DUR Board Meeting
March 11, 2013
Minervas (Kelly Inn)
1800 North 12th Street
Bismarck, ND

North Dakota Medicaid
DUR Board Meeting Agenda
Minervas (Kelly Inn)
1800 North 12th Street
Bismarck, ND
March 11, 2013
1pm

1. Administrative items
    - Travel vouchers

2. Old business
    - Review and Approval of Minutes of 12/12 Meeting — Chair
    - Budget Update — Brendan
    - Second Review of Genitourinary Smooth Muscle Relaxants — Brendan
    - Second Review of Agents Used to Treat Multiple Sclerosis — Brendan
    - Update on medications greater than $3,000 (i.e., Juxtapid, Gattex) — Brendan

3. New business
    - Review of Fulyzaq — HID
    - Review of Xeljanz — HID
    - Asthma Management — HID
    - Criteria Recommendations — HID
    - Upcoming Meeting Date/Agenda — Chair

4. Adjourn — Chair

Please remember to silence all cellular phones and pagers during the meeting.

Drug Utilization Review (DUR) Meeting Minutes
December 3, 2012

Members Present: Norman Byers, John Savageau, Russ Sobotta, Tanya Schmidt, Leann Ness, David Clinkenbeard, Carrie Sorenson, Cheryl Huber, Carlotta McCleary, James Carlson, Greg Pfister, Michael Booth, Jeffrey Hostetter

Members Absent: Steve Irsfeld, Todd Twogood

Medicaid Pharmacy Department: Brendan Joyce

HID Staff Present: Candace Rieth

Chair G. Pfister called the meeting to order at 1:00 pm. Chair G. Pfister asked for a motion to approve the minutes from the September meeting. N. Byers moved that the minutes be approved and D. Clinkenbeard seconded the motion. Chair G. Pfister called for a voice vote to approve the minutes. The motion passed with no audible dissent. Dr. Michael Booth has filled the open position on the DUR Board. Introductions were made.

Budget Update
B. Joyce informed the board members that there is no new information from fiscal since the last board meeting. B. Joyce also informed the board that the rebate owed to the government by the state is larger than was originally anticipated.

Actinic Keratosis Second Review
A motion and second were made at the September meeting to place agents used to treat Actinic Keratosis on prior authorization. The topic was brought up for a second review. There was no public comment. After discussion, Chair G. Pfister called for a voice vote to approve the motion. The motion passed with no audible dissent.

Moxeza Second Review
A motion and second were made at the September meeting to place Moxeza on prior authorization. The topic was brought up for a second review. There was no public comment. Chair G. Pfister called for a voice vote to approve the motion. The motion passed with no audible dissent. Moxeza will be added to the ophthalmic anti-infective form.

Patients Taking Multiple Long-Acting Narcotics Second Review
B. Joyce reviewed recipients taking multiple long-acting narcotics and Oxycontin three times daily. After discussion, the board agreed that edits should be put in to place to decrease the chance of diversion and to improve patient care.

Yearly PA Review
The Board reviews products annually that have previously been placed on prior authorization. This allows the Board a chance to update the prior authorization forms and criteria. All forms and criteria were reviewed. Changes include:

1. ACE-I/ARB/Renin Inhibitors PA form – M. Booth made a motion to remove losartan from prior authorization. C. Huber seconded the motion. There was no public comment. Motion passed with no audible dissent.
2. Gilenya – Add "specialist involved in therapy" to form.
3. Livalo – J. Hostetter made a motion to require adequate dosing of existing generics (simvastation/atorvastatin) for 3 months or side effects as criteria for coverage. C. Sorenson seconded the motion. There was no public comment. Motion passed with no audible dissent.

4. Nuedexta – Add 'specialist involved in therapy' to form.
5. Metozolv – Add to ODT form.
6. Oral Anticoagulants – Update form and criteria with new indications.
7. Solodyn – Add to Doryx/Oracea form.
8. Soma 250 – Add to Carisoprodol form.

Kathleen Karnick, representing Janssen, spoke about Nucynta and Nucynta ER. Randy Troxell, representing Novartis, spoke about Gilenya and ACE-I/ARB/Renin Inhibitor prior authorization.

Genitourinary Smooth Muscle Relaxants Review
B. Joyce reviewed genitourinary smooth muscle relaxants (GSM) clinical information and data with the Board. There was no public comment. After discussion, N. Byers made a motion to place GSMs on prior authorization. T. Schmidt seconded the motion. This topic will be brought up at the next meeting for finalization.

Agents Used to Treat Multiple Sclerosis (MS) Review
B. Joyce reviewed Aubagio clinical information and data with the Board. There was no public comment. After discussion, J. Hostetter made a motion to place Aubagio on prior authorization. D. Clinkenbeard seconded the motion. This topic will be brought up at the next meeting for finalization.

Criteria Recommendations
The recommended RDUR criteria enclosed in the packet were developed from product information provided by the manufacturers and usually are consistent with new indications, new drugs added, new warnings, etc. These proposed criteria will be added to the current set of criteria, and will be used in future DUR cycles. C. Huber moved to approve the new criteria and D. Clinkenbeard seconded the motion. Chair G. Pfister called for a voice vote. The motion passed with no audible dissent.

The next DUR Board meeting will be held March 11, 2013 in Bismarck. N. Byers made a motion to adjourn the meeting. G. Pfister seconded. The motion passed with no audible dissent. G. Pfister adjourned the meeting.

HEALTH INFORMATION DESIGNS

Genitourinary Smooth Muscle Relaxants (GSM) Prior Authorization

Fax Completed Form to:
866-254-0761
For questions regarding this Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients who are prescribed GSMs must follow these guidelines:
Note:

- **Patient must have an FDA approved indication for the medication requested.**
- **Patient must try oxybutynin ER.**

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name	Recipient Date of Birth	Recipient Medicaid ID Number	
Physician Name:			
Physician Medicaid Provider Number	Telephone Number	Fax Number	
Address	City	State	Zip Code
Qualifications for coverage:			
Requested Drug and Dosage: □ **Enablex** □ **Detrol LA** □ **Toviaz** □ **Gelnique** □ **Myrbetriq** □ **Oxytrol** □ **Detrol** □ **Sanctura** □ **Vesicare** □ **Sanctura XR**	**Diagnosis for this request:** **Failed therapy (Drug and Dose)** **Start Date:** **End Date:**		
Physician Signature		Date	

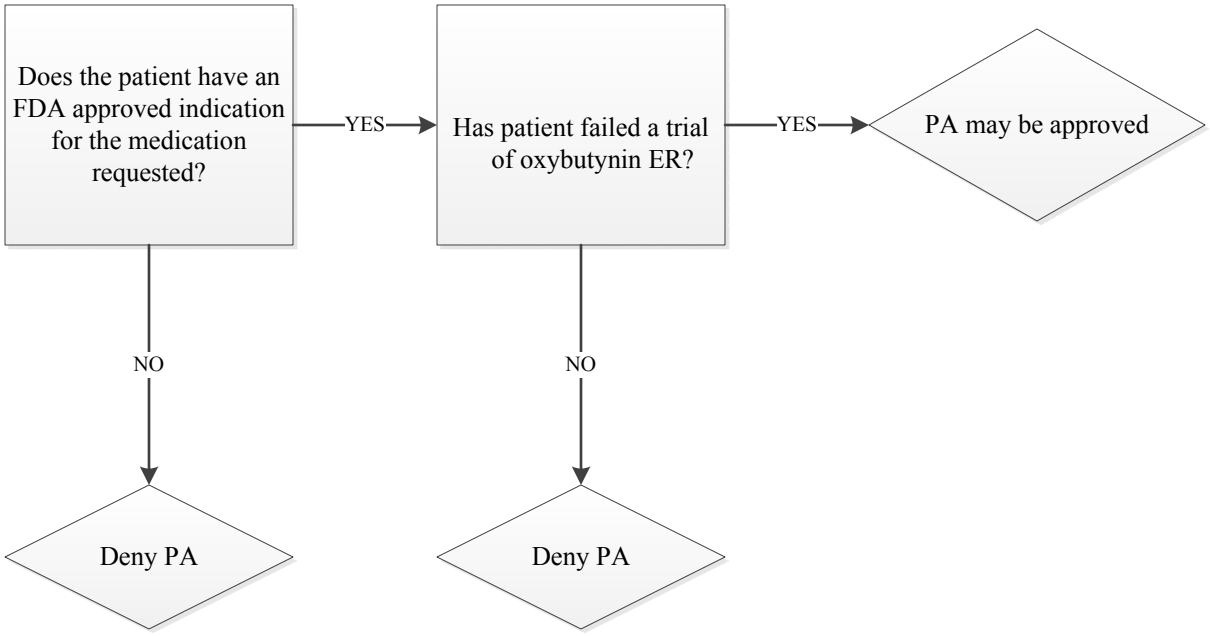
Part II: TO BE COMPLETED BY PHARMACY

PHARMACY NAME:			ND MEDICAID PROVIDER NUMBER:
PHONE NUMBER	FAX NUMBER	DRUG	NDC #

Part III: FOR OFFICIAL USE ONLY

Date Received	Initials:
Approved - Effective dates of PA: From: / / To: / /	Approved by:
Denied: (Reasons)	

North Dakota Department of Human Services
Genitourinary Smooth Muscle Relaxants
Authorization Algorithm



HEALTH INFORMATION DESIGNS

Aubagio Prior Authorization

Fax Completed Form to:
866-254-0761
For questions regarding this Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients who are prescribed Aubagio must follow these guidelines:

***Note:**

- ***Patient must have a confirmed diagnosis of a relapsing form of multiple sclerosis.***
- ***Patient must have a neurologist involved in therapy.***
- ***Obtain transaminase and bilirubin levels within 6 months before initiation of Aubagio and monitor ALT levels at least monthly for 6 months.***
- ***Aubagio is contraindicated in pregnant women or women of childbearing potential who are not using reliable contraception.***

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name	Recipient Date of Birth	Recipient Medicaid ID Number	
Physician Name	Neurologist involved in therapy:		
Physician Medicaid Provider Number	Telephone Number	Fax Number	
Address	City	State	Zip Code
Qualifications for coverage:			
Requested Drug and Dosage: □ **Aubagio**	**Diagnosis for this request:**		
Physician Signature		Date	

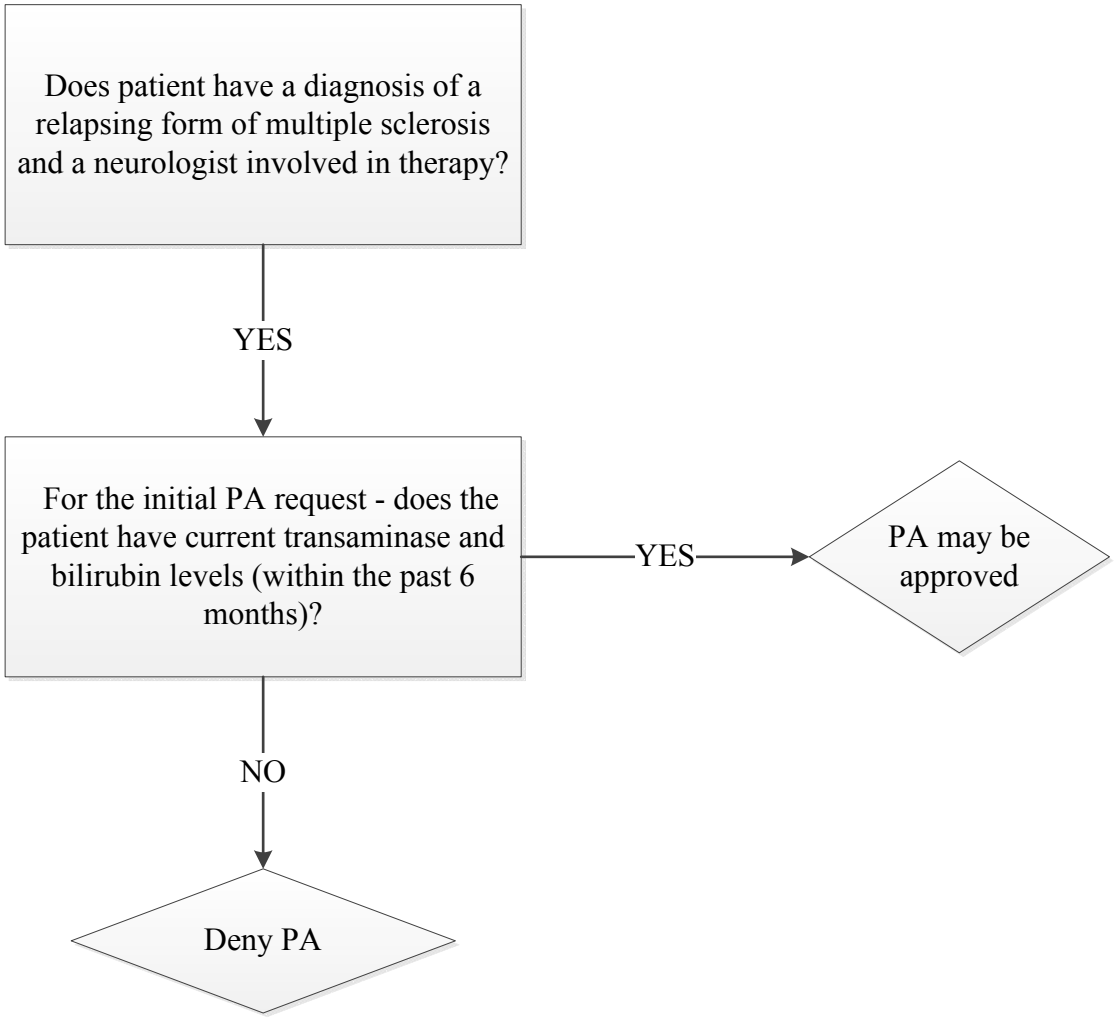
Part II: TO BE COMPLETED BY PHARMACY

PHARMACY NAME:			ND MEDICAID PROVIDER NUMBER:
PHONE NUMBER	FAX NUMBER	DRUG	NDC #

Part III: FOR OFFICIAL USE ONLY

Date Received	Initials:
Approved - Effective dates of PA: From: / / To: / /	Approved by:
Denied: (Reasons)	

North Dakota Department of Human Services
Aubagio* Authorization Algorithm



Aubagio is contraindicated in pregnant women or women of childbearing potential who are not using reliable contraception.

ND Medicaid Utilization			
Drugs over $3,000/RX for all of 2012			
Drug	**Rx Count**	**Dollar Total**	**Dollar/Rx**
HP ACTHAR GEL 80 UNIT/ML VIAL	1	$29,136.20	$29,136.20
HELIXATE FS 2,000 UNIT VIAL	7	$195,121.36	$27,874.48
FIRAZYR 30 MG/3 ML SYRINGE	1	$22,033.60	$22,033.60
HELIXATE FS 1,000 UNIT VIAL	12	$259,998.99	$21,666.58
INCIVEK 375 MG TABLET	12	$222,369.29	$18,530.77
VENTAVIS 20 MCG/1 ML SOLUTION	5	$79,571.60	$15,914.32
STELARA 90 MG/ML SYRINGE	5	$58,811.45	$11,762.29
STIVARGA 40 MG TABLET	2	$20,194.60	$10,097.30
REVLIMID 15 MG CAPSULE	1	$9,005.85	$9,005.85
TASIGNA 200 MG CAPSULE	1	$8,652.53	$8,652.53
AFINITOR 10 MG TABLET	5	$40,832.85	$8,166.57
XTANDI 40 MG CAPSULE	2	$16,065.20	$8,032.60
AFINITOR 5 MG TABLET	5	$38,717.63	$7,743.53
ZEMAIRA 1,000 MG VIAL	12	$72,537.26	$6,044.77
GLEEVEC 400 MG TABLET	4	$23,763.14	$5,940.79
STELARA 45 MG/0.5 ML SYRINGE	2	$11,857.28	$5,928.64
SUTENT 25 MG CAPSULE	1	$5,899.63	$5,899.63
NEXAVAR 200 MG TABLET	2	$11,761.05	$5,880.53
SENSIPAR 60 MG TABLET	1	$5,545.89	$5,545.89
ZYTIGA 250 MG TABLET	2	$10,959.60	$5,479.80
ELAPRASE 6 MG/3 ML VIAL	40	$218,992.02	$5,474.80
HUMIRA CROHN'S STARTER PACK	1	$5,358.15	$5,358.15
VICTRELIS 200 MG CAPSULE	14	$69,165.48	$4,940.39
GLEEVEC 100 MG TABLET	7	$33,888.14	$4,841.16
SABRIL 500 MG POWDER PACKET	2	$9,358.80	$4,679.40
TARCEVA 100 MG TABLET	7	$31,484.98	$4,497.85
NUTROPIN AQ NUSPIN 20 PEN CART	3	$13,292.85	$4,430.95
GILENYA 0.5 MG CAPSULE	26	$113,569.03	$4,368.04
VANCOCIN HCL 250 MG PULVULE	11	$47,421.20	$4,311.02
HUMIRA PSORIASIS STARTER PACK	2	$8,074.39	$4,037.20
NEUPOGEN 300 MCG/ML VIAL	17	$65,593.08	$3,858.42
AVONEX ADMIN PACK 30 MCG VL	13	$49,889.80	$3,837.68
COPAXONE 20 MG INJECTION KIT	63	$234,507.37	$3,722.34
TEMODAR 100 MG CAPSULE	6	$21,504.85	$3,584.14
AVONEX PREFILLED SYR 30 MCG	49	$172,855.25	$3,527.66
ZYVOX 600 MG TABLET	1	$3,442.64	$3,442.64
CUBICIN 500 MG VIAL	14	$47,297.29	$3,378.38
TASIGNA 200 MG CAPSULE	2	$6,188.30	$3,094.15
BETASERON 0.3 MG KIT	5	$15,366.05	$3,073.21
LOVENOX 80 MG PREFILLED SYRN	10	$30,526.85	$3,052.69
MERREM IV 1 GM VIAL	3	$9,137.55	$3,045.85
Totals	**379**	**$2,349,749.07**	**$6,199.87**

Recently Approved Drugs Over $3,000/Rx

1. Juxtapid (lomitapide) capsules – Microsomal triglyceride transfer protein inhibitor indicated as an adjunct to a low-fat diet and other lipid-lowering treatments, including LDL apheresis where available, to reduce low density lipoprotein-cholesterol (LDL-C), apolipoprotein B (apo B), total cholesterol (TC), and non-high density lipoprotein-cholesterol (non-HDL-C) in patients with homozygous familial hypercholesterolemia (HoFH). **$695.44/capsule**

2. Gattex (teduglutide [rDNA origin]) injection – Glucagon-like peptide-2 (GLP-2) analog indicated for the treatment of adult patients with Short Bowel Syndrome (SBS) who are dependent on parenteral support. **$6,186/kit**

3. Kynamro (mipomersen sodium) injection – Oligonucleotide inhibitor of apolipoprotein B-100 synthesis indicated as an adjunct to lipid-lowering medications and diet to reduce LDL-C, TC, apo B, and non-HDL-C in patients with HoFH. Pricing expected to be similar to Juxtapid. **$176,000/year**

North Dakota Medicaid Department of Human Services
DUR Board Meeting
Fulyzaq® Review

I. Indication

Fulyzaq (crofelemer) is a botanical derived anti-diarrheal indicated for the symptomatic relief of non-infectious diarrhea in adult patients with HIV/AIDS on anti-retroviral therapy.

II. Dosage and Administration

One 125mg delayed-release tablet taken orally two times a day, with or without food.

III. Warnings and Precautions

- Rule out infectious etiologies of diarrhea before starting crofelemer.
- If infectious etiologies are not considered, there is a risk that patients will not receive the appropriate therapy and their disease may worsen.

IV. Adverse Reactions

The most common adverse reactions (incidence ≥3%) are upper respiratory tract infection, bronchitis, cough, flatulence and increased bilirubin.

Reference

1. Fulyzaq® [prescribing information]. Raleigh, NC. Salix Pharmaceuticals, Inc.; Jan 2013.

North Dakota Medicaid Department of Human Services
DUR Board Meeting
Xeljanz® Review

I. Overview

Xeljanz (tofacitinib) was recently approved by the FDA as a new treatment option for adult patients with moderately to severely active rheumatoid arthritis (RA) who have had an inadequate response or intolerance to methotrexate. Xeljanz is an inhibitor of Janus kinase (JAK). Blocking JAK mutes the inflammation responses responsible for RA. Xeljanz may be used as monotherapy or in combination with methotrexate or other nonbiologic disease-modifying antirheumatic drugs (DMARDs). Xeljanz should not be used in combination with biologic DMARDs or potent immunosuppressants such as azathioprine and cyclosporine.

II. Warnings and Precautions

- Serious Infections – Do not administer Xeljanz during an active infection, including localized infections. If a serious infection develops, interrupt Xeljanz until the infection is controlled.
- Lymphomas and other malignancies have been reported in patients treated with Xeljanz.
- Gastrointestinal Perforations – Use with caution in patients that may be at increased risk.
- Laboratory monitoring – Recommended due to potential changes in lymphocytes, neutrophils, hemoglobin, liver enzymes and lipids.
- Immunizations – Live vaccines should not be given concurrently with Xeljanz.
- Severe hepatic impairment – Not recommended.

III. Drug Interactions

- Potent inhibitors of CYP3A4 (e.g., ketoconazole): Reduce dose to 5 mg once daily.
- One or more concomitant medications that result in both moderate inhibition of CYP3A4 and potent inhibition of CYP2C19 (e.g., fluconazole): Reduce dose to 5 mg once daily.
- Potent CYP inducers (e.g., rifampin): May result in loss of or reduced clinical response.

IV. Adverse Reactions

The most commonly reported adverse reactions during the first 3 months in controlled clinical trials (occurring in greater than or equal to 2% of patients treated with Xeljanz monotherapy or in combination with DMARDs) were upper respiratory tract infections, headache, diarrhea and nasopharyngitis.

V. Dosage and Cost

The recommended dose of Xeljanz is 5 mg twice daily. Xeljanz will cost approximately $27,000 annually ($36.99 per pill).

Reference

1. Xeljanz® [prescribing information]. NY, NY. Pfizer Labs; November 2012.

NORTH DAKOTA MEDICAID
RETROSPECTIVE DRUG UTILIZATION REVIEW
CRITERIA RECOMMENDATIONS
MARCH 2013

Criteria Recommendations ***Approved*** ***Rejected***

1. 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

Util A	Util B	Util C
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.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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

Util A	Util B	Util C
Stribild	Voriconazole	

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

12. 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

Util A	Util B	Util C **(Include)**
Stribild	Colchicine	Renal Impairment
		Hepatic Impairment

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

13. 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

Util A	Util B	Util C (Include)
Colchicine		Stribild

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

14. Stribild / Dexamethasone _____ _____

Alert Message: Caution is advised when co-administering Stribild (elvitegravir/ cobicistat/emtricitabine/tenofovir) with the CYP3A4 inducer dexamethasone. Concurrent use may significantly decrease plasma concentrations of elvitegravir and cobicistat (CYP3A4 substrates) leading to loss of therapeutic effect and development of resistance.

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

Util A	Util B	Util C
Stribild	Dexamethasone	

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

15. Stribild / Fluticasone _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with an inhaled or nasal fluticasone product may increase plasma concentrations of fluticasone resulting in reduced serum cortisol concentrations. Alternative corticosteroids should be considered, particularly for long term use.

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

Util A	Util B	Util C
Stribild	Fluticasone Inhaled & Nasal	

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

16. Stribild / Salmeterol _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with salmeterol is not recommended. Concurrent use may result in increased risk of cardiovascular adverse events associated with salmeterol, including QT prolongation, palpitations, and sinus tachycardia.

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

Util A	Util B	Util C
Stribild	Salmeterol	

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

17. Stribild / Atorvastatin _____ _____

Alert Message: Coadministration of Stribild (elvitegravir/cobicistat/emtricitabine/tenofovir) with an atorvastatin-containing product (Lipitor and Caduet) should be initiated at the lowest starting dose of atorvastatin and titrated carefully while monitoring for atorvastatin-related adverse effects. Concurrent use of these agents may result in increased atorvastatin plasma concentrations due to inhibition by cobicistat of CYP3A4-mediated atorvastatin metabolism.

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

Util A	Util B	Util C
Stribild	Atorvastatin	

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

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

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

Util A	Util B*				Util C
Stribild	SSRIs	Pitavastatin	Salicylates	Saxagliptin	
	TCAs	Rosuvastatin	Thiazides	Linagliptin	
	Trazodone	Tamoxifen	Acyclovir	Clonazepam	
	Bupropion	Valsartan	Cidofovir	Ethosuximide	
	CCBs	Olmesartan	Ganciclovir	Cyclosporine	
	Carvedilol	Telmisartan	Valacyclovir	Tacrolimus	
	Metoprolol	Digoxin	Valganciclovir	Sirolimus	
	Nebivolol	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.

19. 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

Util A	Util B			Util C
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.

20. 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

Util A	Util B	Util C
Stribild	Clorazepate	
	Diazepam	
	Estazolam	
	Flurazepam	
	Chlordiazepoxide	
	Alprazolam	
	Buspirone	
	Zolpidem	
	Clobazam	

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

21. 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

Util A	Util B	Util C
Stribild	Ethinyl Estradiol/Norgestimate	

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

22. 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

Util A	Util B	Util C
Atazanavir	PR Prolongation	
	Conduction Disorder	

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

23. 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

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

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

24. Omega-3-Acid Ethyl Esters / Therapeutic Appropriateness _____ _____
Alert Message: The safety and effectiveness of Lovaza (omega-3-acid ethyl esters) have not been established in patients less than 18 years of age.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Omega-3-acid ethyl esters		

Age Range: 0 – 18 yoa

References:
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

25. Omega-3-Acid Ethyl Esters / Overuse _____ _____
Alert Message: Lovaza (omega-3-acid ethyl esters) may be over-utilized. The manufacturer's maximum recommended dose is 4 grams per day, taken as a single 4 gram dose or 2 grams twice daily.

Conflict Code: ER - Overutilization
Drugs/Diseases

Util A	Util B	Util C
Omega-3-acid ethyl esters		

Max Dose: 4 grams daily

References:
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

26. Omega-3-Acid Ethyl Esters / Therapeutic Duplication _____ _____
Alert Message: Therapeutic duplication of omega-3 acids may be occurring. The safety and efficacy of coadministration of these agents has not been studied and, therefore, is not recommended.

Conflict Code: TD – Therapeutic Duplication
Drugs/Diseases

Util A	Util B	Util C
Omega-3-acid ethyl esters	Icosapent ethyl	

References:
Vascepa Prescribing Information, July 2012, Amarin Pharma Inc.
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

27. Omega-3-Acid Ethyl Esters / Anticoagulants _____ _____

Alert Message: Some studies have demonstrated prolongation of bleeding time when anticoagulants and omega-3 fatty acids are used concurrently. Patients receiving treatment with Lovaza (omega-3-acid ethyl esters) and drugs affecting coagulation should be monitored periodically.

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

Util A	Util B	Util C
Omega-3-acid ethyl esters	Anticoagulants	

References:
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

28. Omega-3-Acid Ethyl Esters / Pregnancy / Pregnancy Negating _____ _____

Alert Message: Lovaza (omega-3-acid ethyl esters) is FDA pregnancy category C. There are no adequate and well-controlled studies in pregnant women and it is unknown if omega-3-acid ethyl esters can cause fetal harm. Omega-3-acid ethyl esters should be used during pregnancy only if the potential benefit to the patient justifies the potential risk to the fetus.

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

Util A	Util B	Util C **(Negating)**
Omega-3-Acid Ethyl Esters	Pregnancy ICD-9s	Delivery Miscarriage Abortion

References:
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

29. Omega-3-Acid Ethyl Esters / Hepatic Impairment _____ _____

Alert Message: Patients taking Lovaza (omega-3-acid ethyl esters) that have hepatic impairment should have ALT and AST levels monitored periodically.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C (Include)
Omega-3-acid ethyl esters		Chronic Liver Disease Cirrhosis

References:
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

30. Omega-3-Acid Ethyl Esters / Atrial Fibrillation or Flutter _____ _____

Alert Message: In clinical trials with Lovaza (omega-3-acid ethyl esters), recurrent atrial fibrillation (AF) or persistent AF was seen in some patients with symptomatic paroxysmal AF or persistent AF. The clinical significance of these results is uncertain, but there may be an association between omega-3-acid ethyl esters and more frequent recurrences of symptomatic AF or flutter in these patients.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C (Include)
Omega-3-acid ethyl esters		Atrial Fibrillation
		Atrial Flutter

References:
Lovaza Prescribing Information, August 2012, GlaxoSmithKline.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

31. Omega-3-Acid Ethyl Esters / Non-adherence _____ _____

Alert Message: Based on refill history, your patients may be under-utilizing Lovaza (omega-3-acid ethyl esters). 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
Omega-3-acid ethyl esters		

References:
Schedlbauer A, Davis P, Fahey T. Interventions to Improve Adherence to Lipid Lowering Medication (Review). Cochrane Database System Rev. 2010 Mar 17;(3):CD004371.
Bersot T, Haffner S, Harris WS, et al., Hypertriglyceridemia: Management of Atherogenic Dyslipidemia. Jrnl of Fam Pract. 2006 Jul;55(7):S1-S8.
Osterberg L and Blaschke T. Adherence to Medication. N Engl J Med 2005;353:487-497.

32. Dronedarone / Therapeutic Appropriateness _____ _____

Alert Message: The safety and effectiveness of Multaq (dronedarone) have not been established in patients less than 18 years of age.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Dronedarone		

Age Range: 0 – 17 yoa

References:
Multaq Prescribing Information, September 2012, Sanofi-Aventis U.S.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

33. Dronedarone / Pulmonary Toxicity _____ _____

Alert Message: Cases of interstitial lung disease (including pneumonitis and pulmonary fibrosis) have been reported in patients treated with Multaq (dronedarone). Onset of dyspnea or non-productive cough may be related to pulmonary toxicity and patients should be carefully evaluated. In the event that pulmonary toxicity is confirmed, dronedarone should be discontinued.

Conflict Code: DB – Drug-Drug Marker and/or Diagnosis

Drugs/Diseases

Util A	Util B	Util C
Dronedarone	Pneumonitis	
	Pulmonary Fibrosis	
	Dyspnea	

References:
Multaq Prescribing Information, September 2012, Sanofi-Aventis U.S.
Clinical Pharmacology, 2012 Elsevier / Gold Standard.

34. Forfivo XL / Overutilization _____ _____

Alert Message: Forfivo XL (extended-release bupropion) may be over-utilized. The manufacturer's maximum recommended dose is 450 mg once daily. Exceeding the recommended dose increases the risk of dose-related seizures.

Drugs/Diseases

Util A	Util B	Util C
Forfivo XL		

References:
Forfivo XL Prescribing Information, Nov. 2011, Intelgenx Corp.
Facts & Comparisons, 2012 Updates Wolters Kluwer Health.

35. Forfivo XL / Therapeutic Appropriateness (0-18 yoa) _____ _____

Alert Message: Safety and effectiveness of Forfivo XL (extended-release bupropion) in pediatric patients have not been established. Anyone considering the use of bupropion in a child or adolescent must balance the potential risks with the clinical need.

Drugs/Diseases

Util A	Util B	Util C
Forfivo XL		

Age Range: 0-18 yoa
References:
Forfivo XL Prescribing Information, Nov. 2011, Intelgenx Corp.
Facts & Comparisons, 2012 Updates Wolters Kluwer Health.

36. Bupropion / Ticlopidine & Clopidogrel _____ _____

Alert Message: Concurrent use of a bupropion-containing agent with clopidogrel or ticlopidine (CYP2B6 Inhibitors) is not recommended. Co-administration of these agents may result in elevated bupropion (CYP2B6 substrate) plasma concentrations and risk of bupropion-related adverse effects (e.g., seizures, nausea, tremor and insomnia).

Drugs/Diseases

Util A	Util B	Util C
Bupropion-All	Ticlopidine	
	Clopidogrel	

References:

Forfivo XL Prescribing Information, Nov. 2011, Intelgenx Corp.
Facts & Comparisons, 2012 Updates Wolters Kluwer Health.
Clinical Pharmacology, 2012 Elsevier/Gold Standard.