not experience a decrease in transfusion burden after 9 weeks of treatment (administration of 3 doses) at the maximum dose of 1.75mg/kg or if unacceptable toxicity occurs at any time. Subsequent approvals will be for 1 year if the prescriber documents the member is responding well to treatment.

Utilization Details of SCD Medications: Fiscal Year 2020

Pharmacy Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	CLAIMS/ MEMBER	COST/ CLAIM	% COST
HYDROXYUREA CAP 500MG	442	110	$10,576.68	4.02	$23.93	7.38%
DROXIA CAP 300MG	85	21	$4,026.98	4.05	$47.38	2.81%
DROXIA CAP 200MG	50	11	$2,276.58	4.55	$45.53	1.59%
DROXIA CAP 400MG	34	11	$1,372.48	3.09	$40.37	0.96%
OXBRYTA TAB 500MG	10	6	$104,256.10	1.67	$10,425.61	72.71%
ENDARI POW 5GM	8	2	$20,551.28	4.00	$2,568.91	14.33%
HYDROXYUREA 100% POW	3	1	$317.67	3.00	$105.89	0.22%
TOTAL	**632**	**129***	**$143,377.77**	**4.90**	**$226.86**	**100%**

CAP = capsule; TAB = tablet; POW = powder
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER
ADAKVEO J0791	34	15	$468,335.90	$13,774.58	2.27
TOTAL	**34⁺**	**15***	**$468,335.90**	**$13,774.58**	**2.27**

⁺Total number of unduplicated claims.
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020

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Appendix H

Fiscal Year 2020 Annual Review of Synagis® (Palivizumab)

Oklahoma Health Care Authority
September 2020

Current Prior Authorization Criteria

A prior authorization is required for all members who receive palivizumab in an outpatient setting. Palivizumab is approved for members who meet the established prior authorization criteria, which is based on a modified version of the American Academy of Pediatrics (AAP) 2014 guidelines for palivizumab prophylaxis.

Synagis® (Palivizumab) Approval Criteria:

A. Member Selection:
   1. Infants younger than 12 months of age at the start of respiratory syncytial virus (RSV) season:
      a. Born before 29 weeks, 0 days gestation; or
      b. Born before 32 weeks, 0 days gestation and develop chronic lung disease (CLD) of prematurity (require >21% oxygen supplementation for ≥28 days after birth); or
      c. Have hemodynamically significant congenital heart disease [acyanotic heart disease and receiving medication to control congestive heart failure (CHF) and will require surgical procedures, or have moderate-to-severe pulmonary hypertension]; or
      d. May be considered for:
         i. Infants with neuromuscular disease or a congenital anomaly that impairs the ability to clear secretions from the upper airway because of ineffective cough; or
         ii. Infants who undergo cardiac transplantation during RSV season; or
         iii. Infants who are profoundly immunocompromised during RSV season; or
         iv. Infants with cystic fibrosis with clinical evidence of CLD and/or are nutritionally compromised; or
   2. Infants 12 to 24 months of age at the start of RSV season:
      a. Born before 32 weeks, 0 days gestation and have CLD of prematurity (required ≥28 days of oxygen after birth) and continue to require medical support (chronic corticosteroid therapy, diuretic therapy, or supplemental oxygen) during the 6 months before the start of the RSV season; or

b. May be considered for:
    i. Infants who undergo cardiac transplantation during RSV season; or
    ii. Infants who are profoundly immunocompromised during RSV season; or
    iii. Infants with cystic fibrosis with manifestations of severe lung disease or weight for length less than the 10th percentile.

B. Length of Treatment: Palivizumab is approved for use only during RSV season. Approval dates will be November 1st through March 31st.

C. Units Authorized: The maximum duration of therapy is 5 doses, with a dose to be administered no more often than every 30 days. Members given doses more frequently than every 30 days will not be authorized for additional doses. Doses administered prior to the member's discharge from a hospital will be counted as 1 of the approved total.

D. Dose-Pooling: To avoid unnecessary risk to the patient, multiple patients are not to be treated from a single vial. Failure to follow this recommendation will result in referral of the provider to the Quality Assurance Committee of the Oklahoma Health Care Authority.

Utilization of Synagis® (Palivizumab): Fiscal Year 2020

Comparison of Fiscal Years

Fiscal Year	*Total Members	Total Claims	Total Cost	Cost/ Claim	Cost/ Day	Total Units	Total Days
2019	290	1,146	$2,824,554.94	$2,464.71	$82.21	1,029	34,359
2020	333	1,539	$3,781,909.64	$2,457.38	$81.93	1,329	46,158
% Change	**14.80%**	**34.30%**	**33.90%**	**-0.30%**	**-0.30%**	**29.20%**	**34.30%**
Change	**43**	**393**	**$957,354.70**	**-$7.33**	**-$0.28**	**300**	**11,799**

*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2019 = 07/01/2018 to 06/30/2019; Fiscal Year 2020 = 07/01/2019 to 06/30/2020

Pharmacy Claim Details for 2019-2020 Respiratory Syncytial Virus (RSV) Season

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER	% COST
PALIVIZUMAB PRODUCTS						
SYNAGIS INJ 100MG/ML	1,019	317	$3,012,495.42	$2,956.33	3.2	79.66%
SYNAGIS INJ 50MG/0.5ML	520	228	$769,414.22	$1,479.64	2.3	20.34%
TOTAL	**1,539**	**333***	**$3,781,909.64**	**$2,457.38**	**4.6**	**100%**

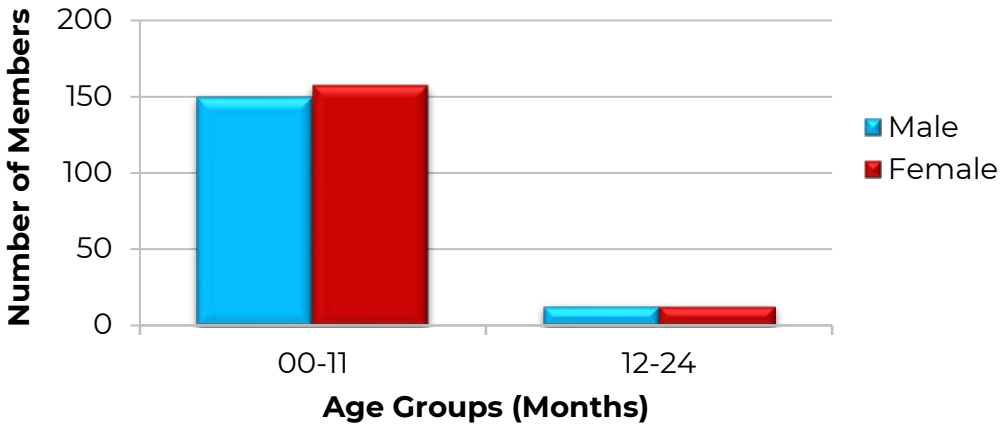
INJ = injection
*Total number of unduplicated members.
Costs do not reflect rebated prices or net costs.

Cost Per Vial

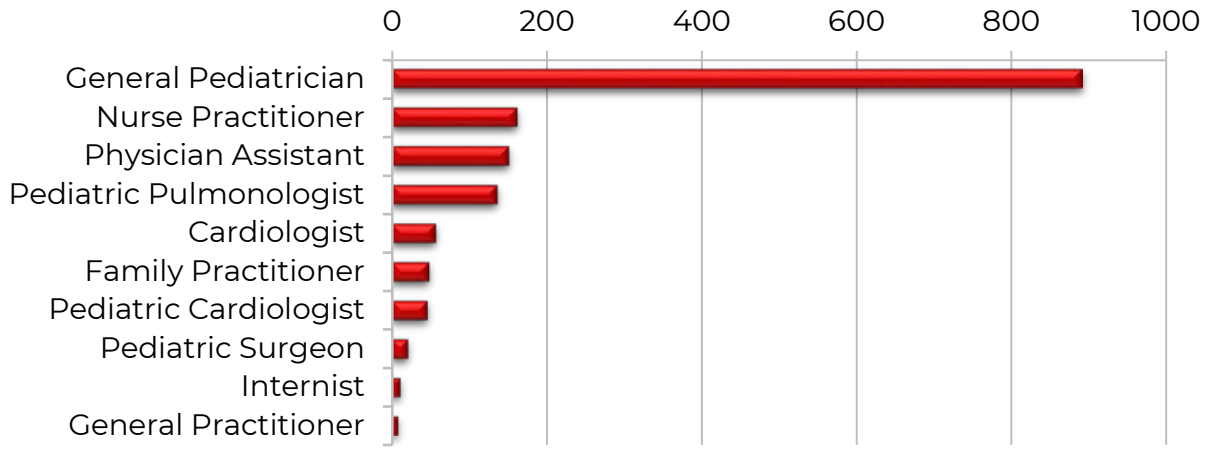
Vial Size	Cost Per Vial
Synagis® (palivizumab) 100mg/mL vial	$2,911.26
Synagis® (palivizumab) 50mg/0.5mL vial	$1,509.20

Costs do not reflect rebated prices or net costs.
Costs based on specialty pharmaceutical allowable cost (SPAC).

Demographics of Members Utilizing Synagis® (Palivizumab)

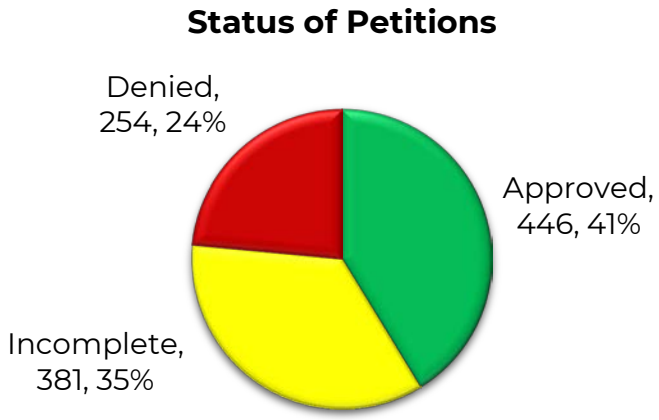


Top Prescriber Specialties of Synagis® (Palivizumab) by Number of Claims

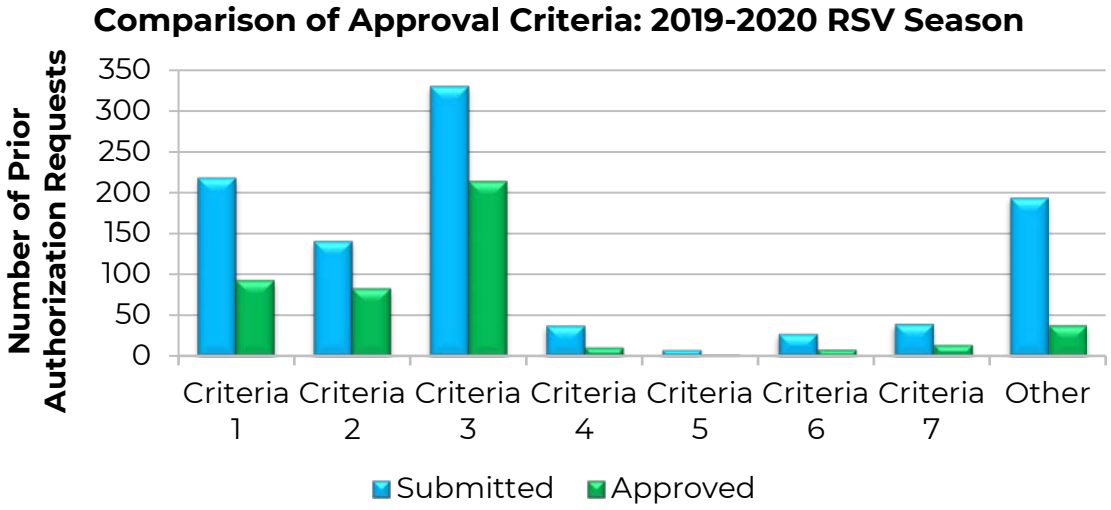


Prior Authorization of Synagis® (Palivizumab)

There were 1,081 palivizumab prior authorization requests submitted for 521 unique members during fiscal year 2020. This is a slight increase in both submitted petitions and number of members requesting palivizumab compared to fiscal year 2019 when there were 1,073 palivizumab prior authorization requests submitted for 519 unique members. The following chart shows the status of the submitted petitions for fiscal year 2020.



The following graph shows the number of submissions and approvals for each prior authorization criteria. The graph is followed by a numbered list in which the list number corresponds to the criteria number in the graph. The most commonly requested and approved criteria selection during the 2019 to 2020 RSV season was criteria number 3: infants born before 29 weeks, 0 days gestation. Infants born before 32 weeks, 0 days gestation and who had chronic lung disease (CLD) of prematurity was also a commonly requested and approved criteria selection (criteria number 1).



Criteria List:

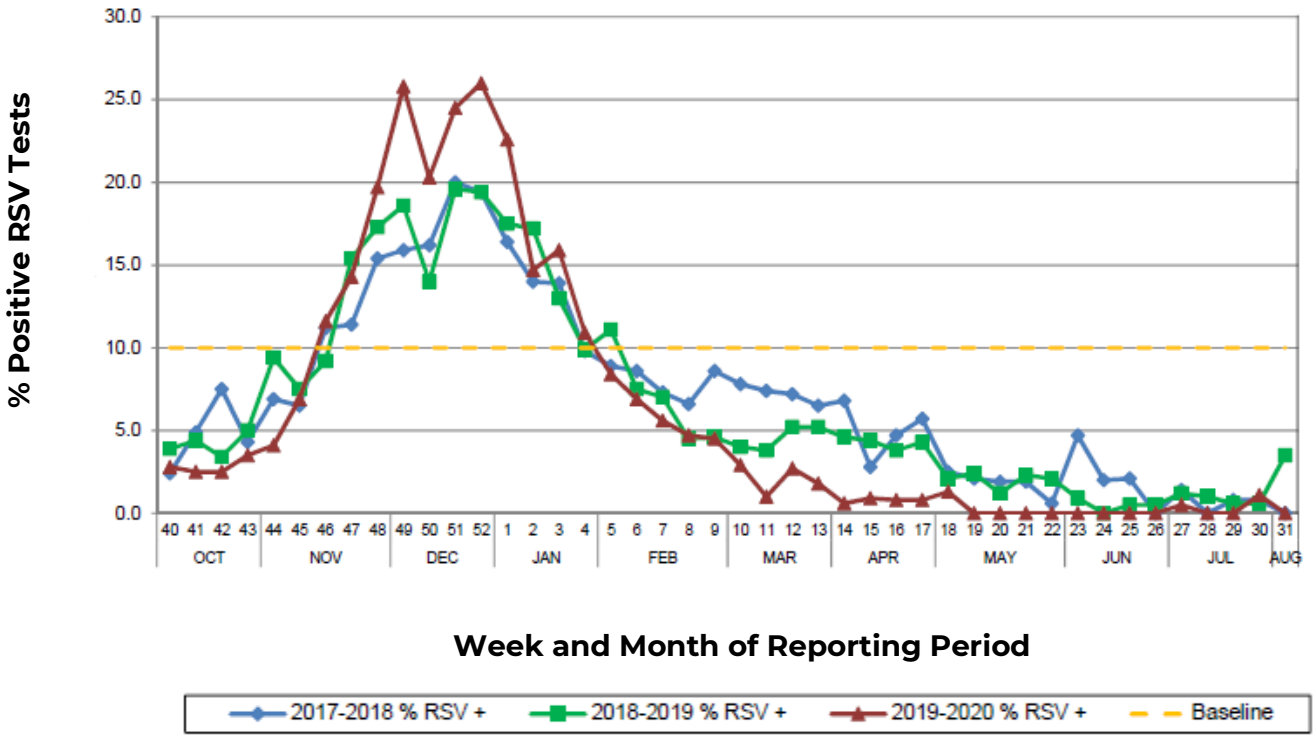
1. Infants 0 to 24 months of age at the start of RSV season born before 32 weeks, 0 days gestation and have CLD of prematurity
2. Infants who have hemodynamically significant congenital heart disease and will require surgical procedures, or have moderate-to-severe pulmonary hypertension
3. Infants born before 29 weeks, 0 days gestation
4. Infants with neuromuscular disease or a congenital anomaly that impairs the ability to clear secretions from the upper airway because of ineffective cough

5. Infants who undergo cardiac transplantation during RSV season
6. Infants who are profoundly immunocompromised during RSV season
7. Infants with cystic fibrosis with clinical evidence of CLD and/or are nutritionally compromised

Season Comparison[1,2,3,4]

The following chart contains the weekly percentage of laboratory positive RSV tests in Oklahoma as reported by the Oklahoma State Department of Health (OSDH) Viral Respiratory Illness Sentinel Surveillance System. The chart is included to compare RSV seasons since 2017. RSV is determined to be in season once the percentage of positive tests is >10% for 2 consecutive weeks. Similarly, the season is determined to be at an end when the percentage of positive tests is <10% for 2 consecutive weeks. RSV seasons appear to be similar with a peak typically in December or January and a season end by late March. SoonerCare palivizumab prior authorization approvals are initiated with a start date of November 1st and continue to March 31st; this approval window corresponds to the following state monitoring graph as well as with state data reported by the Centers for Disease Control and Prevention (CDC). For the 2019 to 2020 RSV season for Oklahoma, the OSDH determined the onset week by percentage of positive antigen detection tests was the week of November 17th with a season offset the week of February 2nd.

OSDH: Weekly Percentage of Laboratory Positive RSV Tests 2017-2020

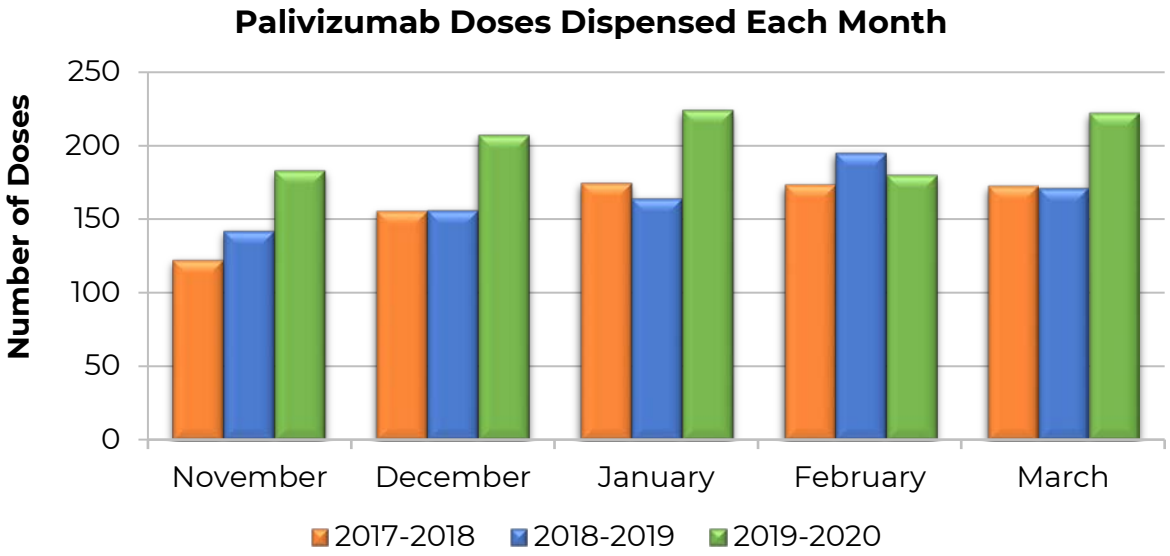


The CDC reported seasonality by using RSV polymerase chain reaction (PCR) laboratory detections. Laboratories are shifting away from antigen-based RSV testing, and since 2014 the majority of RSV detections among reporting laboratories were determined by PCR. If the Oklahoma season was based on percentage of positive PCR tests and a threshold of 10%, similar to antigen testing, season onset and offset would have occurred the week of November 30th and February 1st. If the Oklahoma season was based on percentage of positive PCR tests and a threshold of 3%, a commonly cited PCR threshold, season onset and offset would have occurred the week of November 9th and March 7th.

RSV season onset, when evaluated by PCR detections and a new statistical method determined by the CDC, is defined as the second of 2 consecutive weeks when the slope, or normalized 5-week moving average of RSV detections between subsequent weeks, exceeded 10 standardized detections per week. Season offset was determined as the last week when the standardized detections exceeded the standardized detections at onset. These changes were done to reflect the adoption of a statistical method rather than a threshold or percentage positive which can be influenced by volume of tests performed. The CDC cautions that the statistical detection method used captures a high proportion of RSV detection for retrospectively determining seasonality but cannot be used to determine seasonal onset and offset in real time and can only be used after the season is at an end. The CDC advises that surveillance data collected by state and local health departments might be more accurate to describe local RSV circulation trends. RSV PCR testing is not currently reported by the OSDH to evaluate local trends specific to the state of Oklahoma. The *Updated Guidance for Palivizumab Prophylaxis Among Infants and Young Children at Increased Risk of Hospitalization for Respiratory Syncytial Virus Infection* released by the AAP in 2014 states the following with regard to RSV seasonality:

> "During the 6 RSV seasons from July 2007 to January 2013, the median duration of the RSV season ranged from 13 to 23 weeks, with median peak activity from mid-December to early February, with the exception of Florida and Alaska. Within the 10 Health and Human Services Regions, in the few regions when the RSV season began in October, the season ended in March or early April. In regions where the RSV season began in November or December, the season ended by April or early May. Because 5 monthly doses of palivizumab at 15mg/kg per dose will provide more than 6 months of serum palivizumab concentrations above the desired serum concentration for most infants, administration of more than 5 monthly doses is not recommended within the continental United States."[3]

The following bar graph shows the number of palivizumab doses reimbursed for by SoonerCare for each month during the last 3 RSV seasons. Both the number of prior authorization requests submitted for palivizumab and the number of unique members requesting palivizumab have increased over the past 3 RSV seasons.



Market News and Updates[5,6,7,8,9,10,11,12,13,14]

Guideline Update(s):

- **February 2019:** Two groups from the AAP, the Committee on Infectious Diseases and the Subcommittee on Bronchiolitis, regularly review and evaluate all pertinent data regarding palivizumab as they become available. The AAP recommendations from the 2014 RSV policy statement and technical report were reaffirmed in February 2019. These recommendations were previously reaffirmed in October 2017. In 2015, SoonerCare adopted the updated guidance for palivizumab prophylaxis released by the AAP in 2014, which urged more limited use of palivizumab prophylaxis than previously recommended in children born after 29 weeks gestation or those in the second year of life.

Pipeline:

- **MVA-BN® RSV:** Bavarian Nordic is developing MVA-BN® RSV, a universal RSV vaccine. The vaccine incorporates 5 different RSV antigens to stimulate a broad immune response against both RSV subtypes (A and B), thus mimicking the immune response observed following a natural response to an RSV infection. The Phase 2 program in elderly patients included a revaccination of patients after 1 year, following which the immune responses were rapidly and significantly increased. Phase 2 study results have demonstrated that the vaccine induced broad and

durable antibody and T-cell responses against RSV, as well as mucosal immune responses. A Phase 3 trial in patients 60 years of age and older is planned to start in 2021 and will enroll a total of 12,000 to 14,000 patients over 2 RSV seasons.

- **Nirsevimab (MEDI8897):** AstraZeneca is developing nirsevimab, an extended half-life RSV F monoclonal antibody (mAb) for the prevention of lower respiratory tract infections (LRTI) caused by RSV. Nirsevimab is being developed for use in late preterm and healthy full-term infants and is being developed so that it may only require 1 dose during a typical 5-month RSV season. In a Phase 2b study, nirsevimab showed a significant reduction in medically-attended LRTI and hospitalizations caused by RSV in healthy preterm infants. The study demonstrated for the first time that a single-dose mAb can significantly reduce medically-attended RSV LRTI, including bronchiolitis and pneumonia, in infants throughout the full RSV season. The U.S. Food and Drug Administration (FDA) previously granted nirsevimab Breakthrough Therapy and Fast Track designations. Phase 3 and phase 2/3 studies of nirsevimab in full-term, healthy late preterm, and high-risk infants are ongoing.
- **EPD-938:** Enanta Pharmaceuticals is developing EPD-938, an N-protein inhibitor that targets RSV replication, for the treatment of RSV infection. In October 2019, Enanta announced new data from the Phase 2a human challenge study in healthy adult patients inoculated with RSV was being presented at IDWeek 2019. The data demonstrated that EDP-938 administered once or twice daily achieved statistically significant reductions in RSV viral load by quantitative viral culture, as well as in mucus production. These data support the further clinical evaluation of EDP-938. A Phase 2b clinical study of EDP-938 in adult outpatients with RSV is ongoing.
- **ResVax™:** In 2019, both the FDA and the European Medicines Agency (EMA) recommended that Novavax conduct an additional Phase 3 clinical study of ResVax™ to confirm efficacy against medically significant RSV disease in infants born to mothers vaccinated with ResVax™. ResVax™ is an RSV F recombinant nanoparticle vaccine (RSV F Vaccine) intended for infants via maternal immunization at 28 to 36 weeks gestation. Novavax is currently in discussions with multiple potential commercial partners about the opportunity to bring ResVax™ to market globally and is continuing to determine regulatory licensure requirements and pathways in the United States, the European Union, and other locations.
- **RV521:** ReViral is developing RV521, a potent, orally available inhibitor of the RSV F protein, for the treatment of RSV infection in pediatric, elderly, and immunocompromised patients. Results from a Phase 2a human challenge study in healthy adult patients inoculated with RSV

demonstrated that RV521 significantly reduced RSV viral load, reduced mucus production, and improved disease severity. RV521 was well tolerated and no patients discontinued the study due to adverse events. A 3-part, multicenter Phase 2 study (REVIRAL 1) in infants with RSV LRTI is ongoing.

- **DS-Cav1:** A novel, experimental RSV vaccine, DS-Cav1, was engineered and developed by researchers at the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH). DS-Cav1 has shown early promise in a Phase 1 clinical study. An interim analysis of study data showed that 1 dose of DS-Cav1 prompted large increases in RSV-neutralizing antibodies in healthy adults that were sustained for several months.
- **RSV Vaccine Candidate:** In September 2019, Janssen announced that the FDA granted Breakthrough Therapy designation for the company's investigational prophylactic RSV senior vaccine for the prevention of RSV-mediated LRTI in adults 60 years of age and older. The prophylactic RSV senior vaccine candidate leverages unique features of Janssen's adenovector platform (AdVac®); the investigational vaccine contains the gene encoding for the F protein of the RSV virus as an antigen.

Recommendations

The College of Pharmacy does not recommend any changes to the current Synagis® (palivizumab) prior authorization criteria at this time.

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[3] Rose EB, Wheatley A, Langley G, et al. Respiratory Syncytial Virus Seasonality — United States, 2014–2017. *MMWR Morb Mortal Wkly Rep* 2018; 67(2):71–76.
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[7] AstraZeneca. Nirsevimab reduced respiratory syncytial virus infections and hospitalizations in preterm infants in Phase IIb trial. Available online at: https://www.astrazeneca.com/media-centre/press-releases/2020/nirsevimab-reduced-respiratory-syncytial-virus-infections-and-hospitalisations-in-preterm-infants-in-phase-iib-trial.html. Issued 07/30/2020. Last accessed 08/21/2020.
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[9] Enanta Pharmaceuticals. New Data from Enanta's Phase 2a Human Challenge Study of EDP-938 for RSV Demonstrates Highly Statistically Significant Reductions (P<0.001) in Total Symptom Score, Mucus Weight, and RSV Viral Load as Measured by RT-PCR Assay and by Plaque Assay. Available online at: https://www.enanta.com/investors/news-releases/press-release/2019/New-Data-from-Enantas-Phase-2a-Human-Challenge-Study-of-EDP-938-for-RSV-Demonstrates-Highly-Statistically-Significant-Reductions-p0001-in-Total-Symptom-Score-Mucus-Weight-and-RSV-Viral-Load-as-Measured-by-RT-PCR-Assay-and-by-Plaque-Assay/default.aspx. Issued 10/03/2019. Last accessed 08/21/2020.
[10] Novavax. Pipeline: ResVax™ RSV F Vaccine. Available online at: https://novavax.com/our-pipeline#rsv-f-vaccine. Last accessed 08/21/2020.
[11] DeVincenzo J, Tait D, Efthimiou J, et al. A Randomized, Placebo-Controlled, Respiratory Syncytial Virus Human Challenge Study of the Antiviral Efficacy, Safety, and Pharmacokinetics of RV521, an Inhibitor of the RSV-F Protein. *Antimicrob Agents Chemother* 2020; 64(2)e01884-19. doi: 10.1128/AAC.01884-19.
[12] National Institutes of Health (NIH). Experimental Respiratory Syncytial Virus Vaccine Prompts Antibody Surge. Available online at: https://www.nih.gov/news-events/news-releases/experimental-respiratory-syncytial-virus-vaccine-prompts-antibody-surge. Issued 08/01/2019. Last accessed 08/24/2020.
[13] Crank MC, Ruckwardt TJ, Chen M, et al. A Proof of Concept for Structure-Based Vaccine Design Targeting RSV in Humans. *Science* 2019; 365(6452):505-509. doi: 10.1126/science.aav9033.
[14] Johnson & Johnson. Janssen Announces U.S. FDA Breakthrough Therapy Designation for Investigational Prophylactic Vaccine for the Prevention of Respiratory Syncytial Virus in Older Adults. Available online at: https://www.jnj.com/janssen-announces-u-s-fda-breakthrough-therapy-designation-for-investigational-prophylactic-vaccine-for-the-prevention-of-respiratory-syncytial-virus-in-older-adults. Issued 09/03/2019. Last accessed 08/21/2020.

Appendix I

Fiscal Year 2020 Annual Review of Givlaari® (Givosiran) and Scenesse® (Afamelanotide)

Oklahoma Health Care Authority
September 2020

Introduction[1,2,3,4,5,6,7,8,9,10]

Porphyrias are a group of disorders characterized by abnormally high levels of porphyrins due to deficiencies of certain enzymes essential to the synthesis of hemoglobin. The symptoms associated with the various types differ, depending on the specific enzyme that is deficient. Acute hepatic porphyria (AHP) refers to a set of metabolic disorders in which the enzyme deficiency occurs in the liver; AHP includes acute intermittent porphyria (AIP), variegate porphyria (VP), aminolevulinic acid (ALA) dehydratase deficiency porphyria (ALAD), and hereditary coproporphyria (HCP). Three groups of symptoms [abdominal pain, central nervous system (CNS) abnormalities, and peripheral neuropathy] are described as a "classic triad" that should suggest acute porphyria, in addition to a highly sensitive and highly specific elevated urinary porphobilinogen (PBG) test. In the United States, the prevalence of porphyria is estimated to be 1 in 25,000 individuals, with AIP being the most common and ALAD the least common in most regions.

The goal of treatment for an acute attack of AHP is to quickly abate the attack and provide supportive and symptomatic care until the acute attack resolves. For patients with an acute attack severe enough to require hospitalization or if the disease is accompanied by nausea and vomiting, motor neuropathy, paresis, seizures, agitation, delirium, psychosis, ileus that prevents oral intake, or hyponatremia, intravenous (IV) administration of hemin is recommended. The goal of therapy is to prevent progression of symptoms which increase the risk of life-threatening sequelae from a severe acute attack of AHP. Liver transplantation is reserved for patients with life-threatening acute attacks or progression of symptoms despite IV hemin therapy. In November 2019, the U.S. Food and Drug Administration (FDA) approved Givlaari® (givosiran), the first FDA-approved treatment for AHP. Givosiran is a small interfering RNA (siRNA) therapeutic targeting ALA synthase 1 (ALAS1), which reduces elevated levels of ALAS1 messenger RNA (mRNA), leading to reduction of toxins associated with attacks and other disease manifestations of AHP.

Erythropoietic protoporphyria (EPP) is a rare, inherited metabolic disorder caused by a deficiency of the enzyme ferrochelatase (FECH). Due to abnormally low levels of the FECH enzyme, excessive amounts of

protoporphyrin accumulate in the bone marrow, blood plasma, red blood cells (RBCs), and superficial blood vessels under the skin that are highly sensitive to sunlight. The major symptoms of EPP are related to phototoxicity, which results in severe pain on exposure to sunlight and also on exposure to artificial ultraviolet (UV) lights in some patients. The severity and degree of symptoms varies from patient to patient. It is estimated that EPP occurs in about 1 in 150,000 individuals. Thus, the prevalence of disease in the United States is estimated to be roughly 2,335 individuals based off a population of 327 million people.

Standard treatment for EPP consists of avoidance of sunlight, use of sun protective clothing and sunscreens, and symptomatic and supportive care. In October 2019, the FDA approved Scenesse® (afamelanotide), the first FDA-approved treatment to help adult patients with EPP increase their light exposure. Afamelanotide is an alpha-melanocyte stimulating hormone (α-MSH) analog that functions as a melanocortin-1 receptor (MC1-R) agonist, resulting in increased production of eumelanin in the skin independent of exposure to sunlight or artificial UV light sources. Melanin, in the form of eumelanin, is photoprotective; eumelanin absorbs, scatters, and quenches UV light, scavenges free radicals, and acts as a neutral density filter that reduces all wavelengths of light equally.

Current Prior Authorization Criteria

Givlaari® (Givosiran) Approval Criteria:

1. An FDA approved diagnosis of acute hepatic porphyria (AHP) confirmed by:
    a. Genetic testing; or
    b. Elevated urinary porphobilinogen (PBG) and signs/symptoms of AHP; and
2. Member must be 18 years of age or older; and
3. Givlaari® must be administered in a health care setting by a health care professional prepared to manage anaphylaxis; and
    a. Givlaari® must be shipped to the health care setting where the member is scheduled to receive treatment; and
4. The prescriber must agree to monitor liver function tests prior to initiating treatment with Givlaari®, every month during the first 6 months of treatment, and as clinically indicated thereafter; and
5. The prescriber must agree to monitor renal function during treatment with Givlaari® as clinically indicated; and
6. Member must not be taking sensitive CYP1A2 or CYP2D6 substrates (e.g., caffeine, dextromethorphan, duloxetine, amitriptyline, olanzapine, fluoxetine, paroxetine, hydrocodone, tramadol) concomitantly with Givlaari®; and

7. The member's recent weight must be provided on the prior authorization request in order to authorize the appropriate amount of drug required according to package labeling; and
8. Initial approvals will be for the duration of 6 months. Further approval may be granted if the prescriber documents that the member is responding well to treatment as indicated by less porphyria attacks and that the members does not have elevated transaminase levels.

Scenesse® (Afamelanotide) Approval Criteria:

1. An FDA approved indication to increase pain-free light exposure in adult patients with a history of phototoxic reactions from erythropoietic protoporphyria (EPP); and
    a. The diagnosis of EPP must be confirmed by genetic testing; and
2. Member must be 18 years of age or older; and
3. Scenesse® must be administered by a health care professional who is proficient in the subcutaneous implantation procedure and has completed the training program provided by the manufacturer prior to administration of the Scenesse® implant; and
    a. Scenesse® must be shipped via cold chain supply shipping and delivery to the health care setting where the member is scheduled to receive the implant administration; and
    b. Scenesse® must be stored under refrigeration (36 to 46°F) and protected from light prior to implantation; and
4. The Scenesse® implant should be inserted using an SFM Implantation Cannula or other implantation device that has been determined by the manufacturer to be suitable for implantation of Scenesse®; and
5. The prescriber must agree that the member will be monitored by a health care provider for at least 30 minutes after the implant administration; and
6. The prescriber must agree that the member will have a full body skin examination performed at least twice yearly while the member is being treated with Scenesse® to monitor pre-existing and new skin pigmentary lesions; and
7. Documentation that member will maintain sun and light protection measures during treatment with Scenesse® to prevent phototoxic reactions related to EPP; and
8. A quantity limit of 1 implant per 60 days will apply. Initial approvals will be for 2 implants for the duration of 4 months. Further approval may be granted if the prescriber documents that the member is responding well to treatment as indicated by increased tolerance of sunlight (i.e., less phototoxic reactions).

Utilization of Givlaari® (Givosiran) and Scenesse® (Afamelanotide): Fiscal Year 2020

Fiscal Year 2020 Utilization: Medical Claims

Fiscal Year	*Total Members	†Total Claims	Total Cost	Cost/ Claim	Claims/ Member
2020	1	3	$119,340.00	$39,780.00	3

*Total number of unduplicated members.
†Total number of unduplicated claims.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020
Please note: There was no SoonerCare utilization of Givlaari® (givosiran) or Scenesse® (afamelanotide) during fiscal year 2019 as both medications were FDA approved during fiscal year 2020.

Demographics of Members Utilizing Givlaari® (Givosiran) and Scenesse® (Afamelanotide)

- There was 1 unique member utilizing Givlaari® (givosiran) during fiscal year 2020. However, due to the limited number of members utilizing Givlaari® (givosiran) during fiscal year 2020, detailed demographic information could not be provided.
- There was no SoonerCare utilization of Scenesse® (afamelanotide) during fiscal year 2020.

Top Prescriber Specialties of Givlaari® (Givosiran) and Scenesse® (Afamelanotide) by Number of Claims

- The only prescriber specialty listed on paid claims for Givlaari® (givosiran) during fiscal year 2020 was an internal medicine practitioner with a specialty in hematology/oncology.

Prior Authorization of Givlaari® (Givosiran) and Scenesse® (Afamelanotide)

There were 3 medical prior authorization requests submitted for Givlaari® (givosiran) with a miscellaneous J-code during fiscal year 2020. Givlaari® (givosiran) received a drug-specific J-code effective July 1, 2020. There were no prior authorization requests submitted for Scenesse® (afamelanotide) during fiscal year 2020.

Market News and Updates[11,12,13,14,15,16]

Anticipated Patent Expiration(s):

- Scenesse® (afamelanotide): March 2029
- Givlaari® (givosiran): October 2034

Pipeline:

- **Afamelanotide:** Clinuvel is currently evaluating Scenesse® (afamelanotide) in adult patients with vitiligo and with VP. Clinuvel also has another α-MSH analog, CUV9900, in early development.

Recommendations

The College of Pharmacy does not recommend any changes to the current Givlaari® (Givosiran) or Scenesse® (afamelanotide) prior authorization criteria at this time.

Utilization Details of Givlaari® (Givosiran) and Scenesse® (Afamelanotide): Fiscal Year 2020

Medical Claims

PRODUCT UTILIZED	TOTAL CLAIMS	TOTAL MEMBERS	TOTAL COST	COST/ CLAIM	CLAIMS/ MEMBER
GIVLAARI J3490	3	1	$119,340.00	$39,780.00	3
TOTAL	**3⁺**	**1***	**$119,340.00**	**$39,780.00**	**3**

*Total number of unduplicated members.
⁺Total number of unduplicated claims.
Costs do not reflect rebated prices or net costs.
Fiscal Year 2020 = 07/01/2019 to 06/30/2020
Please note: There was no SoonerCare utilization of Scenesse® (afamelanotide) during fiscal year 2020.

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Appendix J

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: August 12, 2020

FDA Approves Targeted Treatment for Rare Duchenne Muscular Dystrophy Mutation

The FDA granted accelerated approval and Priority Review designation to Viltepso (viltolarsen) injection for the treatment of Duchenne muscular dystrophy (DMD) in patients who have a confirmed mutation of the DMD gene that is amenable to exon 53 skipping. This is the second FDA-approved targeted treatment for patients with this type of mutation. Approximately 8% of patients with DMD have a mutation that is amenable to exon 53 skipping.

Viltepso was evaluated in 2 clinical studies with a total of 32 patients, all of whom were male and had genetically confirmed DMD. The increase in dystrophin production was established in 1 of those 2 studies, a study that included 16 DMD patients, with 8 patients receiving Viltepso at the recommended dose. In the study, dystrophin levels increased, on average, from 0.6% of normal at baseline to 5.9% of normal at week 25. The FDA concluded that the applicant's data demonstrated an increase in dystrophin production that is reasonably likely to predict clinical benefit in patients with DMD who have a confirmed mutation of the dystrophin gene amenable to exon 53 skipping. A clinical benefit of the drug has not been established. In making this decision, the FDA considered the potential risks associated with the drug, the life-threatening and debilitating nature of the disease, and the lack of available therapies.

The most common side effects observed in DMD patients treated with Viltepso 80mg/kg via intravenous (IV) infusion once weekly were upper respiratory tract infection, injection site reaction, cough, and fever. Although kidney toxicity was not observed in the Viltepso clinical studies, the clinical experience with Viltepso is limited, and kidney toxicity, including potentially fatal glomerulonephritis, has been observed after administration of some antisense oligonucleotides.

FDA NEWS RELEASE

For Immediate Release: August 7, 2020

FDA Approves New Opioid for Intravenous Use in Hospitals, Other Controlled Clinical Settings

The FDA approved Olinvyk (oliceridine), an opioid agonist for the management of moderate-to-severe acute pain in adults, where the pain is severe enough to require an IV opioid and for whom alternative treatments are inadequate. Olinvyk is indicated for short-term IV use in hospitals or other controlled clinical settings, such as during inpatient and outpatient procedures. It is not indicated for at-home use.

A total of 1,535 patients with moderate-to-severe acute pain were treated with Olinvyk in controlled and open-label trials. Its safety and efficacy were established by comparing Olinvyk to placebo in randomized, controlled studies of patients who had undergone bunion surgery or abdominal surgery. Patients administered Olinvyk reported decreased pain compared to placebo at the approved doses.

The safety profile of Olinvyk is similar to other opioids. As with other opioids, the most common side effects of Olinvyk are nausea, vomiting, dizziness, headache, and constipation. Olinvyk should not be given to patients with significant respiratory depression; acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment; known or suspected gastrointestinal obstruction; or known hypersensitivity to the drug. Prolonged use of opioid analgesics during pregnancy can result in neonatal opioid withdrawal syndrome.

FDA NEWS RELEASE

For Immediate Release: August 7, 2020

FDA Approves Oral Treatment for Spinal Muscular Atrophy

The FDA approved Evrysdi (risdiplam) to treat patients 2 months of age and older with spinal muscular atrophy (SMA), a rare and often fatal genetic disease affecting muscle strength and movement. This is the first oral drug approved to treat this disease. The FDA granted Evrysdi Fast Track, Priority Review, and Orphan Drug designations.

Evrysdi contains a survival of motor neuron 2 (SMN2)-directed RNA splicing modifier. The efficacy of Evrysdi for the treatment of patients with infantile-onset and later-onset SMA was evaluated in 2 clinical studies. The infantile-onset SMA study included 21 patients who had an average age of 6.7 months when the study began. In that open-label study, efficacy was established based on the ability to sit without support for ≥5 seconds and survival without permanent ventilation. After 12 months of treatment, 41% of patients were able to sit independently for >5 seconds, a meaningful difference from the natural progression of the disease as almost all untreated infants with infantile-onset SMA cannot sit independently. After ≥23 or more months of treatment, 81% of patients were alive without permanent ventilation, which is a noticeable improvement from typical disease progression without treatment. Patients with later-onset SMA were evaluated in a second randomized, placebo-controlled study. The study included 180 patients with SMA aged 2 to 25 years. The primary endpoint was the change from baseline in MFM32 (a test of motor function) total score at the 1-year mark. Patients on Evrysdi saw an average 1.36 increase in their score at the 1-year mark, compared to a 0.19 decrease in patients on placebo (inactive treatment).

The most common side effects of Evrysdi include fever, diarrhea, rash, ulcers of the mouth area, arthralgia, and urinary tract infections. Patients with infantile-onset SMA had similar side effects as individuals with later-onset SMA. Additional side effects for the infantile-onset population include upper respiratory tract infection, pneumonia, constipation, and vomiting.

FDA NEWS RELEASE

For Immediate Release: July 31, 2020

FDA Approves New Indication for Drug Containing an Active Ingredient Derived from Cannabis to Treat Seizures in Rare Genetic Disease

The FDA approved Epidiolex [cannabidiol (CBD)] oral solution for the treatment of seizures associated with tuberous sclerosis complex (TSC) in patients 1 year of age and older. Epidiolex was previously approved for the treatment of seizures associated with 2 rare and severe forms of epilepsy, Lennox-Gastaut syndrome (LGS) and Dravet syndrome (DS). Epidiolex is the only FDA-approved drug that contains a purified drug substance derived from cannabis. The FDA granted Epidiolex Priority Review designation.

Epidiolex's effectiveness for the treatment of seizures associated with TSC was established in a randomized, double-blind, placebo-controlled trial where 148 patients

out of a total of 224 in the study received Epidiolex. The study measured the change from baseline in seizure frequency. In the study, patients treated with Epidiolex had a significantly greater reduction in the frequency of seizures during the treatment period than patients who received placebo (inactive treatment). This effect was seen within 8 weeks and remained consistent throughout the 16-week treatment period.

The most common side effects that occurred in Epidiolex-treated patients with TSC in the clinical trial were diarrhea, elevated liver enzymes, decreased appetite, sleepiness, fever, and vomiting.

FDA NEWS RELEASE

For Immediate Release: July 24, 2020

FDA Approves First Cell-Based Gene Therapy for Adult Patients with Relapsed or Refractory MCL

The FDA approved Tecartus (brexucabtagene autoleucel), a cell-based gene therapy for treatment of adult patients diagnosed with mantle cell lymphoma (MCL) who have not responded to or who have relapsed following other kinds of treatment. Tecartus, a chimeric antigen receptor (CAR) T cell therapy, is the first cell-based gene therapy approved by the FDA for the treatment of MCL. Tecartus was approved under the Accelerated Approval pathway and was granted Priority Review, Breakthrough Therapy, and Orphan Drug designation.

The safety and efficacy of Tecartus was established in a multicenter clinical trial of 60 adults with refractory or relapsed MCL who were followed for at least 6 months after their first objective disease response. The complete remission rate after treatment with Tecartus was 62%, with an objective response rate of 87%.

The label carries a *Boxed Warning* for cytokine release syndrome (CRS), which is a systemic response to the activation and proliferation of CAR-T cells causing high fever and flu-like symptoms, and for neurologic toxicities. Both CRS and neurologic toxicities can be fatal or life-threatening. The most common side effects of Tecartus include serious infections, low blood cell counts, and a weakened immune system. Because of the risk of CRS and neurological toxicities, Tecartus is being approved with a risk evaluation and mitigation strategy (REMS), which includes elements to assure safe use (ETASU). The risk mitigation measures for Tecartus are identical to those of the current REMS Program for another CAR-T therapy, Yescarta.

FDA NEWS RELEASE

For Immediate Release: July 23, 2020

FDA Requiring Labeling Changes for Opioid Pain Medicines, Opioid Use Disorder Medicines Regarding Naloxone

The FDA is now requiring that labeling for opioid pain medicines and medicines to treat opioid use disorder (OUD) be updated to recommend that as a routine part of prescribing these medicines, health care professionals should discuss the availability of naloxone with patients and caregivers, both when beginning and renewing treatment. The required labeling changes recommend that health care professionals consider prescribing naloxone when they prescribe medicines to treat OUD. Additionally, the labeling changes recommend that health care professionals consider prescribing naloxone to patients being prescribed opioid pain medicines who are at increased risk of opioid overdose, including those who are also taking benzodiazepines or other medicines that depress the central nervous system; those who have a history of OUD; and those who have experienced a prior opioid overdose. A naloxone prescription should also be

considered for patients prescribed opioids who have household members, including children, or other close contacts at risk for accidental ingestion or opioid overdose.

The FDA is requiring that these recommendations be added to the prescribing information for opioid pain medicines and medicines to treat OUD, including buprenorphine, methadone, and naltrexone.

FDA NEWS RELEASE

For Immediate Release: July 7, 2020

FDA Approves New Therapy for Myelodysplastic Syndromes (MDS) That Can Be Taken at Home

The FDA approved Inqovi (decitabine/cedazuridine) tablets for treatment of adult patients with myelodysplastic syndromes (MDS) and chronic myelomonocytic leukemia (CMML). Inqovi is taken as 1 tablet by mouth once daily for 5 consecutive days of each 28-day cycle. Prior to this approval, patients with MDS needed to visit a health care facility to receive IV therapy. The FDA granted Inqovi Priority Review and Orphan Drug designations.

The approval was based on clinical trial results which showed similar drug concentrations between IV decitabine and Inqovi. During an 8-week period, about half of the patients who were formerly dependent on transfusions were able to no longer require transfusions. The safety profile of Inqovi was also similar to IV decitabine.

Some common side effects of Inqovi included fatigue, constipation, hemorrhage, muscle pain, mucositis, arthralgia, nausea, and fever with low white blood cell count. Inqovi can cause fetal harm, and both male and female patients of reproductive age are advised to use effective contraception.

FDA NEWS RELEASE

For Immediate Release: July 2, 2020

FDA Approves New HIV Treatment for Patients with Limited Treatment Options

The FDA approved Rukobia (fostemsavir), a new type of antiretroviral medication for adults living with human immunodeficiency virus (HIV) who have tried multiple HIV medications and whose HIV infection cannot be successfully treated with other therapies because of resistance, intolerance, or safety considerations. The FDA granted Rukobia Fast Track, Priority Review, and Breakthrough Therapy designations.

The safety and efficacy of Rukobia, taken by mouth twice daily, were evaluated in a clinical trial of 371 heavily treatment-experienced adult participants who continued to have high levels of virus (HIV-RNA) in their blood despite being on antiretroviral drugs. A total of 272 participants were treated in the main trial arm, and an additional 99 participants received Rukobia in a different arm of the trial. Most participants had been treated for HIV for >15 years (71%), had been exposed to ≥5 different HIV treatment regimens before entering the trial (85%), and/or had a history of acquired immunodeficiency syndrome (AIDS; 86%). Participants in the main cohort of the trial received either Rukobia or a placebo twice daily for 8 days, in addition to their failing antiretroviral regimen. On the eighth day, participants treated with Rukobia had a significantly greater decrease in levels of HIV-RNA in their blood compared to those taking the placebo. After the eighth day, all participants received Rukobia with other antiretroviral drugs. After 24 weeks of Rukobia plus other antiretroviral drugs, 53% of participants achieved HIV-RNA suppression, where levels of HIV were low enough to be considered undetectable. After 96 weeks, 60% of participants continued to have HIV-RNA suppression.

The most common adverse reaction to Rukobia was nausea. Severe adverse reactions included elevations in liver enzymes among participants also infected with hepatitis B or C virus and changes in the immune system.

FDA NEWS RELEASE

For Immediate Release: June 29, 2020

FDA Approves First-Line Immunotherapy for Patients with MSI-H/dMMR Metastatic Colorectal Cancer

The FDA approved Keytruda (pembrolizumab) IV injection for the first-line treatment of patients with unresectable or metastatic microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) colorectal cancer. This marks the first immunotherapy approved for this patient population as a first-line treatment and which is administered to patients without also giving chemotherapy. The FDA granted this application Priority Review.

The FDA's approval for this indication was based on the results of 1 multicenter, international, open-label, active-controlled, randomized trial that compared Keytruda with chemotherapy treatment in 307 patients with MSI-H or dMMR metastatic colorectal cancer. The study demonstrated a statistically significant improvement in progression-free survival (PFS) as assessed by blinded independent review. Median PFS was 16.5 months in the Keytruda group and 8.2 months in the standard of care group. Longer-term analysis is needed to assess for an effect on survival.

Common side effects of Keytruda include fatigue, musculoskeletal pain, decreased appetite, pruritus, diarrhea, nausea, rash, fever, cough, dyspnea, constipation, pain, and abdominal pain. Keytruda can cause serious conditions known as immune-mediated side effects, including inflammation of healthy organs such as the lungs, colon, liver, endocrine glands, and kidneys.

FDA NEWS RELEASE

For Immediate Release: June 29, 2020

FDA Approves Breast Cancer Treatment That Can Be Administered at Home by Health Care Professional

The FDA approved Phesgo, a combination of pertuzumab, trastuzumab, and hyaluronidase–zzxf, for subcutaneous (sub-Q) injection to treat adult patients with human epidermal growth factor receptor 2 (HER2)-positive breast cancer that has spread to other parts of the body, and for treatment of adult patients with early HER2-positive breast cancer. The therapeutic components in Phesgo are the same as those in FDA-approved IV pertuzumab and IV trastuzumab.

The FDA's approval was based on the results of a non-inferiority study in patients with HER2-positive early breast cancer, which demonstrated Phesgo had comparable efficacy and safety as IV pertuzumab and IV trastuzumab, except for administration-related reactions, which were higher with Phesgo due to its sub-Q administration.

Prescribing information for Phesgo includes a *Boxed Warning* to advise health care professionals and patients about the risk of potential heart failure, fetal harm, and lung toxicity. Health care professionals should use similar monitoring parameters as those used with IV pertuzumab and IV trastuzumab.

The most common side effects for patients taking Phesgo were alopecia, nausea, diarrhea, anemia, and asthenia. Phesgo can cause worsening of chemotherapy induced neutropenia.

FDA NEWS RELEASE

For Immediate Release: June 25, 2020

FDA Approves New Therapy for Dravet Syndrome

The FDA approved Fintepla (fenfluramine), a Schedule IV controlled substance, for the treatment of seizures associated with DS in patients years of age 2 and older. DS is a life-threatening, rare and chronic form of epilepsy that is often characterized by severe and unrelenting seizures despite medical treatment. Fintepla was granted Priority Review and Orphan Drug designations from the FDA.

The effectiveness of Fintepla for the treatment of seizures associated with DS was demonstrated in 2 clinical studies in 202 patients ages 2 to 18 years. The studies measured the change from baseline in the frequency of convulsive seizures. In both studies, patients treated with Fintepla had significantly greater reductions in the frequency of convulsive seizures during the trials than patients who received placebo. These reductions were seen within 3 to 4 weeks, and remained generally consistent over the 14- to 15-week treatment periods.

Fintepla labeling includes a *Boxed Warning* stating the drug is associated with valvular heart disease (VHD) and pulmonary arterial hypertension (PAH). Because of these risks, patients must have an echocardiogram (ECG) performed before treatment, every 6 months during treatment, and once 3 to 6 months after treatment is discontinued. If the ECG shows signs of VHD, PAH, or other cardiac abnormalities, health care professionals must consider the benefits and risks of continuing treatment with Fintepla for the patient. Because of the risks of VHD and PAH, Fintepla is available only through the Fintepla REMS program. As part of the REMS requirements, prescribers and patients must adhere to the required cardiac monitoring with ECGs in order for the patient to receive Fintepla.

FDA NEWS RELEASE

For Immediate Release: June 18, 2020

FDA Approves First Therapy for Rare Disease that Causes Low Phosphate Blood Levels, Bone Softening

The FDA approved Crysvita (burosumab-twza) injection to treat patients 2 years of age and older with tumor-induced osteomalacia (TIO), a rare disease that is characterized by the development of tumors that cause weakened and softened bones. The tumors associated with TIO release a peptide hormone-like substance known as fibroblast growth factor 23 (FGF23) that lowers phosphate levels.

The safety and efficacy of Crysvita were evaluated in 2 studies that together enrolled 27 adults with TIO. In both studies, patients received Crysvita every 4 weeks. For the first study, half of patients achieved normal phosphate levels through week 24 and maintained normal or near normal phosphate levels through week 144. In the second study, 69% of patients achieved normal phosphate levels through week 24 and maintained normal or near normal phosphate levels through week 88. The results of bone scans for patients in the first study also suggested healing of the bone lesions related to osteomalacia.

The most common side effects reported in adults with TIO taking Crysvita were tooth abscess, muscle spasms, dizziness, constipation, injection site reaction, rash, and headaches. Crysvita is also FDA-approved to treat adults and children 6 months of age and older with X-linked hypophosphatemia, which causes low levels of phosphate in the blood and leads to impaired bone growth and development in children and teenagers.

Current Drug Shortages Index (as of August 17, 2020):

The information provided in this section is provided voluntarily by manufacturers.

Alogliptin Tablets	***Currently in Shortage***
Amifostine Injection	***Currently in Shortage***
Aminophylline Injection, USP	***Currently in Shortage***
Amoxapine Tablets	***Currently in Shortage***
Amphetamine Aspartate; Amphetamine Sulfate; Dextroamphetamine Saccharate; Dextroamphetamine Sulfate Tablets	***Currently in Shortage***
Anagrelide Hydrochloride Capsules	***Currently in Shortage***
Asparaginase Erwinia Chrysanthemi (Erwinaze®)	***Currently in Shortage***
Atropine Sulfate Injection	***Currently in Shortage***
Atropine Sulfate Ophthalmic Ointment	***Currently in Shortage***
Avycaz® (ceftazidime and avibactam) for Injection, 2 grams/ 0.5 grams	***Currently in Shortage***
Azithromycin Tablets	***Currently in Shortage***
Belatacept (Nulojix®) Lyophilized Powder for Injection	***Currently in Shortage***
Bumetanide Injection, USP	***Currently in Shortage***
Bupivacaine Hydrochloride and Epinephrine Injection, USP	***Currently in Shortage***
Bupivacaine Hydrochloride Injection, USP	***Currently in Shortage***
Calcitriol Injection USP 1MCG /ML	***Currently in Shortage***
Calcium Chloride Injection, USP	***Currently in Shortage***
Capreomycin Injection, USP	***Currently in Shortage***
Cefazolin Injection	***Currently in Shortage***
Cefepime Injection	***Currently in Shortage***
Cefotaxime Sodium Injection	***Currently in Shortage***
Cefotetan Disodium Injection	***Currently in Shortage***
Cefoxitin for Injection, USP	***Currently in Shortage***
Chlorothiazide (Diuril®) Oral Suspension	***Currently in Shortage***
Cisatracurium Besylate Injection	***Currently in Shortage***
Continuous Renal Replacement Therapy (CRRT) Solutions	***Currently in Shortage***
Dexamethasone Sodium Phosphate Injection	***Currently in Shortage***
Dexmedetomidine Injection	***Currently in Shortage***
Dextrose 25% Injection	***Currently in Shortage***
Dextrose 50% Injection	***Currently in Shortage***
Dicyclomine Oral Tablets/Capsules	***Currently in Shortage***
Diltiazem Hydrochloride	***Currently in Shortage***
Dimercaprol (Bal in Oil) Injection USP	***Currently in Shortage***
Diphenhydramine Injection	***Currently in Shortage***
Disulfiram Tablets	***Currently in Shortage***
Dobutamine Hydrochloride Injection	***Currently in Shortage***
Dopamine Hydrochloride Injection	***Currently in Shortage***

Dorzolamide Hydrochloride and Timolol Maleate (Cosopt®) Ophthalmic Solution	***Currently in Shortage***
Dorzolamide Hydrochloride Ophthalmic Solution	***Currently in Shortage***
Doxycycline Hyclate Injection	***Currently in Shortage***
Echothiophate Iodide (Phospholine Iodide®) Ophthalmic Solution	***Currently in Shortage***
Enalaprilat Injection, USP	***Currently in Shortage***
Epinephrine Injection, 0.1 mg/mL	***Currently in Shortage***
Epinephrine Injection, Auto-Injector	***Currently in Shortage***
Erythromycin Lactobionate for Injection, USP	***Currently in Shortage***
Erythromycin Ophthalmic Ointment	***Currently in Shortage***
Etomidate Injection	***Currently in Shortage***
Famotidine Injection	***Currently in Shortage***
Famotidine Tablets	***Currently in Shortage***
Fentanyl Citrate (Sublimaze®) Injection	***Currently in Shortage***
Fluorescein Injection	***Currently in Shortage***
Fluorescein Strips	***Currently in Shortage***
Flurazepam Hydrochloride Capsules	***Currently in Shortage***
Fluvoxamine ER Capsules	***Currently in Shortage***
Furosemide Injection, USP	***Currently in Shortage***
Gemifloxacin Mesylate (Factive®) Tablets	***Currently in Shortage***
Guanfacine Hydrochloride Tablets	***Currently in Shortage***
Heparin Sodium and Sodium Chloride 0.9% Injection	***Currently in Shortage***
Hydrocortisone Tablets, USP	***Currently in Shortage***
Hydromorphone Hydrochloride Injection, USP	***Currently in Shortage***
Hydroxypropyl (Lacrisert®) Cellulose Ophthalmic Insert	***Currently in Shortage***
Hydroxyzine Pamoate Oral Capsules	***Currently in Shortage***
Imipenem and Cilastatin for Injection, USP	***Currently in Shortage***
Ketamine Injection	***Currently in Shortage***
Ketoprofen Capsules	***Currently in Shortage***
Ketorolac Tromethamine Injection	***Currently in Shortage***
Labetalol Hydrochloride Injection	***Currently in Shortage***
Letermovir (Prevymis™) Injection	***Currently in Shortage***
Leucovorin Calcium Lyophilized Powder for Injection	***Currently in Shortage***
Leuprolide Acetate Injection	***Currently in Shortage***
Levetiracetam Extended-Release Oral Tablets, USP	***Currently in Shortage***
Levetiracetam Immediate-Release Oral Tablets, USP	***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***
Lithium Oral Solution	***Currently in Shortage***

Lorazepam Injection, USP	***Currently in Shortage***
Loxapine Capsules	***Currently in Shortage***
Methadone Hydrochloride Injection	***Currently in Shortage***
Methyldopa Tablets	***Currently in Shortage***
Methylphenidate Hydrochloride (Quillivant XR®) for Extended-Release Oral Suspension	***Currently in Shortage***
Metoprolol Tartrate Injection, USP	***Currently in Shortage***
Metronidazole Injection, USP	***Currently in Shortage***
Midazolam Injection, USP	***Currently in Shortage***
Morphine Sulfate Injection, USP	***Currently in Shortage***
Multi-Vitamin Infusion (Adult and Pediatric)	***Currently in Shortage***
Nalbuphine Hydrochloride Injection	***Currently in Shortage***
Nizatidine Capsules	***Currently in Shortage***
Ondansetron Hydrochloride Injection	***Currently in Shortage***
Oxytocin Injection, USP Synthetic	***Currently in Shortage***
Pantoprazole Sodium for Injection	***Currently in Shortage***
Parathyroid Hormone (Natpara®) Injection	***Currently in Shortage***
Physostigmine Salicylate Injection, USP	***Currently in Shortage***
Pindolol Tablets	***Currently in Shortage***
Potassium Acetate Injection, USP	***Currently in Shortage***
Procainamide Hydrochloride Injection, USP	***Currently in Shortage***
Promethazine (Phenergan®) Injection	***Currently in Shortage***
Propofol Injectable Emulsion	***Currently in Shortage***
Rifapentine Tablets	***Currently in Shortage***
Ropivacaine Hydrochloride Injection	***Currently in Shortage***
Sclerosol Intrapleural Aerosol	***Currently in Shortage***
Sertraline Hydrochloride Oral Solution, USP	***Currently in Shortage***
Sertraline Hydrochloride Tablets	***Currently in Shortage***
Sincalide (Kinevac®) Lyophilized Powder for Injection	***Currently in Shortage***
Sodium Acetate Injection, USP	***Currently in Shortage***
Sodium Bicarbonate Injection, USP	***Currently in Shortage***
Sodium Chloride 23.4% Injection	***Currently in Shortage***
Sodium Chloride Injection USP, 0.9% Vials and Syringes	***Currently in Shortage***
Sulfasalazine Tablets	***Currently in Shortage***
Tacrolimus Capsules	***Currently in Shortage***
Technetium Tc99m Succimer Injection (DMSA)	***Currently in Shortage***
Thiothixene Capsules	***Currently in Shortage***
Timolol Maleate Ophthalmic Gel Forming Solution	***Currently in Shortage***
Timolol Maleate Ophthalmic Solution	***Currently in Shortage***
Timolol Maleate Tablets	***Currently in Shortage***
Triamcinolone Acetonide (Triesence®) Injection, Suspension	***Currently in Shortage***
Trifluridine Ophthalmic Solution	***Currently in Shortage***
Vecuronium Bromide for Injection	***Currently in Shortage***