

**Alabama Medicaid DUR Board Meeting Minutes**  
**October 28, 2015**

**Members Present:** Kelli Littlejohn Newman, Melinda Rowe, Paula Thompson, Bernie Olin, Frank Pettyjohn, Richard Glaze, Chris Phung, Marilyn Bulloch, Denyse Thornley-Brown, P.J. Hughes

**Also Present:** Tiffany Minnifield, Clemice Hurst, Heather Vega, Lori Thomas, Kristin Marvin, Jessica Blackburn

**Present via Conference Call:** Kristian Testerman, Laci Miller, Tammy Dubac, Lisa Channell, Michelle Stiles

**Members Absent:** Sandra Parker, Christopher Randolph, Dan McConaghy, Donald Kern

**Call to Order:** The DUR meeting was called to order by P. Thompson at approximately 1:03p.m.

**Review and Adoption of Minutes:** The minutes of the July 22, 2015 meeting were presented and P. Thompson made a motion to update the Time Ratio for January 2015. F. Pettyjohn seconded the motion and the motion was approved unanimously.

**Prior Authorization and Overrides Update:** L. Thomas began the Prior Authorization and Overrides Update with the Monthly Manual Prior Authorizations and Overrides Report for the month of April 2015. She reported 10,201 total manual requests. She then reported 22,700 electronic requests for the same time frame. From the Prior Authorization and Override Response Time Ratio report for April 2015, L. Thomas reported that approximately 58% of all manual PAs and 57% of all overrides were completed in less than two hours. Approximately 86% percent of all manual PAs and overrides were completed in less than four hours. Ninety-five percent of all manual PAs and 94% of all overrides were completed in less than eight hours. For the month of May 2015, L. Thomas reported 9,137 manual PA requests and 21,179 electronic PA requests. She reported that 57% of manual PAs and 55% of overrides were completed in less than two hours. Eighty-five percent of all manual PAs and 83% of all overrides were completed in less than four hours. Ninety-five percent of all manual PAs and 94% of all overrides were completed in less than eight hours. For the month of June 2015, L. Thomas reported 9,629 manual PA requests and 20,303 electronic PA requests. L. Thomas reported that approximately 65% of all manual PAs and 66% of all overrides were completed in less than two hours. Eighty-eight percent of all manual PA requests and 90% of all overrides were completed in less than four hours. Ninety-four percent of all manual PA requests and 95% of all overrides were completed in less than eight hours.

**Program Summary Review:** L. Thomas briefly reviewed the Alabama Medicaid Program Summary. She reported 3,687,299 total prescriptions, 227,149 average recipients per month using pharmacy benefits and an average paid per prescription of \$90.42 for the months of January 2015 through June 2015.

**Cost Management Analysis:** L. Thomas reported an average cost per claim of \$95.51 for June 2015. From the 2<sup>nd</sup> Quarter 2015 Drug Analysis, L. Thomas reported 79.9% generic utilization, 9.8% brand single-source, 6.3% brand multi-source (those requests which required a DAW override), and 4% OTC and "other". From the Top 25 Drugs Based on Number of Claims from 04/01/2015-06/30/2015, L. Thomas reported the top five drugs: hydrocodone-acetaminophen, amoxicillin, cetirizine, ProAir<sup>®</sup> HFA, and montelukast sodium. She then reported the top five drugs from the Top 25 Drugs Based on Claims Cost from 04/01/2015-6/30/2015: Vyvanse<sup>®</sup>, Abilify<sup>®</sup>, Harvoni<sup>®</sup>, Invega<sup>®</sup> Sustenna<sup>®</sup>, and Adderall XR<sup>®</sup>. L. Thomas reminded the Board that Abilify was now available as a generic product. B. Olin asked if there

were any limitations on ADHD medications. L. Thomas explained that Vyvanse and Adderall XR are preferred agents and have quantity limitations in place. From the Top 15 Therapeutic Classes by Total Cost of Claims for the same time frame, L. Thomas reported the top five classes: Antipsychotic Agents, Amphetamines, Miscellaneous Anticonvulsants, Hemostatics, and Respiratory Tract Corticosteroids.

**Review of Hepatitis C Medication Utilization:** L. Thomas presented pre-rebate utilization data for Harvoni<sup>®</sup>, Sovaldi<sup>®</sup>, and Viekira PAK<sup>™</sup>. K. Newman reviewed the criteria development process with the Board. L. Thomas also presented the information provided in the Hepatitis C Antiviral Agents Prior Authorization (PA) Criteria Instructions. P. Hughes asked if the physician must have a specialty to prescribe the Hepatitis C antiviral medications. L. Thomas replied that there is no specialty requirement but that most physicians are gastroenterologist or hepatologist. R. Glaze asked if the patient must sign an acknowledgment of Medicaid's policy when receiving treatment and K. Newman stated that she could ask other states what they are doing. P. Hughes also asked how Medicaid is handling requests for recipients who are incarcerated. K. Newman explained that Medicaid does not cover prescriptions for Medicaid recipients during their incarceration.

**RDUR Intervention Report:** L. Thomas presented the RDUR Activity Report for April 2015. She reported 625 profiles reviewed and 815 letters sent with 113 responses received as of the date of the report. She reported 41 of 64 physicians indicated that they found the RDUR letters "useful" or "extremely useful". The criteria for the cycle of intervention letters included duplicate antipsychotic therapy (Risperdal Consta and oral antipsychotics; paliperidone injection and oral antipsychotics) and appropriate use (concurrent use of buprenorphine and pure opiate agonist). L. Thomas then presented the RDUR Activity Report for May 2015. She reported 728 profiles reviewed and 901 letters sent with 116 responses received as of the date of the report. She reported 84 of 123 physicians indicated that they found the RDUR letters "useful" or "extremely useful". The criteria for the cycle of intervention letters included appropriate use (use of short-acting opioids in the absence of long-acting analgesics), drug-drug interaction (oxycodone and CYP3A4 inducers), overutilization precaution (overutilization of Kapvay), and appropriate use (concurrent use of buprenorphine and pure opiate agonist). The June 2015 Activity Report indicated 744 profiles reviewed and 1,031 letters sent with 123 responses received as of the date of the report. L. Thomas reported 50 of 89 physicians indicated that they found the RDUR letters "useful" or "extremely useful". The criteria for the cycle of intervention letters were drug-disease precaution (aripiprazole use in patients with cardiovascular disease, cerebrovascular disease, or predisposed hypotension), drug-disease precaution (safety and efficacy of aripiprazole in patients with psychosis associated with Alzheimer's disease), and appropriate use (concurrent use of buprenorphine and pure opiate agonist).

**Proposed Criteria:** L. Thomas presented the proposed set of 52 criteria to the Board. T. Minnifield instructed the Board members to mark their ballots. Of the 52 criteria, results from the criteria vote returned 51 approved and 1 approved as amended.

**Medicaid Update:** T. Minnifield began the Medicaid Update by reminding the Board members that all Medicaid information discussed is available online, as well as any new Medicaid ALERTs.

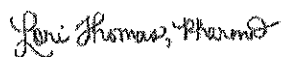
**P & T Committee Update:** C. Hurst began the P & T Update by informing the Board that the last meeting was held on August 19, 2015 and covered the Antihypertensives and Hepatitis C Antivirals. The next P and T meeting is scheduled for November 4, 2015, at 9 am and will cover the Respiratory Agents, Intranasal Corticosteroids, and the Eye, Ear, Nose, and Throat Preparations.

**New Business:** P. Thompson notified the Board that the next DUR meeting will be held on January 27, 2016. K. Newman mentioned that the next face-to-face meeting with the Care Networks was scheduled for November. K. Newman discussed the pharmacy supplemental tax with the Board and provided information regarding the state plan amendment which was sent to the Centers for Medicare and

Medicaid Services (CMS). F. Pettyjohn made a motion to adjourn the meeting. The motion was seconded by M. Bulloch. A voice vote to adjourn was unanimous. The meeting was adjourned at 2:25 p.m.

**Next Meeting Date:** The next DUR Board meeting will be held on January 27, 2016.

Respectfully submitted,

A handwritten signature in cursive script that reads "Lori Thomas, PharmD".

Lori Thomas, PharmD

**ALABAMA MEDICAD  
RETROSPECTIVE DRUG UTILIZATION REVIEW  
CRITERIA RECOMMENDATIONS**

**Criteria Recommendations**

**Accepted   Approved   Rejected  
As  
Amended**

**1. Umeclidinium-Vilanterol/ Overutilization**

\_\_\_✓\_\_\_   \_\_\_   \_\_\_

Alert Message: The manufacturer's recommended dose of Anoro Ellipta (umeclidinium/vilanterol) is 1 oral inhalation (umeclidinium 62.5mcg/ vilanterol 25mcg) once daily.

Clinically significant cardiovascular effects and fatalities have been reported in association with excessive use of inhaled sympathomimetic drugs.

Conflict Code: ER - Overutilization

Drugs/Diseases

Util A

Util B

Util C

Umeclidinium -Vilanterol

Max Dose: umeclidinium 62.5mcg/ vilanterol 25mcg per day

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.

Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**2. Umeclidinium-Vilanterol/ Black Box Warning**

\_\_\_✓\_\_\_   \_\_\_   \_\_\_

Alert Message: Anoro Ellipta (umeclidinium/vilanterol) contains the long-acting beta-2 adrenergic agonist (LABA) vilanterol and all LABAs increase the risk of asthma-related death. The safety and efficacy of umeclidinium/vilanterol in patients with asthma have not been established. Umeclidinium/vilanterol is not indicated for the treatment of asthma.

Conflict Code: TA – Therapeutic Appropriateness

Drugs/Diseases

Util A

Util B

Util C

Umeclidinium -Vilanterol

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.

Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**3. Umeclidinium-Vilanterol/ Cardiovascular, Convulsive Disorders, Thyrotoxicosis & Diabetes**

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Alert Message: Anoro Ellipta (umeclidinium/vilanterol) should be used with caution in patients with cardiovascular or convulsive disorders, thyrotoxicosis, or sensitivity to sympathomimetic drugs. The vilanterol component is a sympathomimetic amine and can exacerbate these conditions.

Conflict Code: TA – Therapeutic Appropriateness  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Umeclidinium -Vilanterol	Hypertension Arrhythmias Heart Failure Diabetes Seizures Epilepsy	

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.  
Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**4. Umeclidinium-Vilanterol / Strong CYP3A4 Inhibitors**

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Alert Message: Concurrent use of Anoro Ellipta (umeclidinium/vilanterol) with a strong CYP3A4 inhibitor may result in increased systemic exposure to the vilanterol component. Vilanterol is a CYP3A4 substrate and inhibition of the CYP3A4-mediated metabolism may increase exposure and risk of adverse cardiovascular effects.

Conflict Code: DD –Drug/Drug Interactions  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Umeclidinium -Vilanterol	Nefazodone Clarithromycin Telithromycin Ketoconazole Itraconazole Posaconazole Voriconazole	Saquinavir Ritonavir Nelfinavir Indinavir Boceprevir Telaprevir

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.  
Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**5. Umeclidinium-Vilanterol / MAOIs, TCA, & Other QT Prolong Meds**

Alert Message: Anoro Ellipta (umeclidinium/vilanterol) should be administered with extreme caution to patients being treated with MAOIs, TCAs, or drugs known to prolong the QTc interval because the action of the adrenergic agonist, vilanterol, on the cardiovascular system may be potentiated by these agents.

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Conflict Code: DD –Drug/Drug Interactions

Drugs/Diseases

Util A

Util B

Util C

Umeclidinium –Vilanterol

Albuterol	Disopyramide	Imipramine	Pazopanib	Thloridazine
Alfuzosin	Dofetilide	Indapamide	Pentamidine	Tizanidine
Amantadine	Dolasetron	Isradipine	Pimozide	Tolterodine
Amiodarone	Doxepin	Itraconazole	Posaconazole	Trazodone
Amitriptyline	Dronedarone	Ketoconazole	Procalnamide	TMP/SMZ
Amphetamine	Droperidol	Lapatinib	Propafenone	Trimipramine
Arsenic Trioxide	Ephedrine	Levalbuterol	Protriptyline	Vandetanib
Asenapine	Epinephrine	Levofloxacin	Quetiapine	Vardenafil
Atazanavir	Erythromycin	Lithium	Quinidine	Venlafaxine
Atomoxetine	Escitalopram	Metaproterenol	Ranolazine	Ziprasidone
Azithromycin	Felbamate	Methadone	Risperidone	Zolmitriptan
Chloral Hydrate	Flecainide	Moexipril/HCTZ	Ritonavir	Ezogabine
Chloroquine	Fluconazole	Moxifloxacin	Salmeterol	Isocarboxazid
Chlorpromazine	Fluoxetine	Nicardipine	Saquinavir	Phenelzine
Ciprofloxacin	Foscarnet	Nilotinib	Sertraline	Tranylcypromine
Citalopram	Fosphenytoin	Norfloxacin	Solifenacin	Linezolid
Clarithromycin	Galantamine	Nortriptyline	Sotalol	Rasagiline
Clomipramine	Gemifloxacin	Octreotide	Sunitinib	
Clozapine	Granisetron	Ofloxacin	Tacrolimus	
Dasatinib	Haloperidol	Ondansetron	Tamoxifen	
Desipramine	Ibutilide	Paliperidone	Telithromycin	
Diphenhydramine	lloperidone	Paroxetine	Terbutaline	

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.  
Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**6. Umeclidinium-Vilanterol / Non-Potassium Sparing Diuretics** \_\_\_\_\_✓\_\_\_\_\_

Alert Message: Caution should be exercised when Anoro Ellipta (umeclidinium/vilanterol), a beta-agonist containing combo agent, is prescribed concurrently with non-potassium-sparing diuretics because concomitant administration may potentiate the ECG changes or hypokalemia that may result from the administration of the diuretic.

Conflict Code: DD- Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Umeclidinium -Vilanterol	Furosemide	indapamide
	Bumetanide	Methyclothiazide
	Torsemide	Metolazone
	Chlorothiazide	
	Chlorthalidone	
	HCTZ	

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.  
Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**7. Umeclidinium-Vilanterol / Nonselective Beta Blockers** \_\_\_\_\_✓\_\_\_\_\_

Alert Message: Concurrent use of a beta-adrenergic blocker with Anoro Ellipta (umeclidinium/vilanterol), a beta<sub>2</sub>-agonist containing combo agent, may diminish the pulmonary effect of the beta-agonist component, vilanterol. Beta-blockers not only block the therapeutic effects of beta-agonists, but may produce severe bronchospasm in patients with asthma and COPD. If concomitant therapy cannot be avoided, consider a cardioselective beta-blocker, but administered with caution.

Conflict Code: DD- Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Negating)</u>
Umeclidinium -Vilanterol	Carvedilol	Acebutolol
	Nadolol	Atenolol
	Labetalol	Betaxolol
	Penbutolol	Bisoprolol
	Pindolol	Metoprolol
	Propranolol	Nebivolol
	Sotalol	
	Timolol	

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.  
Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**8. Umeclidinium-Vilanterol / Anticholinergics**

  ✓      \_\_\_\_\_    \_\_\_\_\_

Alert Message: The concurrent use of Anoro Ellipta (umeclidinium/vilanterol) with anticholinergic agents should be avoided. The umeclidinium component of the combo product is an anticholinergic agent and concomitant use with other anticholinergics may lead to an increase in anticholinergic adverse effects.

Conflict Code: DD- Drug/Drug Interaction

Drugs/Diseases

Util A

Umeclidinium -Vilanterol

Util B

Trihexyphenidyl

Benztropine

Orphenadrine

Darifenacin

Fesoterodine

Flavoxate

Oxybutynin

Solifenacin

Tolterodine

Trospium

Hyoscyamine

Scopolamine

Propantheline

Glycopyrrolate

Mepenzolate

Methscopolamine

Dicyclomine

Util C

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.

Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**9. Umeclidinium-Vilanterol / Narrow Angle Glaucoma**

  ✓      \_\_\_\_\_    \_\_\_\_\_

Alert Message: Anoro Ellipta (umeclidinium-vilanterol) should be used with caution in patients with narrow-angle glaucoma. The umeclidinium component of this combo product is an anticholinergic agent and its use in this patient population can worsen the condition.

Conflict Code: TA – Therapeutic Appropriateness

Drugs/Diseases

Util A

Umeclidinium -Vilanterol

Util B

Util C (Include)

Narrow Angle Glaucoma

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.

Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.



**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**10. Umeclidinium-Vilanterol / Urinary Retention**

  ✓                      

Alert Message: Anoro Ellipta (umeclidinium-vilanterol) should be used with caution in patients with urinary retention. The umeclidinium component of this combo product is an anticholinergic agent and its use can worsen urinary retention, especially in patients with prostatic hyperplasia or bladder neck obstruction.

Conflict Code: TA – Therapeutic Appropriateness  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Umeclidinium –Vilanterol		Urinary Retention Bladder Neck Obstruction Prostatic Hyperplasia

References:

Clinical Pharmacology, 2014 Elsevier/Gold Standard.  
Anoro Ellipta Prescribing Information, Dec. 2013, GlaxoSmithKline.

**11. Umeclidinium / Overutilization**

  ✓                      

Alert Message: The manufacturer’s recommended dose of Incruse Ellipta (umeclidinium) is 1 oral inhalation (62.5 mcg) once daily.

Conflict Code: ER - Overutilization  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Umeclidinium		

Max Dose: umeclidinium 62.5mcg per day

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.  
Incruse Ellipta Prescribing Information, 2014, GlaxoSmithKline.

**12. Umeclidinium / Therapeutic Appropriateness (Age 0-18 yoa)**

  ✓                      

Alert Message: The safety and efficacy of Incruse Ellipta (umeclidinium) in pediatric patients have not been established.

Conflict Code: TA – Therapeutic Appropriateness  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Umeclidinium		

Age Range: 0-18 yoa

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.  
Incruse Ellipta Prescribing Information, 2014, GlaxoSmithKline.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**13. Umeclidinium / Narrow Angle Glaucoma**

Alert Message: Incruse Ellipta (umeclidinium) should be used with caution in patients with narrow-angle glaucoma. Umeclidinium is an anticholinergic agent and its use in this patient population can worsen the condition.

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Conflict Code: TA – Therapeutic Appropriateness

Drugs/Diseases

Util A

Util B

Util C (Include)

Umeclidinium

Narrow Angle Glaucoma

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.

Incruse Ellipta Prescribing Information, 2014, GlaxoSmithKline.

**14. Umeclidinium / Urinary Retention**

Alert Message: Incruse Ellipta (umeclidinium) should be used with caution in patients with urinary retention. Umeclidinium is an anticholinergic agent and its use can worsen urinary retention, especially in patients with prostatic hyperplasia or bladder neck obstruction.

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Conflict Code: TA – Therapeutic Appropriateness

Drugs/Diseases

Util A

Util B

Util C

Umeclidinium

Urinary Retention  
Bladder Neck Obstruction  
Prostatic Hyperplasia

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.

Incruse Ellipta Prescribing Information, 2014, GlaxoSmithKline.

**15. Umeclidinium / Other Anticholinergics**

Alert Message: The concurrent use of Incruse Ellipta (umeclidinium) with anticholinergic agents should be avoided. Umeclidinium is an anticholinergic agent and concomitant use with other anticholinergics may lead to an increase in anticholinergic adverse effects.

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Conflict Code: DD- Drug/Drug Interaction

Drugs/Diseases

Util A

Util B

Util C

Umeclidinium

Trihexyphenidyl  
Benztropine  
Orphenadrine  
Darifenacin  
Fesoterodine  
Flavoxate  
Oxybutynin  
Solifenacin  
Tolterodine  
Trospium  
Hyoscyamine  
Scopolamine  
Propantheline  
Glycopyrrolate  
Mepenzolate  
Methscopolamine  
Dicyclomine

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.

Incruse Ellipta Prescribing Information, 2014, GlaxoSmithKline.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**16. Umeclidinium / Nonadherence**

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Alert Message: Based on refill history, your patient may be under-utilizing Incruse Ellipta (umeclidinium). Non-adherence to the prescribed dosing regimen may result in sub-therapeutic effects, which may lead to decreased outcomes and additional healthcare costs.

Conflict Code: LR - Nonadherence

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Umeclidinium		

References:

van Boven JF, Chavannes NH, van der Molen T, et al. Clinical and Economic Impact of Non-adherence in COPD: A Systematic Review. *Respir Med.* 2014 Jan;108(1):103-113.

Restrepo RD, Alvarez MT, Wittnebel LD, et al., Medication Adherence Issues in Patients Treated for COPD. *International Journal of COPD.* 2008;3(3):371-384.

Simoni-Wastila L, Wei Y, Qian J, et al., Association of Chronic Obstructive Pulmonary Disease Maintenance Medication Adherence With All-Cause Hospitalization and Spending in a Medicare Population. *Am J Geriatr Pharmacother.* 2012 Jun;10(3):201-210.

Lareau Sc, Yawn BP. Improving Adherence with Inhaler Therapy in COPD. *International Journal COPD.* 2010 Nov 24;5:401-406.

**17. Dabigatran 150 mg / P-gp Inhibitors / CKD Stage 3**

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Alert Message: In patients with moderate renal impairment (CrCl 30-50 mL/min) consider reducing the dose of Pradaxa (dabigatran) to 75 mg twice daily when administered concomitantly with the P-gp inhibitor dronedarone or ketoconazole. Concurrent use of dabigatran with one of these agents in patients with moderate renal impairment is expected to produce increased dabigatran exposure greater than that seen with either factor (P-gp inhibition or renal impairment) alone.

Conflict Code: DD -- Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Dabigatran 150mg	Dronedarone Ketoconazole	CKD Stage 3

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard

Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.

**18. Dabigatran / P-gp Inhibitors / CKD Stage 4 & 5**

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Alert Message: Concurrent use of Pradaxa (dabigatran) and a P-gp inhibitor in patients with severe renal impairment (CrCl 15-30 mL/min) should be avoided. P-gp inhibition and impaired renal function are the major independent factors that result in increased dabigatran exposure. Concomitant use of dabigatran with a P-gp inhibitor in patients with severe renal impairment is expected to produce increased dabigatran exposure greater than that seen with either factor alone.

Conflict Code: DD -- Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Dabigatran	Dronedarone Ketoconazole Itraconazole Verapamil Diltiazem Ritonavir	Amlodarone Quinidine Clarithromycin Erythromycin Ticagrelor Cobicistat Nicardipine Felodipine Tacrolimus Cyclosporine CKD Stage 4 & 5

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard

Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.

FDA: Drug Development and Drug Interactions: Tables of Substrates, Inhibitors and Inducers. Available at: [http://www.fda.gov/Drugs/DevelopmentApprovalProcess/DevelopmentResources/Drug Interactionalabeling/ucm093664.htm](http://www.fda.gov/Drugs/DevelopmentApprovalProcess/DevelopmentResources/DrugInteractionalabeling/ucm093664.htm)

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**19. Namzaric / Nonadherence**

Alert Message: Based on refill history, your patient may be under-utilizing Namzaric (memantine ER/donepezil). Non-adherence to the prescribed dosing regimen may result in sub-therapeutic effects, which may lead to decreased outcomes and additional healthcare costs.

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Conflict Code: LR - Nonadherence

Drugs/Diseases

Util A

Util B

Util C

Memantine ER/Donepezil

References:

Osterberg L, Blaschke T. Adherence to Medication. N Eng Jnl Med. 2005;353:487-97.

Arlt S, Lindner R, Rosler A, et al., Adherence to Medication in Patients with Dementia, Predictors and Strategies for Improvement. Drugs Aging 2008;25(12):1033-1047.

Iuga AO, McGuire MJ. Adherence and Health Care Costs. Risk Manag Healthc Policy. 2014 Feb 20;7:35-44.

**20. Amphetamine Sulfate / Overutilization**

Alert Message: Evekeo (amphetamine sulfate) may be over-utilized. The usual dosing range for amphetamine sulfate for the treatment of narcolepsy is 5 to 60 mg per day in divided doses (Intervals of 4 to 6 hours) depending on individual patient response. Doses exceeding the recommended range may increase the risk of adverse effects.

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Conflict Code: ER - Overutilization

Drugs/Diseases

Util A

Util B

Util C (Include)

Amphetamine

Narcolepsy

Max Dose: 60 mg/day

References:

Evekeo Prescribing Information, May 2014, Arbor Pharmaceuticals, Inc.

**21. Amphetamine Sulfate / Obesity ≤ 11 yoa**

Alert Message: Evekeo (amphetamine sulfate) is not recommended for use as an anorectic agent in children under 12 years of age.

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Conflict Code: TA – Therapeutic Appropriateness

Drugs/Diseases

Util A

Util B

Util C (Negate)

Amphetamine      Obesity

ADHD/ADD

Narcolepsy

Age Range: 0-11 yoa

References:

Evekeo Prescribing Information, May 2014, Arbor Pharmaceuticals, Inc.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**22. Tramadol - All / Certain CYP3A4 Inhibitors**

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Alert Message: Concurrent use of a tramadol-containing agent with a CYP3A4 inhibitor may result in increased tramadol plasma concentrations and risk of tramadol-related adverse effects (e.g., respiratory depression, sedation, or serotonin syndrome) due to inhibition of tramadol CYP3A4-mediated metabolism. Monitor patient for therapeutic and adverse effects and adjust tramadol dose if necessary.

Conflict Code: DD – Drug/Drug Interactions

Drugs/Diseases

Util A

Tramadol

Tramadol/APAP

Util B

Nefazodone

Ketoconazole

Itraconazole

Posaconazole

Voriconazole

Clarithromycin

Telithromycin

Erythromycin

Boceprevir

Telaprevir

Util C

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.

Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.

**23. Tramadol - All / CYP2D6 Inhibitors**

\_\_\_\_\_√\_\_\_\_\_

Alert Message: Concurrent use of a tramadol-containing agent with a CYP2D6 inhibitor may decrease the metabolism of tramadol to its M1 active metabolite leading to decreased analgesic effects and possible increased tramadol (parent drug) plasma concentrations. The patient may be at increased risk of adverse effects (e.g., respiratory depression, sedation, or serotonin syndrome) due to elevated parent drug levels. Monitor patient for therapeutic and adverse effects and adjust tramadol dose if necessary.

Conflict Code: DD – Drug/Drug Interactions

Drugs/Diseases

Util A

Tramadol

Tramadol/APAP

Util B

Quinidine

Propafenone

Util C

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.

Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**24. Tramadol – All / Dual CYP 3A4 & 2D6 Inhibitors**

\_\_\_\_\_√\_\_\_\_\_

Alert Message: Concurrent use of a tramadol-containing agent with a drug that inhibits both CYP3A4 and 2D6 mediated metabolism may result in elevated tramadol plasma concentrations and decreased levels of the tramadol active metabolite (M1). Clinical monitoring for tramadol therapeutic and adverse effects (e.g., serotonin syndrome and seizures) is recommended and tramadol dosage reduction may be required.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Tramadol	Ritonavir	
Tramadol/APAP	Delavirdine	
	Ranolazine	
	Imatinib	
	Amiodarone	

References:

Clinical Pharmacology, 2015 Elsevier/Gold Standard.  
Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.

**25. Mitigare / Dual CYP3A4 & P-gp Inhibitors**

\_\_\_\_\_√\_\_\_\_\_

Alert Message: The concurrent use of Mitigare (colchicine capsules) with drugs that inhibit both P-gp and CYP3A4 is contraindicated in patients with renal or hepatic impairment. Combining these dual inhibitors with colchicine in patients with renal or hepatic impairment has resulted in life-threatening or fatal colchicine toxicity.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Colchicine	Amiodarone	
	Ranolazine	
	Dronedarone	
	Verapamil	
	Diltiazem	
	Felodipine	
	Cobicistat	
	Nilotinib	
	Erythromycin	
	Clarithromycin	
	Ketoconazole	
	Itraconazole	
	Saquinavir	
	Ritonavir	
	Nelfinavir	
	Boceprevir	
	Telaprevir	

References:

Mitigare Prescribing Information, Sept. 2014, Hikma Americas, Inc.

**Criteria Recommendations**

**Accepted Approved Rejected**  
**As**  
**Amended**

**26. Beclomethasone 40 mcg / Overutilization**

Alert Message: Children's QNASL (beclomethasone nasal aerosol) may be over-utilized. The manufacturer's recommended dose of beclomethasone nasal aerosol is 80 mcg per day administered as 1 actuation in each nostril once daily (maximum 2 actuations per day).

  ✓                      

Drugs/Diseases

Util A

Util B

Util C

Beclomethasone 40 mcg

Max Dose: 80 mcg/day (1 canister per month – 60 actuations)

References:

Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**27. Beclomethasone 40 mcg / Therapeutic Appropriateness 0-3 yoa**

Alert Message: The safety and effectiveness of Children's QNASL (beclomethasone nasal aerosol) in children less than 4 years of age have not been established.

  ✓                      

Drugs/Diseases

Util A

Util B

Util C

Beclomethasone 40 mcg

Age Range: 0-3 yoa

References:

Facts & Comparisons, 2015 Updates, Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**28. Riociguat / Overutilization**

Alert Message: Adempas (riociguat) may be over-utilized. The manufacturer's maximum recommended daily dose is 7.5 mg (2.5 mg three times a day). If at any time the patient has symptoms of hypotension, decrease the dosage by 0.5 mg taken three times a day.

  ✓                      

Conflict Code: ER - Overutilization

Drugs/Diseases

Util A

Util B

Util C (Negating)

Riociguat

Tobacco Use Disorder

Max Dose: 7.5 mg/day

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**29. Riociguat / Pregnancy / Pregnancy Negating (Black Box)**

\_\_\_\_\_ ✓ \_\_\_\_\_ \_\_\_\_\_

Alert Message: Adempas (riociguat) is contraindicated in females who are pregnant. Riociguat was consistently shown to have teratogenic effects when administered to animals. If this drug is used during pregnancy, or if the patient becomes pregnant while taking riociguat, the patient should be apprised of the potential hazard to the fetus.

Conflict Code: MC -- Drug (Actual) Diagnosis Precaution/Warning/Contraindication  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Negating)</u>
Riociguat	Pregnancy	Miscarriage Delivery Abortion

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.

**30. Riociguat / Females of Reproductive Age (Black Box)**

\_\_\_\_\_ ✓ \_\_\_\_\_ \_\_\_\_\_

Alert Message: Adempas (riociguat) can cause fetal harm when administered during pregnancy and is contraindicated in women who are pregnant. In females of reproductive potential, exclude pregnancy prior to initiation of therapy, monthly during treatment, and advise use of acceptable contraception during therapy and for 1 month following therapy.

Conflict Code: TA – Therapeutic Appropriateness  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat		

Gender: Females

Age Range: 11-50 yoa

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.

**31. Riociguat / Severe Renal Impairment**

\_\_\_\_\_ ✓ \_\_\_\_\_ \_\_\_\_\_

Alert Message: Safety and effectiveness of Adempas (riociguat) have not been demonstrated and use is not recommended in patients with creatinine clearance < 15 mL/min or on dialysis.

Conflict Code: MC -- Drug (Actual) Diagnosis Precaution/Warning/Contraindication  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Chronic Kidney Stage IV Chronic Kidney Stage V ESRD Dialysis	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.



**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**32. Riociguat / Severe Hepatic Impairment**

Alert Message: Safety and effectiveness of Adempas (riociguat) have not been demonstrated in patients with severe hepatic impairment (Child Pugh C), therefore use is not recommended. No dosage adjustments are recommended in patients with mild to moderate hepatic impairment.

\_\_\_\_✓\_\_\_\_

Conflict Code: MC – Drug (Actual) Diagnosis Precaution/Warning/Contraindication  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Hepatic Impairment	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**33. Riociguat / Nitrates & Nitric Oxide Donors**

Alert Message: Concurrent use of Adempas (riociguat) with nitrates or nitric oxide donors in any form is contraindicated due to risk of hypotension.

\_\_\_\_✓\_\_\_\_

Conflict Code: DD –Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Amyl Nitrate Isosorbide Dinitrate Isosorbide Mononitrate Nitroglycerin	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**34. Riociguat / Phosphodiesterase-5 Inhibitors**

Alert Message: Concurrent use of Adempas (riociguat) with phosphodiesterase (PDE) inhibitors, specific or nonspecific, is contraindicated due to risk of hypotension.

\_\_\_\_✓\_\_\_\_

Conflict Code: DD –Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Sildenafil Tadalafil Vardenafil Avanafil Dipyridamole Theophylline Cilostazol	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**35. Riociguat / Strong CYP3A4 Inducers**

Alert Message: Concurrent use of Adempas (riociguat), a CYP3A4 substrate, with a strong CYP3A4 inducer may result in significantly reduced riociguat exposure and loss of therapeutic effect.

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Conflict Code: DD –Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Rifampin	Phenytoin
	Rifapentine	Phenobarbital
	Rifabutin	Nevirapine
	Carbamazepine	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**36. Riociguat / Strong CYP3A4 and P-gp/BCRP Inhibitors**

Alert Message: Concurrent use of Adempas (riociguat) with an agent that is a strong CYP3A4 and P-gp/BCRP (breast cancer resistant protein) inhibitor may increase riociguat exposure and result in hypotension. Monitor for signs and symptoms of hypotension in patients receiving concurrent treatment with strong CYP3A4 and P-gp/BCRP inhibitors. A dose reduction should be considered in patients who may not tolerate the hypotensive effect of riociguat.

\_\_\_\_\_√\_\_\_\_\_

Conflict Code: DD –Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Ketoconazole	Saquinavir
	Itraconazole	Ritonavir
	Telaprevir	Nelfinavir

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.  
Fujita Y, Noguchi K, Suzuki T, et.al., Biochemical Interaction of Anti-HCV Telaprevir with the ABC Transporters P-glycoprotein and Breast Cancer Resistance Protein. BMC Research Notes 2013, 6:445.  
Gupta A, Zhang Y, Unadkat D, et al., HIV Protease Inhibitors are Inhibitors but not Substrates of the Human Breast Cancer Resistance Protein (BCRP/ABCG2). Jnl Pharmco and Exp Therap. 2004, Vol. 310, No. 1:334-341.

**Criteria Recommendations**

**Accepted Approved Rejected**  
**As**  
**Amended**

**37. Riociguat / Bleeding**

Alert Message: Adempas (riociguat) may cause treatment-emergent bleeding events. In clinical trials, serious bleeding was reported in 2.4% of patients taking riociguat compared to placebo.

\_\_\_\_\_✓\_\_\_\_\_

Conflict Code: MC – Drug (Actual) Disease Precaution/Warning  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Hemorrhage, unspecified Gastrointestinal hemorrhage Hemoptysis Epistaxis	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**38. Riociguat / Pulmonary Edema**

Alert Message: Adempas (riociguat) is a pulmonary vasodilator and may significantly worsen the cardiovascular status of patients with pulmonary veno-occlusive disease (PVOD). Should signs of pulmonary edema occur, the possibility of PVOD should be considered, and if confirmed, riociguat treatment should be discontinued.

\_\_\_\_\_✓\_\_\_\_\_

Conflict Code: MC – Drug (Actual) Disease Precaution/Warning  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Pulmonary Edema	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**39. Riociguat / Tobacco Use Disorder**

Alert Message: The diagnostic history suggests that the patient may be a smoker. Smoking increases the clearance of Adempas (riociguat) by 2-3 fold due to CYP1A1 induction. Patients who are smokers may require higher doses of riociguat (> 2.5 mg three times a day if tolerated) to match exposure seen in nonsmokers. Dose reduction may be required in patients who stop smoking.

\_\_\_\_\_✓\_\_\_\_\_

Conflict Code: MC (Actual) Disease Precaution/Warning  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Riociguat	Tobacco Use Disorder	

References:

Adempas Prescribing Information, Sept. 2014, Bayer Healthcare Pharmaceuticals.  
Facts & Comparisons, 2015 Wolters Kluwer Health.  
Clinical Pharmacology, 2015 Elsevier/Gold Standard.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**40. Riociguat / Non-adherence**

  √      \_\_\_\_\_    \_\_\_\_\_

Alert Message: Based on refill history, your patient may be under-utilizing Adempas (riociguat). Non-adherence to the prescribed dosing regimen may result in sub-therapeutic effects which may lead to decreased patient outcomes and additional healthcare costs.

Conflict Code: LR - Nonadherence

Drugs/Diseases

Util A

Util B

Util C

Riociguat

References:

Osterberg L, Blaschke T. Adherence to Medication. *N Engl J Med* 2005;353:487-97.  
Waxman A, Chen SY, Boulanger L, Golden G. Adherence to Phosphodiesterase Type 5 Inhibitors for the Treatment of Pulmonary Arterial Hypertension - A Real-World Analysis. *Chest*. 2011;140:736A.  
Roebuck MC, Liberman JN, Gemmill-Toyama M, Brennan TA. Medication Adherence Leads to Lower Health Care Use and Costs Despite Increased Drug Spending. *Health Affairs*. No.1 (2011):91-99.  
Ho PM, Bryson CL, Rumsfeld JS. Medication Adherence: Its Importance In Cardiovascular Outcomes. *Circulation*. 2009;119:3028-3035.

**41. Edoxaban / Overutilization**

  √      \_\_\_\_\_    \_\_\_\_\_

Alert Message: The manufacturer’s recommended maximum dose of Savaysa (edoxaban) is 60 mg once daily in patients with CrCL > 50 to ≤ 95 mL/min. The daily dose should not exceed 30 mg once daily in patients with a CrCL of 15 to 50 mL/min or in patients with DVT or PE weighing less than or equal to 60 kg or who use certain P-gp inhibitors. Edoxaban should not be used in patients with CrCL > 95 mL/min because of an increased risk of ischemic stroke.

Conflict Code: ER - Overutilization

Drugs/Diseases

Util A

Util B

Util C (Include)

Edoxaban

Renal Impairment

Max Dose: 60mg/day

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**42. Edoxaban / Overutilization**

  √      \_\_\_\_\_    \_\_\_\_\_

Alert Message: The manufacturer’s recommended maximum dose of Savaysa (edoxaban) should not exceed 30 mg once daily in patients with a CrCL of 15 to 50 mL/min or in patients with DVT or PE weighing less than or equal to 60 kg or who concurrently use certain P-gp inhibitors. Edoxaban should not be used in patients with CrCL > 95 mL/min because of an increased risk of ischemic stroke.

Conflict Code: ER - Overutilization

Drugs/Diseases

Util A

Util B

Util C (Include)

Edoxaban

CKD Stage 3

CKD Stage 4

Max Dose: 30mg/day

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**43. Edoxaban 60mg / Overutilization**

Alert Message: The manufacturer's recommended maximum dose of Savaysa (edoxaban) should not exceed 30 mg once daily in patients with a CrCL of 15 to 50 mL/min or in patients with DVT or PE weighing less than or equal to 60 kg or who concurrently use certain P-gp inhibitors. Edoxaban should not be used in patients with CrCl > 95 mL/min because of an increased risk of ischemic stroke.

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Conflict Code: ER - Overutilization

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>	
Edoxaban 60mg	Deep Vein Thrombosis Pulmonary Embolism	CKD Stage 3 CKD Stage 4 Verapamil Quinidine	Azithromycin Clarithromycin Erythromycin Itraconazole
			Ketoconazole

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**44. Edoxaban / Severe Renal Disease (Black Box warning)**

Alert Message: Savaysa (edoxaban) use is not recommended in patients with CrCL < 15 mL/min. Renal clearance accounts for 50% of the total clearance of edoxaban and edoxaban blood levels are increased in patients with poor renal function as compared to those with higher renal function.

\_\_\_\_\_ ✓ \_\_\_\_\_ \_\_\_\_\_

Conflict Code: ER - Overutilization

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Edoxaban		CKD Stage 5

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**45. Edoxaban / Renal Impairment (Negating)**

Alert Message: Savaysa (edoxaban) should not be used in patients with CrCL > 95 mL/min because of an increased risk of ischemic stroke. Renal clearance accounts for 50% of the total clearance of edoxaban and as renal function improves and edoxaban levels decrease, the risk of ischemic stroke increases.

\_\_\_\_\_ ✓ \_\_\_\_\_ \_\_\_\_\_

Conflict Code: TA - Therapeutic Appropriateness

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Negating)</u>
Edoxaban		Renal Impairment

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**46. Edoxaban / Active Pathological Bleed**

Alert Message: Savaysa (edoxaban) can cause serious, potentially fatal bleeding and is contraindicated in any patient with active pathological bleeding.

\_\_\_\_√\_\_\_\_

Conflict Code: MC - Drug Disease Precaution/Warning  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Edoxaban	Intracranial Hemorrhage Gastrointestinal Hemorrhage	

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**47. Edoxaban / Mitral Stenosis & Heart Valve Replacement**

Alert Message: The safety and efficacy of Savaysa (edoxaban) has not been studied in patients with mechanical heart valves or moderate to severe mitral stenosis. The use of edoxaban is not recommended in these patients.

\_\_\_\_√\_\_\_\_

Conflict Code: MC - Drug Disease Precaution/Warning  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Edoxaban	Mitral Stenosis 394.0 Heart Valve Replacement V43.3	

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**48. Edoxaban / Antiplatelets, Thrombolytics, Aspirin & NSAIDS**

Alert Message: Concomitant use of Savaysa (edoxaban) with drugs affecting hemostasis (e.g., aspirin, platelet aggregation inhibitors and NSAIDS) may increase the risk of bleeding. Promptly evaluate any signs or symptoms of blood loss if the patient is treated concurrently with these agents.

\_\_\_\_√\_\_\_\_

Conflict Code: DD – Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Edoxaban	Dipyridamole Ticlopidine Cilostazol Vorapaxar Clopidogrel Prasugrel Ticagrelor Anagrelide Aspirin NSAIDS	

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**Criteria Recommendations**

**Accepted Approved Rejected**  
**As**  
**Amended**

**49. Edoxaban / Anticoagulants**

Alert Message: Concomitant use of Savaysa (edoxaban) with an anticoagulant may increase the risk of bleeding. Long-term treatment with edoxaban and other anticoagulants is not recommended because of the increased risk of bleeding. Short-term co-administration may be needed for patients transitioning to or from edoxaban.

\_\_\_\_\_ ✓ \_\_\_\_\_

Conflict Code: DD – Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Edoxaban	Warfarin Apixaban Rivaroxaban Dabigatran Enoxaparin	

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**50. Edoxaban / Moderate to Severe Hepatic Impairment**

Alert Message: The use of Savaysa (edoxaban) in patients with moderate to severe hepatic impairment (Child-Pugh B and C) is not recommended as these patients may have intrinsic coagulation abnormalities. No dose reduction is required in patients with mild hepatic impairment (Child-Pugh A).

\_\_\_\_\_ ✓ \_\_\_\_\_

Conflict Code: DD – Drug/Drug Interaction  
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Edoxaban		Hepatic Impairment

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**Criteria Recommendations**

**Accepted Approved Rejected  
As  
Amended**

**51. Edoxaban / Rifampin**

Alert Message: Co-administration of Savaysa (edoxaban), a P-gp substrate, with rifampin should be avoided due to the risk of decreased edoxaban efficacy. Rifampin is a potent P-gp inducer and concurrent use with edoxaban may result in decreased edoxaban exposure.

\_\_\_\_√\_\_\_\_

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

Util A

Util B

Util C

Edoxaban

Rifampin

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

**52. Edoxaban / Nonadherence**

Alert Message: Based on refill history, your patient may be under-utilizing Savaysa (edoxaban). Non-adherence to the prescribed dosing regimen may result in sub-therapeutic effects (i.e., increasing risk of thrombotic events), which may lead to decreased patient outcomes and additional healthcare costs.

\_\_\_\_√\_\_\_\_

Conflict Code: LR - Nonadherence

Drugs/Diseases

Util A

Util B

Util C

Edoxaban

References:

Savaysa Prescribing Information, Jan. 2015, Daiichi Sankyo, Inc.

Osterberg L, Blaschke T. Adherence to Medication. N Engl J Med 2005;353:487-497.

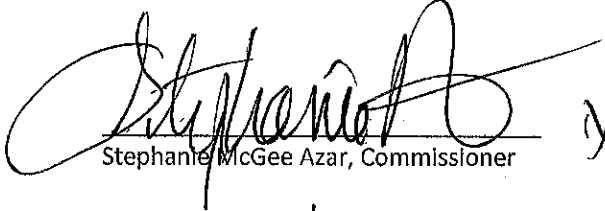
Kumbhani DJ, Steg PG, Cannon CP, et al. Adherence to Secondary Prevention Medications and Four-year Outcomes in Outpatients with Atherosclerosis. Am J Med.

<http://dx.doi.org/10.1016/j.amjmed.2013.01.033>.

Kneeland PP, Fang MC. Current Issues in Patient Adherence and Persistence: Focus on Anticoagulants for the Treatment and Prevention of Thromboembolism. Pat Pref Adher 2010;4:51-60.

Ferguson C, Inglis SC, Newton PJ, et al. Atrial Fibrillation and Thromboprophylaxis in Heart Failure: The Need for Patient-Centered Approaches to Address Adherence. Vascular Health and Risk Management 2013;9:3-11.

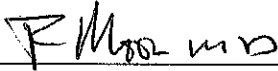




Stephanie McGee Azar, Commissioner

Approve ( ) Deny

1-14-16  
Date

  
Robert Moon, M.D., Deputy Commissioner  
and Medical Director

Approve ( ) Deny

1-13-16  
Date

  
Kathy Hall, Deputy Commissioner

Approve ( ) Deny

1/11/16  
Date