

Alabama Medicaid DUR Board Meeting Minutes

January 23, 2013

Members Present: Denyse Thornley-Brown , Paula Thompson, Kelli Littlejohn, Robert Moon, Rhonda Harden, David Harwood, Wendy Gomez, Bernie Olin

Also Present: Clemice Hurst, Tiffany Minnifield, Heather Vega, Lori Thomas, Jonathon Sun

Present via Conference Call: Chris Barwick, Kristian Testerman, Amanda Sparkman, Holley Rice

Members Absent: Dan McConaghy, Donald Marks, Jimmy Jackson

Call to Order: The DUR meeting was called to order by D. Thornley-Brown at approximately 1:00p.m.

Review and Adoption of Minutes: The minutes of the July 25, 2012 meeting were presented and reviewed. D. Harwood made a motion to approve the minutes as presented and R. Moon seconded the motion. 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 August 2012. She reported 10,176 total requests. She then reported 29,827 electronic requests for the same time frame. From the Prior Authorization and Override Response Time Ratio report for August 2012, L.Thomas reported that approximately 81% of all manual PAs were responded to in less than two hours, about 96% in less than four hours and 99% in less than eight hours. For the month of September 2012, L.Thomas reported 9,396 manual PA requests and 24,576 electronic PA requests. She reported that about 72% of PAs and 67% of overrides were responded to in less than two hours and, approximately 95% in less than four hours and 99% in less than eight hours. For the month of October 2012, L.Thomas reported 11,126 manual PA requests and 29,196 electronic PA requests for the same time frame. For October, L.Thomas reported 80-81% of the manual PAs and overrides were approved in less than two hours, approximately 94% in less than four hours and 96-97% approved in less than eight hours.

Program Summary Review: L.Thomas briefly reviewed the Alabama Medicaid Program Summary. She reported 4,306,241 total prescriptions, 228,611 average recipients per month and an average paid per prescription of \$57.44 for the months of April 2012 through September 2012.

Cost Management Analysis: L.Thomas reported an average cost per claim of \$54.18 for September 2012. L. Thomas mentioned that the cost per claim has decreased since September 2011. R. Harden pointed out that there was almost a \$5 difference between claims in August 2012 and September 2012. From the 1st Quarter 2012 Drug Analysis, L.Thomas reported 78.3% generic utilization, 9.2% brand single-source, 4.98% brand multi-source (those requests which required a DAW override) and 7.6% OTC and "other". From the Top 25 Drugs Based on Number of Claims from 07/01/2012 – 09/30/2012, L.Thomas reported the top five drugs: hydrocodone-acetaminophen, amoxicillin, omeprazole, alprazolam and ProAir[®] HFA. She also mentioned that Singulair[®] was no longer in the top five because a generic became available in August 2012. She then reported the top five drugs from the Top 25 Drugs Based on Claims Cost from 07/01/2012 – 09/30/2012: Abilify[®], Vyvanse[®], Singulair[®], Focalin XR[®], and Invega Sustenna[®]. L. Thomas reminded the Board that Singulair[®] has topped this list for several years. 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, Hemostatics, Amphetamines, Corticosteroids (Respiratory Tract), and Anorexigenic Agents and Respiratory and Cerebral Stimulants. L. Thomas informed the Board that the Amphetamine AHFS Class includes medications such as Adderall[®] and Vyvanse[®] and that the Anorexigenic and Respiratory and Cerebral Stimulant AHFS Class includes Concerta[®], Daytrana[®], Focalin[®], etc.

UPDATES

Hydrocodone Utilization: L. Thomas presented a version of the letter for the top 100 prescribers of hydrocodone. At the October 2012 DUR Board meeting, numerous suggestions were recommended by Board members and L. Thomas pointed out the addition of those suggestions to the letter. K. Littlejohn and D. Harwood made further recommendations to the letter. R. Harden made a motion to amend the letter and P. Thompson seconded the motion. The letter will be amended and sent to the Agency for final approval. L. Thomas also gave an overview of the query results for the top 100 prescribers of hydrocodone for 2012.

Proposed Criteria: L.Thomas presented the proposed set of 51 criteria to the Board. Results from the criteria vote returned 51 approved.

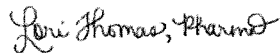
Medicaid Update: T. Minnifield reminded the Board members that all Medicaid information discussed is available online and that the Agency now has WiFi access. She advised the Board that effective January 1, 2013, all Ordering, Prescribing, and Referring Physician should be enrolled as an Alabama Medicaid provider. T. Minnifield reminded the Board of the next DUR meeting to be held on April 24, 2013. K. Littlejohn discussed the Medicaid Commission delegated by Governor Bentley to look at options for the future of Alabama Medicaid and encouraged interested parties to view the information on the Medicaid website

P & T Committee Update: C.Hurst began the P&T Update by informing the Board that the last meeting was held on November 14, 2012, but did not have a quorum and therefore the drug class reviews were tabled until the upcoming February 13, 2013 meeting. The next meeting will include re-reviews of several AHFS Classes.

New Business: There being no new business, D.Thornley-Brown moved to adjourn the meeting. P. Thompson made a motion to adjourn the meeting. The motion was seconded by D. Harwood. The meeting was adjourned at 2:00 p.m.

Next Meeting Date: The next DUR Board meeting will be held on April 24, 2013.

Respectfully submitted,



Lori Thomas, PharmD

Criteria Recommendations

Accepted Approved Rejected
As
Amended

4. Mirabegron / Bladder Outlet Obstruction

 ✓ _____ _____

Alert Message: Myrbetriq (mirabegron) should be administered with caution to patients with clinically significant bladder outlet obstruction (BOO). Urinary retention in patients with BOO has been reported in postmarketing experience in patients taking mirabegron.

Conflict Code: MC – Drug/Disease Precaution
Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Mirabegron	Bladder Obstruction	

References:

Myrbetriq Prescribing Information, June 2012, Astellas Pharma US, Inc.

5. Mirabegron / Antimuscarinic Medications

 ✓ _____ _____

Alert Message: Myrbetriq (mirabegron) should be administered with caution to patients taking antimuscarinic medications for the treatment of overactive bladder (OAB). Urinary retention in patients taking antimuscarinic medications for the treatment of OAB has been reported in postmarketing experience in patients taking mirabegron.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Mirabegron	Darifenacin Fesoterodine Oxybutynin Solifenacin Tolterodine Trospium	

References:

Myrbetriq Prescribing Information, June 2012, Astellas Pharma US, Inc.

6. Mirabegron / Digoxin

 ✓ _____ _____

Alert Message: For patients who are initiating a combination of Myrbetriq (mirabegron) and digoxin, the lowest dose for digoxin should initially be considered. The concurrent use of mirabegron and digoxin has been shown to increase the Cmax and AUC of digoxin, 29% and 27%, respectively. Serum digoxin concentrations should be monitored and used for titration of the digoxin dose to obtain the desired clinical effect.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Mirabegron	Digoxin	

References:

Myrbetriq Prescribing Information, June 2012, Astellas Pharma US, Inc.

7. Mirabegron / Pediatric Patients

_____√_____

Alert Message: The safety and effectiveness of Myrbetriq (mirabegron) in pediatric patients have not been established.

Conflict Code: TA – Therapeutic Effectiveness

Drugs/Diseases

Util A

Util B

Util C

Mirabegron

Age Range: 0-18 yoa

References:

Myrbetriq Prescribing Information, June 2012, Astellas Pharma US, Inc.

8. Mirabegron / Drugs Metabolized by CYP2D6

_____√_____

Alert Message: Myrbetriq (mirabegron) is a moderate CYP2D6 inhibitor and co-administration with a drug that is a CYP2D6 substrate may result in increased systemic exposure to the substrate. Appropriate monitoring and dose adjustment may be necessary, especially with narrow therapeutic index drugs metabolized by CYP2D6.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

Util A

Util B

Util C

Mirabegron

Thioridazine*

Codeine

Morphine

Clomipramine

Flecainide*

Cyclobenzaprine

Nortriptyline

Imipramine

Propafenone*

Darifenacin

Olanzapine

Protriptyline

Atomoxetine*

Delavirdine

Ondansetron

Trimipramine

Desipramine*

Dextromethorphan

Oxycodone

Venlafaxine

Dextroamphetamine*

Dolasetron

Paroxetine

Ziprasidone

Metoprolol*

Donepezil

Penbutolol

Zolpidem

Nebivolol*

Doxepin

Pentazocine

Clonidine

Perphenazine*

Flecainide

Propranolol

Fluvoxamine

Almotriptan

Fluoxetine

Perphenazine

Metoclopramide

Amphetamine

Fluphenazine

Propafenone

Nebivolol

Arformoterol

Haloperidol

Risperidone

Pimozide

Aripiprazole

Hydrocodone

Ritonavir

Asenapine

Iloperidone

Selegiline

Atomoxetine

Labetalol

Sertraline

Carvedilol

Maprotiline

Tamoxifen

Chlorpheniramine

Methamphetamine

Timolol

Cinacalcet

Metoprolol

Tolterodine

Citalopram

Mexiletine

Tramadol

Clozapine

Mirtazapine

Amitriptyline

References:

Myrbetriq Prescribing Information, June 2012, Astellas Pharma US, Inc.

Hartshorn EA, Tatro DS. Principles of Drug Interactions Facts & Comparisons, 2012 Wolters Kluwer Health, Inc.

FDA: Drug Development and Drug Interactions: Tables of Substrates, Inhibitors and Inducers. [08/28/2012].

Available at:

<http://www.fda.gov/Drugs/DevelopmentApprovalProcess/DevelopmentResources/DrugInteractionsLabeling/ucm093664.htm>

*CYP2D6 Sensitive substrate and/or narrow therapeutic index CYP2D6 substrate

Criteria Recommendations

Accepted Approved Rejected
As
Amended

9. Stribild / Other Antiretroviral Therapy

____/____ _____ _____

Alert Message: The patient appears to be receiving other antiretroviral therapy in addition to Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir). Stribild is a complete regimen for the treatment of HIV-1 infections and should not be administered with other antiretroviral medications.

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

Util A Util B Util C
Stribild All Other Antiretroviral

References:
Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

10. Fosamprenavir / Delavirdine

____/____ _____ _____

Alert Message: The concurrent use of Lexiva (fosamprenavir) and delavirdine is contraindicated. Co-administration of these agents may lead to loss of virologic response and possible resistance to delavirdine.

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

Util A Util B Util C
Fosamprenavir Delavirdine

References:
Facts & Comparisons, 2012 Updates.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.

11. Revatio / Children 0-17 years of Age

____/____ _____ _____

Alert Message: Revatio (sildenafil) should not be prescribed to children (ages 1 through 17) for pulmonary arterial hypertension (PAH). This recommendation is based on a recent long-term clinical pediatric trial showing that: (1) children taking a high dose of Revatio had a higher risk of death than children taking a low dose and (2) the low doses of Revatio are not effective in improving exercise ability. Revatio is not FDA approved for the treatment of PAH in children.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A Util B Util C
Revatio

Age Range: 1-17 yoa

References:
MedWatch The FDA Safety Information and Adverse Event Reporting Program Safety Information. Revatio (sildenafil): Drug Safety Communication - Recommendation Against Use in Children [Posted 08/30/2012].

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

12. Didanosine / Ribavirin

Alert Message: The concurrent use of didanosine (Videx/Videx EC) with a ribavirin-containing agent is contraindicated. Co-administration of these agents may cause significant increases in blood concentrations of didanosine and its active metabolite, resulting in increased risk of didanosine-related toxicities including fatal hepatic failure, peripheral neuropathy, pancreatitis and symptomatic hyperlactatemia/lactic acidosis.

Conflict Code: DD – Drug/Drug Interactions

Util A Util B Util C
Didanosine Ribavirin

References:

Videx EC Prescribing Information, Nov. 2011, Bristol-Myers Squibb.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.
Facts & Comparisons, 2012 Updates.

13. Rilpivirine / Prolongation Agents

Alert Message: Edurant (rilpivirine) has been shown to prolong the QTc interval and the concurrent use of other agents that prolong the QTc interval may result in additive effects increasing the risk of potentially life-threatening cardiac arrhythmias, including torsades de pointes.

Conflict Code: DD- Drug/Drug Interaction

Drugs/Diseases

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

References:

Edurant Prescribing Information, August 2012, Tibotec Therapeutics.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.
Facts & Comparisons, 2012 Updates.

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

14. Cyclosporine / RA / Renal Imp & Uncontrolled HTN & Malignancies ✓ _____ _____

Alert Message: The use of cyclosporine (i.e., Neoral & Gengraf) is contraindicated in rheumatoid arthritis patients with abnormal renal function, uncontrolled hypertension, or malignancies.

Conflict Code: MC – Drug/Disease Precaution/Warning

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Neoral	Rheumatoid Arthritis	Abnormal Renal Function
Gengraf		Hypertension
		Malignancies

References:

Facts & Comparisons, 2012 Updates.

Neoral Prescribing Information, August 2012, Novartis Pharmaceuticals Corp.

Gengraf Prescribing information, 2010, Abbott Laboratories.

15. Teriflunomide / Overutilization _____ ✓ _____ _____

Alert Message: The manufacturer’s maximum recommended daily dose of Aubagio (teriflunomide) is 14 mg.

Conflict Code: ER - Overutilization

Drugs/Diseases

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

Max Dose: 14mg/day

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

16. Teriflunomide / Hepatic Impairment (Black Box Warning) _____ ✓ _____ _____

Alert Message: Aubagio (teriflunomide) use is contraindicated in patients with severe hepatic impairment as it may increase the risk of hepatic injury. Teriflunomide is the principal active metabolite of leflunomide a drug that has been reported to cause severe liver injury. If drug induced liver injury is suspected, discontinue teriflunomide and start accelerated elimination procedure.

Conflict Code: MC – Drug (Actual) Disease Precaution/Warning (Black Box Warning)

Drugs/Diseases

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

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

17. Teriflunomide / Pregnancy / Miscarriage, Delivery, Contraceptives

Alert Message: Aubagio (teriflunomide) is contraindicated in pregnant women or in women of childbearing potential who are not using reliable contraception. If the drug is required during pregnancy, or if the patient becomes pregnant while taking the drug, apprise the patient of the potential harm to the fetus. If pregnancy does occur during treatment discontinue drug immediately and initiate an accelerated elimination procedure. Also inform patient that there is an Aubagio pregnancy registry available.

Conflict Code: MC – Drug/Diagnosis Precaution/Warning (Black Box Warning)

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Negate)</u>
Teriflunomide	Pregnancy	Miscarriage Abortion Delivery Contraceptives

Age Range: 12-50 yoa

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

18. Teriflunomide / Leflunomide

Alert Message: The concurrent administration of Aubagio (teriflunomide) and leflunomide is contraindicated. Teriflunomide is the principal active metabolite of leflunomide and coadministration of these agents would result in elevated plasma concentrations of teriflunomide.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Teriflunomide	Leflunomide	

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

19. Teriflunomide / CYP2C8 Substrates

Alert Message: The concurrent administration of Aubagio (teriflunomide), a CYP2C8 inhibitor, with a CYP2C8 substrate (e.g., repaglinide, pioglitazone and rosiglitazone) may result in increased concentrations of the substrate. Therefore, monitoring patients for increased exposure to the substrate is recommended.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Teriflunomide	Repaglinide Pioglitazone Rosiglitazone Sitagliptin Trepstinil Amiodarone	

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.

23. Teriflunomide / Peripheral Neuropathy

___✓___ ___ ___

Alert Message: Peripheral neuropathy has been reported in patients receiving Aubagio (teriflunomide). If a patient taking teriflunomide develops symptoms consistent with peripheral neuropathy, such as bilateral numbness or tingling of hands or feet, consider discontinuing teriflunomide therapy and performing an accelerated elimination procedure.

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

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Teriflunomide	Peripheral Neuropathy Paresthesia	

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

24. Teriflunomide / Acute Renal Failure & Hyperkalemia

___✓___ ___ ___

Alert Message: Patients receiving Aubagio (teriflunomide) with symptoms of renal failure or hyperkalemia should have renal function and potassium levels monitored. In clinical trials, transient acute renal failure and hyperkalemia (1.2% and 1%, respectively) were reported in subjects receiving teriflunomide.

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

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Teriflunomide	Acute Renal Failure Hyperkalemia	

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

25. Teriflunomide / Hypertension / Antihypertensive Meds (Negate)

___✓___ ___ ___

Alert Message: Aubagio (teriflunomide) can increase blood pressure therefore blood pressure should be checked before initiating teriflunomide treatment and periodically thereafter. Elevated blood pressure should be appropriately managed during teriflunomide therapy.

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

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C (Negate)</u>
Teriflunomide	Hypertension	Antihypertensive Medications

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

26. Teriflunomide / Hepatotoxic Drugs

_____✓_____

Alert Message: Aubagio (teriflunomide) is the principal active metabolite of leflunomide a drug that has been reported to cause severe liver injury. Concomitant use of teriflunomide with other potentially hepatotoxic drugs may increase the risk of severe liver injury. If drug induced liver injury is suspected, discontinue teriflunomide and start accelerated elimination procedure.

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

<u>Util A</u>	<u>Util B</u>				
Teriflunomide	Amoxicillin/Clavulanate	Abacavir	Fluoxetine	Sertraline	Cyclosporine
	Erythromycin	Allopurinol	Hydralazine	Stavudine	Sirolimus
	Cotrimoxazole	Amiloride	HCTZ	Sulfasalazine	Tacrolimus
	Isoniazid	Amiodarone	Hydrocodone	Tamoxifen	Atomoxetine
	Disulfiram	Aspirin	Itraconazole	Venlafaxine	Balsalazide
	Flutamide	Atenolol	Ketoconazole	Zafirlukast	Protease Inh.
	Carbamazepine	Bleomycin	Labetalol	Niacin	Delavirdine
	Nitrofurantoin	Bromfenac	Lamivudine	Naltrexone	Efavirenz
	Acetaminophen	Bupropion	Levofloxacin	Sunitinib	Nevirapine
	Ticlopidine	Butorphanol	Lisinopril	Lapatinib	NSAIDs
	Rifampin	Captopril	Melphalan	Pazopanib	Statins
	Valproic Acid	Cefadroxil	Methyldopa	Methotrexate	
	Ciprofloxacin	Cefepime	Nefazodone	Procainamide	
	Ranitidine	Chlorpromazine	Nelfinavir	Azathioprine	
	Levofloxacin	Clarithromycin	Norfloxacin	Bosentan	
	Phenytoin	Cyclophosphamide	Omeprazole	Fluconazole	
	Enalapril	Dapsone	Orlistat	Posaconazole	
	Chlorpromazine	Dicloxacillin	Paroxetine	Voriconazole	
	Azithromycin	Didanosine	Pemoline	Felbamate	
	Mercaptopurine	Doxycycline	Propylthiouracil	Chlorzoxazone	
	Telithromycin	Ezetimibe	Pyrazinamide	Dantrolene	
	Duloxetine	Felodipine	Quetiapine	Rifapentine	
	Ethinyl Estradiol-Levonorgestrel		Ranitidine	Oxandrolone	

References:

Aubagio Prescribing Information, Sept. 2012, Genzyme Corporation.
 Chang CY & Schiano TD. Review Article; Drug Hepatotoxicity. Aliment Pharmacol Ther. May 15;25(10):1135-1151
 Suzuki A, Andrade RJ, Bjornsson E, et al., Drugs Associated with Hepatotoxicity and Their Reporting Frequency of Liver Adverse Events in VigiBase: Unified List Based on International Collaborative Work. Drug Saf. 2010 Jun1;33(6):503-522.

27. Stribild / Contraindicated Drugs

_____✓_____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) is contraindicated with drugs that are highly dependent on CYP3A4 for clearance and for which elevated plasma concentrations are associated with serious and/or life-threatening adverse events.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Stribild	Alfuzosin	
	Ergot Derivatives	
	Lovastatin	
	Simvastatin	
	Pimozide	
	Revatio	
	Triazolam	
	Midazolam - Oral	

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
 Clinical Pharmacology, 2012 Elsevier/Gold Standard.

28. Stribild / Rifampin

_____✓_____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) is contraindicated with the potent CYP3A4 inducer rifampin. Concurrent use of these agents may result in significant decreases in the plasma concentrations of cobicistat and elvitegravir (CYP3A4 substrates), leading to loss of virologic response and possible resistance.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

Util A Util B Util C
Stribild Rifampin

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.

29. Stribild / Non-adherence

_____✓_____

Alert Message: Nonadherence to antiretroviral therapy may result in insufficient drug plasma levels and partial suppression of viral load leading to the development of resistance, HIV progression, and increased mortality.

Conflict Code: LR - Nonadherence

Drugs/Diseases

Util A Util B Util C
Stribild

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in HIV-1 Infected Adults and Adolescents. Department of Health and Human Services. March 27, 2012;1-167.
Available at: <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>.
Beer L, Heffelfinger J, Frazier E. et al. Use of and Adherence to Antiretroviral Therapy in a Large U.S. Sample of HIV-1 Infected Adults in Care, 2007-2008. Open AIDS J. 2012;6:213-223.

30. Stribild / Renal Impairment

_____✓_____

Alert Message: Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) should not be initiated in patients with estimated creatinine clearance below 70 ml/min. Because Stribild is a fixed-dose combination tablet it should be discontinued if estimated creatinine clearance declines below 50 mL/min during treatment as dose interval adjustment required for emtricitabine and tenofovir cannot be achieved.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

Util A Util B Util C
Stribild Renal Impairment

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.

31. Stribild / Hepatic Impairment

____√____

Alert Message: Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) use has not been evaluated in patients with severe hepatic impairment (Child-Pugh Class C) and therefore its use is not recommended in this population. No dose adjustment of Stribild is required in patients with mild (Child-Pugh Class A) or moderate (Child-Pugh Class B) hepatic impairment.

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

Drugs/Diseases

Util A Util B Util C
Stribild Hepatic Impairment

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.

32. Stribild / CYP3A4 Inducers

____√____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with the CYP3A4 inducers rifabutin or rifapentine is not recommended. Concurrent use with either inducer may result in significant decreases in the plasma concentrations of cobicistat and elvitegravir (CYP3A4 substrates), leading to loss of virologic response and possible resistance.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

Util A Util B Util C
Stribild Rifabutin
 Rifapentine

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.

33. Stribild / Anticonvulsants

____√____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with the CYP3A4 inducers carbamazepine, oxcarbazepine, phenytoin or phenobarbital may significantly decrease plasma concentrations of elvitegravir and cobicistat (CYP3A4 substrates), which may result in loss of therapeutic effect and development of resistance. Alternative anticonvulsants should be considered.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

Util A Util B Util C
Stribild Carbamazepine
 Oxcarbazepine
 Phenytoin
 Phenobarbital

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

34. Stribild / Clarithromycin

 ✓ _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with clarithromycin may increase plasma concentrations of both clarithromycin and cobicistat. Patients with a CrCl between 50mL/min and 60mL/min should have the clarithromycin dose reduced by 50%. No dose adjustment is required for CrCl of 60mL/min or greater.

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

Util A Util B Util C
Stribild Clarithromycin

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

35. Stribild / Telithromycin

 ✓ _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with telithromycin may increase plasma concentrations of both telithromycin and cobicistat. Monitor patient for adverse effects of either agent.

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

Util A Util B Util C
Stribild Telithromycin

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

36. Stribild / Neuroleptics

 ✓ _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with a neuroleptic agent may increase plasma concentrations of the neuroleptic. A decrease in the dose of the neuroleptic may be needed when co-administered with Stribild.

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

Util A Util B Util C
Stribild Antipsychotics 1st & 2nd Generation

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

37. Stribild / Ketoconazole and Itraconazole

 ✓ _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with ketoconazole or itraconazole may increase plasma concentrations of the antifungal due to inhibition by cobicistat of CYP3A4-mediated antifungal metabolism. The maximum daily dose of ketoconazole or itraconazole should not exceed 200mg per day.

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

Util A Util B Util C (Include)
Ketoconazole Stribild
Itraconazole

Max Dose: 200mg/day

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

38. Stribild / Voriconazole

____✓____

Alert Message: An assessment of benefit/risk ratio is recommended to justify use of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with Vfend (voriconazole). Concurrent use of these agents may increase plasma concentrations of voriconazole due to inhibition by cobicistat of CYP3A4-mediated voriconazole metabolism.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Stribild	Voriconazole	

References:
Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

39. Stribild / Colchicine / Renal & Hepatic Impairment

____✓____

Alert Message: Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) should not be administered with colchicine to patients with renal or hepatic impairment. Concurrent use of these agents in patients with these disease states may significantly increase the plasma concentrations of colchicine.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Stribild	Colchicine	Renal Impairment Hepatic Impairment

References:
Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

40. Colchicine / Stribild

____✓____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with colchicine may increase colchicine plasma concentrations and dosage adjustment of colchicine is required. If used to treat gout flares, administer a single 0.6mg dose of colchicine, followed by 0.3mg 1 hour later (repeat no sooner than 3 days). If used for gout prophylaxis and the original regimen was 0.6mg BID, reduce dose to 0.3mg QD, if regimen was 0.6mg QD, reduce to 0.3mg QOD. If used for familial Mediterranean fever the maximum daily dose is 0.6mg daily.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C (Include)</u>
Colchicine		Stribild

Max Dose: 0.6mg/day
References:
Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

Criteria Recommendations

**Accepted Approved Rejected
As
Amended**

45. Stribild / CYP3A4, 2D6, P-gp, BCRP, OATP1B1 or OATP1B3 Substrates & Agents undergoing Active Tubular Secretion J

Alert Message: Caution is advised when co-administering Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with drugs that are primarily metabolized by CYP3A4 or CYP2D6, or are substrates of P-gp, BCRP, OATP1B1 or OATP1B3 as concurrent use may result in increased plasma concentrations of the substrate. Clinical and/or therapeutic drug concentration monitoring is advised during coadministration.

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

<u>Util A</u>	<u>Util B*</u>				<u>Util C</u>
Stribild	SSRIs	Pitavastatin	Salicylates	Saxagliptin	
	TCA's	Rosuvastatin	Thiazides	Linagliptin	
	Trazodone	Tamoxifen	Acyclovir	Clonazepam	
	Bupropion	Valsartan	Cidofovir	Ethosuximide	
	CCBs	Olmesartan	Ganciclovir	Cyclosporine	
	Carvedilol	Telmisartan	Valacyclovir	Tacrolimus	
	Metoprolol	Digoxin	Valganciclovir	Sirolimus	
	Nebivololol	Warfarin	Ezetimibe		
	Propranolol	Metformin	Glyburide		
	Timolol	Morphine	Repaglinide		
	Antiarrhythmics	Vancomycin	Nateglinide		

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

FDA: Drug Development and Drug Interactions: Table of Substrates, Inhibitors and Inducers. [Accessed 10/17/2012]

Available at:

<http://www.fda.gov/Drugs/DevelopmentApprovalProcess/DevelopmentResources/DrugInteractionsLabeling/ucm093664.htm#4>

***Drugs that are substrates but are contraindicated or have other more specific alerts are not included in this group.**

46. Stribild / Nephrotoxic Drugs

_____√_____

Alert Message: Avoid administering Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with concurrent or recent use of nephrotoxic agents. Renal impairment, including cases of acute renal failure and Fanconi syndrome, has been reported with Stribild use.

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

<u>Util A</u>	<u>Util B</u>		<u>Util C</u>
Stribild	Acetaminophen	Adefovir	Zoledronate
	Aspirin	Cidofovir	Bea Lactams
	NSAIDs	Indinavir	Clopidogrel
	Amitriptyline	Benzodiazepines	Tetracycline
	Doxepin	Cyclosporine	Statins
	Fluoxetine	Tacrolimus	Gemfibrozil
	Lithium	ACEIs	Mesalamine
	Acyclovir	ARBs	
	Neomycin	Statins	
	Paromomycin	Carmustine	
	Foscarnet	Methotrexate	
	Ganciclovir	Loop Diuretics	
	Pentamidine	Triamterene	
	Quinolones	Proton Pump Inhibitors	
	Rifampin	Allopurinol	
	Sulfonamides	Haloperidol	
	Vancomycin	Pamidronate	
	Doxylamine	Phenytoin	
	Diphenhydramine	Ranitidine	

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.
Naughton CA. Drug-Induced Nephrotoxicity. Am Fam Physician. 2008 Sep.15;78(6):743-750.

47. Stribild / CYP3A4 Sedative Hypnotics

_____√_____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) and a sedative/hypnotic agent that is a CYP3A4 substrate may result in elevated plasma concentrations of the sedative/hypnotic due to inhibition by cobicistat of CYP3A4-mediated metabolism. Dose reduction and clinical monitoring of the sedative/hypnotic agent is recommended when used currently with Stribild.

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

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Stribild	Clorazepate	
	Diazepam	
	Estazolam	
	Flurazepam	
	Chlordiazepoxide	
	Alprazolam	
	Buspirone	
	Zolpidem	
	Clobazam	

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

48. Stribild / Ethinyl Estradiol-Norgestimate

_____✓_____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) and an ethinyl estradiol/norgestimate contraceptive may result in elevated norgestimate and reduced ethinyl estradiol concentrations. Risk associated with these altered levels may include insulin resistance, dyslipidemia and venous thrombosis. Consider the risk/benefits associated with concurrent use, particularly in women who have risk factors for these events. Alternative (non-hormonal) methods of contraception can be considered.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Stribild	Ethinyl Estradiol/Norgestimate	

References:

Stribild Prescribing Information, August 2012, Gilead Sciences, Inc.

49. Atazanavir / PR Interval Prolongation

_____✓_____

Alert Message: Reyataz (atazanavir) has been shown to prolong the PR interval in some patients. Atazanavir should be used with caution in patients with preexisting conduction system disease or when administered with other drugs that may prolong the PR interval.

Conflict Code: MC – Drug (Actual) Disease Precaution

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Atazanavir	PR Prolongation Conduction Disorder	

References:

Reyataz Prescribing Information, March 2012, Bristol-Myers Squibb.

50. Atazanavir / PR Interval Prolongation

_____✓_____

Alert Message: Reyataz (atazanavir) has been shown to prolong the PR interval in some patients. Atazanavir should be used with caution in patients with preexisting conduction system disease or when administered with other drugs that may prolong the PR interval.

Conflict Code: DD –Drug/Drug Interaction

Drugs/Diseases

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Atazanavir	Digoxin Quinidine Procainamide Disopyramide Flecainide Amiodarone Propafenone Verapamil Lacosamide Propranolol Metoprolol Nadolol	Labetalol Timolol Pindolol Bisoprolol Acebutolol Betaxolol Penbutolol Carteolol Sotalol Nebivolol Ritonavir Atazanavir

References:

Reyataz Prescribing Information, March 2012, Bristol-Myers Squibb.

Criteria Recommendations

Accepted Approved Rejected
As
Amended

51. Complera / Non-adherence

_____√_____

Alert Message: Nonadherence to antiretroviral therapy may result in insufficient drug plasma levels and partial suppression of viral load leading to the development of resistance, HIV progression, and increased mortality.

Conflict Code: LR - Nonadherence

Drugs/Diseases

Util A

Util B

Util C

Complera

References:

Complera Prescribing Information, August 2012, Gilead Sciences, Inc.

Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in HIV-1 Infected Adults and Adolescents. Department of Health and Human Services. March 27, 2012;1-167.

Available at: <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>.

Beer L, Heffelfinger J, Frazier E. et al. Use of and Adherence to Antiretroviral Therapy in a Large U.S. Sample of HIV-1 Infected Adults in Care, 2007-2008. Open AIDS J. 2012;6:213-223.

Stephanie Azar
Stephanie McGee Azar, Commissioner

Approve () Deny

3/8/13
Date

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

Approve () Deny

3-5-13
Date

Kathy Hall
Kathy Hall, Deputy Commissioner

Approve () Deny

3/5/13
Date