# Drug Utilization Review Board

Oklahoma Health Care Authority

4545 N. Lincoln Suite 124

Oklahoma City, Oklahoma 73105

OHCA Board Room

October 11, 2006

@ 6:00 p.m.

THE UNIVERSITY OF OKLAHOMA

THE UNIVERSITY OF OKLAHOMA

# MEMORANDUM

**TO:** Drug Utilization Review Board Members

**FROM:** Shellie Gorman, Pharm.D.

**SUBJECT:** **Packet Contents for Board Meeting – October 11, 2006**

**DATE:** October 4, 2006

**NOTE:** **THE DUR BOARD WILL MEET AT 6:00 P.M.**

Enclosed are the following items related to the October 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 Zorbtive™ and Omnitrope™ – **See Appendix C.**

**Action Item** – Vote to Prior Authorize Increlex™ and Iplex™ – **See Appendix D.**

**Action Item** – Vote to Prior Authorize Zanaflex Capsules – **See Appendix E.**

30 Day Notice to Prior Authorize Fortament® – **See Appendix F.**

**Action Item** – Annual Review of Anti-Ulcers/PPIs – **See Appendix G.**

Utilization Review of Beta-Blockers – **See Appendix H.**

Utilization Review of Flu Medications – **See Appendix I.**

New Products – **See Appendix J.**

FDA and DEA Updates – **See Appendix K.**

Future Business

Adjournment

# Drug Utilization Review Board

(DUR Board)

**Meeting – October 11, 2006 @ 6:00p.m.**

Oklahoma Health Care Authority
4545 N. Lincoln Suite 124
Oklahoma City, Oklahoma 73105
**Oklahoma Health Care Authority Board Room**

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## AGENDA

Discussion and Action on the Following Items:

Items to be presented by Dr. McNeill, Chairman:

**1. Call To Order**

A. Roll Call – Dr. Graham

Items to be presented by Dr. McNeill, Chairman:

**2. Public Comment Forum**

A. Acknowledgment of Speakers and Agenda Item

Items to be presented by Dr. McNeill, Chairman:

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

A. September 13, 2006 DUR Minutes – Vote
B. September 13, 2006 DUR Recommendations Memorandum
C. Provider Correspondence

Items to be presented by Dr. Flannigan, Dr. McNeill, Chairman:

**4. Update on DUR/MCAU Program – See Appendix B.**

A. Retrospective Drug Utilization Review for May 2006
B. Retrospective Drug Utilization Review Response for March 2006
C. Medication Coverage Activity Audit for September 2006
D. Help Desk Activity Audit for September 2006

Items to be presented by Dr. Moore, Dr. McNeill, Chairman:

**5. Action Item – Vote to Prior Authorize Zorbtive™ and Omnitrope™ – See Appendix C.**

A. Product Summaries
B. COP Recommendations

Items to be presented by Dr. Moore, Dr. McNeill, Chairman

**6. Action Item – Vote to Prior Authorize Increlex™ and Iplex™ – See Appendix D.**

A. Product Summaries
B. COP Recommendations

Items to be presented by Dr. Browning, Dr. McNeill, Chairman:

**7. Action Item – Vote to Prior Authorize Zanaflex Capsules™ – See Appendix E.**

A. Product Summary
B. COP Recommendations

Items to be presented by Dr. Gorman, Dr. McNeill, Chairman

**8. 30 Day Notice to Prior Authorize Fortamet® – See Appendix F.**

A. Product Summary
B. COP Recommendations

Items to be presented by Dr. Chonlahan, Dr. McNeill, Chairman

**9. Action Item - Annual Review of Anti-Ulcer / PPIs – See Appendix G.**

A. Background
B. Clinical Literature Update
C. Beta-Blocker Utilization
D. Prevalence and Therapy Review
E. COP Recommendations

Items to be presented by Dr. Chonlahan, Dr. Gorman, Dr. McNeill, Chairman

**10. Utilization Review of Beta-Blockers – See Appendix H.**

A. Current Prior Authorization Criteria
B. Utilization Review
C. COP Recommendations

Items to be presented by Dr. Flannigan, Dr. McNeill, Chairman:

**11. Utilization Review of Flu Medications – See Appendix I.**

A. Definitions
B. CDC Recommendations
C. Utilization Reviews
D. COP Recommendation
E. Tables and Charts

Items to be presented by Dr. Gorman, Dr. McNeill, Chairman:

**12. New Product Reviews – See Appendix J.**

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

**14. Future Business**

A. Hemophilia Utilization Review
B. Topical Products Utilization Review
C. Annual Reviews
D. New Product Reviews and 30 Day Notices

**15. Adjournment**

# APPENDIX A

# OKLAHOMA HEALTH CARE AUTHORITY
# DRUG UTILIZATION REVIEW BOARD MEETING
# MINUTES of MEETING of SEPTEMBER 13, 2006

| BOARD MEMBERS: | PRESENT | ABSENT |
|---|---|---|
| Brent Bell, D.O., D.Ph. | X | |
| Mark Feightner, D.Ph. | | X |
| Dorothy Gourley, D.Ph. | | X |
| Anetta Harrell, D.Ph. | X | |
| Kyle Hrdlicka, D.O. | | X |
| Dan McNeill, Ph.D., PA-C; Chairman | X | |
| Cliff Meece, D.Ph., Vice-Chairman | X | |
| John Muchmore, M.D. | X | |
| James Rhymer, D.Ph | X | |

| COLLEGE of PHARMACY STAFF: | PRESENT | ABSENT |
|---|---|---|
| Leslie Browning, D.Ph./PA Coordinator | X | |
| Metha Chonlahan, D.Ph./Clinical Pharmacist | X | |
| Karen Egesdal, D.Ph./SMAC-ProDUR Coordinator/OHCA Liaison | X | |
| Kelly Flannigan, Pharm.D../Operations Manager | X | |
| Shellie Gorman, Pharm.D./DUR Manager | X | |
| Ronald Graham, D.Ph./Pharmacy Director | X | |
| Chris Le, Pharm.D., Clinical Pharmacist/Coordinator | | X |
| Carol Moore, Pharm.D., Clinical Pharmacist | X | |
| Neeraj Patel, Pharm.D., Clinical Pharmacist | X | |
| Lester A. Reinke, Ph.D. | | X |
| Visiting Pharmacy Students: Brenda Hoang, Caroline Nguyen | X | |

| OKLAHOMA HEALTH CARE AUTHORITY STAFF: | PRESENT | ABSENT |
|---|---|---|
| Alex Easton, M.B.A./ Pharmacy Operations Manager | | X |
| Mike Fogarty, J.D., M.S.W./Chief Executive Officer | | X |
| Lynn Mitchell, M.D., M.P.H/Director of Medical Services | X | |
| Nancy Nesser, Pharm.D., J.D./Pharmacy Director | X | |
| Howard Pallotta, J.D./Director of Legal Services | | X |
| Lynn Rambo-Jones, J.D./Deputy General Counsel III | X | |
| Rodney Ramsey/Drug Reference Coordinator | X | |
| Jill Ratterman, D.Ph./Pharmacy Specialist | X | |

**OTHERS PRESENT:**

| | | |
|---|---|---|
| Brevan Fulkerson, MedImmune | Curtis Krause, MedImmune | Lance Burcham, MedImmune |
| Jim Delatte, Takeda | Fred Morse, BMS | Steve Higgins, TAP Pharmaceuticals |
| Lance Stewart, Merck | Melissa Johnson, OSMA | Nancy Hudson, Pfizer |
| Jorge Nassar, BMS | Jim Fowler, Astra Zeneca | Albert Appiat, Pfizer |

**PRESENT FOR PUBLIC COMMENT:**

Ashley Kunzman, MedImmune Inc. Agenda Item No. 7

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

**1A: Roll Call**

Dr. Meece called the meeting to order. Roll call by Dr. Graham established the presence of a quorum.

**ACTION:** NONE REQUIRED.

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

Ashley Kunzman, MedImmune Inc.; for Agenda Item No. 7.

**ACTION:** NONE REQUIRED.

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

**3A: July 12, 2006 DUR Minutes**

Dr. Meece moved to approve minutes as submitted; seconded by Dr. Harrell.

**ACTION:** MOTION CARRIED.

**AGENDA ITEM NO. 4:** **UPDATE ON DUR/MCAU PROGRAM**

**4A: Retrospective Drug Utilization Review Report: April 2006**
**4B: Retrospective Drug Utilization Review Response: February 2006**
**4C: Medication Coverage Activity Report: July, August 2006**
**4D: Help Desk Activity Report: July, August 2006**
**4E: Therapy Management Quarterly Report, 4th Quarter FY06**

Reports included in agenda packet; presented by Dr. Flannigan.

**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 5:** **VOTE TO PRIOR AUTHORIZE PEDICULICIDES**

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

Dr. Meece moved to approve as submitted; seconded by Dr. Bell.

**ACTION:** MOTION CARRIED.

**AGENDA ITEM NO. 6:** **VOTE TO PRIOR AUTHORIZE ANTIEMETICS**

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

Dr. Meece moved to approve as submitted; seconded by Dr. Bell.

**ACTION:** MOTION CARRIED.

**AGENDA ITEM NO. 7:** **ANNUAL REVIEW OF SYNAGIS®**

For Public Comment; Ashley Kunzman, MedImmune Inc.: Thank you very much for your time. Tonight we'd like to address the issue of Synagis prophylaxis for the '06-'07 season. I have four points that I'd like to touch on. Number one, RSV is still the top cause of hospitalizations in infants under the age of one. Synagis is indicated for the prevention of serious lower respiratory tract disease caused by RSV in pediatric patients at high risk of RSV disease. Safety and efficacy were established in infants with BPD, infants with a history of premature birth and children of hemodynamically significant congenital heart disease. Ninety-seven percent of the population will get RSV before the age of two. The endpoint of the clinical trials are based on reduced hospitalizations and intubations. In this particular population, the 33 to 35 weekers, which is what we will be addressing tonight, Synagis reduced hospitalizations by greater than 80% regardless of risk factors. The goal is to reduce the severity of the disease in high risk populations. So to get straight to the point, exposure to tobacco smoke is a risk factor that is considered in some places for these infants that are 32 to 35 weeks. Many of you have received date from Dr. Bandel in regards to the link between exposure to tobacco smoke and severe RSV. As a very brief review, Oklahoma infants are at a greater risk of being exposed to tobacco smoke because of the disproportionate share of pregnant moms that smoke, according to the CDC state and national data and the limited success of the Oklahoma cessation program at this time. So that, what that means that we're asking tonight that smoking or exposure to tobacco smoke be added as an additional risk factor for those children 33 to 35 weeks gestation age. Many of the surrounding states include Texas, Kansas, Colorado have now added smoking as an additional risk factor. The third point is the length of treatment. As noted in the agenda, the recommendation for the first injection of Synagis has been pushed back to October 15th. Based on the PI, it is prudent to begin dosing prior to the RSV season reaching epidemic levels. The key is to have the patient's serum concentration at or above 40 mcg/ml. This typically happens after the second injection. Two of the last three years, RSV has reached epidemic levels in mid-October. We ask the start date remain at October 1st, if not moved up to September 15th to make sure the high risk infants are covered. As far as the end of the season, we recommend reviewing virology from around the state before making the final decision on the end of the season. And finally, in regards to dose pooling, there was a comment on the agenda that the providers who give Synagis not pool the drug and use it on the individual vial basis. We ask

that Medicaid remind the providers of this point to ensure compliance and coverage of those infants that are at high risk of getting severe RSV disease. Thank you.
Dr. Muchmore: I'm curious. What is the objection to dose pooling?
Ms. Kunzman: It's a single use vial and there's no preservatives in it, so it technically should only be entered once to draw once. It's referenced in the PI as well.
Dr. McNeill: When we spoke last week, I had asked for information on populations of . . . how many people are we talking about here if smoking were added . . . we talking about five people or five thousand people?
Ms. Kunzman: I think we spoke about that too. It's ..... I've been diligently been working with the home health agencies to figure out exactly how many children above and beyond the ones that already have two risk factors, would need smoking to get the Synagis prophylaxis. The difficulty with the data is that for the last few years, they have not been documenting smoking as a risk factor for your patients, and so they haven't been checking the docs or even asking the patients, and so it's difficult unless we could somehow look back at your data and see, you know, what historically it was. But even then, it might be overinflated because people would have just said, oh you've got a smoker in the house. That's an easy one to pick, especially in Oklahoma, since 30% of the moms smoke. So it's an easy one to .....
Dr. Nesser: I don't understand . . . what you're saying is they haven't been checking the box. How could you review out data to see if the box was checked if they're not checking the box.
Ms. Kunzman: Oh no, no. This is just information that I got from the home health agencies and that they communicated to me. that they quit asking the question because they knew it wasn't part of your criteria, so rather than ..... you know, they're processing, what, 400 you know, something plus a year, and so basically don't process ..... the people that I have .... simply have told me that they quit asking the question because it wasn't part of the criteria.
Dr. Nesser: So they ask the questions based on who's paying for the medication?
Ms. Kunzman: They base it on the criteria for ..... I mean a lot of the private payers don't put the risk factors on there. Some do, some don't. And unfortunately, that's a very ..... that's a small number of patients in comparison with the Medicaid .....
Dr. Nesser: Right. It just seems like if you need to know that, you need to know that regardless of payer and you need to know it regardless of whether it impacts the payment. If you're a home health company trying to make sure that these kids are getting what they, that seems like that would be documented, that this is a family that smokes. If it's that important to know that. So I guess I'm just surprised they don't document it in the chart or something.
Ms. Kunzman: Quite frankly, what's been communicated to me is in the effort of processing the paperwork, they try to make it as efficient as possible. We've now asked that they start documenting as much as possible, but obviously we're not the ones sitting there. We're not ..... you know, we're way more engaged than the person sitting there checking the list.
Board Member: Looks like it would affect your outcomes when asked to make outcomes based on that.
Ms. Kunzman: So all that being said I didn't want to come in here with a number that was (unintelligible).
Dr. McNeill: The treatment denials ..... you have a sense of what they were, why they didn't meet the criteria? Or is that part of this .....? OK.
Materials included in agenda packet; presented by Dr. Moore.
Dr. Meece moved to approve as submitted; seconded by Dr. Muchmore.
**ACTION:** MOTION CARRIED.

**AGENDA ITEM NO. 8:** **30-DAY NOTICE TO PRIOR AUTHORIZE ZORBTIVE™ AND OMNITROPE™**
Materials included in agenda packet; presented by Dr. Moore.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 9:** **30-DAY NOTICE TO PRIOR AUTHORIZE INCRELEX™ AND IPLEX™**
Materials included in agenda packet; presented by Dr. Moore.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 10:** **30-DAY NOTICE TO PRIOR AUTHORIZE EXBUERA®**
Materials included in agenda packet; presented by Dr. Gorman.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 11:** **30-DAY NOTICE TO PRIOR AUTHORIZE GLUMETZA™**
Materials included in agenda packet; presented by Dr. Gorman.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 12:** **30-DAY NOTICE TO PRIOR AUTHORIZE ZANAFLEX CAPSULES™**
Materials included in agenda packet; presented by Dr. Browning.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 13:** **NEW PRODUCT REVIEWS**
Materials included in agenda packet; presented by Dr. Gorman.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 14:** **FDA & DEA UPDATES**
Materials included in agenda packet; presented by Dr. Graham.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 15:** **FUTURE BUSINESS**
**15A: Flu Medication Review**
**15B: Hemophilia Utilization Review**
**15C: Topical Products Utilization Review**
**15D: Beta Blocker Utilization Review**
**15E: Annual Reviews**
**15F: New Product Revices and 30-Day Notices**
Materials included in agenda packet; submitted by Dr. Graham.
**ACTION:** NONE REQUIRED.

**AGENDA ITEM NO. 16:** **ADJOURNMENT**
The meeting was declared adjourned.

# The University of Oklahoma College of Pharmacy

**Pharmacy Management Consultants**
ORI W-4403; PO Box 26901
Oklahoma City, OK 73190
(405)-271-9039


# Memorandum

**Date:** September 14, 2006

**To:** Nancy Nesser, Pharm.D., J.D.
Pharmacy Director
Oklahoma Health Care Authority

**From:** Shellie Gorman, Pharm.D.
Drug Utilization Review Manager
Pharmacy Management Consultants

**Subject:** DUR Board Recommendations from Meeting of September 13, 2006.

**Recommendation 1: Vote to Prior Authorize Pediculicides**

MOTION CARRIED by unanimous approval.

1. Coverage of OTC Permethrin and Pyrethrin products (will include kits containing lotion, shampoos and creams, but not coverage of individual combs, sprays etc.) will require a prescription (written or called in). A quantity limit based on one individual package size for a 7 day supply will be placed on the OTC products.

2. Lindane lotion and shampoo will be available only after first-line treatment with OTC permethrin or pyrethrin products has failed. At point-of-sale the pharmacy clinical edit will search history for paid claims to identify the following criteria:
   - Member must be ≥13 years old (clinical exception if less than 13 years old and weighs ≥110lbs)
   - Must have trial of OTC Permethrin or Pyrethrin
   - Quantity limit of 60ml for 7 days (claim will deny if there is a Lindane prescription in history during the previous 30 days)

3. Ovide® lotion available only after treatment with an OTC product and Lindane have failed. Clinical exception to the use Lindane if member is between the ages of 6 and 13 or weighs less than 110lbs. At point-of-sale the pharmacy clinical edit will search history for paid claims to identify the following criteria:

- Member must be ≥ 6 years old
- Quantity limit of 60ml for 7 days; may be repeated once if needed for current infestation after 7 days of date of service of the original fill.

4. Prior authorization required for Eurax
   - Must have a trial of Permethrin 1% or 5%
   - Quantity Limit of 60 grams/mls for 30 days

5. Clinical exception if known resistance to OTC Permethrin and Pyrethrin.

**Recommendation 2: New Vote to Prior Authorize Antiemetics**

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends consideration of prior authorization for 5HT3 antagonists, substance P antagonists, and cannabinoids to ensure appropriate utilization. Quantity limits already established will remain in effect.

Criteria for Approval:

1. FDA approved diagnosis.
2. Clinical supporting information on failure or contraindication with conventional antiemetic drug therapies at maximum FDA approved daily dose with dates and dosages.

Clinical Exceptions:

1. Approval granted through the Point-of-Sale system for members undergoing chemotherapy, radiation therapy or surgery for cancer related diagnosis or prescriptions written by an oncologist or radiology oncologist.
2. Documented adverse effect, drug interaction, or contraindication to tier-1 products.
3. Approval granted for hyperemesis gravidarum with supporting documentation listing
   a. week of gestation,
   b. presence of weight loss (loss of ≥ 5% pre-pregnancy body weight)
   c. recent hospitalizations or emergency room visits due to hyperemesis, or
   d. history of hyperemesis gravidarum with previous pregnancies.
4. Approval granted if there is a unique FDA-approved indication not covered by any other products.

| No PA | PA Required |
|---|---|
| **Corticosteroids** | **5HT3 Antagonist** |
| Dexamethasone, methylprednisolone, cortisone, prednisone, prednisolone | Dolasetron<br>Ondansetron |
| **Antidopaminergic** | |
| Thiethylperazine | Granisetron |
| **Antihistaminic** | |
| Meclizine, hydroxyzine | Palonosetron |
| Cyclizine | |
| Promethazine | |
| **Anticholinergic** | |
| Scopolamine, trimethobenzamide, | |
| **Prokinetic** | **Substance P/Neurokinin Antagonist** |
| Metoclopramide | Aprepitant (In combination with corticosteroid or 5HT3 antagonist) |
| **Antipsychotic** | **Cannabinoids** |
| Droperidol | Nabilone |
| Chlorpromazine | Dronabinol |
| Prochlorperazine | |
| Perphenazine, prochlorperazine, fluphenazine, mesoridazine, thioridazine, trifluoperazine | |

## Recommendation 3: Annual Review of Synagis®

MOTION CARRIED by unanimous approval.

The College of Pharmacy recommends the following changes to the current Synagis® approval criteria:

- Limit to six (6) doses, to be given one every 30 days. Additional doses will be reviewed and authorized by a clinical pharmacist on an individual basis.
- Change the start date of authorization from October 1st to October 15th.
- Change the end date of authorization from May 1st to March 31st.
- Define Chronic Lung Disease as "formerly bronchopulmonary dysplasia" on the criteria and on the petition form.
- Set dosing range of vial size + 10% to avoid the use of additional or larger vials. (e.g. 1 to 55 mg = 50 mg vial x1, 56-110 mg = 100 mg vial x1…etc)

## Updated Criteria for Prior Authorization of Synagis®

A. Member Selection. Members must be included in one of the following age groups at the beginning of the RSV season:*

1) Infants and children less than 24 months old with Chronic Lung Disease (CLD) (formerly bronchopulmonary dysplasia) who have required medical treatment ($O_2$, bronchodilator, corticosteroid, or diuretic therapy) for CLD in the 6 months prior to RSV season.
2) Infants less than 12 months of age, born at 28 weeks gestation or earlier
3) Infants less than 6 months of age, born at 29-32 weeks gestation
4) Infants, up to 6 months old at the start of RSV season, born at 32-36 weeks gestation, who have 2 or more of the following risk factors:

a. Child care attendance
b. School-aged siblings
c. Exposure to environmental air pollutants (Tobacco smoke exposure can be controlled by the family, therefore not a risk factor for Synagis prophylaxis)
d. Congenital abnormalities of the airway
e. Severe neuromuscular disease

5) Children up to 24 months old with hemodynamically significant cyanotic and acyanotic congenital heart disease.
6) Infants up to 12 months old with moderate to severe pulmonary hypertension, cyanotic heart disease, or those on medications to control congestive heart failure.

* Treatment should continue through the entire RSV season.

B. Length of treatment. Synagis® is approved for use only during RSV season, which is generally November 1 through April 30, as determined by Oklahoma State Dept. of Health. Approval dates for Synagis® will be October 15th thru March 31st. The maximum duration of therapy is 6 doses with 1 dose given every 30 day. Additional doses may be requested on an individual basis.

C. Units authorized. The number of units authorized is calculated as the closest number of full vials necessary to provide the dose based on 15mg/kg per month. Only those doses that require greater than 10 % of a vial's dose may use an additional vial (e.g. 1 to 55 mg = 50 mg vial x1, 56-110 mg = 100 mg vial x1 ...etc).

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.

OKLAHOMA STATE UNIVERSITY
CENTER FOR HEALTH SCIENCES

OSU

OSU Physicians
Department of Pediatrics
635 West 11th Street
Tulsa, Oklahoma 74127
918-382-3166 Fax 918-382-3188

**10/9/05**

**Oklahoma Health Care Authority**
**Attention: Drug Utilization Review Board**
**4545 N. Lincoln Boulevard**
**Suite 124**
**Oklahoma City, OK 73105**

**Re: Synagis**

**Dear DUR:**

**The Oklahoma State University-Center For Health Sciences pediatricians understand that the OHCA's DUR Board does not consider smoking as a reason for the use of Synagis in preterm infants. Although smoke and smoking by family members is voluntary, our patients live in circumstances where exposure to smoke and smoking is not an option. Patients are exposed to family members would rather put the infants outside so that the adults can smoke inside. We agree that "in a perfect world", exposure to smoke of any kind could be eliminated, but we do not live in a "perfect world". Exposure to smoke of any kind certainly increases the risk of the development of respiratory illnesses and we would like to keep the infants out of the hospital. Please reconsider your decision concerning the exposure to smoke and the use of Synagis.**

**Thank you for your consideration.**

**Kayse Shrum, DO** **Rhonda Casey, DO** **Chris Clary, DO**

**Stanley E. Grogg, DO** **Jay Johnson, DO**

**OSU-CHS Pediatricians**

**W a d e  P e d i a t r i c s**

**Kevin Wade, MD**

**3505 W. Broadway Street**
**Muskogee, OK 74401**
**Phone 918-683-8442**
**Fax 918-683-8390**

To Whom It May Concern:

I write on behalf of my pediatric patients and risks of RSV. RSV can be life-threatening, can increase morbidity and give rise to other chronic disease (Asthma).

Synagis vaccination has proven to be an excellent, appropriate preventative of RSV infection in my "at risk" population. Long-term, Synagis saves money, decreases morbidity and mortality. If we could include more risk factors to include more patients, we could protect more patients, and prevent more examples of chronic disease.

Cigarette smoking and it's contact to "at risk" lungs is a key irritant and primary stimulator of airway pathology. Imagine being able to protect this population of patients too. We know of cigarettes pathologic ability. It is a direct risk factor. We have to be preventative towards patient care. Cigarette inclusion as a major risk factor will allow Synagis's protection.

Sincerely,

Kevin Wade, M.D.

J. FIELDS, M.D.
E. FOX, M.D.
500 E. Robinson
Doctors Park Suite 2600
Norman, OK 73071
(405) 364-6432

September 7, 2006

TO: Oklahoma Medicaid DUR Board
4545 N Lincoln Blvd
Oklahoma City, OK 73105

RE: Synagis coverage for Medicaid eligible patients

To Whom It May Concern:

I am sending this letter to express my concerns regarding this year's Synagis protocol.

It is documented in the AAP guidelines for Synagis that premature infants (32-35 weeks gestation) are at high risk for severe RSV disease and would benefit greatly from prophylaxis. This risk increases with low birth wt, environmental smoke exposure, multiple births, and if the baby has a school-age sibling in the home.

AAP guidelines also state that RSV prophylaxis should be administered throughout the entire season. Limiting the number of injections could leave these infants at risk for infection late in the season.

I would appreciate your consideration of these very important issues during the upcoming board meeting.

Sincerely,

Eileen M. Fox, M.D.

EMF/rv

J. FIELDS, M.D.
E. FOX, M.D.
500 E. Robinson
Doctors Park Suite 2600
Norman, OK 73071
(405) 364-6432

September 7, 2006

TO: Oklahoma Medicaid DUR Board
4545 N Lincoln Blvd
Oklahoma City, OK 73105

RE: Synagis coverage for Medicaid eligible patients

To Whom It May Concern:

This letter is in regard to the Synagis protocol for the 2006-2007 season.

According to AAP guidelines, Synagis would greatly benefit premature infants born at 32-35 weeks gestation. It is well documented that these infants are at risk for severe RSV disease.

Other risks include:

a. Multiple births
b. Low birth weight
c. Environmental smoke exposure
d. School-age sibling in family

Also, the AAP guidelines clearly state that the number of Synagis injections should not be limited to 5 doses. Late season infections could be detrimental for these fragile infants.

Thank you for your time and consideration of this matter.

Sincerely,

James E. Fields M.D.

James E. Fields, M.D.

JEF/rv

Saints
Pediatric Associates

Julie Morrow, D.O.

9-8-06

To Whom It May Concern,

I am writing this letter as an advocate of the high risk infants in our state. As you know, prevention of RSV is vitally important to maintaining the health of our children and keeping the overall cost of healthcare at an acceptable level. The current protocol, as set by the American Academy of Pediatrics, for the administration of this injection is very clear. Low birth weight infants as well as those with environmental exposure to smoke in the household are at a much higher risk than the general population. Hospitalization of these infants becomes extremely costly for the state and could potentially be prevented if Synagis prophylaxis was a covered benefit for these children. Moreover, the aforementioned prophylaxis should be given throughout the entire RSV season. By limiting the number of allowed injections by a set number versus the actual RSV season, the risk for infection again rises. This in turn increases the real potential for unwarranted hospital bills. Generally, the families cannot afford to pay these bills so the state again is in a position to cover costs which may have been prevented.

I hope the DUR Board will strongly consider providing more extended coverage for this very real problem. Thank you for your time and efforts in providing the best health care possible for the infants of Oklahoma.

Sincerely,

Julie Morrow

Julie M. Morrow, D.O.

608 N. W. 9th Street
Oklahoma City, OK 73102
Phone: (405) 272-7337

SOUTHWESTERN PEDIATRICS & ALLERGY CLINIC, INC.
REX R. MATTHEWS, M.D.
ALLERGY AND PEDIATRICS
8220 S. PENNSYLVANIA
OKLAHOMA CITY, OKLAHOMA 73159

TELEPHONE
682-1443

September 1, 2006

Oklahoma Medicaid DUR Board
4545 N. Lincoln Blvd.
Oklahoma City, Ok. 73105

RE: Synagis Protocol for the coming up season 2006/07

To The DUR Board:

I have been made aware that the DUR Board will be meeting on September 14, 2006. I would like to voice my concerns on Synagis protocol for the up coming RSV season.

I feel low birth weight should be made a risk factor for prophylaxing babies with Synagis.

Also it is well documented that smoking cessation programs are often unsuccessful. In light of the risk to the child, many parents are unable to quit. Sometimes even if they are able to quit, often relatives or friends are unwilling to not smoke around the child. Therefore, smoking sould be considered as a potential risk factor for Synagis prophylaxis.

Lastly, I would like you to consider the number of injections per child to be determined by local virology data. If we were to limit the number of injections to five, we may be putting babies in risk for RSV infection. (After working hard to prevent RSV infection for 5 months).

Sincerely,

Rex R. Matthews, MD
RRM/kg

**Wazir S. Ahmad, M.D., FAAP**

**PEDIATRICS**
**ADOLESCENT MEDICINE**

**600 PHYSICIANS AND SURGEONS BLDG.**
**1211 N. SHARTEL**
**OKLA. CITY, 235-9955**

September 11, 2006

To the DUR Board:

I have been made aware that the next DUR board meeting will be on September 13, 2006. I will be unable to attend this meeting, but would like to voice some concerns on Synagis protocol for the upcoming season.

I do believe that there some other important criteria to consider a patient as a candidate to receive Synagis such as exposure to tobacco smoke and low birth weight. I should also mention that low birth weight infants are not the only group of children at risk of developing serious complications and/or long term sequelae from RSV infections. Because effectiveness of using this medication in high risk populations has been successfully demonstrated many times. I personally believe that infants from families with a strong history of reactive airway disease, who genetically may be predisposed to develop this condition, may also be considered as candidates to receive RSV prophylaxis knowing the long term sequelae of this infection of the airways,

Sincerely,

Wazir S. Ahmad, M.D. FAAP

# Alecia A. Hanes, M.D. FAAP

BOARD CERTIFIED PEDIATRICS

508 W. Vandament, Suite 210
Yukon, Oklahoma 73099

Phone: (405) 350-0200
Fax: (405) 350-0024


May 2, 2006

Oklahoma Healthcare Authority
4545 N. Lincoln Blvd.
OKC, OK 73105

Dear Sir or Madam,

Smoking is one of the most severe risk factors I see for RSV and RSV complications. My RSV patients whose parents smoke are much more likely to be hospitalized. Please consider adding smoking in the household or by caregiver as a risk factor for prophylaxis Synagis.

Sincerely,

Alecia Hanes, M.D.

Norman Regional
Family Medicine Associates

*Cynthia L. Taylor, M.D.*
*L. Diane Butler, A.R.N.P.*
*Susan M. Thompson, A.R.N.P.*

September 8, 2006

To The Oklahoma DUR Board:

It has come to my attention that the DUR Board will be meeting in September 2006. I will be unable to attend this meeting, but wanted to share my thoughts on Synagis protocol for the 2006-07 season.

As determined in the Holman Paper, low birth weight is one of the most important risk factors in determining which infants will receive Synagis prophylaxis. With this in mind, I would like to see the inclusion of low birth weight as well as multiple births as a risk factor for Synagis prophylaxis.

In addition, it is well documented that smoking cessation programs are often unsuccessful. In light of the risk to the child, parents are unable or unwilling to quit smoking even though it puts their child at significant risk. Therefore, smoking should also be strongly considered as a potential risk factor for Synagis candidates.

Finally, I would like to see the number of injections per child be determined by the local virology lab at Children's Hospital. Last year the virology lab data showed RSV to be epidemic well into April. It would not be cost effective to provide prophylaxis through March only to have a child hospitalized in April due to inadequate Synagis antibody levels.

Thank you for your consideration in this matter.

Sincerely,

Cynthia Taylor

Cynthia L. Taylor, M.D.

CLT/tdh

*1237 E. Alameda • Norman, OK 73071 • 405.321.4511*

CURTIS E. HARRIS, M.S., M.D., J.D.

September 30, 2006

Nancy Nesser, PharmD, JD
Director of Pharmacy Services, OHCA
4545 North Lincoln Blvd, Suite 124
Oklahoma City OK 73105

Dear Dr. Nesser;

I write this letter to encourage you to add insulin Exubera to the Medicaid formulary for the State of Oklahoma as a first-tier medication for the treatment of both Type I and Type II Diabetes, without the requirement of pre-approval.

Exubera allows me to begin insulin therapy earlier, with less patient resistance, than using subcutaneous injections. The general trend in Diabetology is to institute multiple drug therapy (including insulin) long before the traditional protocols called for in the past. Several studies have shown better control with preservation of islet cell function if combination therapy is begun early, especially if that therapy includes insulin.

Resistance to insulin therapy does not center primarily on fear of needles and injections in my experience. Rather, it is the negative feelings of others (often family members) who have taken insulin that is discouraging. The fear of hypoglycemia, the fear of a medication injected into the body that "takes over," and the fear that insulin means "the end of the road" are the factors that underlay resistance to insulin therapy. Inhaled insulin can be treated more like a pill (oral therapy) in the patient's mind, making institution of therapy easier.

Thank you for considering my letter. If I can be of any additional assistance, please let me know.

Sincerely,

Curtis E. Harris, MS, MD, JD

1218 MORNING STAR ADA, OK 74820
VOICE (580) 310-9918 • CELL (405) 973-5132 • FAX (580) 310-9919 • Email mcjd@ailnet1.com

# APPENDIX B

# Retrospective Drug Utilization Review Report

***Claims Reviewed for May 2006***

| Module | Drug Interaction | Duplication of Therapy | Drug-Disease Precautions | Dosing & Duration |
|---|---|---|---|---|
| **Total # of messages returned by system when no limits were applied** | 31,934 | 36,909 | 588,174 | 24,271 |
| **Limits which were applied** | Established, Major, Males and Females, 66-150 years | Narcotics, Females, age 45-48 years | Contraindicated, Female Age 32-34 years, Pregnancy | High dose, Carbamates, Tingabine, Hydantoins, Oxazolidinedions, Succinimides, Valproic Acid, Misc. Anticonvulsants. Males and Females, Age 41-65 |
| **Total # of messages after limits were applied** | 18 | 282 | 110 | 79 |
| **Total # of members reviewed after limits were applied** | 21 | 205 | 79 | 76 |

| **LETTERS** | | | |
|---|---|---|---|
| **Prescribers** | | **Pharmacies** | |
| **Sent** | **Responded** | **Sent** | **Responded** |
| 142 | | 124 | |

# Retrospective Drug Utilization Review Report

## Claims Reviewed for March 2006

| Module | Drug Interaction | Duplication of Therapy | Drug-Disease Precautions | Dosing & Duration |
|---|---|---|---|---|
| **Limits which were applied** | Established, Major, Males and Females Age 22-42 | Narcotics, Females, Age 38-41 | Contraindicated, Age 16-19, Pregnancy | High dose, Carbamates, Tingabine, Hydantoins, Oxazolidinedions, Succinimides, Valproic Acid, Miscellaneous Anticonvulsants, Males and Females, Age 16-21 |

**Response Summary (Physician)**
Letters Sent: 157
Response Forms Returned: 90

The response forms returned yielded the following results:

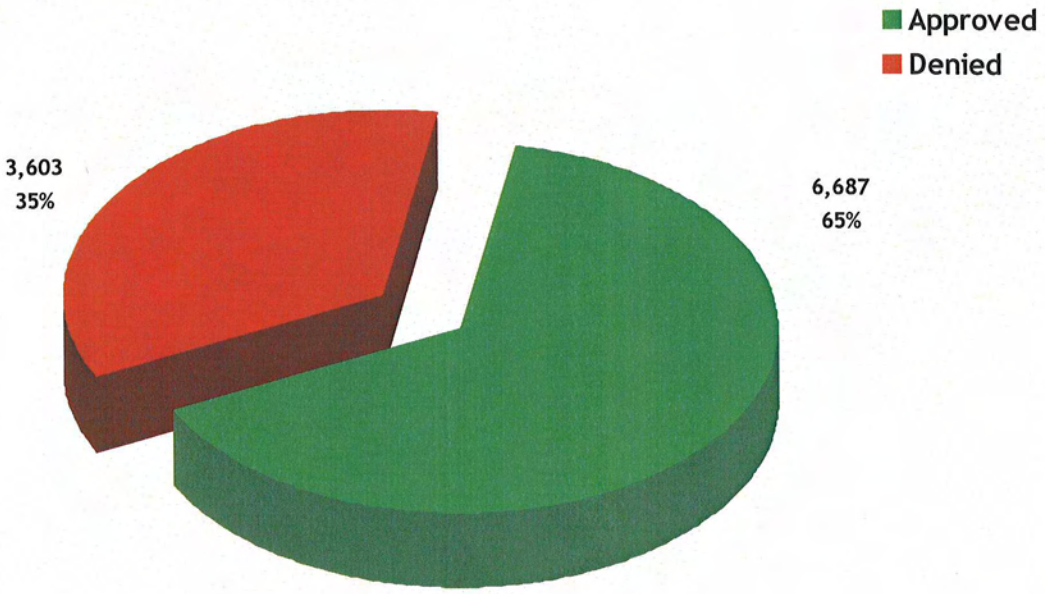
| | |
|---|---|
| *18 (20%)* | *Record Error—Not my patient.* |
| *15 (17%)* | *No longer my patient.* |
| *7 ( 8%)* | *Medication has been changed prior to date of review letter.* |
| *20 (22%)* | *I was unaware of this situation & will consider making appropriate changes in therapy.* |
| *23 (25%)* | *I am aware of this situation and will plan to continue monitoring therapy.* |
| *7 ( 8%)* | *Other* |

**Response Summary (Pharmacy)**
Letters Sent: 138
Response Forms Returned: 123

The response forms returned yielded the following results:

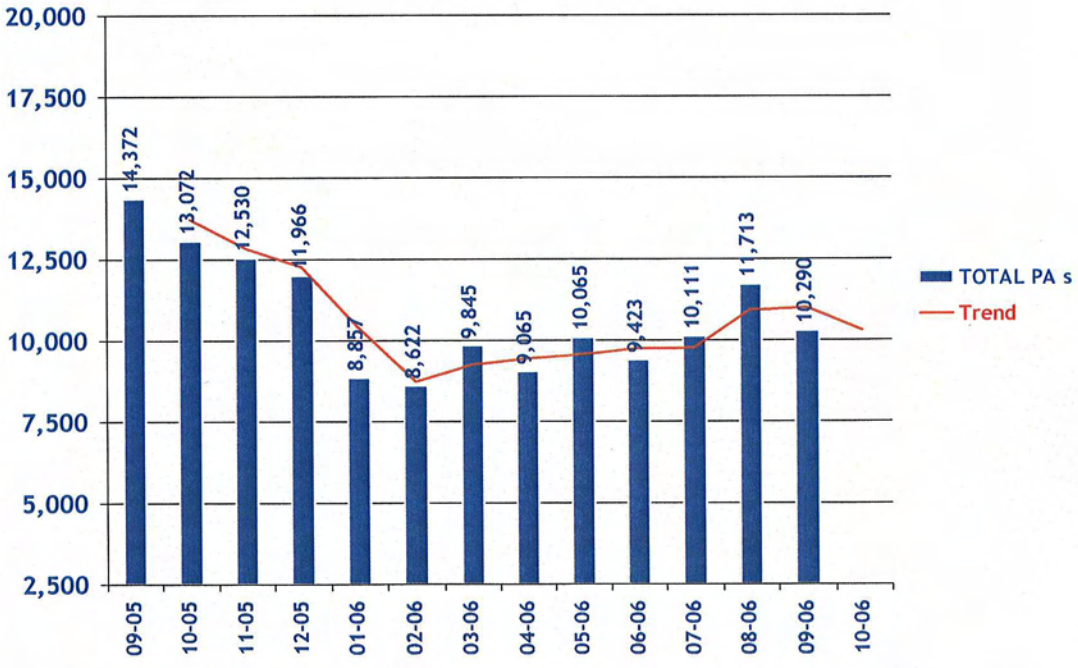
| | |
|---|---|
| *1 ( 1%)* | *Record Error—Not my patient.* |
| *14 (11%)* | *No longer my patient.* |
| *7 ( 6%)* | *Medication has been changed prior to date of review letter.* |
| *36 (29%)* | *I was unaware of this situation & will consider making appropriate changes in therapy.* |
| *43 (35%)* | *I am aware of this situation and will plan to continue monitoring therapy.* |
| *22 (18%)* | *Other* |

# PRIOR AUTHORIZATION ACTIVITY REPORT
## September 2006




PHARMACY Management Consultants

# PRIOR AUTHORIZATION REPORT
## September 2005 - September 2006




PHARMACY Management Consultants

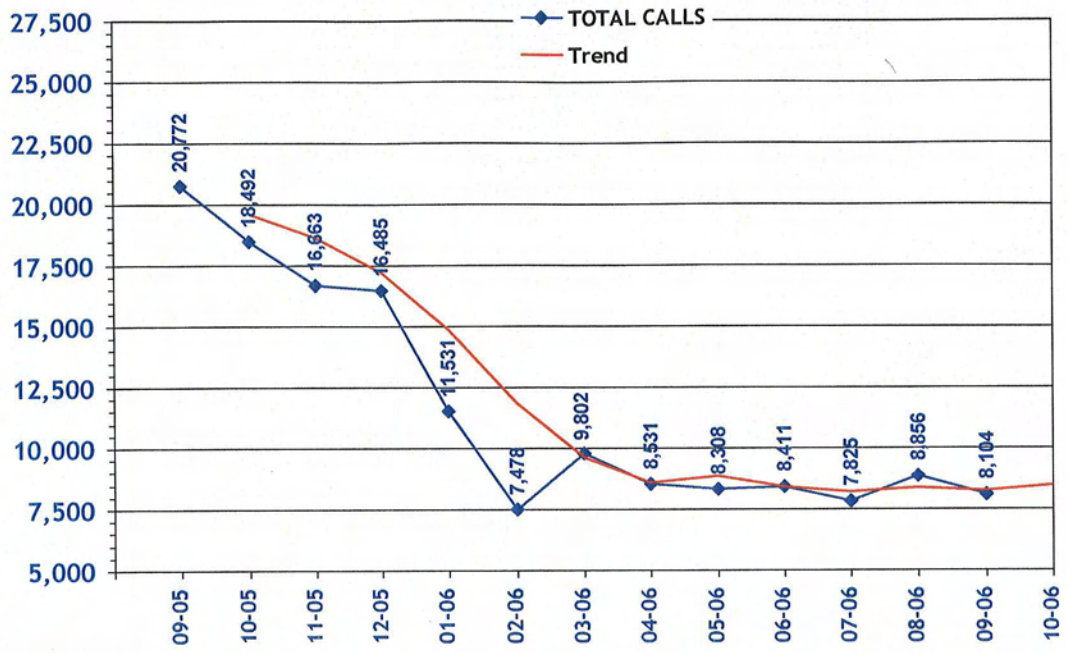
# Activity Audit for
## September 01, 2006 Through September 30, 2006

| | Average Length of Approvals in Days | Approved | Denied | Total |
|---|---|---|---|---|
| ACE Inhibitors | 75 | 7 | 20 | 27 |
| Angiotensin Receptor Antagonist | 122 | 3 | 3 | 6 |
| Antidepressant | 208 | 119 | 188 | 307 |
| Antihistamine | 105 | 1193 | 901 | 2094 |
| Antiulcers | 19 | 10 | 7 | 17 |
| Anxiolytic | 100 | 3089 | 465 | 3554 |
| Calcium Channel Blockers | 215 | 16 | 64 | 80 |
| Growth Hormones | 172 | 19 | 1 | 20 |
| HTN Combos | 71 | 3 | 2 | 5 |
| Hypnotics | 94 | 313 | 163 | 476 |
| Nsaids | 299 | 28 | 116 | 144 |
| Plavix | 358 | 313 | 47 | 360 |
| Stimulant | 196 | 700 | 307 | 1007 |
| | | | | |
| Emergency PAs | | 10 | 0 | 10 |
| | | | | |
| Overrides | | | | |
| Brand | 222 | 22 | 20 | 42 |
| Dosage Change | 14 | 274 | 27 | 301 |
| High Dose | 162 | 3 | 0 | 3 |
| Lost/Broken Rx | 11 | 72 | 8 | 80 |
| Nursing Home Issue | 8 | 18 | 2 | 20 |
| Other | 6 | 24 | 17 | 41 |
| Quantity vs. Days Supply | 217 | 233 | 244 | 477 |
| Stolen | 3 | 8 | 2 | 10 |
| Wrong D.S. on Previous Rx | 0 | 0 | 1 | 1 |
| **Overrides Total** | | **654** | **321** | **975** |

**Denial Reasons**

| | |
|---|---|
| Lack required information to process request. | 2802 |
| Unable to verify required trials. | 1219 |
| Does not meet established criteria. | 214 |
| Member has active PA for requested medication. | 157 |
| Not an FDA approved indication/diagnosis. | 134 |
| Considered duplicate therapy. Member has a prior authorization for similar medication. | 123 |
| Requested dose exceeds maximum recommended FDA dose. | 67 |
| Medication not covered as pharmacy benefit. | 35 |
| Member not approved for TB coverage and/or medication requested not associated with TB symptoms. | 5 |
| Duplicate Requests | 565 |
| * Changes to existing | 1,018 |

# CALL VOLUME MONTHLY REPORT
## September 2005 - September 2006




PHARMACY Management Consultants

# APPENDIX C

**Vote to Prior Authorize New Growth Hormone Products**
**Zorbtive ™ and Omnitrope™ [somatropin (rDNA origin) for injection]**
**Oklahoma Health Care Authority**
**October 2006**

| Zorbtive™<br>Serono, Inc | Omnitrope™<br>Sandoz, Inc |
|---|---|
| Zorbtive™ is a recombinant human growth hormone (hGH) approved for treatment of Short Bowel Syndrome. It acts on receptors in the small intestines, enhancing the transport of water, electrolytes, and nutrients across the intestinal mucosa. It is available in 8.8 mg multidose vials to be reconstituted. | Omnitrope™ is a recombinant human growth hormone approved for treatment of pediatric and adult growth hormone deficiency (GHD). It is available as lyophilized powder for reconstitution in 1.5 mg single use and 5.8 mg multidose vials |

**Recommendations**

As with all other growth hormones, the College of Pharmacy recommends prior authorization of these two drugs. The criteria are based on the specific indications of each drug.

**Omnitrope™**

- Criteria established for Classic hGH deficiency for pediatric and adult members

**Zorbtive™**

- Diagnosis of Short Bowel Syndrome
- Under the care of gastroenterologist
- Documentation of specialized nutritional support (may consist of a high carbohydrate, low-fat diet, adjusted for individual patient requirements and preferences. Nutritional supplements may be added according to the discretion of the treating physician.)
- Used in conjunction with optimal management of SBS may include dietary adjustments, enteral feedings, parenteral nutrition, fluids, and micronutrient supplements as needed.
- Daily dose not to exceed 8 mg
- Approval for 4 weeks of treatment (administration for greater than 4 weeks has not been adequately studied)

# APPENDIX D

**Vote to Prior Authorize IGF-1 Analog Products**
**Increlex™ and Iplex™ (mecasermin rinfabate [rDNA origin])**
**Oklahoma Health Care Authority**
**October 2006**

| Increlex™<br>Tercica, Inc | IPlex™<br>Insmed, Inc |
|---|---|
| Increlex™ is an aqueous solution for injection containing recombinant human IGF-1, approved for treatment of Primary IGF-1 deficiency (IGFD). It is available in 10 mg/ml multidose vials containing 4 ml. | IPlex™, an aqueous solution for injection containing a protein complex of recombinant human IGF-1 and human IGFBP-3, is approved for treatment of Primary IGFD. It is available as 36 mg/0.6 ml single dose vials |

**Recommendations**

The College of Pharmacy recommends prior authorization with the criteria based on the following FDA approved indications for use as listed below.

- Initiation of therapy
  - Therapy initiated by an endocrinologist
  - Diagnosis of Primary IGF-1 Deficiency with all of the following:
    - Height >3 SD below the mean
    - Basal IGF-1 >3 SD below the mean
    - Normal or elevated GH
  - Documentation of mutation in GH receptor (GHR) or mutation in post-GHR signaling pathway or IGF-1 gene defects (Laron Syndrome)
  - Not approved for use in secondary IGF-1 deficiencies related to GH deficiency, malnutrition, hypothyroidism, or chronic steroid therapy.

- Discontinue therapy

  Therapy may be discontinued when one of the following criteria is met:
  - Epiphyses closed
  - Covered height (165.1 cm. in males, 152.4 cm in females) is reached
  - Sensitivity to mecasermin
  - Member is noncompliant

# APPENDIX E

**Vote to Prior Authorize Zanaflex Capsules™ (tizanidine hydrochloride)**
**Oklahoma Health Care Authority**
**October 2006**

**Manufacturer** Acorda
**Classification** *FDA classification*: Muscle relaxant
*Status*: prescription only

## Summary

Zanaflex Capsules™ (tizanidine hydrochloride) marketed by Acorda is a short-acting drug for the management of spasticity. Treatment with Zanaflex Capsules™ should be reserved for times when relief of spasticity is most important because of it's short duration of effect. Spasticity is thought to be reduced by blocking nerve impulses through pre-synaptic inhibition of motor neurons, causing a decrease in spasticity without reducing muscle strength.

## Recommendations:

The College of Pharmacy recommends prior authorization of Zanaflex Capsules™. Tizanidine tablets must be tried prior to consideration of the capsules. The capsules may be considered for authorization if there is supporting information as to why the member cannot take the tablets.

**Cost comparison**

| | AWP / Unit | SMAC/ Unit | Daily Dose* | Monthly Dose (30 day supply) | Length of therapy |
|---|---|---|---|---|---|
| Tizanidine 2mg Tab | N/A | $0.09 | TID | $ 8.10 | 3-6 months |
| Tizanidine 4mg Tab | N/A | $0.11 | TID | $ 9.90 | 3 months |
| Zanaflex 2mg Cap | $1.82 | N/A | TID | $163.80 | 3 months |
| Zanaflex 4mg Cap | $2.16 | N/A | TID | $194.40 | 2.5 months |
| Zanaflex 6mg Cap | $3.62 | N/A | TID | $325.80 | 6 months |

## REFERENCES

1. Zanaflex Capsules™ Package Insert (www.ZanaflexCapsules.com)

# APPENDIX F

# 30 Day Notice to Prior Authorize Fortamet® (metformin hydrochloride) Extended Release Tablets

**Oklahoma Health Care Authority**
**October 2006**

**Manufacturer** Andrx Labs, Inc.
**Classification** FDA classification: Oral Antihyperglycemic
Status: prescription only


**Summary**
Fortamet® is an extended-release form of metformin hydrochloride designed for once daily administration using the Single-Composition Osmotic Technology (SCOT®) which provides a constant rate of delivery of metformin as long as there is undissolved drug in the core. Fortamet® is indicated for monotherapy as adjunct to diet and exercise and concomitantly with a sulfonylurea or insulin to improve glycemic control in adults.


**Cost Comparison**

| | EAC / unit | SMAC / unit | Average Daily Dose[2] | $ / Month (30 day supply) |
|---|---|---|---|---|
| Fortamet® (tablet) 500 mg | $ 1.16 | | 1000 mg QD | $ 69.60 |
| Fortamet® (tablet) 1000 mg | $ 2.74 | | 1000 mg QD | $ 82.20 |
| Metformin ER (tablet) 500 mg | N/A | $ 0.23 | 1000 mg QD | $ 13.80 |
| Metformin (tablet) 1000 mg | N/A | $ 0.12 | 1000 mg BID | $ 7.20 |

**Recommendations**
The College of Pharmacy recommends prior authorization of Fortamet®. Approval based on clinical documention of inability to take other generically available forms of metformin ER.

**REFERENCE**

Fortamet® Product Information. Andrx Labs, Inc. 2003.

# APPENDIX G

# Prior Authorization Annual Review - Fiscal Year 2006

## Anti-Ulcer Drugs

**Oklahoma Health Care Authority**
**October 2006**

### Product Based Prior Authorization

With respect to the anti-ulcer medications there are two tiers of medications in the therapeutic category. A failed trial with a tier-1 anti-ulcer medication within the past 120 consecutive days is required before a tier-2 anti-ulcer medication can be approved.

Criteria required before moving to tier-2 medications include a failure of a maximum 40mg dose of omeprazole and trial of at least one tier-1 product (including omeprazole) or a clinical exception to the use of a tier-1 product.

Clinical exceptions to tier-1 anti-ulcer trials are the following:

1. H pylori eradication
2. Prophylaxis or treatment of NSAID induced ulcer
3. Erosive esophagitis or maintenance of healed erosive esophagitis
4. GERD complications (e.g. esophageal strictures, dysphagia, Barrett's esophagus)
5. Scleroderma

| Anti-Ulcer Medications | |
|---|---|
| **Prior Authorization required for:**<br>Ranitidine (Zantac) capsules and effervescent products<br>Lansoprazole (Prevacid) granules and solutab products<br>Lansoprazole/Naproxen (Prevacid NapraPac)<br>Esomeprazole I.V. (Nexium I.V.) and Lansoprazole I.V. (Prevacid I.V.) | |
| **Tier 1** | **Tier 2** |
| Ranitidine (Zantac) tablets | Pantoprazole sodium (Protonix)** |
| Rabeprazole sodium (Aciphex) | Esomeprazole magnesium (Nexium)** |
| Lansoprazole (Prevacid) capsules | Brand Rx (Prilosec) |
| Generic Rx omeprazole and Prilosec OTC*# | |
| Omeprazole (Zegerid) granules and capsules | |
| Pantoprazole I.V. (Protonix I.V.) | |

All versions of the prescription only product will remain Tier 2 until a SMAC can be applied or a supplemental rebate is established.
* 20mg capsules covered up to a maximum quantity of 120 per 30 days; 40mg capsules requires PA.
** Conversion to tier-2 drug on 01/09/2006 due to supplemental rebate program.
**# Prilosec OTC does not count against 3-brand limit.**

### Update on Fiscal Year 2006

Product(s) moved from tier-1 to tier-2: Pantoprazole sodium (Protonix) and Esomeprazole magnesium (Nexium) due to manufacturer's discontinuation of participation in the supplemental rebate program.

OTC Omeprazole (Prilosec) and generic prescription formulation is covered without a PA and does not count against 3-brand limit.

## Utilization

For the period of July 2005 through June 2006, a total of 57,652 members received anti-ulcer products through the SoonerCare program.

| FY 2004 versus FY 2005 | | | % Change |
|---|---|---|---|
| **Cost FY '06** | | **$ 18,479,080.22*** | **10.3** ↓ |
| | *Cost FY '05* | *$ 20,606,356.08* | |
| **Claims FY '06** | | **226,861** | **34.0** ↓ |
| | *Claims FY '05* | *343,851* | |
| **Per Diem FY '06** | | **$2.63** | **10.3** ↑ |
| | *Per Diem FY '05* | *$ 2.36* | |
| **Members FY '06** | | **57,652** | **5.9** ↑ |
| | *Members FY '05* | 54,253 | |

*Does not include supplemental rebate information

### FY 2006

| Selected-Tiered Products | # of Claims | Total Units | Total Days | Units per Day | Total Cost | Per Diem |
|---|---|---|---|---|---|---|
| *Tier 1 PPI's* | 83,834 | 3,016,679 | 2,648,876 | 1.14 | $ 8,513,857.97 | 3.21 |
| *Tier 2 PPI's* | 64,614 | 1,940,691 | 1,921,693 | 1.01 | $ 7,993,525.36 | 4.16 |
| *OTC Prilosec* | 6,172 | 255,390 | 205,451 | 1.24 | $176,695.07 | 0.86 |
| *Tier 1 Ranitidine tabs* | 44,646 | 2,524,627 | 1,436,873 | 1.76 | $ 319,934.58 | 0.22 |
| *Tier 2 Ranitidine caps, effervescent, brand* | 44 | 2,400 | 1,350 | 1.78 | $ 5,547.74 | 4.11 |
| **Totals*** | **199,310*** | **7,739,787*** | **6,214,243*** | **1.25*** | **$ 17,009,560.72*** | **2.74*** |

*Excludes (I.V., liquids, combination products, remaining H2's, and/or supplemental rebate information)

### FY 2005

| Selected-Tiered Products | # of Claims | Total Units | Total Days | Units per Day | Total Cost | Per Diem |
|---|---|---|---|---|---|---|
| *Tier 1 PPI's* | 151,139 | 5,413,406 | 4,975,339 | 1.09 | $ 17,989,457.57 | 3.62 |
| *Tier 2 PPI's* | 951 | 29,973 | 28,539 | 1.05 | $ 74,432.78 | 2.61 |
| *OTC Prilosec* | 9,753 | 393,840 | 316,407 | 1.25 | $ 256,238.82 | 0.81 |
| *Tier 1 Ranitidine tabs* | 73,899 | 2,721,570 | 1,509,522 | 1.80 | $ 617,019.01 | 0.41 |
| *Tier 2 Ranitidine caps, effervescent, brand* | 24 | 1,610 | 725 | 2.22 | $ 3,327.99 | 4.59 |
| **Totals*** | **235,766*** | **8,560,399*** | **6,830,532*** | **1.25*** | **$ 18,940,476.17*** | **2.77*** |

**Total petitions submitted in for this category during FY05: 4,984**

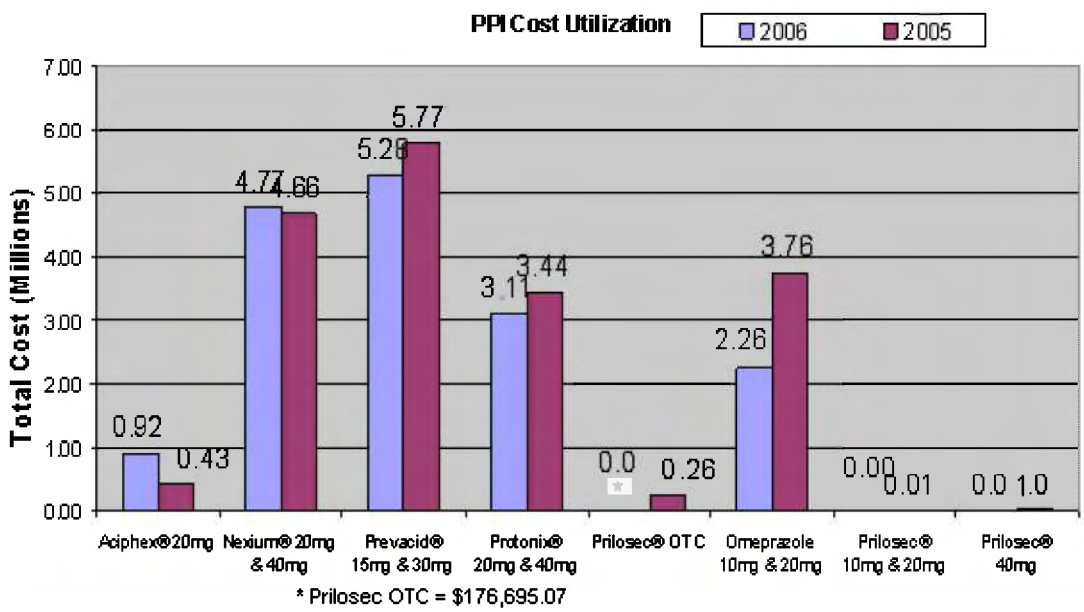
| | |
|---|---|
| *Approved* | *1,622* |
| Denied | 2,477 |
| Incomplete | 855 |
| *SPA* | *1,419* |
| INCOMPLETES/DENIEDS APPROVED | 813 |
| Total Clients with Regular PA | 2,151 |

## Members Age/Gender FY06

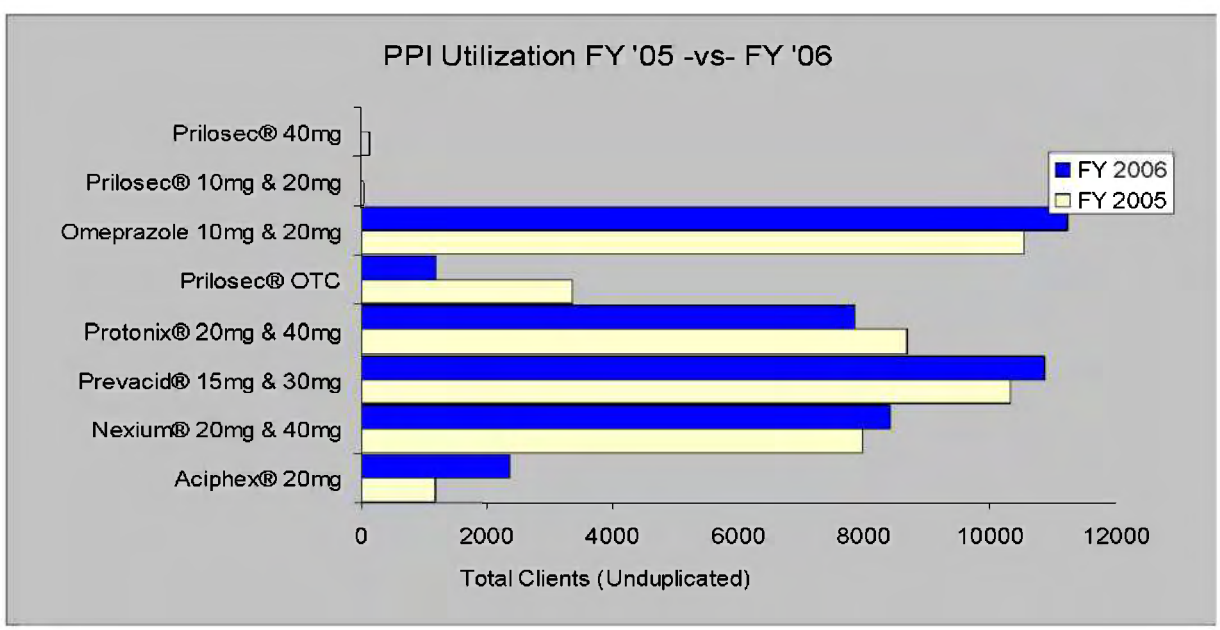
| Age | Female | Male | Totals |
|---|---|---|---|
| 0 to 9 | 3,058 | 3,339 | 6,397 |
| 10 to 19 | 4,451 | 2,855 | 7,306 |
| 20 to 34 | 5,378 | 1,223 | 6,601 |
| 35 to 49 | 6,091 | 2,922 | 9,013 |
| 50 to 64 | 7,598 | 3,550 | 11,148 |
| 65 to 79 | 7,297 | 2,680 | 9,977 |
| ≥80 | 6,001 | 1,209 | 7,210 |
| **Totals** | **39,874** | **17,778** | **57,652*** |

*unduplicated members

## PPI Utilization for SoonerCare FY06




* Prilosec OTC = $176,695.07



## Medicaid-Medicare Dual-Eligibles FY06

| FY 2006 | # of Members | # of Claims | Total Units | Total Days | Total Cost | Per Diem |
|---|---|---|---|---|---|---|
| *Duals* | 26,079 | 186,586 | 4,564,916 | 3,386,731 | $8,743,239.89 | 2.58 |
| *Non-Duals* | 31,573 | 118,310 | 5,838,524 | 3,637,143 | $9,735,840.33 | 2.68 |

## PPI vs H2 Claims

| | # of Claims | | Total Cost* |
|---|---|---|---|
| | PPIs | H2s | |
| *Duals* | 104,537 | 81,819 | 8,290,440,98 |
| *Non-Duals* | 75,771 | 42,059 | 8,378,827.82 |
| *Totals** | 180,308 | 123,878 | 16,669,268.80 |

*Excludes (combination products and supplemental rebate information)

## Current News for Anti-Ulcer Prior Authorization Category

Omeprazole (Zegerid) capsules approved by FDA as of 03/01/2006.

Esomeprazole (Nexium) received approved indication for use in children 12 to 17 for short-term treatment of GERD as of 05/01/2006.

Patent expirations: Nexium (esomeprazole)... .....04/19/2007
Prevacid (lansoprazole)..... .....05/10/2009
Protonix (pantoprazole)..... .....07/19/2010

## Recommendations

The College of Pharmacy recommends no action at this time. In the meantime, we will continue to monitor and evaluate the anti-ulcer category.

# APPENDIX H

# Beta-Blocker Review

Oklahoma Health Care Authority

**September 2006**

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

Cardiovascular disease is a leading cause of death in adults in the United States. Hypertension is estimated to affect almost 65 million individuals nationwide and 1 billion worldwide. Implementing early hypertension treatment can slow disease progression and delay the development of heart attack, heart failure, stroke, kidney disease, and blindness. Beta-blockers have been a mainstay of first-line pharmacologic treatment for primary uncomplicated hypertension. Clinical evidence has shown beta-blockers to be effective in hypertension, post myocardial infarction, angina pectoris, heart failure, dysrhythmias, migraines, and preventing premature death. Beta-blockers have been commonly used as primary prevention of coronary heart disease but clinical evidence remains inadequate to support an indication for the prevention of cardiovascular events. This review will provide an update on current clinical literature evaluating the appropriate use of beta-blockers and the role of beta-blockers in hypertensive patients.

## Background[1]

| Blood Pressure | Systolic Blood Pressure | Diastolic Blood Pressure |
|---|---|---|
| Normal | <120 | and <80 |
| Pre-hypertension | 120-139 | or 80-89 |
| Stage 1 | 140-159 | or 90-99 |
| Stage 2 | ≥160 | or ≥ 100 |

It is estimated 30% patients are unaware they have hypertension. The systolic blood pressure becomes more indicative of cardiovascular risk with patients over the age of 50. Systolic blood pressure is more difficult to control compared to diastolic blood pressure.

Most patients often require two or more medications to control their hypertension. Those patients who are unable to control blood pressure with three medications at full doses are categorized as having resistant hypertension.

## Clinical Literature Update[2,3]

**Meta-analysis:** **Beta-blockers versus other anti-hypertensive agents**
13 Random controlled trials (n=105,951)
**Beta-blockers versus placebo or no treatment**
7 Random controlled trials (n=27,433)

**Purpose:** Enlarge and analyze the data on atenolol and other beta-blockers effect on ***stroke, myocardial infarction, and all cause mortality.***

**Method:** Randomized controlled trials, patients with primary hypertension, beta-blocker usage in at least 50% of all patients in one treatment group, outcome data on all-cause mortality, cardiovascular morbidity, or both.

The analysis compared beta-blockers in 2 main groups: beta-blockers versus other antihypertensive drugs and beta-blockers versus placebo or no treatment. Data on all beta-blockers and three subgroups were analyzed. The subgroups included non-atenolol beta-blockers, mixed beta-blockers and diuretics (~50% started on beta-blockers), and atenolol.

**Outcome Data:**

**Group One**

| All Beta Blockers -vs- other antihypertensive agents | |
|---|---|
| | Relative Risk (95 % CI) |
| Stroke | **1.16** (1.04-1.30) |
| Myocardial Infarction | 1.02 (0.93-1.12) |
| Mortality of all causes | 1.03 (0.99-1.08) |

| Non-Atenolol Beta Blockers -vs- other antihypertensive agents | |
|---|---|
| | Relative Risk (95 % CI) |
| Stroke | **1.20** (0.30-4.71) |
| Myocardial Infarction | 0.86 (0.67-1.11) |
| Mortality of all causes | 0.89 (0.70-1.12) |

| Mixed Beta Blockers/Diuretics –vs- antihypertensive agents | |
|---|---|
| | Relative Risk (95 % CI) |
| Stroke | **1.09** (0.98-1.21) |
| Myocardial Infarction | 1.00 (0.81-1.22) |
| Mortality of all causes | 0.97 (0.89-1.05) |

| Atenolol versus other antihypertensive agents | |
|---|---|
| | Relative Risk (95 % CI) |
| Stroke | **1.26** (1.15-1.38) |
| Myocardial Infarction | 1.05 (0.91-1.21) |
| Mortality of all causes | 1.08 (1.02-1.14) |

**Group 2**

| All Beta Blockers versus Placebo or No Treatment | |
|---|---|
| | Relative Risk (95 % CI) |
| Stroke | **0.81** (0.71-0.93) |
| Myocardial Infarction | 0.93 (0.83-1.05) |
| Mortality of all causes | 0.95 (0.86-1.04) |

| Non-Atenolol Beta Blockers versus Placebo or No Treatment | |
|---|---|
| | Relative Risk (95 % CI) |
| Stroke | **0.84** (0.64-1.10) |
| Myocardial Infarction | 0.89 (0.74-1.06) |
| Mortality of all causes | 0.94 (0.79-1.10) |
| **Atenolol versus Placebo or No Treatment** | |
| | Relative Risk (95 % CI) |
| Stroke | **0.85** (0.72-1.01) |
| Myocardial Infarction | 0.99 (0.83-1.19) |
| Mortality of all causes | 1.01 (0.89-1.15) |

**Conclusion[2,3]:**

Beta-blockers in **primary** prevention resulted in a higher risk of stroke than with other antihypertensive treatments overall. The analysis demonstrated that beta-blockers did not significantly reduce the risk of myocardial infarction or all cause mortality. Regarding combination beta-blocker and diuretic treatment, the reduce risk of stroke may be associated with the increased benefit of diuretic use with beta-blockers. In comparison to other beta-blockers, atenolol revealed less than favorable effects on primary prevention of stroke, myocardial infarction, and all cause mortality.

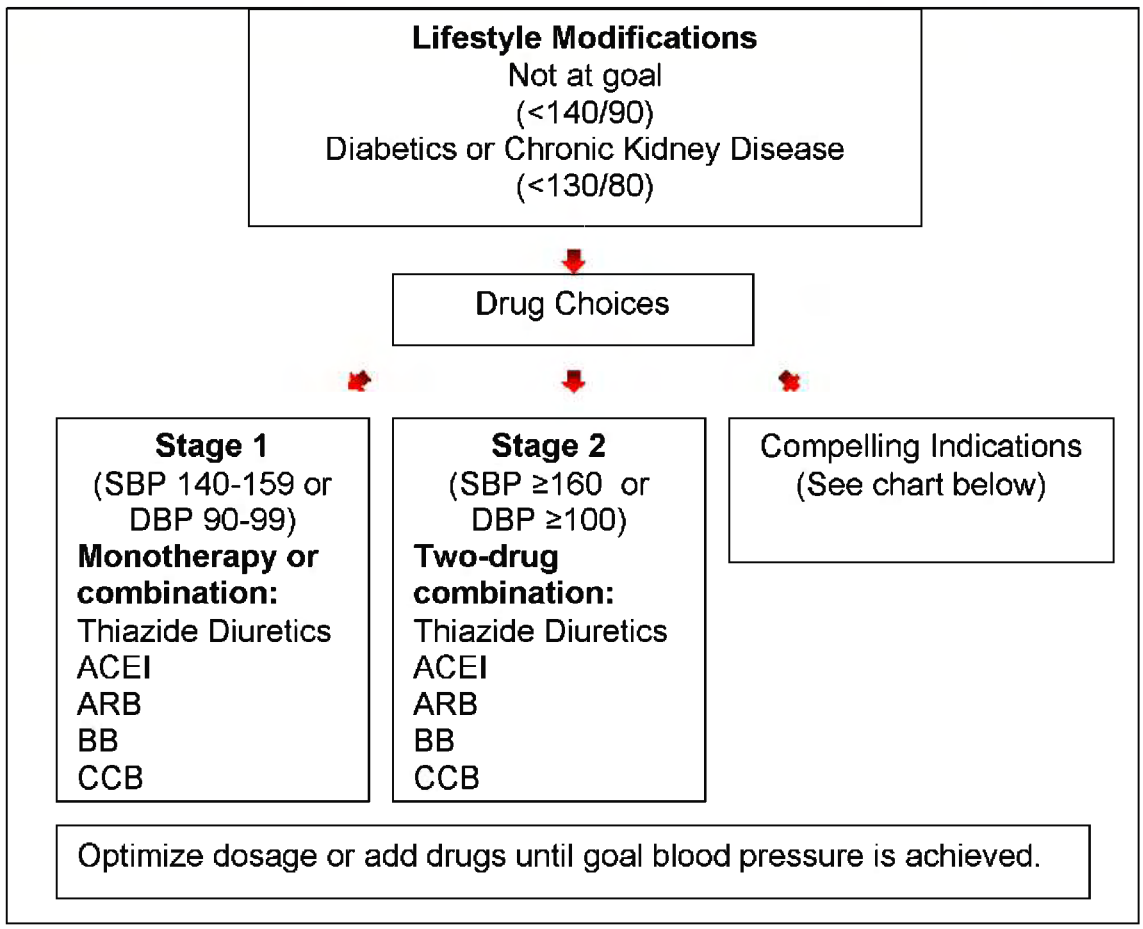
Meta-analysis reveals less than optimum efficacy with beta-blockers compared to other antihypertensive agents. Study investigators suggest beta-blockers should not remain the first-line choice for primary prevention or be used as reference drugs in future randomized controlled trials.

## Patient Evaluation of Risks and Complications[1]

| Major Cardiovascular Risk Factors |
|---|
| Hypertension |
| Cigarette Smoking |
| Obesity |
| Physical Activity |

## Treatment[1,4,5]

### Treatment Algorithm for Hypertension JNC VII[1]:




| Compelling Indications | Recommended Treatment[1] | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Diuretics | Nitrates Vasodilators | BB | ACEI | ARB | CCB | ALDO/ ANT | |
| Heart Failure | √ | √ | √ | √ | √ | | √ | |
| Post-MI | | | √ | √ | | | √ | |
| High-risk coronary disease | √ | | √ | √ | | √ | | |
| Diabetes | √ | | √ | √ | √ | √ | | |
| Chronic kidney disease | | | | √ | √ | | | |
| Recurrent stroke prevention | √ | | | √ | | | | |
| Angina Pectoris | | √ | √ | | | √ | | |
| Arrhythmias | | | √ | | | √ | | |
| Isolated Systolic Hypertension | √ | | √ | | | √ | | |

ACEI=Angiotension converting enzyme inhibitor, ARB=Angiotension receptor blocker, BB=Beta-blocker, CCB=Calcium Channel Blocker, MI=Myocardial Infarction, Aldo/Ant=Aldosterone antagonist

## Beta-Blockers[6,7]

| Product | Dosing | Cost[6,7] | Indications* | Cardio-selective | Side Effects** |
|---|---|---|---|---|---|
| *Beta-Blockers* | | | | | |
| Atenolol<br>(25, 50, 100mg) tabs | 25-100mg<br>QD-BID | <br>$21.00 | 1,2,3 | Yes | A |
| Betaxolol<br>(10, 20mg) tabs | 5-40mg<br>QD | <br>$27.30 | 1 | Yes | A |
| Bisoprolol<br>(5, 10mg) tabs | 5-20mg<br>QD | <br>$30.60 | 1 | Yes | A |
| Metoprolol<br>(25, 50, 100mg) tabs<br>(25,50,100,200mg) XL tabs | 50-200mg<br><br>QD-BID | <br>$14.40<br>$25.80 | 1,2,3, 5,11 | Yes | A |
| Nadolol<br>(20, 40, 80, 120mg) tabs | 20-320mg<br>QD | <br>$22.20 | 1,2,10 | No | A |
| Propranolol<br>(10, 20, 40, 60, 80mg) tabs<br>(60, 80, 120, 160mg) ER caps | 40-240mg<br><br>QD-BID | <br>$15.60<br>$33.30 | 1,2,3,8,10,11,<br>12,13,14 | No | A |
| Timolol<br>(5, 10, 20mg) tabs | 10-60mg<br>BID | <br>$18.00 | 1,3,10 | No | A |
| Esmolol<br>(10mg/ml,20mg/ml,250mg/ml) | 50-300<br>mcg/kg/min | N/A | 1,4,6,7,11 | Yes | A |
| Sotalol<br>(80, 120, 160, 240mg) tabs | 80-640mg<br>BID | $75.00 | 4,11 | No | A |
| *Beta-Blockers with Intrinsic Sympathomimetic Activity (ISA)* | | | | | |
| Acebutolol<br>(200, 400mg) caps | 200-1200mg<br>QD-BID | $22.20 | 1,2,4 | Yes | B |
| Carteolol<br>(2.5, 5mg) tabs | 2.5-10mg<br>QD | Brand<br>$42.30 | 1 | No | B |
| Penbutolol<br>(20mg) tabs | 10-80mg<br>QD | Brand<br>$51.60 | 1 | No | B |
| Pindolol<br>(5,10mg) tabs | 10-60mg<br>BID | <br>$42.60 | 1 | No | B |
| *Beta-Blockers with Alpha Blocking Activity* | | | | | |
| Carvedilol<br>(3.125, 6.25, 12.5, 25mg) tabs | 12.5-50mg<br>BID | Brand<br>$106.20 | 1,5 | No | C |
| Labetalol<br>(100, 200, 300mg) tabs | 200-1200mg<br>BID | <br>$23.40 | 1 | No | C |
| *Beta-Blockers and Diuretics Combinations* | | | | | |
| Atenolol/Chlorthalidone<br>(50-25, 100-25mg) tabs | 50-100mg<br>QD | $11.99 | 1 | Yes | A |
| Bisoprolol/HCTZ<br>(2.5-6.25,5-6.25,10-6.25mg) tabs | 2.5-10mg<br>QD | $22.99 | 1 | Yes | A |
| Metoprolol/HCTZ<br>(50-25,100-25,100-50mg) | 50-100mg<br>QD-BID | N/A | 1 | Yes | A |
| Propranolol/HCTZ<br>(40-25, 80-25mg) tabs<br>(80-50,120/50,160/50mg) | 80-160mg<br><br>QD-BID | $11.99<br><br>$55.50 | 1 | No | A |

Cost for 30 day supply of generic product at lowest daily dosage, Brand cost if generic unavailable

| *Indications | |
|---|---|
| 1. Hypertension | 8. Cardiac Arrhythmias |
| 2. Angina Pectoris | 9. Post Myocardial Infarction |
| 3. Myocardial Infarction | 10. Migraine Prophylaxis |
| 4. Ventricular Arrhythmias | 11. Atrial Fibrillation |
| 5. Congestive Heart Failure | 12. Essential Tremor |
| 6. Supraventricular Tachycardia | 13. Hypertrophic Cardiomyopathy |
| 7. Intra- or Post-operative Hypertension | 14. Pheochromocytoma |

| **Side Effects | | |
|---|---|---|
| A | B | C |
| Fatigue; depression; bradycardia; impotence; decreased exercise tolerance; congestive heart failure; worsening of peripheral arterial insufficiency; may aggravate allergic reactions; bronchospasm; may mask symptoms of and delay recovery from hypoglycemia; Raynaud's phenomenon; insomnia; vivid dreams or hallucinations; acute mental disorder; increased serum triglycerides, decreased HDL cholesterol; sudden withdrawal may lead to exacerbation of angina and myocardial infarction | Similar to other beta-adrenergic blocking agents, but with less resting bradycardia and lipid changes; acebutolol has been associated with a positive antinuclear antibody test and occasional drug-induced lupus | Similar to other beta-adrenergic blocking agents, but more orthostatic hypotension; hepatotoxicity |

## Beta-blocker Precautions

- May be less effective in African-American patients
- Use may be associated with higher incidence of development of type 2 diabetes and may mask symptoms of hypoglycemia but this should not deter treatment for select indications in patients with diabetes
- Beta-blocker alone in elderly not as effective as a diuretic monotherapy
- Beta-blockers with intrinsic sympathomimetic activity (ISA both beta agonist and antagonist effects) is contraindicated with angina or history of MI due to possible event reoccurence
- Sudden withdrawal of a beta-blocker in patients with angina pectoris may increase risk of myocardial infarction or cardiac arrhythmia.
- Side effects of beta-blockers may be minimized by gradual titration of dose when initiating therapy.
- **NOT** recommended in patients with asthma, reactive airway disease, second or third degree block when using non-cardioselective beta-blockers.
- Betapace should not be substituted for Betapace AF. Betapace AF is distributed with educational insert specifically for patients with atrial fibriallation/flutter.
- Beta-blocker therapy should be withdrawn gradually to avoid acute tachycardia, hypertension, and/or ischemia.

## Special Considerations[1,4,5]

### Heart Failure

- Asymptomatic individuals with ventricular dysfunction recommend treatment with BB's or ACEI's.
- Symptomatic ventricular dysfunction requires loop diuretics along with ACEI's, BB's, ARB's or Aldosterone antagonists.

### Diabetic Hypertension

- Combination of two or more drugs: Thiazide diuretics, BB's, ACEI's, ARB's and CCB's.

### Chronic Kidney Disease

- Combination of three or more drugs: usually loop diuretics with other drug classes.
- ACEI's or ARB's favorable effects on progression of diabetic and nondiabetic renal disease.

### Cerebrovascular Disease

- Blood pressure control at approximately 160/100 mmHg is appropriate during acute stroke until stabilized or improved.
- Recurrent stroke treated with combination of *ACEI and thiazide diuretic*.

### Left ventricular hypertrophy

- Acceptable treatment with all antihypertensive agents except hydralazine and minoxidil.

### Peripheral arterial disease

- Any class of antihypertensive drugs in conjunction with aspirin therapy

### Hypertension in pregnancy

- Methyldopa, BB's, and vasodilators are preferred medications for the safety of fetus.

### Beta-blocker relevant indications

- May be used to treat tachyarrythmias/fibrillation, migraines, thyrotoxicosis (short term), essential tremor, or perioperative hypertension.

## Conclusion

Early treatment and prevention is vital in preventing cardiovascular disease progression resulting from chronic hypertension. Overall, beta-blockers have been shown to be equally effective for select diagnoses of uncomplicated hypertension, angina pectoris, migraine, post-MI, heart failure, and both atrial and ventricular arrhythmias.

In recent clinical literature, primary prevention with beta-blockers have been shown to be suboptimal in primary prevention of stroke, myocardial infarction and premature death. Beta-blockers also pose a higher risk for stroke compared to other antihypertensive drugs.

National guidelines (JNC7[1]) for uncomplicated hypertension recommend thiazide diuretics as first-line treatment followed by beta-blockers, ACEI's, and CCB's alone or in combination. For patients with high blood pressure, 2006 AHA/ACC guidelines recommend first-line treatment with beta-blockers and/or ACEI's[4] with or without thiazide diuretics. Patients with history of myocardial infarction, acute coronary syndrome, or left ventricular dysfunction with or without heart failure symptoms should be on a beta-blocker unless contraindicated. Beta-blockers are recommended for heart failure in patients without contraindications but only about half of the patients discharged from the hospital receive a prescription for beta-blockers.[5] In patients with diabetes, beta-blockers should not be avoided due to the possibility of glucose intolerance or insulin resistance. Beta-blockers and ACEI's have been shown to prevent heart failure in diabetic patients.

Based on clinical literature, the appropriate use of beta-blockers in the management of cardiovascular disease can effectively lower blood pressure, prevent cardiovascular events, and improve quality of life.

## SoonerCare Utilization Calendar Year 2005

During fiscal year 2005 a total of **$1,412,146.46** was spent on beta-blockers for a total of 11,290 non-dual members.

**Trends in Utilization of Beta-Blockers**

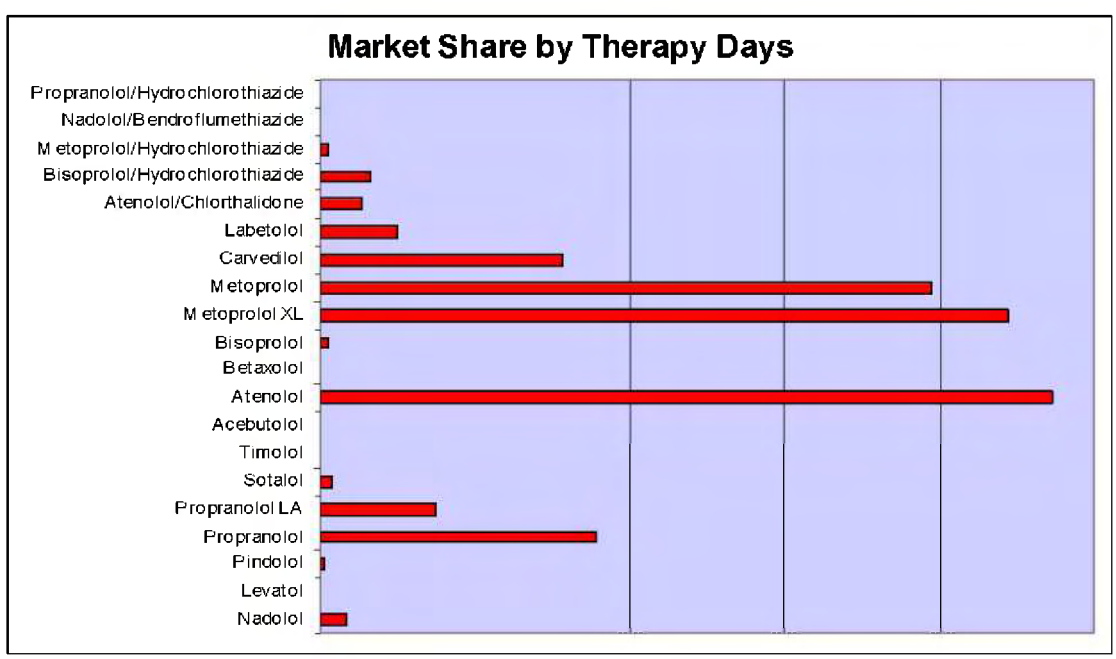
| | *Fiscal Year 2004* | *Fiscal Year 2005* | *Percent Change* | |
|---|---|---|---|---|
| **Total Members** | **9,709** | **11,290** | **Increased** | **16.3 %** |
| **Total Claims** | **39,616** | **48,871** | **Increased** | **23.4 %** |
| **Total Cost** | **$ 994,579.89** | **$ 1,412,146.46** | **Increased** | **42.0 %** |
| **Cost per Claim** | **$ 25.11** | **$ 28.89** | **Increased** | **15.1 %** |
| **Per-Diem Cost** | **$ 0.66** | **$ 0.75** | **Increased** | **13.6 %** |
| **Total Units** | **2,178,235** | **2,738,259** | **Increased** | **25.7 %** |
| **Total Days** | **1,510,764** | **1,876,746** | **Increased** | **24.2 %** |

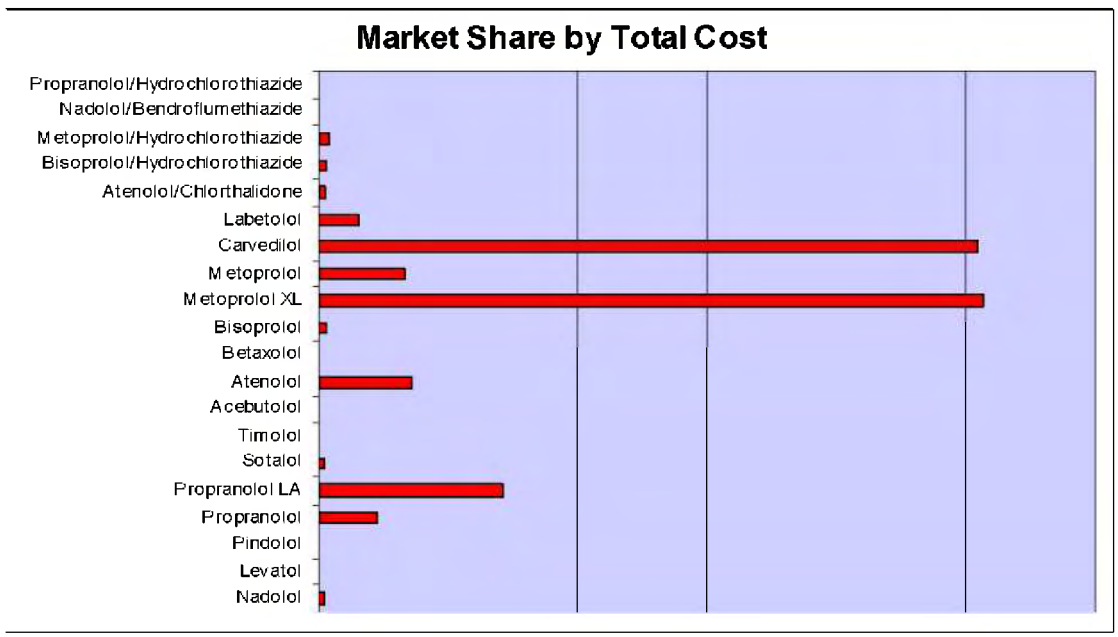
# Utilization of Beta-Blockers

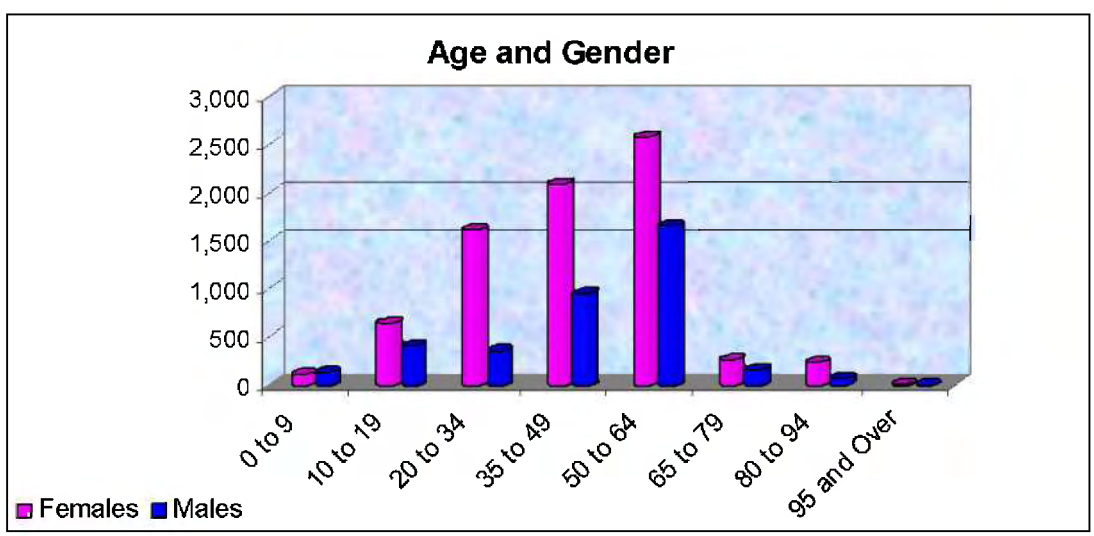
| DRUGNAME | CLAIMS | UNITS | DAYS | MEMBERS | COST | COST/ DAY | UNITS/ DAY |
|---|---|---|---|---|---|---|---|
| NADOLOL TAB 20MG | 180 | 9,006 | 6,150 | 40 | $ 1,332.46 | $ 0.22 | 1.46 |
| NADOLOL TAB 40MG | 165 | 8,806 | 7,246 | 41 | $ 1,584.99 | $ 0.22 | 1.22 |
| NADOLOL TAB 80MG | 77 | 4,010 | 3,408 | 16 | $ 1,064.50 | $ 0.31 | 1.18 |
| NADOLOL TAB 160MG | 4 | 240 | 120 | 1 | $ 433.88 | $ 3.62 | 2.00 |
| LEVATOL TAB 20MG | 1 | 30 | 30 | 1 | $ 53.55 | $ 1.79 | 1.00 |
| PINDOLOL TAB 5MG | 49 | 3,162 | 2,341 | 11 | $ 492.81 | $ 0.21 | 1.35 |
| PINDOLOL TAB 10MG | 26 | 2,205 | 765 | 5 | $ 357.75 | $ 0.47 | 2.88 |
| PROPRANOLOL TAB 10MG | 1,864 | 154,062 | 60,144 | 588 | $ 13,017.23 | $ 0.22 | 2.56 |
| PROPRANOLOL 20MG | 1,919 | 136,667 | 59,402 | 585 | $ 13,511.13 | $ 0.23 | 2.30 |
| PROPRANOLOL TAB 40MG | 1,195 | 80,332 | 41,053 | 414 | $ 9,057.89 | $ 0.22 | 1.96 |
| PROPRANOLOL TAB 60MG | 144 | 9,203 | 4,670 | 46 | $ 4,020.81 | $ 0.86 | 1.97 |
| PROPRANOLOL 80MG | 271 | 22,740 | 9,488 | 73 | $ 2,290.48 | $ 0.24 | 2.40 |
| PROPRANOLOL INJ 1MG/ML | 4 | 820 | 132 | 1 | $ 203.60 | $ 1.54 | 6.21 |
| PROPRANOLOL SOL 20MG/5ML | 115 | 22,519 | 3,446 | 27 | $ 2,063.06 | $ 0.60 | 6.53 |
| PROPRANOLOL SOL 40MG/5ML | 12 | 501 | 360 | 4 | $ 100.40 | $ 0.28 | 1.39 |
| INDERAL LA CAP 60MG | 561 | 25,171 | 20,170 | 192 | $ 32,687.09 | $ 1.62 | 1.25 |
| INDERAL LA CAP 80MG | 761 | 31,637 | 28,524 | 242 | $ 47,280.46 | $ 1.66 | 1.11 |
| INDERAL LA CAP 120MG | 414 | 19,919 | 15,622 | 94 | $ 36,770.23 | $ 2.35 | 1.28 |
| INDERAL LA CAP 160MG | 118 | 7,534 | 5,158 | 33 | $ 17,866.06 | $ 3.46 | 1.46 |
| INNOPRAN XL CAP 80MG | 95 | 3,700 | 3,700 | 26 | $ 4,872.93 | $ 1.32 | 1.00 |
| INNOPRAN XL CAP 120MG | 34 | 1,745 | 1,360 | 9 | $ 2,295.79 | $ 1.69 | 1.28 |
| SOTALOL HCL TAB 80MG | 134 | 8,413 | 5,097 | 37 | $ 1,712.74 | $ 0.34 | 1.65 |
| SOTALOL HCL TAB 120MG | 40 | 2,690 | 1,360 | 9 | $ 872.10 | $ 0.64 | 1.98 |
| SOTALOL HCL TAB 160MG | 52 | 3,140 | 1,600 | 8 | $ 1,157.74 | $ 0.72 | 1.96 |
| SOTALOL HCL TAB 240MG | 10 | 680 | 340 | 2 | $ 362.95 | $ 1.07 | 2.00 |
| TIMOLOL MAL TAB 5MG | 3 | 90 | 90 | 1 | $ 36.75 | $ 0.41 | 1.00 |
| TIMOLOL MAL TAB 10MG | 21 | 1,670 | 630 | 6 | $ 399.15 | $ 0.63 | 2.65 |
| TIMOLOL MAL TAB 20MG | 9 | 540 | 270 | 1 | $ 240.27 | $ 0.89 | 2.00 |
| ACEBUTOLOL CAP 200MG | 33 | 2,362 | 1,152 | 11 | $ 760.13 | $ 0.66 | 2.05 |
| ACEBUTOLOL CAP 400MG | 2 | 60 | 60 | 1 | $ 38.20 | $ 0.64 | 1.00 |
| ATENOLOL TAB 25MG | 3,818 | 179,888 | 150,304 | 1,054 | $ 22,231.51 | $ 0.15 | 1.20 |
| ATENOLOL TAB 50MG | 5,853 | 285,373 | 240,999 | 1,476 | $ 33,657.44 | $ 0.14 | 1.18 |
| TENORMIN TAB 100MG | 1,720 | 91,936 | 81,749 | 424 | $ 15,103.56 | $ 0.18 | 1.12 |
| BETAXOLOL TAB 10MG | 17 | 495 | 690 | 3 | $ 446.12 | $ 0.65 | 0.72 |
| BETAXOLOL TAB 20MG | 16 | 670 | 690 | 2 | $ 809.39 | $ 1.17 | 0.97 |
| BISOPROL FUM TAB 5MG | 112 | 4,538 | 3,860 | 27 | $ 4,386.21 | $ 1.14 | 1.18 |
| BISOPROL FUM TAB 10MG | 27 | 1,645 | 1,870 | 8 | $ 1,640.49 | $ 0.88 | 0.88 |
| TOPROL XL TAB 25MG | 2,079 | 87,284 | 82,581 | 660 | $ 77,476.90 | $ 0.94 | 1.06 |
| TOPROL XL TAB 50MG | 4,618 | 210,881 | 194,434 | 1,230 | $ 183,760.17 | $ 0.95 | 1.08 |
| TOPROL XL TAB 100MG | 3,107 | 154,636 | 141,302 | 784 | $ 195,586.09 | $ 1.38 | 1.09 |
| TOPROL XL TAB 200MG | 557 | 28,169 | 25,836 | 154 | $ 56,104.26 | $ 2.17 | 1.09 |
| METOPROLOL TAB 25MG | 1,582 | 83,375 | 51,026 | 489 | $ 11,139.58 | $ 0.22 | 1.63 |
| METOPROLOL TAB 50MG | 6,524 | 387,250 | 247,559 | 1,640 | $ 36,777.24 | $ 0.15 | 1.56 |
| METOPROLOL TAB 100MG | 2,657 | 171,609 | 96,950 | 610 | $ 18,220.27 | $ 0.19 | 1.77 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LOPRESSOR INJ 5MG/5ML | 1 | 30 | 30 | 1 | $ 61.17 | $ 2.04 | 1.00 |
| COREG TAB 3.125MG | 1,165 | 71,614 | 37,690 | 315 | $ 122,238.89 | $ 3.24 | 1.90 |
| COREG TAB 6.25MG | 1,503 | 95,777 | 50,909 | 404 | $ 163,184.03 | $ 3.21 | 1.88 |
| COREG TAB 12.5MG | 988 | 63,404 | 33,385 | 270 | $ 108,080.65 | $ 3.24 | 1.90 |
| COREG TAB 25MG | 985 | 67,186 | 33,926 | 220 | $ 114,901.55 | $ 3.39 | 1.98 |
| LABETALOL TAB 100MG | 701 | 40,624 | 20,299 | 358 | $ 8,982.97 | $ 0.44 | 2.00 |
| LABETALOL TAB 200MG | 759 | 58,666 | 22,897 | 308 | $ 15,348.45 | $ 0.67 | 2.56 |
| LABETALOL TAB 300MG | 247 | 17,478 | 7,444 | 78 | $ 5,966.56 | $ 0.80 | 2.35 |
| TENORETIC TAB -50 | 398 | 18,871 | 17,767 | 106 | $ 3,104.07 | $ 0.17 | 1.06 |
| ATENOL/CHLOR TAB 100-25MG | 191 | 9,830 | 9,351 | 55 | $ 1,842.69 | $ 0.20 | 1.05 |
| BISOPRL/HCTZ TAB 2.5/6.25 | 169 | 8,300 | 7,430 | 37 | $ 1,177.93 | $ 0.16 | 1.12 |
| ZIAC TAB 5/6.25MG | 367 | 16,118 | 15,318 | 73 | $ 2,781.70 | $ 0.18 | 1.05 |
| BISOPRL/HCTZ TAB 10/6.25 | 228 | 10,092 | 10,011 | 48 | $ 1,648.94 | $ 0.16 | 1.01 |
| METOPRL/HCTZ TAB 50-25MG | 67 | 3,110 | 2,730 | 24 | $ 3,462.56 | $ 1.27 | 1.14 |
| METOPRL/HCTZ TAB 100-25MG | 18 | 915 | 720 | 10 | $ 1,505.42 | $ 2.09 | 1.27 |
| METOPRL/HCTZ TAB 100-50MG | 26 | 1,450 | 1,270 | 8 | $ 2,710.51 | $ 2.13 | 1.14 |
| CORZIDE TAB 40/5 | 4 | 190 | 190 | 2 | $ 362.87 | $ 1.91 | 1.00 |
| PROPRAN/HCTZ TAB 40/25 | 14 | 811 | 581 | 6 | $ 104.07 | $ 0.18 | 1.40 |
| PROPRAN/HCTZ TAB 80/25 | 40 | 2,390 | 1,060 | 6 | $ 405.07 | $ 0.38 | 2.25 |
| TOTAL | 48,871 | 2,738,259 | 1,876,746 | 11,290* | $ 1,412,146.46 | $ 0.75 | 1.46 |

*Unduplicated non-dual members for 2005.






## Prevalence and Therapy Review

Based on eligibility files from OHCA for 2005, a total of 666,708 members were eligible for pharmacy and medical benefits. Of these members, 95,100 (14.3 %) were flagged as having hypertension based on the presence of an ICD-9 code (401.XX – 405.XX) or a paid claim for a hypertensive medication, with 37,553 members being non-dual. There were 29,390 non-dual adults in this hypertensive group. For comparison there were approximately 111,300 total adult non-dual members during 2005. For the current adult SoonerCare population it would be expected that at least 26 % have hypertension based on these totals.

## 2005 Diagnosis Rates for Non-Dual Members

| | Non-Dual (N=37,553) | |
|---|---|---|
| | *Diagnosis* | No Diagnosis |
| HTN Drug Claim | 17,305 | 15,149 |
| *No HTN Drug Claim* | **5,099** | |

Focusing on the 37,553 non-dual eligible hypertensive members, 5,099 had no antihypertensive related medications in their claims history. The following table lists selected diagnoses associated with these members. Total cost for all medical and pharmacy claims was over $400 million for these members.

## Select Diagnoses from Medical Claims for Hypertensive Non-Dual Members

| *Diagnosis* | *Description* | *Members with Diagnosis* |
|---|---|---|
| 401.xx – 405.xx | HYPERTENSION | 37,553 |
| **305.1, 989.84, V15.82** | **SMOKER** | **6,649** |
| 278.0X | OBESITY | 3,967 |
| **428.xx** | **Heart Failure** | **3,936** |
| 410.xx – 412.xx | Myocardial Infarction | 2,011 |
| **250.xx** | **Diabetes** | **9,027** |
| 413.xx | Angina | 1,286 |
| **427.xx** | **Dysrhythmias** | **2,749** |
| 413.xx – 414.xx | High Risk Coronary Disease | 4,885 |

## Beta-Blocker and Other Hypertension Medication Utilization for Non-Dual Hypertensive Members with Compelling Beta-Blocker Indications or Risk Factors

| | BB or Combo[1] | ACE/ARB or Combo[1] | CCB or Combo[1] | Diuretic[1] | Other[1] | None[2] | % NOT Treated[3] |
|---|---|---|---|---|---|---|---|
| ***Hypertension (N=37,553)*** | **11,290** | **13,448** | **6,192** | **14,822** | **7,763** | **5,099** | **13.6 %** |
| *Smoker (N=6,649)* | 2,337 | 2,601 | 1,257 | 2,893 | 812 | 1,241 | 18.7 % |
| *Obesity (N=3,967)* | 1,272 | 1,890 | 697 | 2,231 | 532 | 591 | 14.9 % |
| *Smoker and Obese (N=947)* | 348 | 461 | 178 | 541 | 125 | 131 | 13.8 % |
| *Heart Failure (N=3,936)* | 1,893 | 2,304 | 880 | 3,010 | 539 | 315 | 8.0 % |
| *Myocardial Infarction (N=2,011)* | 1,196 | 1,182 | 463 | 1,090 | 258 | 244 | 12.1 % |
| *Diabetes (N=9,027)* | 2,948 | 5,643 | 1,725 | 4,691 | 1,101 | 1,101 | 12.2 % |
| *Angina (N=1,286)* | 720 | 757 | 342 | 719 | 177 | 133 | 10.3 % |
| *Dysrhythmias (N=2,749)* | 1,461 | 1,238 | 661 | 1,430 | 352 | 335 | 22.9 % |
| *High Risk Coronary (N=4,885)* | 2,615 | 2,843 | 1,180 | 2,835 | 657 | 505 | 19.3 % |

[1]Number of members with at least one claim for specified hypertension medication or combination product in 2005. Members may be included in more than one hypertensive class.
[2]No hypertension medication claims on file for 2005.
[3]Percent of members not treated with any hypertension medication

## Recommendation

The College of Pharmacy recommends physician education to targeted prescribers detailing recent clinical literature and current guideline recommendations for appropriate cost-effective use of beta-blockers and/or an article in the OHCA provider newsletter. Ensuring appropriate beta-blocker use can prevent cardiovascular disease progression while reducing the overall use of medical services and health care costs. In addition, the provision of cardiovascular health and wellness information targeted to members not currently receiving adequate care will promote self awareness and encourage them to change lifestyle behaviors and seek appropriate medical attention concerning their cardiovascular health. The college of pharmacy also recommends consideration of a disease management program for patients at risk for cardiovascular disease.

References: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2. Lindholm LH, Carlberg B, Samuelsson O. Should β blockers remain first choice in the treatment of primary hypertension? A meta-analysis. Lancet 2005;366:1545-1553.
3. Beevers DG. The end of β blockers for uncomplicated hypertension? Lancet 2005;366:1510-1512.
4. 2006 AHA/ACC Secondary Prevention Guidelines for Patients with Coronary and Other Vascular Disease: Summary. The Pharmacist's Letter 2006;22(6):220601. Available at: http://www.pharmacistsletter.com/(bi4lpu452al5h355iyda3eax)/home.aspx?li=0&st=0&cs=&s=PL. Accessed online June 1, 2006.
5. APHA Special Report. The Appropriate Use of β blockers in Heart Failure. American Pharmacists' Association, Baltimore MD; 2006.
6. Treatment Guidelines: Drugs for Hypertension. Medical Letter June 2005. Available at: http://www.medicalletter.org. Accessed July 10, 2006.
7. Which Beta-Blocker? The Medical Letter 2001;43(W1097A):9-11. Available at: http://www.medicalletter.org. Accessed July 10, 2006.

# APPENDIX I

# Influenza Review

## 2005-2006 Influenza Season

Oklahoma Health Care Authority
October 2006

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## Definitions[1]

*Seasonal (or common) flu* – a respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available.

*Avian (or bird) flu* – a respiratory illness that is caused by influenza viruses that occur naturally among wild birds. The H5N1 variant is deadly to domestic fowl and can be transmitted from birds to humans. There is no human immunity and no vaccine is available.

*Pandemic flu* – a virulent human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person.

Human influenza virus usually refers to those subtypes that spread widely among humans. There are three known A subtypes of influenza viruses (H1N1, H1N2, and H3N2) currently circulating among humans. Influenza viruses are constantly changing and other strains might adapt over time to infect and spread among humans.

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## Vaccine Composition and Manufacturer

For the **2005-2006 Influenza Season**, the FDA mandated the following viral composition: [2]

- A/New Caledonia/20/99 (H1N1)
- A/California/7/2003 (H3N2)
- B/Shanghai/361/2002

For the upcoming **2006-2007 Influenza Season**, the FDA mandated the following composition: [3]

- A/New Caledonia/20/99 (H1N1)
- A/Wisconsin/67/2005 (H3N2)
- B/Malaysia/2506/2004

| Vaccine | Manufacturer |
|---|---|
| FluMist | MedImmune Vaccines |
| Fluarix | GlaxoSmithKline Biologics |
| Fluvirin | Chiron Vaccines |
| Fluzone | Sanofi-Pasteur |

Currently, there is not a commercially available vaccine for humans against H5N1.[1] The US Department of Health and Human Services is working with industry to develop pre-pandemic vaccines using current strains and exploring ways to increase vaccine production capacity. For more information about H5N1 vaccine development go to www.pandemicflu.gov/vaccine/#research.

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## CDC Influenza Vaccination Recommendations for the 2006-2007 Influenza Season[4]

Annual vaccination is recommended for the following groups:

1. Children aged 6--59 months
2. Children and adolescents (aged 6 months--18 years) who are receiving long-term aspirin therapy and, therefore, might be at risk for experiencing Reye syndrome after influenza virus infection
3. Women who will be pregnant during the influenza season
4. Adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma (hypertension is not considered a high-risk condition)
5. Adults and children who have required regular medical follow-up or hospitalization during the preceding year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies, or immunodeficiency (including immunodeficiency caused by medications or by human immunodeficiency virus [HIV])
6. Adults and children who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration
7. Residents of nursing homes and other chronic-care facilities that house persons of any age who have chronic medical conditions
8. Adults 50 years of age or older
9. Healthcare workers
10. Persons in close contact with persons in high risk groups
11. Anyone who wishes to be vaccinated

## Contraindications to Vaccination

Contraindications to Inactivated Influenza Vaccine[5]

- Persons known to have anaphylactic hypersensitivity to eggs or other components of the vaccine

Contraindications to Live, Attenuated Influenza Vaccine[6]

- Persons aged <5 years or those aged ≥50 years
- Persons with asthma, reactive airways disease, or other chronic disorders of the pulmonary or cardiovascular systems; persons with other underlying medical conditions, including such metabolic diseases as diabetes, renal dysfunction, and hemoglobinopathies; or persons with known or suspected immunodeficiency diseases or who are receiving immunosuppressive therapies
- Children or adolescents receiving aspirin or other salicylates (because of the association of Reye syndrome with wild-type influenza virus infection)
- Persons with a history of GBS
- Pregnant women
- Persons with a history of hypersensitivity, including anaphylaxis, to any of the components of LAIV or to eggs

## Vaccine Utilization – 2005-2006 Season

For the 2005-2006 Influenza Season, 2,692 members received Influenza Vaccine through the Pharmacy Fee-for-Service program.

| Product | # of Claims | Total Units | Total Days | Total Cost | Per Client |
|---|---|---|---|---|---|
| Fluzone Inj 2005-2006 | 2,580 | 1,396 | 4,159 | $41,806.87 | 16.27 |
| Fluvirin Inj 2005-2006 | 125 | 108 | 4,418 | $2,809.77 | 22.67 |
| | **2,705** | **1,504** | **4,418** | **$44,616.64** | **16.57** |

| | *2004-2005 Season* | *2005-2006 Season* | *Percent Change* |
|---|---|---|---|
| **Number Pharmacy Claims** | **257** | **2,705** | **+ 952%** |
| **Number Medical Claims** | **40,318** | **76,888** | **+ 91%** |
| **Total Members Inoculated** | **16,510** | **31,309** | **+ 90%** |

**Please note:** In October 2004, Chiron had their license to manufacture influenza vaccine suspended by the UK Medicines and Healthcare products Regulatory Agency (MHRA). This action substantially reduced the number of doses available

in the United States for the 2004-2005 season. Eligible members voluntarily or upon advice from their primary care provider may have declined inoculation.

Claims were reviewed to determine the age of the members.

| All Members | | | |
|---|---|---|---|
| Age | Female | Male | Total |
| 0 to 9 | 9,183 | 10,037 | 19,220 |
| 10 to 19 | 2,567 | 2,612 | 5,179 |
| 20 to 34 | 1,062 | 223 | 1,285 |
| 35 to 49 | 915 | 508 | 1,423 |
| 50 to 64 | 1,333 | 873 | 2,206 |
| 65 to 79 | 634 | 356 | 990 |
| 80 to 94 | 761 | 152 | 913 |
| 95 and over | 91 | 2 | 93 |
| **Totals** | **16,645** | **14,763** | **31,309** |

## Anti-Influenza Utilization – 2005-2006 Season

For the 2005-2006 Influenza Season, 4,691 members received anti-influenza medications through the Pharmacy Fee-for-Service program.

| Product | # of Claims | Total Units | Total Days | Total Cost | Per Diem |
|---|---|---|---|---|---|
| Rimantadine tab 100mg | 62 | 909 | 917 | $1,387.30 | 1.51 |
| Rimantadine syp 50mg/5ml | 35 | 2,466 | 241 | $615.05 | 2.55 |
| Tamiflu® cap 75mg | 2,077 | 20,174 | 11,288 | $142,384.55 | 12.61 |
| Tamiflu® susp 12mg/ml | 2,877 | 118,055 | 17,781 | $169,991.46 | 9.56 |
| Relenza® inh | 2 | 40 | 35 | $124.56 | 3.55 |
| | **5,053** | **141,644** | **30,262** | **$314,502.92** | **10.39** |

| | *2004-2005 Season* | *2005-2006 Season* | *Percent Change* |
|---|---|---|---|
| **Total Cost** | **$222,177.71** | **$314,502.92** | **+ 41.6%** |
| **Total Claims** | **3,661** | **5,053** | **+ 38.0%** |
| **Total Members** | **3,486** | **4,691** | **+ 34.6%** |
| **Per Diem** | **$ 10.11** | **$ 10.39** | **+ 2.8%** |

Fiscal Year 2006

| | # of Members | # of Claims | Total Units | Total Days | Total Cost | Per Diem |
|---|---|---|---|---|---|---|
| *Duals* | 173 | 206 | 2,092 | 1,724 | $12,595.05 | 7.31 |
| *Non-Duals* | 4,518 | 4,847 | 139,552 | 28,538 | $301,907.87 | 10.58 |

**Please note:** The anti-influenza utilization in the dual population is affected by the implementation of Medicare Part D. After January 1, 2006, dual members requiring anti-influenza therapy billed their PDP and not *SoonerCare*.

| Non-Dual Members | | |
|---|---|---|
| Age | Female | Male |
| 0 to 9 | 1,255 | 1,407 |
| 10 to 19 | 724 | 619 |
| 20 to 34 | 244 | 37 |
| 35 to 49 | 111 | 32 |
| 50 to 64 | 49 | 29 |
| 65 to 79 | 5 | 4 |
| 80 to 94 | 1 | 1 |
| 95 and over | 0 | 0 |
| **Totals** | **2,389** | **2,129** |

## Utilization of Anti-Influenza Medications in the Vaccinated SoonerCare Population

Approximately 0.9% of the total *SoonerCare* population inoculated for the 2005-2006 Influenza season was treated with anti-influenza medications.

| | | Anti-Influenza Medications | |
|---|---|---|---|
| | | No | Yes |
| **Flu Shot** | No | - | 4,424 |
| | Yes | 31,042 | **267** |

**Please note:** The utilization of anti-influenza medications in the vaccinated population is affected by the implementation of Medicare Part D. After January 1, 2006, dual members requiring anti-influenza therapy billed their PDP and not *SoonerCare*.

## CDC Recommendations for Use of Antiviral Agents for the 2006-2007 Influenza Season[9]

Testing conducted by the CDC and in Canada indicate high levels of resistance to amantadine and rimantadine. Therefore, the CDC and the Advisory Committee on Immunization Practices recommend that ***neither amantadine nor rimantadine be used for the treatment or chemoprophylaxis of influenza A in the United States*** at this time. Oseltamivir or zanamivir can be prescribed if antiviral treatment of influenza is indicated.

---

## Recommendations

The College of Pharmacy has several recommendations for this category.

1. Include an educational message in the next issue of the Provider Newsletter outlining the CDC recommendation against the use of amantadine and rimantadine.
2. For the **2007-2008** flu season, develop educational outreach materials to encourage the *SoonerCare* population to receive annual influenza vaccinations.

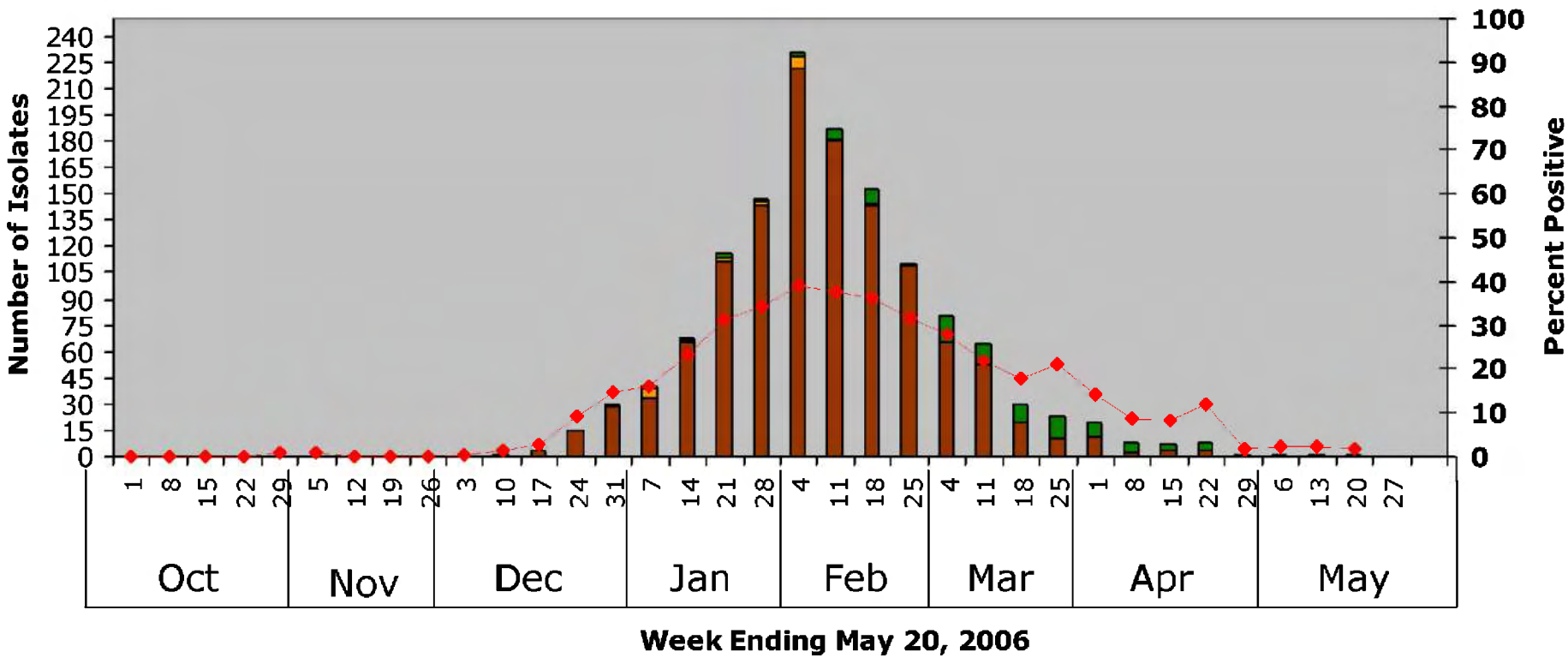
**References**


1. www.pandemicflu.gov/general/ accessed on September 18, 2006.
2. http://www.fda.gov/cber/flu/flu2006.htm accessed on September 21, 2006.
3. http://www.fda.gov/cber/flu/flu2005.htm accessed on September 21, 2006.
4. http://www.cdc.gov/flu/professionals/vaccination/recommendations.htm accessed on September 25, 2006.
5. http://www.cdc.gov/flu/professionals/vaccination/shouldnotinact.htm accessed on September 25, 2006.
6. http://www.cdc.gov/flu/professionals/vaccination/shouldnotlaiv.htm accessed on September 25, 2006.
7. Oklahoma State Health Department Influenza Chart. http://www.health.state.ok.us/program/cdd/fluwatch/updates/05-06/Viral%20Chart%2005-20-06.pdf accessed on September 18, 2006.
8. http://www.who.int/csr/disease/avian_influenza/country/cases_table_2006_09_25/en/index.html accessed on September 28, 2006.
9. http://www.cdc.gov/flu/professionals/treatment/ accessed on September 27, 2006.


**Resources for Pandemic Flu Management Plans**

1. Oklahoma State Department of Health http://www.health.state.ok.us/program/cdd/flu/Oklahoma%20PIM%20Plan%20Final%20WEB%20DRAFT.pdf
2. United Stated Department of Health and Human Services (HHS) http://www.pandemicflu.gov/
3. World Health Organization (WHO) http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf

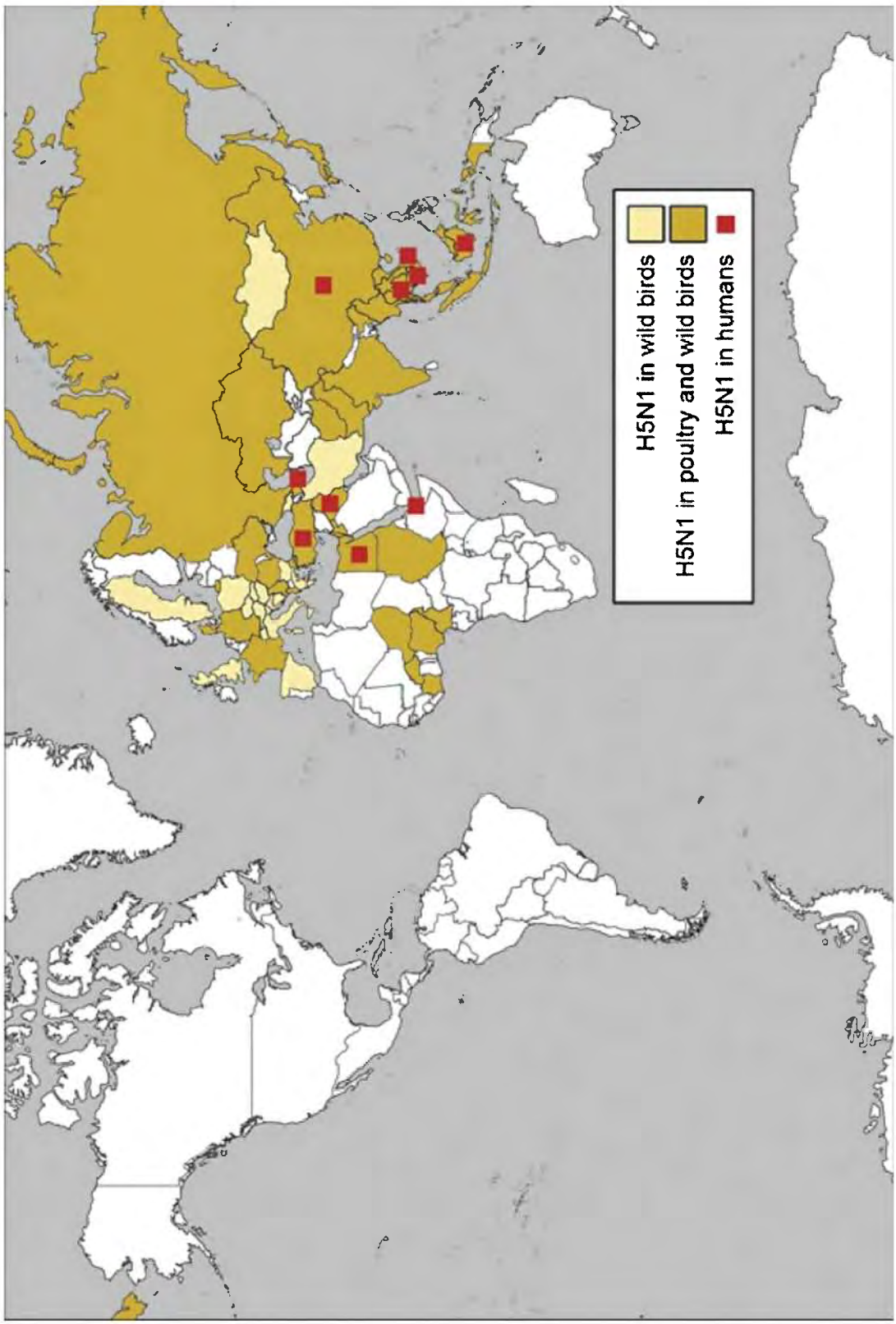
# Culture Positive Influenza Isolates[†] and Percent of Positive Influenza Tests from Sentinel Laboratories by Specimen Collection Date, Oklahoma 2005-2006[7]




[†] Oklahoma sentinel physicians and laboratories submit a sample of specimens to the Oklahoma Public Health Laboratory during influenza season for viral identification.

*Influenza type A (UNK) - Sub-typing not performed or results pending

## Avian Flu Prevalence as of July 7, 2006[1]



## Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to WHO as of September 28, 2006[8]

| Country | 2003 | | 2004 | | 2005 | | 2006 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| Azerbaijan | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | **8** | **5** |
| Cambodia | 0 | 0 | 0 | 0 | 4 | 4 | 2 | 2 | **6** | **6** |
| China | 1 | 1 | 0 | 0 | 8 | 5 | 12 | 8 | **21** | **14** |
| Djibouti | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | **1** | **0** |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 6 | **14** | **6** |
| Indonesia | 0 | 0 | 0 | 0 | 19 | 12 | 49 | 40 | **68** | **52** |
| Iraq | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | **3** | **2** |
| Thailand | 0 | 0 | 17 | 12 | 5 | 2 | 3 | 3 | **25** | **17** |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 4 | **12** | **4** |
| Vietnam | 3 | 3 | 29 | 10 | 61 | 19 | 0 | 0 | **93** | **42** |
| **Total** | **4** | **4** | **46** | **32** | **97** | **42** | **104** | **70** | **251** | **148** |

# APPENDIX J

# New Product Summaries

**Oklahoma Medicaid**
**October 2006**

| Drug | Manufacturer | Indications | Dosage | Adverse Effects | Contraindications | New Molecular Entity | AWP / unit |
|---|---|---|---|---|---|---|---|
| **Fentora™** (fentanyl) buccal tablet | Cephalon, Inc. | Management of breakthrough pain in patients with cancer who are already receiving and who are tolerant to opioids therapy for underlying persistent cancer pain. Product must not be used in opioids non-tolerant patients because life-threatening hypoventilation could occur. | Dosage should be individualized using a progressive plan of pain management. When switching from oral transmucosal fentanyl to Fentora™ the dosing conversion table should be used. | Nausea, vomiting, fatigue, dizziness somnolence, headache, diarrhea, and constipation. | Management of acute or postoperative pain, opioid non-tolerant patients, known intolerance or hypersensitivity to fentanyl or any component of Fentora™. | No | N/A |
| **Noxafil®** (posaconazole) oral suspension | Schering Corporation | Prophylaxis of invasive *Aspergillus* and *Candida* infections in patients, 13 years of age and older, who are at high risk of developing these infections due to being severely immunocompromised. | 200 mg (5 ml) three times daily with a full meal or with liquid nutritional supplement in patients who cannot eat a full meal. Duration based on recovery from neutropenia or immunosuppression. | Fever, headache, rigors, fatigue edema, anorexia dizziness, weakness, diarrhea, nausea, constipation, rash pruritis. | Hypersensitivity to the active substance or excipients, co-administration with ergot alkaloids, co-administration with the CYP3A4 substrates terfenadine, astemizole, cisapride, pimozide, halofantrine, or quinidine. | Yes | $5.71 / ml |

# APPENDIX K

# FDA Public Health Advisory
## Aprotinin Injection (marketed as Trasylol)

Since January, 2006, FDA has been conducting a safety review of Trasylol (aprotinin injection). The review was triggered by the results of two published research studies: one that reported an increase in the chance of kidney failure, heart attack and stroke in patients treated with Trasylol compared to those treated with other similar drugs, and the other that reported an increase in kidney dysfunction compared to another drug. On September 21, 2006, FDA held a public meeting of the Cardiovascular and Renal Drugs Advisory Committee to discuss the safety and overall risk-benefit profile for Trasylol. At that meeting, the committee discussed the findings from the two published observational studies, the Bayer worldwide safety review, and the FDA review of its own post-marketing database.

On September 27, 2006, Bayer Pharmaceuticals told FDA that it had conducted an additional safety study of Trasylol. The preliminary findings from this new observational study of patients from a hospital database reported that use of Trasylol may increase the chance for death, serious kidney damage, congestive heart failure and strokes. FDA was not aware of these new data when it held the September 21, 2006, Advisory Committee meeting on Trasylol safety. FDA is actively evaluating these new data and their implications for appropriate use of the drug.

While FDA conducts its evaluation of this new safety study, we recommend the following to healthcare providers:

- Physicians who use Trasylol should carefully monitor patients for the occurrence of toxicity, particularly to the kidneys, heart, or brain, and promptly report observed adverse event information to Bayer Pharmaceuticals, the drug manufacturer, or to the FDA MedWatch program, by phone (1-800-FDA-1088), by fax (1-800-FDA-0178), or by the Internet at http://www.fda.gov/medwatch/index.html.
- Physicians should consider limiting Trasylol use to those situations where the clinical benefit of reduced blood loss is essential to medical management of the patient and outweighs the potential risks.

These recommendations are similar to those provided in a February 8, 2006, FDA Public Health Advisory and information sheets for health care professionals and patients which were based on the published studies mentioned above. See http://www.fda.gov/cder/drug/infopage/aprotinin/default.htm.

Trasylol works to slow or prevent bleeding, and is used to reduce blood loss and the need for blood transfusion during some types of heart surgeries. Trasylol is made from the lung tissue of cattle.

In the published studies and the recently supplied Bayer study, patients were not assigned at random to receive various treatments, but rather had their treatment chosen by their physician as part of their standard medical care. Consequently, in these safety studies, patients receiving Trasylol may have had a higher chance for serious complications to begin with as compared to patients receiving no treatment or treatment with another drug intended to decrease bleeding. This possibility complicates the assessment of whether the available studies show that Trasylol treatment, rather than other factors, increased the chance for serious kidney or heart complications.

The new study was done for Bayer by a contract research organization. Existing hospital data from 67,000 records of patients undergoing coronary artery bypass graft surgery were examined. 30,000 of the patients were treated with Trayslol and 37,000 were treated with alternate products. Using complex epidemiological and statistical methods, the report suggested that patients receiving Trasylol were at increased risk for death, kidney failure, congestive heart failure and stroke.

Healthcare providers and patients are encouraged to report adverse event information to FDA via the MedWatch program by phone (1-800-FDA-1088), by fax (1-800-FDA-0178), or by the Internet at http://www.fda.gov/medwatch/index.html.

Back to Top Back to Aprotinin

Date created: September 29, 2006

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**Information for Healthcare Professionals**

# Concomitant Use of Ibuprofen and Aspirin

## New Information [9/2006] - Concomitant Use of Ibuprofen and Aspirin:

Ibuprofen can interfere with the anti-platelet effect of low dose aspirin (81 mg per day), potentially rendering aspirin less effective when used for cardioprotection and stroke prevention. Healthcare professionals should advise consumers and patients regarding the appropriate concomitant use of ibuprofen and aspirin.

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*This information reflects FDA's current analysis of data available to FDA concerning these drugs. FDA intends to update this sheet when additional information or analyses become available.*

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***To report serious adverse events associated with the use of these drugs, please contact the FDA MedWatch program using the contact information at the bottom of this sheet.***

## Considerations

Health care professionals should consider:

- Counseling patients about the appropriate timing of ibuprofen dosing if they are also taking aspirin for cardioprotective effects.
- With occasional use of ibuprofen, there is likely to be minimal risk from any attenuation of the antiplatelet effect of low dose aspirin, because of the long-lasting effect of aspirin on platelets.
- Patients who use immediate release aspirin (not enteric coated) and take a single dose of ibuprofen 400 mg should dose the ibuprofen at least 30 minutes or longer after aspirin ingestion, or more than 8 hours before aspirin ingestion to avoid attenuation of aspirin's effect.
- Recommendations about the timing of concomitant use of ibuprofen and enteric-coated low dose aspirin cannot be made based upon available data.
- Other nonselective OTC NSAIDs should be viewed as having the potential to interfere with the antiplatelet effect of low-dose aspirin unless proven otherwise.
- Prescribing analgesics that do not interfere with the antiplatelet effect of low dose aspirin for high risk populations.

## Data Summary

Aspirin is available over-the-counter as a tablet, buffered tablet, effervescent tablet, or caplet in immediate-release formulations and as a tablet in enteric-coated formulations. Individual aspirin doses range from 81 mg to 500 mg.

It has been demonstrated in published and unpublished human ex vivo studies, that ibuprofen interferes with the antiplatelet activity of low dose aspirin (81 mg, immediate release) when they

are ingested concurrently. The mechanism by which this occurs may be through competitive inhibition of the acetylation site of cyclooxygenase (COX) in the platelet. Both ibuprofen (reversible inhibition) and aspirin (irreversible inhibition) occupy nearby sites on COX, such that the presence of ibuprofen interferes with aspirin binding. Once the ibuprofen releases from the binding site, COX will not be inhibited because some aspirin available to bind will have been excreted. This ibuprofen interference attenuates the expected aspirin-mediated irreversible inhibition of thromboxane B2 (TXB2) production and the expected inhibition of platelet aggregation.

There are no clinical endpoint studies conducted specifically to evaluate the interaction. Attenuation of 90% or more of the antiplatelet effect of aspirin has been defined as clinically significant by some investigators. Unpublished single dose trials with ibuprofen 400 mg indicate that interference with aspirin's antiplatelet activity, as measured by TXB2 levels and platelet activation studies, occurs when ibuprofen is taken within 30 minutes after immediate release aspirin dosing. The interaction also occurs when a single dose of ibuprofen 400 mg is taken 8 hours or less prior to aspirin dosing. At least 8 hours should elapse after ibuprofen dosing, before giving aspirin, to avoid significant interference.

One study showed that the antiplatelet effect of enteric-coated low dose aspirin is attenuated when ibuprofen 400 mg is dosed 2, 7, and 12 hours after aspirin.6 FDA is unaware of studies that have looked at the same type of interference by ketoprofen with low dose aspirin, and there are no data looking at nonprescription doses of naproxen. There is at least one study that has suggested that naproxen at higher than nonprescription doses may interfere with aspirin's anti-platelet activity when they are co-administered. Acetaminophen appears to not interfere with the antiplatelet effect of low dose aspirin, and FDA is unaware of any interference by narcotic analgesics.

**Implications**

The clinical implication of the interference by ibuprofen on the anti-platelet effect of aspirin is unclear. However, it is potentially important because the cardioprotective effect of aspirin, when used for secondary prevention of myocardial infarction, could be decreased or negated.

**News Release**
FOR IMMEDIATE RELEASE
September 06, 2006

# Working Together: DEA and the Medical Community

*DEA Issues Policy Statement on Dispensing and Prescribing Controlled Substances for Pain Treatment*

Today, DEA is unveiling a proposed rule that will make it easier for patients with chronic pain or other chronic conditions, to avoid multiple trips to a physician. It will allow a physician to prescribe up to a 90-day supply of Schedule II controlled substances during a single office visit, where medically appropriate.

The Notice of Proposed Rulemaking is accompanied by a policy statement, "Dispensing Controlled Substances for the Treatment of Pain," which provides information requested by medical professionals regarding DEA's position on this important issue.

Also new today, DEA is launching a new page on its website (www.dea.gov) called "Cases Against Doctors." Everyone will be able to see for themselves the criminal acts committed by those few physicians who are subject to prosecution or administrative action each year.

DEA's guiding principle is to prevent the abuse and diversion of prescription controlled substances, which have become increasingly popular and deadly, without impacting the ability of patients with legitimate need to have full access to pain relief prescribed by their physician. DEA remains committed to the September 2001 Balanced Policy of promoting pain relief and preventing abuse of pain medications.

"We listened to the comments of more than 600 physicians, pharmacists, nurses, patients, and advocates for pain treatment, and studied their concerns carefully. Today's policy statement is the result of that collaboration. The policy statement reiterates the DEA's commitment to striking the proper balance to ensure that people who need pain relief get it, and those who abuse it, don't," said DEA Administrator Karen P. Tandy.

The new policy statement outlines the longstanding legal requirements on dispensing controlled substances for the treatment of pain. It addresses the requirement that controlled substances be prescribed only for a legitimate medical purpose, examines the issues surrounding the treatment of pain, and elaborates on DEA's policy for taking appropriate legal action against those very few physicians who illegally prescribe controlled substances.

"We believe that the statement and proposed rule will help the medical professional ensure that only patients who need medication for pain relief get it. The statement reflects an awareness of patients' needs as well as the importance of preventing any illegal diversion of prescription drugs," added Administrator Tandy.

The overwhelming majority of medical professionals who provided written input expressed concern about the statutory provision that restricts doctors from refilling schedule II prescriptions. In response, DEA has developed a proposed regulation that clarifies the statute and expressly allows for the issuance of multiple Schedule II prescriptions in appropriate circumstances. This proposed rule, which is being published for public comment as required by law, is intended to make sure patients get the pain relief they need, and that doctors have the latitude to prescribe in a manner consistent with their sound medical judgment, while enabling DEA to fulfill its legal obligation to prevent drug abuse and diversion.

Under the proposed rule, physicians, as they have always done, must determine whether a patient has a legitimate medical need for the prescribed substance, and the physician must be acting in the usual course of professional practice. DEA's proposed regulation would then permit the physician to issue multiple Schedule II prescriptions, during a single office visit, allowing patients to receive a total of up to a 90-day supply of controlled substances according to the fill date that the doctor gives the pharmacist.

A sixty-day public comment period on the Notice of Proposed Rulemaking begins on September

6, 2006, the date of publication.

**To aid doctors in their responsibility to prevent the diversion and abuse of controlled substances,** DEA also has updated its Practitioner's Manual, which has been posted on www.dea.gov today.

Prescription drug abuse is a growing epidemic and requires everyone's vigilance. Statistics show that:

- Nearly 1 in 10 high school seniors admits to abusing powerful prescription painkillers.
- Today, more new drug users have begun abusing pain relievers (2.4 million) than marijuana (2.1 million) or cocaine (1.0 million).
- 6 million Americans are currently abusing controlled substance prescription drugs- that is more than the number abusing cocaine, heroin, hallucinogens, and inhalants, combined.
- Researchers from the Centers for Disease Control and Prevention report that opioid prescription painkillers now cause more drug overdose deaths than cocaine and heroin combined.
- Admissions to treatment for prescription opiates swelled by a third in just two years (from 46,972 in 2002 to 63,243 in 2004).

The law charges DEA with responsibility to combat this exploding problem by preventing the diversion of legal drugs into the illegal market where they can be abused. The medical community shares DEA's urgent desire to put an end to this growing and dangerous illegal activity.

"Today's policy statement reaffirms that DEA wants doctors to treat pain as is appropriate under accepted medical community standards. Physicians acting in accordance with accepted medical practice should be confident that they will not be criminally charged for prescribing all appropriate pain medications," Administrator Tandy concluded.

Case Against Doctors>>

Practitioners Manual>>

DEA Policy: Dispensing Controlled Substances for the Treatment of Pain>>

DEA Proposal Notice: Issuance of Multiple Prescriptions for Schedule II Controlled Substances>>

Administrator Tandy's DEA Issues Policy Statement on Dispensing and Prescribing Controlled Substances for Pain Treatment (video clip)>>