

# Drug Utilization Review Board

Oklahoma Health Care Authority 2401 N.W. 23rd Street, Suite 1A Oklahoma City, Oklahoma 73107 Ponca Room

Wednesday February 8, 2012 6:00 p.m.



# The University of Oklahoma

# Health Sciences Center

College of Pharmacy

Pharmacy Management Consultants

MEMORANDUM

- TO: Drug Utilization Review Board Members
- FROM: Shellie Keast, Pharm.D., M.S.

SUBJECT: Packet Contents for Board Meeting – February 8, 2012

- DATE: February 2, 2012
- NOTE: The DUR Board will meet at 6:00 p.m. The meeting will be held in the Ponca Room at the Oklahoma Health Care Authority Offices in Shepherd Mall. (North Entrance)

Enclosed are the following items related to the February meeting. Material is arranged in order of the Agenda.

Call to Order

Public Comment Forum

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

Update on DUR / MCAU Program – See Appendix B.

Action Item – Vote to Prior Authorize Select Prenatal Vitamins – See Appendix C.

Action Item - Vote to Prior Authorize Soliris® – See Appendix D.

Action Item – Vote to Prior Authorize Onfi™ – See Appendix E.

- Action Item Annual Review of Erythropoietin Stimulating Agents See Appendix F.
- Action Item Annual Review of Narcotic Analgesics and 30 Day Notice to Prior Authorize Abstral®, Lazanda®, Nucynta® ER, and Oxecta® – See Appendix G.

30 Day Notice to Prior Authorize Xgeva® – See Appendix H.

30 Day Notice to Prior Authorize Makena<sup>™</sup> – See Appendix I.

Action Item – Questions Regarding Annual Review of Mozobil®, Nplate®, Arcalyst®, and Ilaris® – See Appendix J.

FDA and DEA Updates – See Appendix K.

Future Business

Adjournment

# Oklahoma Health Care Authority Drug Utilization Review Board

(DUR Board) Meeting – February 8, 2012 @ 6:00 p.m.

> Oklahoma Health Care Authority 2401 N.W. 23<sup>rd</sup> Street, Suite 1-A Oklahoma City, Oklahoma 73107 Ponca Room (North Entrance)

# AGENDA

Discussion and Action on the Following Items:

Items to be presented by Dr. Muchmore, Chairman:

1. Call To Order

5.

A. Roll Call – Dr. Cothran

Items to be presented by Dr. Muchmore, Chairman:

# 2. Public Comment Forum

A. Acknowledgment of Speakers and Agenda Items

Items to be presented by Dr. Muchmore, Chairman:

- 3. Action Item Approval of DUR Board Meeting Minutes See Appendix A.
  - A. January 11, 2011 DUR Minutes Vote
  - B. January 12, 2011 DUR Recommendation Memorandum

# Items to be presented by Dr. Keast, Dr. Muchmore, Chairman:

# 4. Update on DUR / Medication Coverage Authorization Unit – See Appendix B.

- A. Retrospective Drug Utilization Review for October 2011
- B. Medication Coverage Activity Audit for January 2012
- C. Pharmacy Help Desk Activity Audit for January 2012

Items to be presented by Dr. Keast, Dr. Muchmore, Chairman

Action Item – Vote to Prior Authorize Select Prenatal Vitamins– See Appendix C. A. COP Recommendations

Items to be presented by Dr. Le, Dr. Muchmore, Chairman

- 6. Action Item Vote to Prior Authorize Soliris<sup>®</sup> See Appendix D.
  - A. COP Recommendations

Items to be presented by Dr. Le, Dr. Muchmore, Chairman

Action Item – Vote to Prior Authorize Onfi<sup>™</sup> – See Appendix E.
 A. COP Recommendations

# Items to be presented by Dr. Le, Dr. Muchmore, Chairman

# 8. Action Item – Annual Review of Erythropoietin Stimulating Agents – See Appendix F.

- A. Current Authorization Criteria
- B. Utilization Review
- C. Prior Authorization Review
- D. Market News and Updates
- E. COP Recommendations

## Items to be presented by Dr. Keast, Dr. Muchmore, Chairman

- 9. Action Item Annual Review of Narcotic Analgesics and 30 Day Notice to Prior Authorize Abstral<sup>®</sup>, Lazanda<sup>®</sup>, Nucynta<sup>®</sup> ER, and Oxecta<sup>®</sup> See Appendix G.
  - A. Current Authorization Criteria
  - B. Utilization Review
  - C. Prior Authorization Review
  - D. Hydrocodone Utilization
  - E. Suboxone<sup>®</sup> and Subutex<sup>®</sup> Review
  - F. Market News and Updates
  - G. COP Recommendations

# Items to be presented by Dr. Sipols, Dr. Muchmore, Chairman

# 10. **30 Day Notice to Prior Authorize Xgeva<sup>®</sup> – See Appendix H.**

- A. Product Summary
- B. COP Recommendations

# Items to be presented by Dr. Moore, Dr. Muchmore, Chairman

# 11. 30 Day Notice to Prior Authorize Makena<sup>™</sup> – See Appendix I.

- A. Product Summary
- B. COP Recommendations
- C. Product Details

# Items to be presented by Dr. Sipols, Dr. Muchmore, Chairman

# 12. Action Item – Questions Regarding Annual Review of Mozobil<sup>®</sup>, Nplate<sup>®</sup>, Arcalyst<sup>®</sup>, and Ilaris<sup>®</sup> – See Appendix J.

- A. Current Authorization Criteria
- B. Utilization Review
- C. Market News and Updates
- D. COP Recommendations

# Items to be presented by Dr. Cothran, Dr. Muchmore, Chairman

# 13. FDA and DEA Updates – See Appendix K.

# 14. Future Business

- A. Annual Review Qutenza<sup>®</sup>
- B. Annual Review of Miscellaneous Special Formulation Anti-Infectives
- C. New Product Reviews
- D. Medical Product Reviews
- 15. Adjournment

# Appendix A

### OKLAHOMA HEALTH CARE AUTHORITY DRUG UTILIZATION REVIEW BOARD MEETING MINUTES of MEETING of JANUARY 11, 2012

BOARD MEMBERS:	PRESENT	ABSENT
Brent Bell, D.O., D.Ph.: Vice-Chairman	х	
Mark Feightner, Pharm.D.	Х	
Anetta Harrell, Pharm.D.	х	
Evelyn Knisely, Pharm.D.	х	
Thomas Kuhls, M.D.	х	
John Muchmore, M.D., Ph.D.: Chairman	х	
Paul Louis Preslar, D.O., MBA	х	
James Rhymer, D.Ph.	х	
Bruna Varalli-Claypool, MHS, PA-C	х	
Eric Winegardener, D.Ph.	х	

COLLEGE of PHARMACY STAFF:	PRESENT	ABSENT
Terry Cothran, D.Ph.; Pharmacy Director	х	
Karen Egesdal, D.Ph.; SMAC-ProDUR Coordinator/OHCA Liaison	х	
Ronald Graham, D.Ph.	х	
Shellie Keast, Pharm.D, M.S.; DUR Manager	Х	
Chris Le, Pharm.D.; Clinical Coordinator	х	
Mark Livesay, Operations Manager	х	
Carol Moore, Pharm.D.; Clinical Pharmacist	х	
Neeraj Patel, Pharm.D.; Clinical Pharmacist	Х	
Lester A. Reinke, Ph.D.; Associate Dean for Graduate Studies & Research	Х	
Leslie Robinson, D.Ph.; PA Coordinator	Х	
Jennifer Sipols, Pharm.D.; Clinical Pharmacist	Х	
Graduate Students: Amany Hussein	х	
Visiting Pharmacy Student(s): Nicholas Hastings, Robert Kenney	х	

OKLAHOMA HEALTH CARE AUTHORITY STAFF:	PRESENT	ABSENT
Mike Fogarty, J.D., M.S.W.; Chief Executive Officer		Х
Garth Splinter, M.D., M.B.A.; Director of Medicaid/Medical Services	Х	
Rebecca Pasternik-Ikard, Deputy State Medicaid Director		Х
Nancy Nesser, Pharm.D., J.D.; Pharmacy Director	Х	
Lynn Rambo-Jones, J.D.; Deputy General Counsel III	Х	
Carter Kimble, MPH/Public Affairs- Information Rep.	Х	
Jill Ratterman, D.Ph.; Pharmacy Specialist		х
Kerri Wade, Senior Pharmacy Financial Analyst	Х	
Stacey Hale, Pharmacy Research Analyst	Х	

OTHERS PRESENT:		
Don Kempin, Novo Nordisk	Charlene Kaiser, Amgen	Russ Wilson, J&J
James Brock, USPC	Ryan Kerber, USPC	Brian Maves, Pfizer
Janie Huff, Takeda	David Williams, Forest	Emily Beasley, student, OUHSC College of F
Sandra Manning, BMS	Pat Trahan, Taro	Donna Erwin, BMS
Jim Fowler, AstraZeneca	Jim Chapman, Abbott	Sam Smothers, MedImmune
Lance Burcham, MedImmune	Tim Hoit, MedImmune	Steve Merger, MedImmune

### PRESENT FOR PUBLIC COMMENT:

Agenda Item No. 6

Kathleen Karnik, Pharm.D.; Janssen Scientific Affairs

# AGENDA ITEM NO. 1: CALL TO ORDER 1A: Roll Call Dr. Muchmore called the meeting to order. Roll call by Dr. Cothran established the presence of a quorum. ACTION: NONE REQUIRED

 AGENDA ITEM NO. 2:
 PUBLIC COMMENT FORUM

 Dr. Muchmore acknowledged the speaker for public comment:
 Agenda Item No. 6

 Kathleen Karnik, Pharm.D.; Janssen Scientific Affairs

 ACTION: NONE REQUIRED

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

3A: December 14, 2011 DUR Minutes
 Ms. Varalli-Claypool moved to approve as submitted; seconded by Dr. Harrell.
 ACTION: MOTION CARRIED

AGENDA ITEM NO. 4:

#### UPDATE ON DUR/MEDICATION COVERAGE AUTHORIZATION UNIT

4A: Retrospective Drug Utilization Review: September 2011

- 4B: Retrospective Drug Utilization Review Response: August 2011
- 4C: Medication Coverage Activity Audit: December 2011
- 4D: Pharmacy Help Desk Activity Audit: December 2011
- 4E: Pharmacy Lock-In Program Report for Calendar Year 2011
- Reports included in agenda packet; presented by Dr. Keast.

ACTION: NONE REQUIRED

### AGENDA ITEM NO. 5:

### VOTE TO PRIOR AUTHORIZE BRILINTA™

Reports included in agenda packet; presented by Dr. Keast. Dr. Winegardener moved to approve as submitted; seconded by Dr. Feightner. **ACTION: MOTION CARRIED** 

#### AGENDA ITEM NO. 6:

### VOTE TO PRIOR AUTHORIZE XARELTO™

<u>For Public Comment; Kathleen Karnik, Pharm.D.</u>: Good evening. My name is Kathleen Karnik with Janssen Scientific Affairs and similar to last month, I'm here supporting the recommendations from the College of Pharmacy, but as a courtesy to the Board I wanted to come and address any questions that you might have about this product.

Dr. Muchmore: I think the main question that is on people's minds is what do you do if they're bleeding and overdosed.

<u>Dr. Karnik:</u> So if they're bleeding, you should stop the drug, you should start to administer any type of supportive therapy that you normally would. But the half-life of the drug is anywhere from 5 to 13 hours and so the intent would be that the product would be eliminated from the system fairly quickly. There is some PK data that is now out in the literature about the use of prothrombin complex concentrate. That has shown positive reversible affects when administered to those patients within minutes and has safely reversed PT levels. But that's in very small studies and it's only in APK data, so there is potential hope on the horizon. But at this point, because the half-life is much shorter than some of the other agents currently available. Stopping the drug seems to at some point be able to ......

Dr. Muchmore: Stop the drug and stop the bleeding.

Dr. Karnik: Exactly. But for other things that are also ......

Dr. Muchmore: The thing people have to remember is it's not dialyzable unlike dabigatran and so you would have to do the best you can and PCI is available ...... or PCC.

Dr. Karnik: But it does have a shorter half-life than dabigitran...

<u>Dr. Muchmore:</u> Interesting medications. Does anybody have any comments, questions or motions in regard to rivaroxaban or any questions of Kathleen Karnik? Thank you for coming. That was a good resume, when they're over-bleeding.

Materials included in agenda packet; presented by Dr. Keast.

Dr. Harrell moved to approve as submitted; seconded by Ms. Varalli-Claypool.

ACTION: MOTION CARRIED

AGENDA ITEM NO. 7:

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

### AGENDA ITEM NO. 8: 30-DAY NOTICE TO PRIOR AUTHORIZE SOLIRIS®

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

AGENDA ITEM NO. 9: 30-DAY NOTICE TO PRIOR AUTHORIZE ONFI™ Materials included in agenda packet; presented by Dr. Le. ACTION: NONE REQUIRED

AGENDA ITEM NO. 10: ANNUAL REVIEW OF RIBAVIRIN MISCELLANEOUS PRODUCTS Materials included in agenda packet; presented by Dr. Moore. ACTION: NONE REQUIRED

#### AGENDA ITEM NO. 11:

#### ANNUAL REVIEW OF NASAL ALLERGY PRODUCTS

Materials included in agenda packet; presented by Dr. Sipols. Board discussion: Change "titrated" to "recommended". Use generic Nasacort AQ for 2 to 4 year olds. Do not grandfather this class of drugs. Dr. Kuhls moved to approve with the incorporation of discussed changes to criteria; seconded by Dr. Rhymer.

ACTION: MOTION CARRIED

AGENDA ITEM NO. 12: FDA & DEA UPDATES Materials included in agenda packet; presented by Dr. Cothran. ACTION: NONE REQUIRED

AGENDA ITEM NO. 13: FUTURE BUSINESS

Materials included in agenda packet; submitted by Dr. Graham.

- A: Annual Review of Narcotics
- B: Annual Review of Erythropoiesis Stimulating Agents
- C: New Product Reviews
- D: Medical Product Reviews
- ACTION: NONE REQUIRED

AGENDA ITEM NO. 14: ADJOURNMENT The meeting was adjourned at 7:30 p.m.



# The University of Oklahoma

# Health Sciences Center

# College of Pharmacy

PHARMACY MANAGEMENT CONSULTANTS

# Memorandum

**Date:** January 12, 2012

- To: Nancy Nesser, Pharm.D., J.D. Pharmacy Director Oklahoma Health Care Authority
- From: Shellie Keast, Pharm.D., M.S. Drug Utilization Review Manager Pharmacy Management Consultants
- Subject: DUR Board Recommendations from Meeting of January 11, 2012

## Recommendation 1: Vote to Prior Authorize Brilinta™ (ticagrelor)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends prior authorization of Brilinta™ (ticagrelor) with the following criteria:

- Brilinta<sup>™</sup> (ticagrelor) therapy will be approved for members who meet approved diagnostic criteria: The approved diagnosis is acute coronary syndrome (ACS) (unstable angina, non-ST elevation myocardial infarction, or ST elevation myocardial infarction) with or without percutaneous coronary intervention (PCI).
- 2. Length of approval: 1 year.

As with clopidogrel and prasugrel, the first 90 days will not require prior authorization.

## Recommendation 2: Vote to Prior Authorize Xarelto® (rivaroxaban)

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends prior authorization of Xarelto<sup>®</sup> (rivaroxaban) with the following criteria:

- 1. For Xarelto<sup>®</sup> (rivaroxaban) 10 mg the first 35 days will not require prior authorization to allow for use for DVT prophylaxis only.
- 2. For Xarelto<sup>®</sup> (rivaroxaban) 15 mg and 20 mg a diagnosis of nonvalvular atrial fibrillation will be required.

## **Recommendation 3: Annual Review of Select Ribavirin Products**

## NO ACTION REQUIRED.

The College of Pharmacy does not recommend any changes at this time.

## **Recommendation 4: Annual Review of Nasal Allergy Products**

### MOTION CARRIED by unanimous approval.

The College of Pharmacy does not recommend any changes at this time.

The Drug Utilization Review Board recommended the following changes:

Criteria for approval:

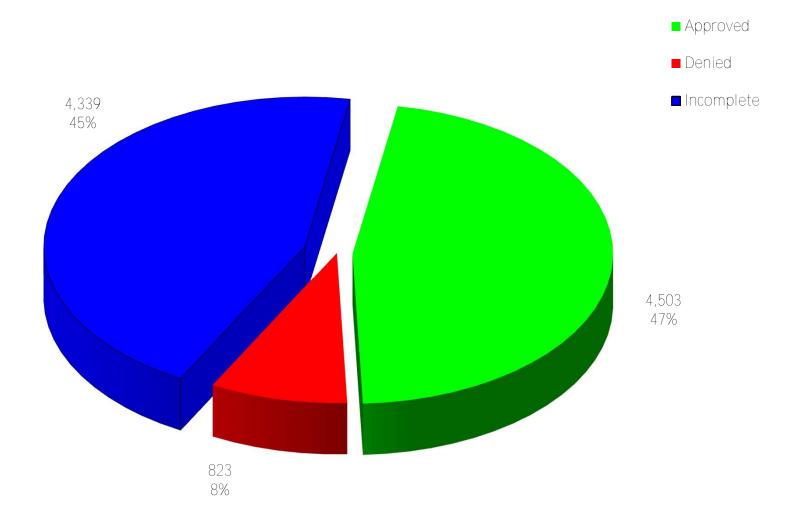
- 1. The following criteria are required for approval of a Tier 2 product:
  - a. Documented adverse effect or contraindication to the preferred products.
  - b. Failure with all Tier 1 medications defined as no beneficial response after at least three weeks use of each during which time the drug has been titrated to the at the maximum recommended dose.
- 2. The following criteria are required for approval of a Tier 3 product:
  - a. All Tier 2 criteria must be met.
  - b. Failure with all available Tier 2 products defined as no beneficial response after at least three weeks use of each during which time the drug has been titrated to the at the maximum recommended dose.
- 3. Approvals will be for the duration of three months, except for members with chronic diseases such as asthma or COPD, in which case authorizations will be for the duration of one year.
- 4. No grandfathering of Tier 2 or Tier 3 products will be allowed for this category.
- 5. For 2 to 4 year olds, the age appropriate lower-tiered generic products must be used prior to the use of higher tiered products.

# **Appendix B**

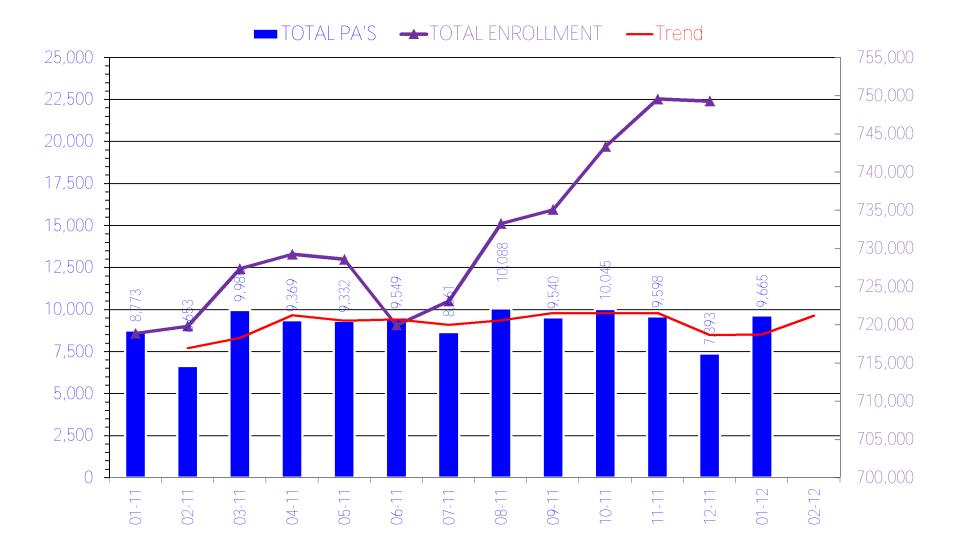
# RETROSPECTIVE DRUG UTILIZATION REVIEW REPORT October 2011

MODULE	DRUG INTERACTION				G-DISEASE AUTIONS	DOSING & DURATION
Total # of <u>messages</u>	57,308	71,821		991, <i>6</i>	588	33,402
Limits applied	Established, Major, Males and Females, Age 51-60	Antipsychotics, Males and		Contraindicated, Males and Females, Epilepsy, Ages 40- 150		High Dose, Duration, Proton Pump Inhibitors, Males & Females age 11-12
Total # of <u>messages</u> <u>after limits</u> were applied	120	203		71		67
Total # of <u>members</u> reviewed	120	174		53		67
LETTERS						
Category		Prescribers	Pharmacies		Total Letters	
Drug Interaction		4		0	4	
Duplication of Therapy		43		0	43	
Drug-Disease Precautions		38		1	39	
Dosing & Duration		20		0	20	
Total Letters Sent		105		1	106	

# PRIOR AUTHORIZATION ACTIVITY REPORT: January 2012



PRIOR AUTHORIZATION REPORT: January 2011 – January 2012



PA totals include overrides

# Prior Authorization Activity 1/1/2012 Through 1/31/2012

	Total	Approved	Denied	Incomplete	Average Length of Approvals in Days
Advair/Symbicort	334	137	22	175	357
Amitiza	10	4	1	5	285
Anti-Ulcer	385	91	78	216	119
Antidepressant	306	92	18	196	348
Antihistamine	162	117	4	41	340
Antihypertensives	106	19	9	78	298
Antimigraine	99	22	17	60	347
Atypical Antipsychotics	711	368	33	310	357
Benign Prostatic Hypertrophy	14	0	4	10	0
Benzodiazepines	73	49	6	18	173
Biologics	23	12	2	9	339
Bladder Control	37	3	5	29	362
Brovana (Arformoterol)	4	4	0	0	316
Byetta	3	2	0	1	363
Elidel/Protopic	23	11	2	10	86
ESA	114	81	5	28	112
Fibric Acid Derivatives	3	2	0	1	365
Fibromyalgia	117	30	19	68	327
Fortamet/Glumetza	1	0	0	1	0
Forteo	4	0	0	4	0
Glaucoma	20	4	0	16	364
Growth Hormones	45	27	8	10	167
HFA Rescue Inhalers	73	17	10	46	313
Insomnia	93	15	17	61	165
Insulin	4	2	0	2	136
Misc Analgesics	35	2	27	6	58
Multiple Sclerosis	6	4	0	2	147
Muscle Relaxant	164	58	60	46	42
Nasal Allergy	216	32	47	137	147
NSAIDS	157	24	23	110	316
Ocular Allergy	60	12	3	45	178
Ocular Antibiotics	43	10	6	27	50
Opioid Analgesic	412	203	21	188	274
Other	1,132	494	117	521	307
Otic Antibiotic	28	5	1	22	25
Pediculicides	148	40	21	87	14
Plavix	173	119	2	52	330
Qualaquin (Quinine)	3	0	2	1	0
Singulair	727	377	27	323	247
Smoking Cessation	76	31	13	32	30
Statins	177	96	8	73	355
Stimulant	1,230	403	81	746	304
Suboxone/Subutex	149	124	3	22	75
Symlin	2	1	0	1	352
Synagis	137	89	9	39	69
Topical Antibiotics	11	2	2	7	31
Topical Antifungals	20	3	2	15	24
Topical Corticosteroids	106	3	26	77	139
Ultram ER and ODT	13	0	3	10	0
Xolair	9	3	0	6	362
Xopenex Nebs	33	11	4	18	289
Zetia (Ezetimibe)	21	10	0	11	361
Emergency PAs	13	13	0	0	
Total	8,065	3,278	768	4,019	

### Overrides

39	23	0	16	221
549	518	4	27	11
6	2	0	4	45
1	1	0	0	26
97	93	1	3	7
15	15	0	0	243
77	75	0	2	6
31	22	2	7	12
778	471	48	259	266
7	5	0	2	20
1,600	1,225	55	320	
9,665	4,503	823	4,339	
	549 6 1 97 15 77 31 778 7 7 <b>1,600</b>	549         518           6         2           1         1           97         93           15         15           77         75           31         22           778         471           7         5           1,600         1,225	549       518       4         6       2       0         1       1       0         97       93       1         15       15       0         77       75       0         31       22       2         778       471       48         7       5       0         1,600       1,225       55	549     518     4     27       6     2     0     4       1     1     0     0       97     93     1     3       15     15     0     0       77     75     0     2       31     22     2     7       778     471     48     259       7     5     0     2       1,600     1,225     55     320

Denial Reasons	
Unable to verify required trials.	3,385
Lack required information to process request.	957
Does not meet established criteria.	777
Drug Not Deemed Medically Necessary	2

Duplicate Requests: 705
Letters: 2,031
No Process: 344
Changes to existing PAs: 531

CALL VOLUME MONTHLY REPORT: January 2011 – January 2012



# Appendix C

# VOTE TO PRIOR AUTHORIZE SELECT PRENATAL VITAMINS

OKLAHOMA HEALTH CARE AUTHORITY, FEBRUARY 2012

# RECOMMENDATIONS

The College of Pharmacy recommends placing a prior authorization on any prenatal vitamin with a cost per day of greater than \$0.75. All preferred products will contain 1 mg of Folic Acid and at least two products will contain DHA/Omega-3 (based on the two lowest priced products available). Products with a cost greater than \$0.75 per day will require prior authorization with the following criteria for approval: clinically significant reason why the member cannot use any available non-prior authorized product.

Due to the transient nature of the use of prenatal vitamins during pregnancy, current members will be allowed to stay on their product for the duration of their pregnancy as long as they remain compliant.

Prior authorization requirements may be removed when the product's price is at or below the designated pricing cutoff.

# EDUCATIONAL OUTREACH

The first area of the educational outreach will be a letter to all prescribers of prenatal vitamins in the last 12 months. Two weeks after the initial mailing a second letter will go out to the prescribers of products which will require a prior authorization to let them know that those products will now need a prior authorization. Both letters will include a copy of the products which will be available without prior authorization and a link to the OHCA web page which will contain the updated list. An article will also appear in the first available provider newsletter and an announcement will be sent out to all contracted pharmacies.

Additionally, a generic prescription form will be attached to all the returned prior authorization requests for the prior authorized products for the prescriber to sign and fax to the pharmacy to change to a non-prior authorized product.

NDC Code	al Vitamins* NDC Description	GCN Description
13925011601	SE-NATAL 19	PRENATAL VIT/FE FUM/DOSS/FA ORAL 29 MG-1 MG TABLET
60258019601	PRENATAL 19	PRENATAL VIT/FE FUM/DOSS/FA ORAL 29 MG-1 MG TABLET
51991046690	VINATE AZ	PRENATAL VITAMINS/FE BISGLY/FA ORAL 27 MG-1 MG TABLET
13925010430	SE-CARE	PV W-O VIT A/FE FUMARATE/FA ORAL 40-1MG TAB CHEW
42192031830	MULTINATAL PLUS	PV W-O VIT A/FE FUMARATE/FA ORAL 40-1MG TAB CHEW
51991057633	VINATE CARE	PV W-O VIT A/FE FUMARATE/FA ORAL 40-1MG TAB CHEW
60258017809	PRENAFIRST	PRENATAL VIT/FE FUMARATE/FA ORAL 17MG-1MG TABLET
13811053530	FOLIVANE-OB	PNV NO.15/IRON FUM & PS CMP/FA ORAL 85 MG-1 MG CAPSULE
51991017801	VINATE II	PRENATAL VITAMINS/FE BISGLY/FA ORAL 29 MG-1 MG TABLET
13811001490	COMPLETENATE	PNV #14/FERROUS FUM/FOLIC ACID ORAL 29 MG-1 MG TAB CHEW
51991053090	VINATE IC	PRENATAL VITS CMB W-O CA NO.2 ORAL 106 MG-1MG CAPSULE
13811056301	TRIVEEN-U	PNV W-O CA NO5/FE FUMARATE/FA ORAL 106.5-1MG CAPSULE
60258017901	PRENATAL-U	PNV W-O CA NO5/FE FUMARATE/FA ORAL 106.5-1MG CAPSULE
00178086630	CITRANATAL B-CALM	PNV WITH CA,NO63/IRON/FA/B6 ORAL 20-1-25 MG TABLET SEQ
13811056930	TARON-BC	PNV WITH CA,NO63/IRON/FA/B6 ORAL 20-1-25 MG TABLET SEQ
13811051910	VOL-PLUS	PNV WITH CA,NO.71/IRON/FA ORAL 27 MG-1 MG TABLET
13811051950	VOL-PLUS	PNV WITH CA,NO.71/IRON/FA ORAL 27 MG-1 MG TABLET
52152017802	PRENATAL PLUS	PNV WITH CA,NO.71/IRON/FA ORAL 27 MG-1 MG TABLET
52152017804	PRENATAL PLUS	PNV WITH CA,NO.71/IRON/FA ORAL 27 MG-1 MG TABLET
60258018301	PRENAPLUS	PNV WITH CA,NO.71/IRON/FA ORAL 27 MG-1 MG TABLET
64376081801	PRENATE PLUS	PNV WITH CA,NO.71/IRON/FA ORAL 27 MG-1 MG TABLET
00904533960	PRENATAL PLUS	PNV WITH CA,NO.72/IRON/FA ORAL 27 MG-1 MG TABLET
64376081601	PRENATAL PLUS	PNV WITH CA,NO.72/IRON/FA ORAL 27 MG-1 MG TABLET
64376081605	PRENATAL PLUS	PNV WITH CA,NO.72/IRON/FA ORAL 27 MG-1 MG TABLET
65162066810	PRENATAL PLUS	PNV WITH CA,NO.72/IRON/FA ORAL 27 MG-1 MG TABLET
65162066850	PRENATAL PLUS	PNV WITH CA,NO.72/IRON/FA ORAL 27 MG-1 MG TABLET
10267206901	PRENATAL LOW IRON	PNV WITH CA,NO.74/IRON/FA ORAL 27 MG-1 MG TABLET
10267206905	PRENATAL LOW IRON	PNV WITH CA,NO.74/IRON/FA ORAL 27 MG-1 MG TABLET
42546026903	PRENATAL LOW IRON	PNV WITH CA,NO.74/IRON/FA ORAL 27 MG-1 MG TABLET
42546026910	PRENATAL LOW IRON	PNV WITH CA,NO.74/IRON/FA ORAL 27 MG-1 MG TABLET
13811051690	VOL-TAB RX	PRENATAL VIT #76/IRON,CARB/FA ORAL 29 MG-1 MG TABLET
60258019309	PRENATABS RX	PRENATAL VIT #76/IRON,CARB/FA ORAL 29 MG-1 MG TABLET
13811051410	VOL-NATE	PRENATAL VIT NO.73/IRON/FA ORAL 28 MG-1 MG TABLET
60258019201	TRINATE	PRENATAL VIT NO.73/IRON/FA ORAL 28 MG-1 MG TABLET
10267227001	CO-NATAL FA	PRENATAL VIT NO.78/IRON/FA ORAL 29 MG-1 MG TABLET
13811002610	VENATAL-FA	PRENATAL VIT NO.78/IRON/FA ORAL 29 MG-1 MG TABLET
60258019001	PRENATABS FA	PRENATAL VIT NO.78/IRON/FA ORAL 29 MG-1 MG TABLET
13925011701	SE-NATAL 19	PRENATAL VIT/FE FUMARATE/FA ORAL 29 MG-1 MG TAB CHEW
60258019701	PRENATAL 19	PRENATAL VIT/FE FUMARATE/FA ORAL 29 MG-1 MG TAB CHEW
10267199101	MATERNITY	PRENATAL VIT/FE FUMARATE/FA/SE ORAL 27 MG-1 MG TABLET
51991015501	VINATE-M	PRENATAL VIT/FE FUMARATE/FA/SE ORAL 27 MG-1 MG TABLET
00642007912	VITAFOL-OB	PRENATAL VIT COMB.10/IRON/FA ORAL 65 MG-1 MG TABLET
13925012401	CAVAN-FOLATE OB	PRENATAL VIT COMB.10/IRON/FA ORAL 65 MG-1 MG TABLET
13811052990	TRIADVANCE	PRENATAL VIT 15/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
63044015301	INATAL ADVANCE	PRENATAL VIT 15/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
63044015364	INATAL ADVANCE	PRENATAL VIT 15/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
13811061490	TRINATAL GT	PRENATAL VIT 16/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
51991015990	VINATE GT	PRENATAL VIT 16/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
51991015991	VINATE GT	PRENATAL VIT 16/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
13811000890	COMPLETE-RF PRENATAL	PRENATAL VIT 17/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
13811061510	TRINATAL ULTRA	PRENATAL VIT 18/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
51991015401	VINATE ULTRA	PRENATAL VIT 18/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
63044015401	INATAL ULTRA	PRENATAL VIT 18/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
63044015463	INATAL ULTRA	PRENATAL VIT 18/IRON CB/FA/DSS ORAL 90-1-50 MG TABLET
13811052690	TRI RX	PNV NO.22/IRON CBN&GLUC/FA/DSS ORAL 27-1-50MG TABLET
51991061790	VINACAL	PNV NO.22/IRON CBN&GLUC/FA/DSS ORAL 27-1-50MG TABLET
13811000710	TRINATAL RX 1	PRENATAL VIT27&CALCIUM/IRON/FA ORAL 60 MG-1 MG TABLET
13925010301	SE-NATAL ONE	PRENATAL VIT27&CALCIUM/IRON/FA ORAL 60 MG-1 MG TABLET
51991056601	VINATE ONE	PRENATAL VIT27&CALCIUM/IRON/FA ORAL 60 MG-1 MG TABLET
13925011990	SE-TAN DHA	PNV NO10/IRON FUM&P/FA/OMEGA-3 ORAL 30-1-310.1 CAPSULE
13811053630	TARON-C DHA	PNV NO16/IRON FUM&PS/FA/OMEGA-3 ORAL 35-1-200 CAPSULE

\*Proposed covered products based on current available pricing.

# **Appendix D**

# 30 Day Notice to Prior Authorize Soliris® (eculizumab)

Oklahoma Health Care Authority, February 2012

Under Oklahoma state law, the OHCA DUR Board must review and make recommendations for any drug subject to prior authorization, whether covered under the pharmacy benefit, the medical benefit, or both. Accordingly, physician administered drugs are brought through the same DUR process as those dispensed by pharmacies.

Manufacturer	Alexion Pharmaceuticals, Inc.
FDA Status	Prescription Only
Classification	Monoclonal Antibody

## Recommendations

The College of Pharmacy recommends medical prior authorization of Soliris<sup>®</sup> (eculizumab) with the following approval criteria:

- 1. Established diagnosis of paroxysmal nocturnal hemoglobinuria or atypical hemolytic uremic syndrome via ICD-9 coding in member's medical claims.
- 2. An age restriction of 19 years and older will apply.

# Appendix E

# Vote to Prior Authorize Onfi<sup>™</sup> (Clobazam)

Oklahoma Health Care Authority February 2012

Manufacturer	Catalent Pharmaceuticals for Lundbeck, Inc.
Classification	Benzodiazepine Anti-epileptic
Status	Prescription Only, C-IV

### Recommendations

The College of Pharmacy recommends prior authorization of Onfi<sup>™</sup> (clobazam) with the following approval criteria:

- 1. Diagnosis of generalized tonic, atonic or myoclonic seizures; and
- 2. Previous failure of at least two non-benzodiazepine anticonvulsants; and
- 3. Previous failure of clonazepam

# **Appendix F**

# Fiscal Year 2011 Annual Review of Erythropoietin Stimulating Agents

## Oklahoma Health Care Authority February 2012

## **Current Prior Authorization\* Criteria for ESAs**

- 1. FDA approved indication for specific products.
  - a. Treatment of Anemia of Chronic Renal Failure Patients
  - b. Treatment of Anemia in Zidovudine-treated HIV-infected Patients
  - c. Treatment of Anemia in Cancer Patients on Chemotherapy
    - i. Myelosuppressive Chemotherapy-Induced Anemia (Hb 8-10 g/dL) Non-Curative
  - d. Reduction of Allogeneic Blood Transfusion in Surgery Patients
- 2. Most recent Hb levels (and date obtained) should be included on petition.
  - a. Each approval will be for 16 weeks in duration.
  - b. Authorization can be granted for up to 8 weeks following the final dose of myelosuppressive chemotherapy in a chemotherapy regimen. Authorization for surgery patients will be for a maximum of 4 weeks.

## 3. Continuation Criteria:

- a. Continue dose if Hb is  $\leq 12.0 \text{ g/dL}$ .
- b. If Hb is increasing and approaching 12 g/dL then reduce dose by at least 25%.
- c. If more than 1 g/dL increase (but Hb not greater than upper limits listed below) has occurred in a 2 week period reduce dose by 25 to 50 %.

## 4. Discontinuation Criteria:

- a. ESRD Discontinue treatment if Hb is at or above 13.0 g/dL.
- b. All others Discontinue treatment if Hb is at or above 12 g/dL.
- c. If a minimum increase of 1 g/dL has not been achieved after initial 8 weeks of therapy.

## 5. Reinitiation Criteria:

a. If Hb decreases to  $\leq$  10 g/dL then therapy may be reinitiated at 25 to 50% of the prior dose.

\*Medicare eligible members do not require prior authorization.

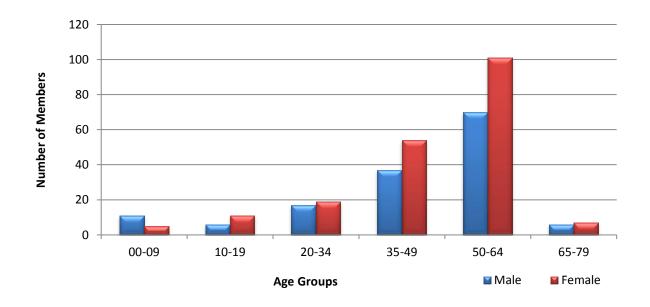
## **Trends in Utilization of ESAs**

Fiscal Year	Members*	Claims	Cost	Cost/ Claim	Units /Claim <sup><sup>∓</sup></sup>
2010	477	9,036	\$2,262,697.86	\$250.41	152.8
2011	352	3,065	\$1,194,646.31	\$389.77	360.4
% Change	-26.21%	-66.08%	-47.20%	55.65%	135.86%
Change	-125	-5,971	-\$1,068,051.55	\$139.36	207.6

\*Some members may be duplicated between pharmacy and medical claims.

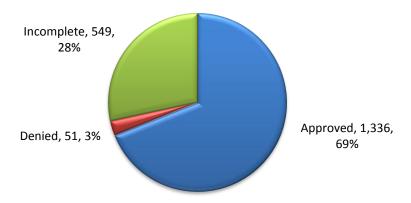
FFor medical billing only, does not include pharmacy claims.

## Demographics of Members Utilizing ESAs during FY2011



## Prior Authorizations of ESAs for FY 2011

The total number of petitions for this category was 1,936. The following chart shows the status of the submitted petitions:



## **Market News and Update**

Anticipated Patent Expirations:

- Epogen<sup>®</sup> and Procrit<sup>®</sup> 2013
- Aranesp<sup>®</sup> 2014 to 2024

June 24, 2011 – the FDA urged more conservative dosing guidelines for ESA products when used to treat anemia in patients with chronic kidney disease (CKD). The new guidelines are being added to the boxed warning and other sections of the package insert. The drug label previously recommended that ESAs should be dosed to achieve and maintain hemoglobin levels within the target range of 10 to 12 g/dL in

CKD patients. This target concept has been removed from the label. Below are the major summary points of the FDA advisory and label changes for the ESA products:

The ESA labels now warn:

- In controlled trials with CKD patients, patients experienced greater risks for death, serious adverse cardiovascular reactions, and stroke when administered ESAs to target a hemoglobin level of greater than 11 g/dL.
- No trial has identified a hemoglobin target level, ESA dose, or dosing strategy that does not increase these risks.

## ESA labels now **recommend**:

For patients with CKD, consider starting ESA treatment when the hemoglobin level is less than 10 g/dL. This advice does not define how far below 10 g/dL is appropriate for an individual to initiate. This advice also does not recommend that the goal is to achieve a hemoglobin of 10 g/dL or a hemoglobin above 10 g/dL. Individualize dosing and use the lowest dose of ESA sufficient to reduce the need for red blood cell transfusions. Adjust dosing as appropriate.

## **Conclusions and Recommendations**

The College of Pharmacy recommends the following changes to the ESA prior authorization criteria:

## **Continuation Criteria:**

- a. Continue dose if Hb is  $\leq 11.0$  g/dL.
- b. If Hb is increasing and approaching **11.0** g/dL then reduce dose.
- c. If more than 1 g/dL increase (but Hb not greater than upper limits listed below) has occurred in a 2 week period reduce dose by 25 to 50 %.

## **Discontinuation Criteria:**

- d. ESRD Discontinue treatment if Hb is at or above 11.0 g/dL.
- e. All others Discontinue treatment if Hb is at or above 11.0 g/dL.
- f. If a minimum increase of 1 g/dL has not been achieved after initial 8 weeks of therapy.

# **Appendix G**

## ANNUAL REVIEW OF NARCOTIC ANALGESICS AND 30 DAY NOTICE TO PRIOR AUTHORIZE ABSTRAL® (FENTANYL) SUBLINGUAL TABLETS, LAZANDA® (FENTANYL) NASAL SPRAY, NUCYNTA® ER (TAPENTADOL), AND OXECTA® (OXYCODONE)

## OKLAHOMA HEALTH CARE AUTHORITY

## FEBRUARY 2012

# CURRENT PRIOR AUTHORIZATION CRITERIA

Narcotic Analgesics						
<u>Tier-1 products</u> are covered with no prior authorization necessary.						
Tier-2 authorization requires:						
<ul> <li>documented 30 day trial/titration period with at least two Tier-1 medications within</li> </ul>						
	the last 90 days, or					
		py requiring time-released medicat	ion			
	zation requires:					
	U	least two Tier-2 medications within	n the last 90 days, or			
		lication to all Tier-2 medications				
		ed diagnosis are exempt from the p				
•		losage limits still apply. Actiq <sup>®</sup> , Fen	tora <sup>®</sup> , and Onsolis <sup>™</sup>			
	proved only for oncology-		.1			
Only or	ne long-acting and one sho	ort-acting agent can be used concur	rently			
Tion 1						
Tier-1	Tier-2	Tier-3	Oncology Only			
	Long Acting					
	fentanyl patch (Duragesic®)	oxymorphone (Opana® ER)				
	morphine ER	morphine sulfate (Kadian®)				
	nioi pinne EK	morphine sulfate (Avinza®)				
		oxycodone (OxyContin®)				
	tramadol ER					
All		(Ultram ER <sup>®</sup> , Ryzolt <sup>®</sup> )				
		morphine and naltrexone				
release		(Embeda <sup>™</sup> )				
narcotics	hydromorphone ER (Exalgo®)					
not listed in	buprenorphine patch					
a higher tier	(Butrans <sup>®</sup> )					
0	Short Acting					
		Hydrocodone/APAP	fentanyl (Actiq®,			
	oxymorphone	(Xodol <sup>®</sup> , Zamicet <sup>®</sup> , Hycet <sup>®</sup> ,	Onsolis™,			
	(Opana <sup>®</sup> )	Zolvit <sup>®</sup> , Liquicet)	Fentora <sup>®</sup> )			
	Tapentadol	oxycodone/APAP	,			
	(Nucynta™)	(Primlev <sup>™</sup> , Xolox <sup>®</sup> )				
	tramadol ODT (Rybix®)					
			·			

# OTHER RESTRICTIONS

## Buprenorphine/naloxone and buprenorphine

- Prescribed by a licensed physician who qualifies for a waiver under the Drug Addiction Treatment Act (DATA) and has notified the Center for Substance Abuse Treatment of the intention to treat addiction patients and has been assigned a DEA (X) number.
- 2. Diagnosis of opiate abuse/dependence.
- 3. Combination with other opioids (including tramadol) will be denied.
- 4. Approval will be for 90 days to allow for concurrent medication monitoring.
- 5. The following limitations will apply:
  - a. **Suboxone**<sup>®</sup> 2mg/0.5mg and 8mg/2mg tablets and film: A quantity limit of 90 per 30 days.
  - b. **Subutex**<sup>®</sup> 2mg tablets and 8mg tablets will only be approved if the member is pregnant (product may be used for the duration of the pregnancy only), or has a documented serious allergy or adverse reaction to naloxone.

# Hydrocodone/APAP

- Quantity limit for a maximum of 3,250mg of APAP per day.
- Annual claim limit of 13 per 365 days.
- Ingredient Duplication ProDUR edit for multiple claims from different physicians.

## **Quantity Limits**

• Quantity limits are also in place for the narcotic products based on the FDA approved dosing. Allowances are made for the highest available dose where applicable.

Fiscal Year	Total	Total	Total	Cost/	Cost/	Total	Total
	Members	Claims	Cost	Claim	Day	Units	Days
2010	144,719	504,380	\$16,581,866.99	\$32.88	\$2.25	32,939,989	7,359,758
2011	152,722	544,741	\$16,975,551.10	\$31.16	\$2.05	36,665,536	8,264,428
% Change	5.5%	8.0%	2.4%	-5.2%	-8.9%	11.3%	12.3%
Change	8,003	40,361	\$393,684.11	-\$1.72	-\$0.20	3,725,547	904,670

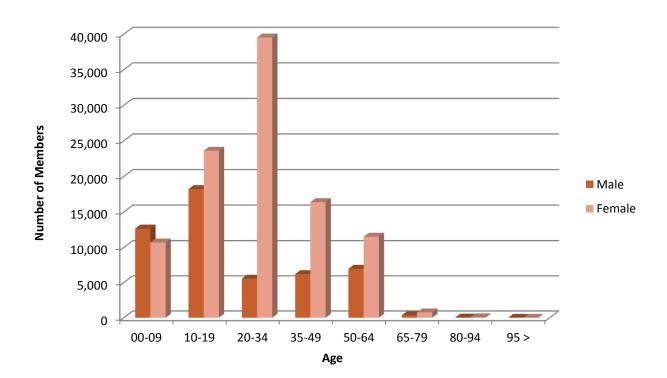
# UTILIZATION FOR FISCAL YEAR 2011

TRENDS IN UTILIZATION

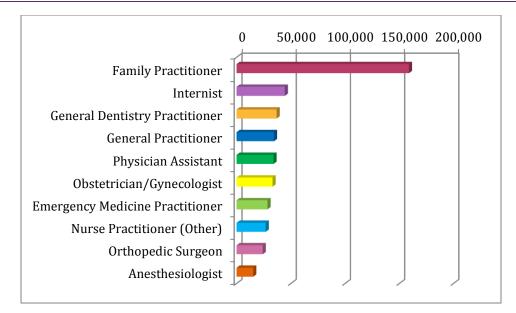
Class	Total	Total	Total	Claims/	Cost/
	Claims	Members	Cost	Member	Day
Hydrocodone Combinations	312,413	104,481	\$3,729,182.80	2.99	\$0.83
Opioid Agonists	115,939	31,093	\$9,993,149.52	3.73	\$3.96
<b>Opioid Combinations</b>	51,608	27,649	\$1,049,830.34	1.87	\$1.64
<b>Codeine Combinations</b>	44,333	31,607	\$407,350.83	1.40	\$1.38
Propoxyphene Combinations	11,021	7,292	\$70,941.68	1.51	\$0.52
<b>Opioid Partial Agonist</b>	5,989	1,428	\$1,621,905.48	4.19	\$11.80
Tramadol Combinations	2,189	1,277	\$44,460.05	1.71	\$1.44
<b>Dihydrocodeine Combinations</b>	1,091	740	\$49,796.47	1.47	\$4.26
Pentazocine Combinations	158	79	\$8,933.93	2.00	\$3.38
	544,741	152,722*	\$16,975,551.10	3.57	\$2.05

## UTILIZATION DETAILS OF NARCOTIC ANALGESICS BY CLASS

\*Unduplicated Members



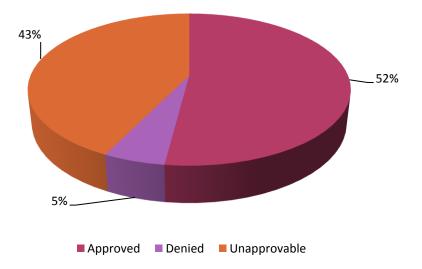
## MEMBER DEMOGRAPHICS



## TOP 10 PRESCRIBERS OF NARCOTIC ANALGESICS BY CLAIMS

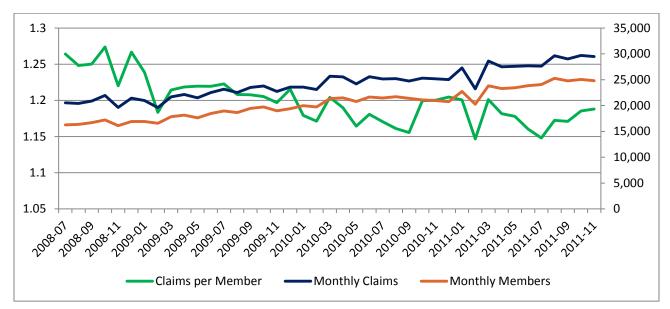
## PRIOR AUTHORIZATION REQUESTS

Most step therapy prior authorization requests for this category are handled through the DUR Plus point-of-sale (POS) prior authorization system. There were a total of 6,238 manual petitions submitted for Narcotic Analgesics during Fiscal Year 2011 for step therapy (that did not meet POS requirements) and quantity limit, ingredient duplication, and claim limit overrides. The following chart shows the status of the submitted petitions.



## HYDROCODONE UTILIZATION

In January 2010, a new edit for hydrocodone use was implemented which only allowed 13 prescriptions per rolling 360 day period. In addition to the use of the ingredient duplication Prospective DUR (ProDUR) module in 2008, the following change to the trend for number of claims per utilizer has been achieved.



# SUBOXONE® (BUPRENORPHINE/ NALOXONE) AND SUBUTEX® (BUPRENORPHINE) REVIEW

In November 2010, the DUR Board approved prior authorization criteria for buprenorphine products which are used to treat opioid addiction. Prior to implementation in May of 2011, review of these medications showed that while the majority of claims were prescribed by the Substance Abuse and Mental Health Services Administration (SAMHSA) certified prescribers, the majority of the prescribers that wrote for at least one claim were non-certified. After implementation, the majority of claims were from certified prescribers.

	Prior to Im	plementation	Post Implementation		
	% SAMHSA	% Not SAMHSA	% SAMHSA	% Not SAMHSA	
	Certified	Certified	Certified	Certified	
Suboxone Claims	85%	15%	97%	3%	
Prescribers	40%	60%	81%	19%	

# **ABSTRAL® (FENTANYL) SUBLINGUAL TABLET**

Abstral<sup>®</sup> (fentanyl) is opioid analgesic indicated only for the management of breakthrough pain in cancer patients, 18 years of age and older, who are already receiving and who are tolerant to opioid therapy for their underlying persistent cancer pain. The tablet should be placed on the floor of the mouth directly under the tongue and allowed to completely dissolve. No more than two doses should be taken during a breakthrough pain event and no more than four episodes per day should be treated. The product is available in 100 mcg, 200 mcg, 300 mcg, 400 mcg, 600 mcg, and 800 mcg sublingual tablets.

# LAZANDA® (FENTANYL) NASAL SPRAY

Lazanda<sup>®</sup> (fentanyl) is an opioid analgesic indicated only for the management of breakthrough pain in cancer patients, 18 years of age and older, who are already receiving and who are tolerant to opioid therapy for their underlying persistent cancer pain. The product is packaged as a 100 mcg or 400 mcg nasal spray and can be dosed up to a maximum of 800 mcg with no more than four doses per 24 hours. Patient must wait at least 2 hours before administering another dose. Each spray bottle contains 5 mL for a total of 8 sprays. Currently this manufacturer does not have a Federal rebate agreement.

# NUCYNTA® ER (TAPENTADOL)

Nucynta<sup>®</sup> ER (tapentadol) is an opioid analgesic indicated for the management of moderate to severe chronic pain in adults when a continuous, around-the-clock opioid analgesic is needed for an extended period of time. It is available in 50 mg, 100 mg, 150 mg, 200 mg, and 250 mg tablets.

# **OXECTA®** (OXYCODONE)

Oxecta<sup>®</sup> (oxycodone) is an opioid analgesic indicated for the management of acute and chronic moderate to severe pain where the use of an opioid analgesic is appropriate. The product will be available in a 5 mg and 7.5 mg tablet and the starting dose is 5 to 15 mg every 4 to 6 hours as needed. Product is not amenable to crushing and dissolution. The product is not expected to start sales until 2012.

The College of Pharmacy recommends continuation of the Narcotic PBPA Category. In addition, the College of Pharmacy recommends placement of the following products in the current Tier structure:

**Abstral®** (fentanyl): to be placed in the Oncology Only Tier with an age restriction of at least 18 years of age and a quantity limit of four tablets daily. Additionally a reason why other forms of fentanyl breakthrough pain therapy cannot be used.

**Lazanda® (fentanyl):** to be placed in the Oncology Only Tier (once a federal rebate is in place) with an age restriction of at least 18 years of age and a quantity limit of 5 mL per month. Additionally a reason why other forms of fentanyl breakthrough pain therapy cannot be used.

**Nucynta® ER (tapentadol):** to be placed in Tier 3 of the Long-Acting Products with an age restriction of at least 18 years of age and a quantity limit of two tablets daily.

**Oxecta® (oxycodone):** to be placed in Tier 3 of the Short-Acting products with a quantity limit of 12 per day.

# **REFERENCES:**

Oxecta<sup>®</sup> Label Information. King Pharmaceuticals, Inc. Available online at: http://labeling.pfizer.com/ShowLabeling.aspx?id=620. Last revised June 2011.

Abstral<sup>®</sup> Label Information. ProStrakan, Inc. Available online at: http://www.abstral.com/pdfs/ABSTRAL-PI-Med-Guide.pdf. January 2011.

Lazanda<sup>®</sup> Label Information. Archimedes Pharma US, Inc. Available online at: http://www.lazanda.com/common/pdfs/Lazanda\_Prescribing\_Information.pdf. Revised June 2011.

Nucynta<sup>®</sup> ER Label Information. Janssen Pharmaceuticals, Inc. Available online at: http://www.nucynta.com/sites/default/files/pdf/nucyntaer-pi.pdf#zoom=100. August 2011.

# **Appendix H**

# 30 Day Notice to Prior Authorize Xgeva® (Denosumab)

# Oklahoma Health Care Authority February 2012

Under Oklahoma state law, the OHCA DUR Board must review and make recommendations for any drug subject to prior authorization, whether covered under the pharmacy benefit, the medical benefit, or both. Accordingly, physician administered drugs are brought through the same DUR process as those dispensed by pharmacies.

Manufacturer	Amgen Manufacturing Limited
Classification	Monoclonal antibody
Status	Prescription Only

#### Summary

Denosumab is a monoclonal antibody which functions as a RANKL (Receptor Activator of Nuclear factor-Kappa B Ligand) inhibitor, and is indicated for the prevention of skeletal-related events in patients with bone metastases from solid tumors. However, it is not indicated at this time for the prevention of skeletal-related events in patients with multiple myeloma. Denosumab is supplied as a single-use vial containing 120 mg/1.7 mL (70 mg/mL). It should be administered at a dose of 120 mg every 4 weeks as a subcutaneous injection in the upper arm, upper thigh, or abdomen and is given by a health professional.

Pre-existing hypocalcemia is a contraindication to treatment with denosumab and should be corrected before initiating therapy. Also, severe hypocalcemia may occur in patients receiving denosumab so it is important to monitor calcium levels and adequately supplement all patients with calcium and vitamin D. Also, osteonecrosis of the jaw can occur in patients receiving denosumab. Patients should have an oral evaluation before beginning treatment with denosumab, and should avoid invasive dental procedures during treatment.

The most common adverse reactions in patients receiving denosumab were fatigue/asthenia, hypophosphatemia, and nausea. The most common serious adverse reaction was dyspnea, and the most common adverse reactions resulting in discontinuation were osteonecrosis and hypocalcemia.

#### Pathophysiology:

RANKL (Receptor Activator of Nuclear factor-Kappa B Ligand) has an important role in bone destruction because it controls osteoclast formation, function, and survival. Osteoclasts, the cells which are responsible for resorbing bone, have the RANK receptor on their surface. When RANKL binds to the RANK receptor, this stimulates the formation of mature osteoclasts and begins the process of bone resorption. Excess RANKL activity has been implicated in the pathology of bone diseases, and many factors such as estrogen deficiency, glucocorticoid exposure, T-cell activation, and skeletal malignancies are known to enhance RANKL and promote osteoclastogenesis and therefore induce bone loss. Denosumab binds to RANKL and prevents this stimulation of osteoclasts, resulting in decreased bone resorption.

# Clinical studies:

- 1. Denosumab was superior to zoledronic acid for delay of time to first skeletal-related event (SRE) in patients with bone metastasis from advanced breast cancer in an international, randomized, double-blind, active-controlled, phase 3, noninferiority trial (n=2046)
- 2. Denosumab was found to be superior to zoledronic acid for delay of time to first SRE in men with bone metastasis from castrate-resistant prostate cancer (n=1901), and it was noninferior to zoledronic acid in delaying time to first SRE in patients with solid tumors other than breast and castrate-resistant prostate cancer with bone metastasis and multiple myeloma (n=1776).
- 3. Denosumab was superior to zoledronic acid for delay of time to first SRE by 3.6 months in men with bone metastasis from castrate-resistant prostate cancer in an international, randomized, double-blind, double-dummy, active-controlled trial (n=1901).

# Treatment costs:

A 120 mg vial of denosumab costs approximately \$1,740. For therapy given every 4 weeks, the cost would be about \$22,620/year (13 injections).

# Recommendations

The College of Pharmacy recommends medical prior authorization of Xgeva® (denosumab) for medical claims with the following criteria:

1. FDA approved indication of prevention of skeletal-related events in patients with bone metastases from solid tumors.

# **Product Information**

#### FDA APPROVED INDICATIONS

- As Xgeva<sup>®</sup>, denosumab is indicated for the prevention of skeletal-related events in patients with bone metastases from solid tumors.
- It has other FDA approved indications as Prolia<sup>®</sup> (denosumab).

### DOSAGE FORM AND ROUTE OF ADMINISTRATION

- Denosumab is supplied in a single-use preservative free 1.7mL vial containing 120mg of denosumab. Other ingredients include sorbitol, acetate, and sodium hydroxide to a pH of 5.2.
- It is a clear, colorless to pale yellow solution that may contain trace amounts of translucent to white proteinaceous particles.
- It is administered subcutaneously.

# DOSING AND DOSE ADJUSTMENTS

- The recommended dose of Xgeva<sup>®</sup> is 120mg administered as a subcutaneous injection every 4 weeks in the upper arm, upper thigh, or abdomen. Administer calcium and vitamin D as necessary to treat or prevent hypocalcemia.
- No adjustments are needed with renal impairment. Caution is advised due to an increased risk of hypocalcemia in patients with renal impairment.
- No clinical trials have been conducted to evaluate the effect of hepatic impairment on the pharmacokinetics of denosumab.

#### CONTRAINDICATIONS

• No contraindications are listed in the manufacturer's labeling.

# SPECIAL POPULATIONS

- Pregnancy Category C. There are no adequate/well-controlled trials of denosumab in pregnant women.
- Nursing mothers: It is not known if denosumab is excreted in human milk, therefore use during lactation should be avoided if possible.
- Pediatric use: The safety and effectiveness of denosumab in pediatric patients have not been established. Treatment with denosumab may impair bone growth in children with open growth plates and may inhibit eruption of dentition.
- Geriatric use: 44% of patients in clinical trials of denosumab were ≥65y/o. No differences in safety of efficacy of denosumab were observed.
- Renal Impairment: Patients with a creatinine clearance of <30mL/min have an increased risk of severe hypocalcemia. Dose adjustment is not needed.

#### WARNINGS AND PRECAUTIONS

- Hypocalcemia: Denosumab can cause severe hypocalcemia. This risk is increased in patients with a creatinine clearance of <30mL/min. Pre-existing hypocalcemia should be corrected prior to starting denosumab.
- Osteonecrosis of the Jaw (ONJ) can occur in patients receiving denosumab. It manifests as jaw pain, osteomyelitis, osteitis, bone erosion, tooth or periodontal infection, toothache, and gingival ulceration/erosion. In clinical trials, 2.2% of patients receiving denosumab developed

ONJ; of these patients, 79% had a history of tooth extraction, poor oral hygiene, or use of a dental appliance

# **ADVERSE REACTIONS**

- The most common adverse reactions in patients receiving denosumab (per-patient incidence ≥ 25%) were fatigue/asthenia, hypophosphatemia, and nausea.
- The most common adverse reactions resulting in discontinuation of denosumab were osteonecrosis (1.8%) and hypocalcemia (18%).
- Severe hypocalcemia (corrected serum calcium less than 7 mg/dL or less than 1.75 mmol/L) occurred in 3.1% of patients treated with denosumab and 1.3% of patients treated with zoledronic acid. Of patients who experienced severe hypocalcemia, 33% experienced 2 or more episodes of severe hypocalcemia and 16% experienced 3 or more episodes.
- Severe hypophosphatemia (serum phosphorus less than 2 mg/dL or less than 0.6 mmol/L) occurred in 15.4% of patients treated with denosumab and 7.4% of patients treated with zoledronic acid.

# DRUG INTERACTIONS

- No formal drug interaction trials have been conducted with denosumab
- Prior bisphosphonate therapy does not seem to affect bone turnover rates at 3 months
- No evidence demonstrates an interaction between concomitant chemotherapy and/or hormone therapy and denosumab

### PATIENT COUNSELING INFORMATION

- Do not use Prolia<sup>®</sup> (denosumab) if you are taking Xgeva<sup>®</sup> (denosumab). These medications contain the same active ingredient.
- Denosumab can cause serious hypocalcemia, infections, and skin problems such as an itching rash. Contact a health care professional if the rash does not go away.
- Contact a health care profession if the patient experiences any of the following symptoms:
  - Spasms, twitches, or cramps in your muscles
  - Numbness or tingling in your fingers, toes, or around your mouth
  - Signs of an infection (fever, chills, severe abdominal pain, burning urination)
  - Severe jaw pain

#### **References:**

- 1. Xgeva<sup>®</sup> (denosumab) prescribing information. Thousand Oaks, CA: Amgen Inc. November 2010.
- 2. Denosumab Monograph. Lexi-Comp Online, Lexi-Drugs Online, Hudson, Ohio: Lexi-Comp, Inc. Accessed 1/6/12.

# **Appendix I**

# 30 Day Notice to Prior Authorize Makena™ (Hydroxyprogesterone Caproate)

#### Oklahoma Health Care Authority, February 2012

Under Oklahoma state law, the OHCA DUR Board must review and make recommendations for any drug subject to prior authorization, whether covered under the pharmacy benefit, the medical benefit, or both. Accordingly, physician administered drugs are brought through the same DUR process as those dispensed by pharmacies.

#### **Product Summary**

#### Makena<sup>™</sup> (hydroxyprogesterone caproate) - FDA approved in February 2011

According to the National Institute of Child Health and Human Development, 12%, or 1 in 8 babies is born prematurely, before 37 weeks gestation<sup>1</sup>. The March of Dimes reports that the premature birth rate has increased by 36% in the last 25 years<sup>2</sup>.

Makena<sup>™</sup> is an intramuscular injectable product to be administered by a healthcare provider. It is indicated to reduce the risk of preterm delivery before 37 weeks gestation for women who have a history of one spontaneous preterm delivery. It is dosed once weekly starting between 16 and 21 weeks gestation and continuing until 37 weeks gestation or delivery, whichever is first. The cost per dose is \$705.00.

#### Utilization Data – 7/2011-12/2011

Drug	Claims	Members	Doses	Cost
Hydroxyprogesterone caproate (Makena™) 250 mg/ml	16	5	17	\$11,985

#### **Recommendations**

The College of Pharmacy recommends medical prior authorization of this medication.

#### Criteria for Approval for Makena™

- 1. Documented history of previous singleton spontaneous preterm delivery (SPTD) prior to 37 weeks gestation; and
- 2. Current singleton pregnancy; and
- 3. Gestational age between 16 weeks, 0 days and 20 weeks, 6 days of gestation.
- 4. Authorizations will be for once a week administration in an office setting through 36 weeks, 6 days of gestation.

# **PRODUCT DETAILS OF MAKENA™ (HYDROXYPROGESTERONE)**

**INDICATIONS:** Makena<sup>™</sup> is a progestin indicated to reduce the risk of preterm birth in women with a singleton pregnancy with a history of singleton spontaneous preterm birth. Makena<sup>™</sup> is not intended for use in women with multiple gestations or other risk factors for preterm birth.

**DOSAGE FORMS:** 5 mL multidose vial (250 mg/mL) containing 1,250mg hydroxyprogesterone caproate.

# ADMINISTRATION:

- Administer intramuscularly at a dose of 250 mg (1 mL) once weekly
- Begin treatment between 16 weeks, 0 days and 20 weeks, 6 days of gestation
- Continue administration once weekly until week 37 (through 36 weeks, 6 days) of gestation or delivery, whichever occurs first

# **CONTRAINDICATIONS:**

- Current or history of thrombosis or thromboembolic disorders
- Known or suspected breast cancer, other hormone-sensitive cancer, or history of these conditions
- Undiagnosed abnormal vaginal bleeding unrelated to pregnancy
- Cholestatic jaundice of pregnancy
- Liver tumors, benign or malignant, or active liver disease
- Uncontrolled hypertension

# **SPECIAL POPULATIONS:**

Pregnancy: Controlled studies show no increase in congenital anomalies, including genital abnormalities in male or female infants, from exposure during pregnancy to hydroxyprogesterone caproate.

#### WARNINGS & PRECAUTIONS:

- Thromboembolic disorders: Discontinue if thrombosis or thromboembolism occurs
- Allergic reactions: Consider discontinuing if allergic reactions occur
- Decreased glucose tolerance: Monitor prediabetic and diabetic women receiving Makena<sup>™</sup>
- Fluid retention: Monitor women with conditions that may be affected by fluid retention, such as preeclampsia, epilepsy, cardiac or renal dysfunction
- **Depression:** Monitor women with a history of clinical depression; discontinue Makena<sup>™</sup> if depression recurs

ADVERSE REACTIONS (Reported in >2% over placebo): injection site reactions including

- pain [35%]
- swelling [17%]
- nodule [5%])
- urticaria (12%)

- pruritus (8%)
- nausea (6%)
- diarrhea (2%)
- **DRUG INTERACTIONS:** No drug-drug interaction studies were conducted with Makena<sup>™</sup>. Metabolism of drugs metabolized by CYP1A2, CYP2A6 and CYP2B6 may be increased if used with Makena<sup>™</sup>. The following are examples of drugs metabolized via those pathways.
  - CYP1A2 (theophylline, tizanidine, clozapine)
  - CYP2A6 (acetaminophen, halothane, nicotine)

• CYP2B6 (efavirenz, bupropion, methadone)

# PATIENT INFORMATION:

Counsel patients that Makena<sup>™</sup> injections may cause pain, soreness, swelling, itching or bruising. Inform the patient to contact her physician if she notices increased discomfort over time, oozing of blood or fluid, or inflammatory reactions at the injection site. Counsel patients to tell her doctor if she's had or have any of the following:

- Blood clots or other blood clotting problems
- Breast cancer or other hormone-sensitive cancers
- Unusual vaginal bleeding not related to your current pregnancy
- Yellowing of your skin due to liver problems during your pregnancy
- Liver problems, including liver tumors
- Uncontrolled high blood pressure
- Allergy to hydroxyprogesterone caproate, castor oil, or other ingredients in Makena™
- Diabetes or prediabetes
- Epilepsy
- Migraine headaches
- Asthma
- Heart problems
- Kidney problems
- Depression
- High blood pressure

**Tell the patient to not give yourself Makena™ injections.** A healthcare professional will give the patient Makena™ injection into the hip area. Tell the patient Makena™ may cause serious side effects, including:

- **Blood clots**. Symptoms of a blood clot may include:
  - Leg swelling
  - Redness in your leg
  - A spot on your leg that is warm to touch
  - Leg pain that worsens when you bend your foot
- Allergic reactions. Symptoms of an allergic reaction may include:
  - Hives
  - Itching
  - Swelling of the face

#### REFERENCES

<sup>1</sup> Eunice Kennedy Shriver National Institute of child Health & Human Development Preterm Labor and Birth. Available online at: <u>http://www.nichd.nih.gov/health/topics/Preterm\_Labor\_and\_Birth.cfm</u>

<sup>2</sup>March of Dimes Prematurity Campaign. Available on line at: <u>http://www.marchofdimes.com/mission/prematurity.html</u>

<sup>3</sup>Makena Product Information. Ther-Rx Corporation. Available online at: <u>http://makena.com//media/PDFs/full-pi.pdf</u> Last revised February 2011.

# **Appendix J**

# Annual Review of Mozobil<sup>®</sup> (plerixafor), Nplate<sup>®</sup> (romiplostim), Arcalyst<sup>®</sup> (rilonacept), and Ilaris<sup>®</sup> (canakinumab)

Oklahoma HealthCare Authority February 2012

Under Oklahoma state law, the OHCA DUR Board must review and make recommendations for any drug subject to prior authorization, whether covered under the pharmacy benefit, the medical benefit, or both. Accordingly, physician administered drugs are brought through the same DUR process as those dispensed by pharmacies.

# **Current Prior Authorization Criteria**

# Mozobil<sup>®</sup> (plerixafor, J2562) criteria for approval:

- FDA approved indication of use in combination with granulocyte-colony stimulating factor (G-CSF) to mobilize hematopoietic stem cells to the peripheral blood for collection and subsequent autologous transplantation in patients with non-Hodgkin's lymphoma (NHL) and multiple myeloma (MM).
- 2. MUST have a cancer diagnosis of non-Hodgkins's lymphoma (NHL) or multiple myeloma (MM). This medication is NOT covered for the diagnosis of leukemia.
- 3. Prescribed by an oncologist only.
- 4. Patient must be at least 18 years of age.
- 5. Must be given in combination with the granulocyte-colony stimulating factor (G-CSF) Neupogen<sup>®</sup> (filgrastim).
- 6. Dosing (requires current body weight in kilograms):
  - a. Recommended dose is 0.24 mg/kg, maximum dose is 40mg/day, administered 11 hours prior to apheresis for up to 4 consecutive days. (USE ACTUAL BODY WEIGHT).
  - b. Dosing for renal impairment:
    - i. Creatinine clearance  $\leq$  50 mL/min: 0.16 mg/kg, maximum of 27 mg/day.
- 7. Approval period will be for two months

# Nplate<sup>®</sup> (romiplostim, J2796) criteria for approval:

- 1. FDA approved indication of chronic immune (idiopathic) thrombocytopenia purpura (ITP).
- 2. Previous insufficient response with at least two of the following treatments: corticosteroids, immunoglobulins, or splenectomy
- 3. Recent platelet count of  $< 50 \times 10^9$ /L
- 4. Initial dosing of 1 mcg/kg once weekly as a subcutaneous injection with recent patient weight in kilograms provided
- 5. Continuation criteria:
  - a. Weekly CBCs with platelet count and peripheral blood smears until stable platelet count
     (≥ 50 x 109/L for at least 4 weeks without dose adjustment) has been achieved; then obtain monthly thereafter
  - b. Dosing adjustments:
    - i. Platelets <  $50 \times 10^9$ /L, increase dose by 1 mcg/kg
    - ii. Platelets >  $200 \times 10^9$ /L for 2 consecutive weeks, reduce dose by 1 mcg/kg

iii. Platelets > 400 x  $10^9$ /L, do not dose. Continue to assess platelet count weekly. When platelets < 200 x  $10^9$ /L, resume at a dose reduced by 1 mcg/kg

# 6. Discontinuation criteria:

- a. Platelet count does not increase to a level sufficient to avoid clinically important bleeding after 4 weeks of therapy at the maximum weekly dose of 10 mcg/kg
- 7. Approval period will be for four weeks initially, and then quarterly.

# Arcalyst<sup>®</sup> (rilonacept, J2793) criteria for approval:

- FDA approved indication of Cryopyrin-Associated Periodic Syndromes (CAPS) verified by genetic testing. This includes Familial Cold Auto-inflammatory Syndrome (FCAS) and Muckle-Wells Syndrome (MWS) in adults and children 12 and older.
- 2. The member should not be using a tumor necrosis factor blocking agent (e.g. adalimumab, etanercept, and infliximab) or anakinra
- 3. Should not be initiated in patients with active or chronic infection including hepatitis B, hepatitis C, human immunodeficiency virus, or tuberculosis.
- 4. Dosing should not be more often than once weekly.
- 5. Approved dosing schedule for adults 18 and over:
  - a. Initial treatment: loading dose of 320 mg delivered as two 2mL subcutaneous injections of 160 mg each given on the same day at two different injection sites.
  - b. Continued treatment is one 160 mg injection given once weekly.
- 6. Approved dosing schedule for pediatric patients aged 12-17 years (must have patient weight in kilograms):
  - a. Initial treatment: loading dose of 4.4 mg/kg, up to a maximum of 320 mg, delivered as one or two subcutaneous injections with a maximum single-injection volume of 2mL.
  - b. Continued treatment is 2.2 mg/kg, up to a maximum of 160 mg, given once weekly.
- 7. Approval period is for one year.

# Ilaris<sup>®</sup> (canakinumab, J0638) criteria for approval:

- FDA approved indication of Cryopyrin-Associated Periodic Syndromes (CAPS) verified by genetic testing. This includes Familial Cold Auto-inflammatory Syndrome (FCAS) and Muckle-Wells Syndrome (MWS) in adults and children 4 and older.
- 2. The member should not be using a tumor necrosis factor blocking agent (e.g. adalimumab, etanercept, and infliximab) or anakinra
- 3. Should not be initiated in patients with active or chronic infection including hepatitis B, hepatitis C, human immunodeficiency virus, or tuberculosis.
- 4. Dosing should not be more often than once every 8 weeks.
- 5. Approved dosing schedule based on weight:
  - a. Body weight >40 kg: 150mg
  - b. Body weight 15 kg 40 kg: 2mg/kg. If inadequate response, may be increased to 3mg/kg
- 6. Approval period is for one year.

# Medical Claims for Fiscal Year 2011

Drug	Members	Claims	Cost	Cost/Claim	Perdiem	Units	Days
Nplate®	1	3	\$5,496.75	\$1,832.25	\$61.08	125	90
Nplate®	1	6	\$8,267.27	\$1,377.88	\$137.79	187	60
Totals:	2	9	\$13,764.02	\$1,529.34	\$91.76	312	150

# Demographics of Members Utilizing Physician-Administered Drugs: FY 2011

- **1.** Female, age 57, diagnosis of thrombocytopenia, unspecified. Also a diagnosis of chronic hepatitis C in history.
- **2.** Female, age 5, diagnosis of thrombocytopenia, unspecified. Also a diagnosis of coagulation and hemorrhagic disorders.

# Prescribers of Physician-Administered Drugs by Number of Claims: FY 2011

- 1. Internal medicine- Hematology & Oncology
- 2. Pediatrics- Pediatric-Hematology-Oncology

# Market News and Updates

- December 2011: The FDA has dropped requirements that anyone using, prescribing, or providing romiplostim enroll in a monitoring network.
  - The warnings and precautions sections of the product labels have been updated to reflect the current understanding of the safety of the drugs.
- Regeneron Pharmaceuticals announced on November 22, 2011 that the FDA has accepted for review the company's supplemental biologics license application for Arcalyst<sup>®</sup> injection for subcutaneous use for the prevention of gout flares in patients initiating uric acid–lowering therapy. The agency's decision is expected by the end of July 2012.
- Phase II and III trials have shown that canakinumab was well tolerated and safe in children with systemic juvenile idiopathic arthritis. Novartis plans to file for regulatory approval of the drug in SJIA in 2012.

# **Conclusion and Recommendations**

The College of Pharmacy recommends no changes to this category at this time.

# Appendix K

# Pfizer Announces Voluntary Nationwide Recall of Lo/Ovral®-28 and Norgestrel/Ethinyl Estradiol Tablets Due to Possibility of Inexact Tablet Counts or Out of Sequence Tablets

January 31, 2012 - NEW YORK, N.Y. – Pfizer Inc. announced today that it has voluntarily recalled 14 lots of Lo/Ovral®-28 (norgestrel and ethinyl estradiol)Tablets and 14 lots of Norgestrel and Ethinyl Estradiol Tablets (generic) for customers in the U.S. market. An investigation by Pfizer found that some blister packs may contain an inexact count of inert or active ingredient tablets and that the tablets may be out of sequence. The cause was identified and corrected immediately.

Lot numbers of affected packs of Lo/Ovral®-28 (norgestrel and ethinyl estradiol)Tablets and Norgestrel and Ethinyl Estradiol Tablets (generic) can be found at

http://www.fda.gov/Safety/Recalls/ucm289770.htm

FDA approves new treatment for most common type of skin cancer

Today, Erivedge (vismodegib) was approved by the U.S. Food and Drug Administration to treat adult patients with basal cell carcinoma, the most common type of skin cancer. The drug is intended for use in patients with locally advanced basal cell cancer who are not candidates for surgery or radiation and for patients whose cancer has spread to other parts of the body (metastatic).

Erivedge, reviewed under the agency's priority review program, is the first FDA-approved drug for metastatic basal cell carcinoma. Erivedge was reviewed under the FDA's priority review program that provides for an expedited six-month review of drugs that may offer major advances in treatment. The drug is being approved ahead of the March 8, 2012 prescription user fee goal date.

Erivedge is a pill taken once a day and works by inhibiting the Hedgehog pathway, a pathway that is active in most basal cell cancers and only a few normal tissues, such as hair follicles.

Erivedge is being approved with a BOXED WARNING alerting patients and health care professionals of the potential risk of death or severe birth effects to a fetus (unborn baby). Pregnancy status must be verified prior to the start of Erivedge treatment. Male and female patients should be warned about these risks and the need for birth control.

FDA approves Gleevec for expanded use in patients with rare gastrointestinal cancer Confirmatory trials show significantly prolonged survival in patients; drug granted regular approval

The U.S. Food and Drug Administration today granted Gleevec (imatinib) regular approval for use in adult patients following surgical removal of CD117-positive gastrointestinal stromal

tumors (GIST). Today's action also highlights an increase in overall patient survival when the drug is taken for 36 months rather than the standard 12 months of treatment.

Gleevec was originally granted accelerated approval for the treatment of advanced or metastatic GIST in 2002. In 2008 Gleevec received a subsequent accelerated approval for adjuvant use that is for the treatment of patients with GIST who had had potentially curative resection (surgical removal) of GIST tumors, but who were at increased risk for a recurrence. The accelerated approval program provides earlier patient access to promising new drugs while the confirmatory clinical trials are being conducted. Regular approval for the metastatic GIST indication was also granted in 2008.

Gleevec is a pill that should be taken with a meal and a glass of water.

Gleevec was first approved by FDA in May 2001 to treat patients with advanced Philadelphia chromosome positive chronic myeloid leukemia, a blood and bone marrow disease linked to a genetic abnormality.

Current Drug Safety Communications (<u>http://www.fda.gov/Drugs/DrugSafety/ucm199082.htm</u>)

- i <u>Tysabri New risk factor for Progressive Multifocal Leukoencephalopathy (PML) associated with</u> <u>Tysabri (natalizumab)<sup>5</sup></u> 1/20/2012
- Adcetris New Boxed Warning and Contraindication for Adcetris (brentuximab vedotin)<sup>6</sup> 1/13/2012
- i <u>CardioGen-82 Update: Preliminary findings from ongoing investigations of CardioGen-82</u><sup>7</sup> 1/12/2012
- Acetaminophen Addition of another concentration of liquid acetaminophen marketed for <u>infants</u><sup>8</sup> 12/22/2011
- i <u>Gilenya Safety review of a reported death after the first dose of Multiple Sclerosis drug Gilenya</u> (fingolimod)<sup>9</sup> 12/20/2011