Alabama Medicaid DUR Board Meeting Minutes
January 24, 2018

Members Present: Robert Moon, Rachel Seaman, P.J. Hughes, Bernie Olin, Kelli Littlejohn Newman, Marilyn Bulloch

Also Present: Tiffany Minnifield, Lori Thomas, Clemice Hurst, Whitney Hughley

Present via Conference Call: Kristian Testerman, Lauren Ward, Tammy Dubac, Amy Donaldson,

Members Absent: Chris Phung, Denyse Thornley-Brown, Dan McConaghy, Donald Kern, Kenny Murray

Call to Order: The DUR meeting was called to order by M. Bulloch at approximately 1:04p.m.

Review and Adoption of Minutes: The minutes of the October 25, 2017 meeting were presented and P.J. Hughes made a motion to approve the minutes. R. Seaman 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 July 2017. She reported 10,139 total manual requests and 18,409 total electronic requests. From the Prior Authorization and Override Response Time Ratio report for July 2017, L. Thomas reported that approximately 69% of all manual PAs and all overrides were completed in less than two hours. Eighty-nine percent of all manual PAs and 91% of all overrides were completed in less than four hours. Ninety-two percent of all manual PAs and 93% of all overrides were completed in less than eight hours. For the month of August 2017, L. Thomas reported 11,965 manual PA requests and 21,033 electronic PA requests were received. She reported that 66% of all manual PAs and 67% of all overrides were completed in less than two hours. Eighty-five percent of all manual PAs and overrides were completed in less than four hours. Eighty-six percent of all manual PAs and 87% of all overrides were completed in less than eight hours. For the month of September 2017, L. Thomas reported 10,671 manual PA requests and 18,998 electronic PA requests. L. Thomas reported that approximately 67% of all manual PAs and 65% of all overrides were completed in less than two hours. Seventy-nine percent of all manual PA requests and all overrides were completed in less than four hours. Eighty-one percent of all manual PA requests and all overrides were completed in less than eight hours.

Program Summary Review: L.Thomas briefly reviewed the Alabama Medicaid Program Summary for the months of April 2017 through September 2017. She reported 3,508,752 total prescriptions, 211,241 average recipients per month using pharmacy benefits, and an average paid per prescription of $104.93.

Cost Management Analysis: L.Thomas reported an average cost per claim of $101.85 for September 2017 and emphasized that the table contained the average cost per claim over the past two years. From the 3rd Quarter 2017 Drug Analysis, L.Thomas reported 79.4% generic utilization, 9.3% brand single-source, 7.4% brand multi-source (those requests which required a DAW override), and 3.9% OTC and "other". From the Top 25 Drugs Based on Number of Claims from 07/01/2017 – 09/30/2017, L.Thomas reported the top five drugs: amoxicillin, cetirizine, hydrocodone-acetaminophen, ProAir® HFA, and montelukast sodium. L. Thomas then reported the top five drugs from the Top 25 Drugs Based on Claims Cost from 07/01/2017 – 09/30/2017: Vyvanse®, Focalin XR®, Invega® Sustenna®, Lyrica®, and ProAir®HFA. She reminded the Board that Vyvanse® and Focalin XR® are preferred agents. 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, Respiratory and CNS Stimulants, Miscellaneous Anticonvulsants, and Insulins.

Opioid Utilization: K. Newman began the discussion of opioid utilization and emphasized that Dr. Moon tasked the Agency with tackling the use of opioids throughout the state. L. Thomas explained that the top 100 prescribers of opioids throughout the state would be targeted. She explained that pain management specialists would not be excluded, however, oncologist would be excluded. L. Thomas discussed the "Opioid Prescribing Report Cards" that would be hand-delivered by Health Information Designs' Academic Detailers. L. Thomas shared a list of the top 100 prescribers to the Board. R. Moon reminded the Board that only Medicaid paid claims were used in the report. M. Bulloch asked if the data could be seen in geographical terms and C. Hurst indicated this could be done through Medicaid's statistical department.

RDUR Intervention Report: L. Thomas presented the RDUR Activity Report for July 2017. She reported 545 profiles reviewed and 581 letters sent with 113 responses received as of the date of the report. She reported 59 of 86 physicians indicated that they found the RDUR letters "useful" or "extremely useful". The criteria for the cycle of intervention letters included Drug-Disease Precaution (narcotic/opioid use in patients with a history of drug abuse); Hepatitis C SVR Response Rates; Appropriate Use (appropriate use of immediate-release opioids); Appropriate Use (concurrent use of buprenorphine and pure opiate agonists).

Proposed Criteria: L.Thomas presented the proposed set of 48 criteria to the Board. T. Minnifield instructed the Board members to mark their ballots. Of the 48 criteria, results from the criteria vote returned 47 approved and 1 approved as amended.

Medicaid Update: T. Minnifield reminded the Board members that all updated Medicaid drug lists provided are also available online and that the next DUR Meeting would be April 25th.

P & T Committee Update: C. Hurst began the P & T Update by informing the Board that the last meeting was held on January 8, 2018, and covered the Antihypertensive Agents and the Hepatitis C Agents. The next P & T meeting is scheduled for February 21, 2018, at 9 a.m. and will cover the Respiratory Agents.

Next Meeting Date: M. Bulloch notified the Board that the next DUR meeting will be held on April 25, 2018. A motion to adjourn the meeting was made by B. Olin. P.J. Hughes seconded the motion and the meeting was adjourned at 2:00 p.m.

Respectfully submitted,

Lori Thomas, PharmD

Lori Thomas, PharmD.

ALABAMA MEDICAID
RETROSPECTIVE DRUG UTILIZATION REVIEW
CRITERIA RECOMMENDATIONS

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*
1. Cabozantinib / Therapeutic Appropriateness	___√___	_____	_____

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

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Cabozantinib Tabs		

Age Range: 0 – 17 yoa

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

2. Cabozantinib / Therapeutic Appropriateness	___√___	_____	_____

Alert Message: Based on its mechanism of action, Cabometyx (cabozantinib) can cause fetal harm when administered to a pregnant woman. If used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential hazard to the fetus. Advise females of reproductive potential to use effective contraception during treatment with cabozantinib and for 4 months after the last dose.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Cabozantinib Tabs		

Gender: Female
Age Range 11 – 50

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

3. Cabozantinib / Overuse ___√___ _____ _____

Alert Message: Cabometyx (cabozantinib) may be over-utilized. The manufacturer's maximum recommended dose for a patient with renal cell carcinoma is 60 mg once daily.

Conflict Code: ER - Overutilization
Drugs/Diseases

Util A	Util B	Util C
Cabozantinib Tabs		

Max Dose: 60 mg/day

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

4. Cabozantinib / Hepatic Impairment ___√___ _____ _____

Alert Message: Increased exposure to Cabometyx (cabozantinib) has been observed in patients with mild to moderate hepatic impairment. Reduce the cabozantinib dose in patients with mild (Child-Pugh score (C-P A) or moderate (C-P B) hepatic impairment. Cabozantinib is not recommended for use in patients with severe hepatic impairment.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Cabozantinib Tabs		Hepatic Impairment

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

5. Cabozantinib / GI Perforations / Fistulas ___√___ _____ _____

Alert Message: Cabometyx (cabozantinib) has been shown to cause gastrointestinal (GI) perforations and fistulas in patients with renal cell carcinoma. Patients should be monitored for symptoms of fistulas and perforations. Cabozantinib therapy should be permanently discontinued in patients who experience a fistula which cannot be appropriately managed or a GI perforation.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Cabozantinib Tabs	GI Perforation Fistulas	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

6. Cabozantinib / Hemorrhage ___√_____ _____ _____

Alert Message: Serious and sometimes fatal hemorrhage has occurred with Cabometyx (cabozantinib) therapy. Do not administer cabozantinib to patients who have or are at risk for severe hemorrhage.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Cabozantinib Tabs		GI Hemorrhage
		Subarachnoid Hemorrhage
		Intracerebral Hemorrhage
		Hemorrhage, unspecified

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

7. Cabozantinib / Thrombotic Events ___√_____ _____ _____

Alert Message: Cabometyx (cabozantinib) treatment results in an increased incidence of thrombotic events. Cabozantinib should be discontinued in patients who experience an acute myocardial infarction or other clinically significant arterial thromboembolic complications.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Cabozantinib Tabs	Cerebral Thrombosis	
	Arterial Thrombosis	
	Venous Thrombosis	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

8. Cabozantinib / CYP3A4 Inhibitors __✓_____ _____ _____

Alert Message: Concomitant use of Cabometyx (cabozantinib) with strong CYP3A4 inhibitors (e.g., ketoconazole and clarithromycin) may result in increased exposure of cabozantinib and may increase the risk of exposure-related toxicity. If concurrent use cannot be avoided, the dose of cabozantinib should be reduced by 20 mg. Resume the dose that was used prior to initiating the CYP3A4 inhibitor 2 to 3 days after discontinuation of the strong inhibitor.

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

Util A	Util B		Util C
Cabozantinib Tabs	Ketoconazole	Clarithromycin	
	Itraconazole	Atazanavir	
	Nefazodone	Saquinavir	
	Telithromycin	Ritonavir	
	Indinavir	Nelfinavir	
	Voriconazole	Cobicistat	
	Posaconazole		

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

9. Cabozantinib / CYP3A4 Inducers ___✓_____ _____ _____

Alert Message: Concomitant use of Cabometyx (cabozantinib) with strong CYP3A4 inducers (e.g., phenytoin and carbamazepine) may result in decreased exposure of cabozantinib leading to reduced efficacy. If concurrent use cannot be avoided, the dose of cabozantinib should be increased by 20 mg (i.e., 60 mg to 80 mg daily or 40 mg to 60 mg daily) as tolerated but should not exceed 80 mg daily. Resume the cabozantinib dose that was used prior to initiating the inducer 2 to 3 days after inducer discontinuation.

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

Util A	Util B		Util C
Cabozantinib Tabs	Phenytoin	Carbamazepine	
	Rifampin	Rifabutin	
	Rifapentine	Phenobarbital	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

10. Cabozantinib / Hypertension ___√___ _____ _____

Alert Message: Patients taking Cabometyx (cabozantinib) show increased incidence of treatment-emergent hypertension. In a randomized trial, hypertension was reported in 37% of cabozantinib-treated patients as compared to 3.1 % of everolimus-treated patients. Blood pressure should be monitored prior to and throughout therapy. Cabozantinib should be discontinued if there is evidence of hypertensive crisis or severe hypertension that cannot be controlled with anti-hypertensive therapy.

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

Util A	Util B	Util C
Cabozantinib Tabs	Hypertension	
	Anti-Hypertensive Drugs	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

11. Cabozantinib / Palmar-Plantar Erythrodysesthesia Syndrome ___√___ _____ _____

Alert Message: Palmar-plantar erythrodysesthesia syndrome (PPES) has been reported in patients treated with Cabometyx (cabozantinib). Cabozantinib should be withheld in patients who develop intolerable Grade 2 PPES or Grade 3 PPES until improvement to Grade 1, at which time cabozantinib therapy can resume at a reduced dose.

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

Util A	Util B	Util C
Cabozantinib Tabs	Palmar-Plantar Erythrodysesthesia Syndrome	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

12. Cabozantinib / Proteinuria ___√___ _____ _____

Alert Message: In clinical trials, proteinuria was observed in 2% of patients receiving Cabometyx (cabozantinib) as compared to < 1 % of patient receiving everolimus. Cabozantinib should be discontinued in patients who develop nephrotic syndrome.

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

Util A	Util B	Util C
Cabozantinib Tabs	Proteinuria	
	Nephrotic Syndrome	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

13. Cabozantinib / Reversible Posterior Leukoencephalopathy Syndrome ___√____ _____ _____

Alert Message: Reversible Posterior Leukoencephalopathy Syndrome (RPLS) has been reported with Cabometyx (cabozantinib) treatment. An evaluation for RPLS should be performed in any patient presenting with seizures, headaches, visual disturbances, confusion or altered mental function. Cabozantinib should be discontinued if RPLS develops.

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

Util A	Util B	Util C
Cabozantinib Tabs	Seizures	
	Headache	
	Visual Disturbances	
	Confusion	
	Altered Mental Function	

References:
Cabometyx Prescribing Information, April 2016, Exelixis, Inc.
Clinical Pharmacology, 2017 Elsevier / Gold Standard.

14. Daclizumab / Overutilization ___√____ _____ _____

Alert Message: The recommended dosage of Zinbryta (daclizumab) is 150 mg injected subcutaneously once monthly.

Conflict Code: ER - Overutilization
Drugs/Diseases

Util A	Util B	Util C
Daclizumab		

Max Dose: 1 injection/month

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Zinbryta Prescribing Information, May 2016, Biogen.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

15. Daclizumab / Hepatic Impairment ___√___ _____ _____

Alert Message: The use of Zinbryta (daclizumab) is contraindicated in patients with pre-existing hepatic disease, hepatic impairment, including ALT and AST at least 2 times the ULN, history of autoimmune hepatitis or other autoimmune conditions involving the liver. Daclizumab can cause severe liver injury including life-threatening events, liver failure, and autoimmune hepatitis. Liver injury can occur at any time during treatment with daclizumab, with cases reported up to 4 months after the last dose of daclizumab.

Conflict Code: TA – Therapeutic Appropriateness **(Black Box Warning)**
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Daclizumab		Hepatic Impairment
		Autoimmune Hepatitis

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Zinbryta Prescribing Information, May 2016, Biogen.

16. Daclizumab / Depression & Suicidal Ideation ___√___ _____ _____

Alert Message: The use of Zinbryta (daclizumab) has been associated with depression-related events, including suicidal ideation or suicide attempt. Daclizumab should be used with caution in patients with previous or current depressive disorders. Advise patients and/or caregivers to immediately report any symptoms of new or worsening depression and/or suicidal ideation to their healthcare provider.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Daclizumab		Depression
		Suicidal Ideation

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Zinbryta Prescribing Information, May 2016, Biogen.

17. Daclizumab / Therapeutic Appropriateness ___√___ _____ _____

Alert Message: Safety and effectiveness of Zinbryta (daclizumab) in patients less than 17 years of age have not been established. Use of daclizumab is not recommended in pediatric patients due to the risk of hepatic injury and immune-mediated disorders.

Conflict Code: TA - Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Daclizumab		

Age Range: 0 - 16 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Zinbryta Prescribing Information, May 2016, Biogen.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

18. Daclizumab / Pregnancy / Pregnancy Negating ___√___ _____ _____

Alert Message: There are no adequate studies on the developmental risk associated with the use of Zinbryta (daclizumab) in pregnant women. Daclizumab is a monoclonal antibody and these agents are known to cross the placenta. Administration of daclizumab in monkeys during gestation resulted in embryofetal death and reduced fetal growth at maternal exposures greater than 30 times that expected clinically.

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

Util A	Util B	Util C **(Negating)**
Daclizumab	Pregnancy	Miscarriage
		Delivery
		Abortion

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Zinbryta Prescribing Information, May 2016, Biogen.

19. Daclizumab / Nonadherence ___√___ _____ _____

Alert Message: Based on refill history, your patient may be under-utilizing Zinbryta (daclizumab). 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
Daclizumab		

References:
Clinical Pharmacology, 2016 Elsevier/Gold Standard.
Osterberg L, Blaschke T. Adherence to Medication. N Engl J Med 2005; 353:487- 497.
Remington G, Rodriguez Y, Logan D, et al., Facilitating Medication Adherence in Patients with Multiple Sclerosis. Int J MS Care. 2013;15:36-45.
McKay KA, Tremlett H, Patten SB, et al., Determinants of Non-adherence to Diseases-Modifying Therapies in Multiple Sclerosis: A Cross-Canada Prospective Study. Mult Scler Jrnl. 2016 June 29;1-9.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

20. Daclizumab / Hepatotoxic Drugs ___√___ _____ _____

Alert Message: Caution should be exercised when administering Zinbryta (daclizumab) with drugs that can cause hepatotoxicity. Daclizumab can cause severe liver injury, including life-threatening events, and the use with other agents that cause liver injury may increase the risk of the adverse effect.

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

Util A	Util B	Util C
Daclizumab	Allopurinol	Nevirapine
	Amiodarone	Nitrofurantoin
	Amoxicillin-clavulanate	Phenytoin
	Atorvastatin	Propylthiouracil
	Azathioprine	Quinidine
	Busulfan	Pyrazinamide
	Carbamazepine	Rifampin
	Chlorpromazine	Simvastatin
	Dantrolene	TMP-SMZ
	Diclofenac	Sulfasalazine
	Didanosine	Sulindac
	Disulfiram	Telithromycin
	Efavirenz	Ticlopidine
	Erythromycin	Valproate
	Flutamide	Alectinib
	Ibuprofen	Sunitinib
	Infliximab	Idelalisib
	Interferon	Ixazomib
	Isoniazid	Erlotinib
	Itraconazole	Lenvatinib
	Ketoconazole	Nefazodone
	Methotrexate	Maraviroc
	Methyldopa	
	Minocycline	

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Zinbryta Prescribing Information, May 2016, Biogen.
Bjornsson, ES. Hepatotoxicity by Drugs: The Most Common Implicated Agents. Int Jrnl Mol Sci. 2016 Feb; 17(2);244.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

21. Panobinostat / Diarrhea ___√___ _____ _____

Alert Message: Farydak (panobinostat) can cause severe diarrhea. Monitor patient for symptoms and ensure the patient has adequate hydration prior to and during therapy. Initiate anti-diarrheal treatment medication at the onset of diarrhea. Interrupt panobinostat therapy at the onset of moderate diarrhea (4 to 6 stools/day) or severe diarrhea (>/= 7 stools/day).

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

Util A	Util B	Util C
Panobinostat	Diarrhea	

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

22. Panobinostat / Cardiovascular Events ___√___ _____ _____

Alert Message: Severe and fatal cardiac ischemic events, including arrhythmias and ECG changes, have occurred in patients receiving Farydak (panobinostat). Panobinostat may prolong the QT interval. Obtain ECG and electrolytes at baseline and periodically during treatment as clinically indicated. Panobinostat should not be initiated in patients with a QTcF > 450 msec or clinically significant baseline ST-segment or T-wave abnormalities.

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

Util A	Util B	Util C **(Include)**
Panobinostat		Myocardial Infarction
		Angina
		QT Prolongation

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

**QTcF is the Fridericia corrected QT interval formula and was used to calculate the QT interval in the clinical trials for Farydak (panobinostat). More than 30 correction formula have been proposed, of which Bazett's (QTcB) and Fridericiaís (QTcF) corrections are the most widely used. Fridericiaís formula generates a more accurate correction in this circumstance.*

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

23. Panobinostat / Hepatic Impairment ___√___ _____ _____

Alert Message: Farydak (panobinostat) can cause hepatic dysfunction. Liver function should be monitored prior to treatment and regularly during treatment. If abnormal liver function tests are observed dose adjustment may be considered. The starting dose of panobinostat should be reduced in patients with mild or moderate hepatic impairment (15 mg and 10 mg, respectively). Avoid use in patients with severe hepatic impairment.

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

Util A	Util B	Util C **(Include)**
Panobinostat		Hepatic Impairment

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

24. Panobinostat / Hemorrhage ___√___ _____ _____

Alert Message: Fatal and serious hemorrhage has been reported during treatment with Farydak (panobinostat). Obtain a baseline platelet count prior to therapy and monitor the CBC weekly during therapy. Interruption of panobinostat therapy, dose adjustment, or drug discontinuation may be necessary if severe toxicity occurs.

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

Util A	Util B	Util C
Panobinostat	Gastrointestinal Bleed	
	Subarachnoid Hemorrhage	
	Intracerebral Hemorrhage	

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

25. Panobinostat 15 mg & 20 mg / Strong CYP3A4 Inhibitors ___√___ _____ _____

Alert Message: The dose of Farydak (panobinostat) should be reduced to 10 mg when co-administered with strong CYP3A4 inhibitors. Panobinostat is a CYP3A4 substrate and inhibition of its CYP3A4-medicated metabolism may result in significantly increased panobinostat exposure and risk of adverse effects.

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

Util A	Util B		Util C
Panobinostat 15 & 20mg	Nefazodone	Ketoconazole	
	Clarithromycin	Itraconazole	
	Telithromycin	Voriconazole	
	Saquinavir	Posaconazole	
	Ritonavir	Cobicistat	
	Nelfinavir		
	Indinavir		

Max Dose: 10 mg

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

26. Panobinostat / Strong CYP3A4 Inducers ___√___ _____ _____

Alert Message: Concurrent use of Farydak (panobinostat), a CYP3A4 substrate, with strong CYP3A4 inducers should be avoided. While drug interaction studies have not been conducted simulation studies using mechanistic models suggest an approximate 70% decrease in the systemic exposure of panobinostat in the presence of strong inducers of CYP3A4.

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

Util A	Util B		Util C
Panobinostat	Phenytoin	Rifampin	
	Phenobarbital	Rifabutin	
	Primidone	Rifapentine	
	Carbamazepine		

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

27. Panobinostat / Sensitive CYP2D6 Substrates ___√___ _____ _____

Alert Message: Concurrent use of Farydak (panobinostat), a CYP2D6 inhibitor, with sensitive CYP2D6 substrates (e.g., atomoxetine, metoprolol, and venlafaxine) should be avoided due to risk of elevated CYP2D6 substrate concentrations. If concomitant use with the CYP2D6 substrate is unavoidable, monitor patient frequently for adverse reactions.

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

Util A	Util B		Util C
Panobinostat	Atomoxetine	Nebivolol	
	Desipramine	Perphenazine	
	Dextromethorphan	Tolterodine	
	Metoprolol	Venlafaxine	

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

28. Panobinostat / QT Prolongation Drugs ___√___ _____ _____

Alert Message: Farydak (panobinostat) has been shown to increase the QTc interval and therefore use with drugs that are known to prolong the QT interval is not recommended.

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

Util A	Util B				Util C
Panobinostat	Albuterol	Disopyramide	Imipramine	Pazopanib	Tolterodine
	Alfuzosin	Dofetilide	Indapamide	Pentamidine	Trazodone
	Amantadine	Dolasetron	Isradipine	Posaconazole	TMP/SMZ
	Amiodarone	Doxepin	Itraconazole	Procainamide	Trimipramine
	Amitriptyline	Dronedarone	Ketoconazole	Propafenone	Vandetanib
	Amphetamine	Droperidol	Lapatinib	Protriptyline	Vardenafil
	Arsenic Trioxide	Ephedrine	Levalbuterol	Quetiapine	Atazanavir
	Asenapine	Epinephrine	Levofloxacin	Quinidine	Ziprasidone
	Erythromycin	Lithium	Ranolazine	Venlafaxine	Zolmitriptan
	Atomoxetine	Escitalopram	Metaproterenol	Risperidone	Ezogabine
	Azithromycin	Felbamate	Methadone	Tizanidine	Rasagiline
	Chloral Hydrate	Flecainide	Moexipril/HCTZ	Ritonavir	Phenelzine
	Chloroquine	Fluconazole	Moxifloxacin	Salmeterol	Tranylcypromine
	Chlorpromazine	Fluoxetine	Nicardipine	Saquinavir	Linezolid
	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	Isocarboxazid	Paliperidone	Telithromycin	
	Diphenhydramine	Iloperidone	Paroxetine	Terbutaline	

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

29. Panobinostat / Therapeutic Appropriateness _____ __√____ _____

Alert Message: Farydak (panobinostat) can cause fetal harm. Advise females of reproductive potential to avoid becoming pregnant while taking panobinostat and to use effective contraception while taking panobinostat and for at least 1 month after the last dose. Because of the potential risk of male-medicated teratogenicity, advise sexually active men to use condoms while on treatment and for 3 months after their last dose of panobinostat.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Panobinostat		

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Farydak Prescribing Information, Feb. 2015, Novartis Pharmaceuticals Corporation.

30. Saxagliptin - All / Pancreatitis ___√____ _____ _____

Alert Message: There have been post-marketing reports of acute pancreatitis in patients taking saxagliptin-containing products (Onglyza, Kombiglyze XR, and Qtern). After initiation of a saxagliptin-containing agent, the patient should be observed for signs and symptoms of pancreatitis. If pancreatitis is suspected, promptly discontinue the saxagliptin-containing agent and initiate appropriate management.

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

Util A	Util B	Util C
Saxagliptin	Pancreatitis	
Saxagliptin/Metformin		
Saxagliptin/Dapagliflozin		

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Facts & Comparisons, 2017, Wolters Kluwer Health.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

31. Saxagliptin – All / Heart Failure ___√___ _____ _____

Alert Message: Consider the risks and benefits of saxagliptin-containing therapy (Onglyza, Kombiglyze XR, and Qtern) in patients who have a history of or who have increased risk factors for heart failure. An increased risk of hospitalization for heart failure has been reported in patients receiving saxagliptin in a cardiovascular outcomes trial. If heart failure develops, evaluate and manage according to current standards of care and consider discontinuing the saxagliptin-containing agents.

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

Util A	Util B	Util C **(Include)**
Saxagliptin		Heart Failure
Saxagliptin/Metformin		Dyspnea
Saxagliptin/ Dapagliflozin		Fatigue
		Edema
		Tachycardia
		Arrhythmia

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Facts & Comparisons, 2017, Wolters Kluwer Health.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

32. Benzodiazepines / Opioids ___√_____ _____ _____

Alert Message: Co-administration of opioids and benzodiazepines should be done with extreme caution as the combination may result in respiratory depression, hypotension, profound sedation, coma, and death. If concurrent administration is clinically warranted consider dosage reduction of one or both agents. Re-evaluate the patient's treatment plan on a regular basis to determine the necessity for continued concomitant use of these agents.

Conflict Code: DD – Drug/Drug Interaction (Black Box Warning)
Drugs/Diseases

Util A	Util B	Util C
Alprazolam	Codeine	
Chlordiazepoxide	Fentanyl	
Clonazepam	Hydrocodone	
Clorazepate	Hydromorphone	
Diazepam	Levorphanol	
Lorazepam	Meperidine	
Oxazepam	Methadone	
Estazolam	Morphine	
Flurazepam	Oxycodone	
Quazepam	Oxymorphone	
Temazepam	Tapentadol	
Triazolam	Tramadol	
Clobazam	Buprenorphine	

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Facts & Comparisons, 2017 Updates, Wolters Kluwer Health.
Sun EC, Dixit A, Humphreys K, et al., Association Between Concurrent Use of Prescription Opioids and Benzodiazepines and Overdose: Retrospective Analysis. BMJ 2017;356:j760
Manchikanti L, Abdi S, Atluri S, et.al. American Society of Interventional Pain Physicians (ASIPP) Guidelines for Responsible Opioid Prescribing in Chronic Non-Cancer Pain: Part 1 – Evidence Assement. Pain Physician 2012;15:S67-S116.
Manchikanti L, Abdi S, Atluri S, et.al. American Society of Interventional Pain Physicians (ASIPP) Guidelines for Responsible Opioid Prescribing in Chronic Non-Cancer Pain: Part 2 – Guidance. Pain Physician 2012;15:S67-S116.
VA/DoD Evidence Based Practice Clinical Practice Guideline Management of Opioid Therapy for Chronic Pain, May 2010. Department of Veterans Affairs, Department of Defense.
Available art: http://www.healthquality.va.gov/guidelines/Pain/cot/COT_312_Full-er.pdf
APS – AAPM Guideline for the Use of Chronic Opioid Therapy in Chronic Noncancer Pain Evidence Review. The American Pain Society in Conjunction with the American Academy of Pain Medicine. 2009.
Available at: http://americanpainsociety.org/uploads/education/guidelines/chronic-opioid-therapy-cncp.pdf

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

33. Synjardy XR / Overutilization ___√___ _____ _____

Alert Message: Synjardy XR (empagliflozin/metformin extended-release) may be over-utilized. The manufacturer's maximum recommended dose of empagliflozin/metformin XR is 25/2000 mg once daily.

Conflict Code: ER - Overutilization
Drugs/Diseases

Util A	Util B	Util C
Empagliflozin/metformin XR		

Max Dose: 25/2000 mg/day

References:
Synjardy XR Prescribing Information, Dec. 2016, Boehringer Ingelheim Pharmaceuticals.

34. Synjardy XR / Mod to Sev Renal Impairment, ESRD & Dialysis __√____ _____ _____

Alert Message: Synjardy XR (empagliflozin/metformin extended-release) use is contraindicated in patients with moderate to severe renal impairment (eGFR below 45 mL/min/1.73m2), end-stage renal disease, or dialysis. Based on its mechanism of action, inhibition of SGLT2 in the proximal renal tubules, the empagliflozin component is not expected to be effective in these patients.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Empagliflozin/metformin XR		CKD Stage 3, 4 & 5
		ESRD
		Dialysis

References:
Synjardy XR Prescribing Information, Dec. 2016, Boehringer Ingelheim Pharmaceuticals.

35. Synjardy XR / Therapeutic Appropriateness (Age 0-17 yoa) ___√____ _____ _____

Alert Message: The safety and effectiveness of Synjardy XR (empagliflozin/metformin extended-release) in pediatric patients under 18 years of age have not been established.

Conflict Code: TA – Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Empagliflozin/metformin XR		

Age Range 0 - 17 yoa

References:
Synjardy XR Prescribing Information, Dec. 2016, Boehringer Ingelheim Pharmaceuticals.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

36. Synjardy XR / Insulin & Sulfonylureas __√____ _____ _____

Alert Message: The concurrent use of Synjardy XR (empagliflozin/metformin extended-release) with insulin or an insulin secretagogue can increase the risk of hypoglycemia. A lower dose of insulin or insulin secretagogue may be required to minimize the risk of hypoglycemia when used in combination with empagliflozin/metformin XR.

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

Util A	Util B	Util C
Empagliflozin/metformin XR	Insulins	
	Chlorpropamide	
	Glimepiride	
	Glipizide	
	Glyburide	
	Tolazamide	
	Tolbutamide	

References:
Synjardy XR Prescribing Information, Dec. 2016, Boehringer Ingelheim Pharmaceuticals.

37. Synjardy XR / Nonadherence __√____ _____ _____

Alert Message: Based on refill history, your patient may be under-utilizing Synjardy XR (empagliflozin extended-release). 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
Empagliflozin/metformin XR		

References:
Synjardy XR Prescribing Information, Dec. 2016, Boehringer Ingelheim Pharmaceuticals.
Osterberg L, Blaschke T. Adherence to medication. N Engl J Med 2005;353:487-97.
Ho PM, Rumsfeld JS, Masoudi FA, et al., Effect of Medication Nonadherence in Diabetes Mellitus. Cardiology Review, April 2007.
Currie CJ, Peyrot M, Morgan CL, et al. The Impact of Treatment Noncompliance on Mortality in People With Type 2 Diabetes. Diabetes Care 35:1279-1284, June 2012.
Butler RJ, Davis TK, Johnson WL, et al. Effects of Nonadherence with\Prescription Drugs Among Older Adults. Am J Manag Care. 2011 Feb; 17(2):153-60.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

38. Codeine - All / Therapeutic Appropriateness ___✓___ _____ _____

Alert Message: Codeine-containing products, used either as an analgesic or an antitussive, are contraindicated in children under 12 years of age and should be prescribed with extreme caution in adolescents 12 to 18 years of age. Codeine is metabolized to morphine and ultra-rapid metabolizers can have excessive morphine formation and toxicity even after normal therapeutic doses. The use of codeine for post-operative pain management in pediatric patients after a tonsillectomy and/or adenoidectomy is contraindicated due to risk of serious respiratory depression.

Conflict Code: TA - Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Codeine		

Age Range: < 18 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
FDA Drug Safety Communication: FDA Restricts Use of Prescription Codeine Pain and Cough Medicines and Tramadol Pain Medicines in Children; Recommends Against Use in Breastfeeding Women. Available at: https://www.fda.gov/Drugs/DrugSafety/ucm549679.htm. Accessed April 21, 2017.

39. Codeine - All / Obesity & Severe Breathing Problems ___✓___ _____ _____

Alert Message: The use of codeine-containing agents are not recommended in adolescent patients between 12 and 18 years of age who are obese or have conditions such as sleep apnea, or other severe lung disease due to risk of opioid-induced respiratory depression. Codeine is metabolized via CYP2D6 to morphine and ultra-rapid metabolizers of CYP2D6 can have excessive morphine formation and toxicity even after normal therapeutic doses.

Conflict Code: TA - Therapeutic Appropriateness (Warning)
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Codeine – All		Obesity
		Sleep Apnea
		Asthma
		Cystic Fibrosis

Age Range: 12 -18 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
FDA Drug Safety Communication: FDA Restricts Use of Prescription Codeine Pain and Cough Medicines and Tramadol Pain Medicines in Children; Recommends Against Use in Breastfeeding Women. Available at: https://www.fda.gov/Drugs/DrugSafety/ucm549679.htm. Accessed April 21, 2017.
European Medicines Agency (EMA): Codeine-containing Medicinal Products for the Treatment of Cough or Cold in Paediatric Patients. Retrieved July 1, 2015. Available on the World Wide Web http://www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/referrals/Codeine_containing_medicinal_products_for_the_treatment_of_cough_and_cold_in_paediatric_patients/human_referral_prac_000039.jsp&mid=WC0b01ac05805c516f

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

40. Codeine - All / Lactation ___√___ _____ _____

Alert Message: The use of codeine-containing agents is not recommended in nursing mothers. Codeine is metabolized to morphine which is excreted in breastmilk and may cause sedation and respiratory depression in breast-fed infants. Codeine is metabolized via CYP2D6 and if the nursing mother is a CYP2D6 ultra-rapid metabolizer excessive morphine formation can occur increasing the risk for excessive sedation and respiratory depression.

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

Util A	Util B	Util C
Codeine - All	Lactation	
	Other Disorder of Lactation	

Age Range: 11 -55 yoa
Gender: Female

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
FDA Drug Safety Communication: FDA Restricts Use of Prescription Codeine Pain and Cough Medicines and Tramadol Pain Medicines in Children; Recommends Against Use in Breastfeeding Women. Available at: https://www.fda.gov/Drugs/DrugSafety/ucm549679.htm. Accessed April 21, 2017.

41. Tramadol - All / Therapeutic Appropriateness ___√_____ _____ _____

Alert Message: Due to the risk of respiratory depression, the use of tramadol-containing agents is contraindicated for the treatment of pain in pediatric patients younger than 12 years of age and in post-operative pain management after tonsillectomy and/or adenoidectomy in pediatric patients younger than 18 years of age. Children who are ultra-rapid metabolizers of CYP2D6, an enzyme responsible for tramadol metabolism, are at increased risk for severe respiratory depression.

Conflict Code: TA - Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C
Tramadol – All		

Age Range: < 18 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
FDA Drug Safety Communication: FDA Restricts Use of Prescription Codeine Pain and Cough Medicines and Tramadol Pain Medicines in Children; Recommends Against Use in Breastfeeding Women. Available at: https://www.fda.gov/Drugs/DrugSafety/ucm549679.htm. Accessed April 21, 2017.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

42. Tramadol - All / Obesity & Severe Breathing Problems __✓_____ _____ _____

Alert Message: The use of tramadol-containing agents are not recommended in adolescent patients between 12 and 18 years of age who are obese or have conditions such as sleep apnea, or other severe lung disease. Children who are ultra-rapid metabolizers of CYP2D6, an enzyme responsible for tramadol metabolism, are at increased risk for severe respiratory depression.

Conflict Code: TA - Therapeutic Appropriateness
Drugs/Diseases

Util A	Util B	Util C **(Include)**
Tramadol – All		Obesity
		Sleep Apnea
		Asthma
		Cystic Fibrosis

Age Range: 12 -18 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
FDA Drug Safety Communication: FDA Restricts Use of Prescription Codeine Pain and Cough Medicines and Tramadol Pain Medicines in Children; Recommends Against Use in Breastfeeding Women. Available at: https://www.fda.gov/Drugs/DrugSafety/ucm549679.htm. Accessed April 21, 2017.

43. Tramadol - All / Lactation ___✓_____ _____ _____

Alert Message: The use of tramadol-containing agents is not recommended in nursing mothers. The parent drug tramadol and its active metabolite (M1) are excreted in breastmilk and may cause excessive sedation and respiratory depression, which could result in death in breast-fed infants. Tramadol is a CYP2D6 metabolized drug and if the nursing mother is a CYP2D6 ultra-rapid metabolizer M1 concentrations will be even higher with increased risk for adverse effects.

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

Util A	Util B	Util C
Tramadol – All	Lactation	
	Other Disorder of Lactation	

Age Range: 11 - 55 yoa
Gender: Female

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
FDA Drug Safety Communication: FDA Restricts Use of Prescription Codeine Pain and Cough Medicines and Tramadol Pain Medicines in Children; Recommends Against Use in Breastfeeding Women. Available at: https://www.fda.gov/Drugs/DrugSafety/ucm549679.htm. Accessed April 21, 2017.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

44. Plecanatide / Overutilization __√____ _____ _____

Alert Message: Trulance (plecanatide) may be over-utilized. The manufacturer's recommended maximum adult dosage is 3 mg once daily.

Conflict Code: ER - Overutilization
Drugs/Diseases
Util A Util B Util C
Plecanatide

Max Dose: 3 mg per day

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Trulance Prescribing Information, Jan. 2017, Synergy Pharmaceuticals.

45. Plecanatide / Therapeutic Appropriateness (Age 0 – 5 yoa) ___√___ _____ _____

Alert Message: Trulance (plecanatide) is contraindicated in patients less than 6 years of age. Due to increased intestinal expression of guanylate cyclase (GC-C), patients less than 6 years of age may be more likely than patients 6 years and older to develop severe diarrhea and its potentially serious consequences. In nonclinical studies, the use of plecanatide in young juvenile mice resulted in mortality in some mice within the first 24 hours of therapy, apparently due to dehydration.

Conflict Code: TA - Therapeutic Appropriateness (Black Box Warning)
Drugs/Diseases
Util A Util B Util C
Plecanatide

Age Range: 0 – 5 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Trulance Prescribing Information, Jan. 2017, Synergy Pharmaceuticals.

46. Plecanatide / Therapeutic Appropriateness – Age 6 – 17 yoa ___√___ _____ _____

Alert Message: The safety and effectiveness of Trulance (plecanatide) in patients 6 years of age to less than 18 years of age have not been established and its use should be avoided in this patient population.

Conflict Code: TA - Therapeutic Appropriateness (Black Box Warning)
Drugs/Diseases
Util A Util B Util C
Plecanatide

Age Range: 6 – 17 yoa

References:
Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Trulance Prescribing Information, Jan. 2017, Synergy Pharmaceuticals.

Criteria Recommendations	*Accepted*	*Approved As Amended*	*Rejected*

47. Plecanatide / Gastrointestinal Obstruction ___✓___ _____ _____

Alert Message: Trulance (plecanatide) is contraindicated in patients with known or suggested gastrointestinal obstruction. Plecanatide is a guanylate cyclase-C (GC-C) agonist which increases intestinal fluid and accelerates transit.

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

Util A	Util B	Util C
Plecanatide	Intestinal Obstruction	
	Paralytic ileus	

References:

Clinical Pharmacology, 2017 Elsevier/Gold Standard.
Trulance Prescribing Information, Jan. 2017, Synergy Pharmaceuticals.

48. Plecanatide / Non-adherence ___✓___ _____ _____

Alert Message: Based on refill history, your patient may be under-utilizing Trulance (plecanatide). Nonadherence 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
Plecanatide		

References:

Trulance Prescribing Information, Jan. 2017, Synergy Pharmaceuticals.
Martin LR, Williams SL, Haskard KB, DiMatteo MR. The Challenge of Patient Adherence. Ther Clin Risk Manag. 2005;1(3):189-199.
Osterberg L, Blaschke T. Adherence to Medication. N Engl J Med 2005;353:487-97.

Stephanie McGee Azar, Commissioner — (X) Approve ( ) Deny — 3-29-18 Date

Robert Moon, M.D., Deputy Commissioner and Medical Director — (✓) Approve ( ) Deny — 3/28/18 Date

Kathy Hall, Deputy Commissioner — (X) Approve ( ) Deny — 3/26/18 Date