| Table 1: Potential Side Effects of Liraglutide and Exenatide Tablets |

- **Glucose Lowering Effect**: Liraglutide and exenatide tablets both lower blood glucose levels.
- **Weight Loss**: Liraglutide is known for its weight loss benefits.

**Glucose Lowering Effect**

- Both medications lower blood glucose levels, with liraglutide having a more pronounced effect.
- Liraglutide is efficacious in both monotherapy and combination therapy.

**Weight Loss**

- Liraglutide is a key component in weight loss therapy, especially in combination with meal replacements and lifestyle modifications.
- Exenatide may have some weight loss benefits, but its primary effect is on glucose control.

**Side Effects**

- Common side effects include nausea, vomiting, and diarrhea.
- More severe side effects may include pancreatitis and angioedema.

**Treatment Guidelines**

- Follow the specific guidelines provided by your healthcare provider for the most effective treatment.
- Regular monitoring of blood glucose levels is crucial.

**Conclusion**

- Combining liraglutide and exenatide tablets can lead to a synergistic effect on glucose control and weight management.
- Consult with your healthcare provider for personalized guidance.

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**Table 2: Comparison of Liraglutide and Exenatide Tablets**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Liraglutide Tablets</th>
<th>Exenatide Tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient</td>
<td>Liraglutide</td>
<td>Exenatide</td>
</tr>
<tr>
<td>Indication</td>
<td>Glucose Control</td>
<td>Glucose Control</td>
</tr>
<tr>
<td>Route of Administration</td>
<td>Oral</td>
<td>Subcutaneous</td>
</tr>
<tr>
<td>Dosage Form</td>
<td>Tablets</td>
<td>Injection</td>
</tr>
<tr>
<td>Commercial Name</td>
<td>NovoLog</td>
<td>Exenatide</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Novo Nordisk</td>
<td>Eli Lilly</td>
</tr>
</tbody>
</table>

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**Table 3: Adverse Events with Liraglutide and Exenatide Tablets**

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th>Liraglutide Tablets</th>
<th>Exenatide Tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>Common</td>
<td>Rare</td>
</tr>
<tr>
<td>Vomiting</td>
<td>Common</td>
<td>Less common</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>Less common</td>
<td>Rare</td>
</tr>
<tr>
<td>Weight loss</td>
<td>Common</td>
<td>Less common</td>
</tr>
</tbody>
</table>

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**Table 4: Contraindications for Liraglutide and Exenatide Tablets**

- Hypersensitivity to any component of these medications.
- Severe hypoglycemia.
- Liver disease.

**Additional Information**

- Consult with your healthcare provider before initiating any combination treatment.
- Regular monitoring of blood glucose levels and liver function tests is recommended.

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**Table 5: Administration of Liraglutide and Exenatide Tablets**

- Liraglutide tablets should be taken once daily, with or without food.
- Exenatide injection is typically given subcutaneously, usually once daily.
- Follow the specific instructions provided by your healthcare provider.

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**Figure 1: Chemical Structure of Liraglutide and Exenatide**

- Liraglutide has a unique structure with modifications from human GLP-1.
- Exenatide is a synthetic version of GLP-1 with substitutions to improve stability.
MEDICATION GUIDE
Lopinavir (loe pin’ a ver) and
Ritonavir (ri toh’ na ver)
Tablets USP

What is the most important information I should know about lopinavir and ritonavir tablets?
Lopinavir and ritonavir tablets may cause serious side effects, including:
• Interactions with other medicines. It is important to know the medicines that should not be taken with lopinavir and ritonavir tablets. For more information, see “Who should not take lopinavir and ritonavir tablets?”
• Side Effects in babies taking lopinavir and ritonavir oral solution. Lopinavir and ritonavir oral solution contains alcohol and propylene glycol. Tell your healthcare provider right away if your baby appears too sleepy or their breathing changes.
• Inflammation of your pancreas (pancreatitis). Lopinavir and ritonavir tablets can cause pancreatitis, which may be serious and may lead to death. People who take high levels of a certain fat (triglycerides) have a risk for developing pancreatitis. If you have abnormal triglyceride levels, you may have an increased risk of high triglyceride levels in your blood, and pancreatitis. If you have a history of pancreatitis, you may have an increased risk of it coming back again during treatment with lopinavir and ritonavir tablets. Tell your healthcare provider if you have any signs or symptoms of pancreatitis including:
  - nausea
  - vomiting
  - stomach area (abdominal) pain
• Liver problems. Liver problems, including death, can happen in people who take lopinavir and ritonavir tablets. Your healthcare provider should do blood tests before and during your treatment with lopinavir and ritonavir tablets to check your liver function. If you have Hepatitis B or Hepatitis C, or other liver problems, you may have an increased risk for developing new or worsening of these problems in some people. Tell your healthcare provider right away if you have any signs or symptoms of liver problems including:
  - loss of appetite
  - pale colored stools
  - yellow skin and whites of eyes (jaundice)
  - itchy skin
  - dark-colored urine
  - stomach area (abdominal) pain
• Changes in your heart rhythm and the electrical activity of your heart. These changes may be seen on an EKG (electrocardiogram) and can lead to serious heart problems. Your risk for these problems may be higher if you:
  - have a history of abnormal heart rhythm or certain types of heart problems.
  - take other medicines that can affect your heart rhythm during treatment with lopinavir and ritonavir tablets.
Tell your healthcare provider right away if you have any of these symptoms:
  - dizziness
  - fainting
  - palpitations
  - sensation of abnormal heartbeats
See “What are the possible side effects of lopinavir and ritonavir tablets?” for more information about serious side effects.

What are lopinavir and ritonavir tablets?
Lopinavir and ritonavir tablets are prescription medicines that are used with other antiretroviral medicines to treat Human Immunodeficiency Virus-1 (HIV-1) infection in adults and children 14 days of age and older. HIV is the virus that causes AIDS (Acquired Immune Deficiency Syndrome). It is not known if lopinavir and ritonavir tablets are safe and effective in children under 14 days old.

Who should not take lopinavir and ritonavir tablets?
Do not take lopinavir and ritonavir tablets if you:
• are allergic to lopinavir, ritonavir, or any of the ingredients in lopinavir and ritonavir tablets. See the end of this Medication Guide for a complete list of ingredients in lopinavir and ritonavir tablets.
• if you have any of the following medicines:
  - alfuzosin
  - aprepitant
  - astemizole
  - drotaverine
  - cobicistat, if you have kidney or liver problems
  - rifampin
  - lurasidone
  - pimozide
  - any containing medicines including:
    - dihydropyridine mephaate
    - verapamil tarrate
    - methyldopa
  - cisapride
  - rifabutin (brand name)
  - lovastatin
  - simvastatin
  - tipranavir (brand name) when used for the treatment of pulmonary arterial hypertension
  - trazodone
  - midazolam, when taken by mouth
  - St. John’s Wort (Hypericum perforatum)

Serious problems can happen if you or your child takes any of the medicines listed above with lopinavir and ritonavir tablets. Before taking lopinavir and ritonavir tablets, tell your healthcare provider about all of your medical conditions, including if you:
• have ever had a serious skin rash or an allergic reaction to medicines that contain lopinavir or ritonavir.
• have or had pancreas problems.
• have liver problems, including Hepatitis B or Hepatitis C.
• have heart problems, including if you have a condition called Congenital Long QT Syndrome.
• have low potassium in your blood.
• have diabetes.
• have high cholesterol in your blood.
• have hemophilia. Lopinavir and ritonavir tablets may cause increased bleeding.
• are pregnant or plan to become pregnant. It is not known if lopinavir and ritonavir tablets will harm your unborn baby.
• Lopinavir and ritonavir oral solution contains alcohol and propylene glycol. You should not take lopinavir and ritonavir oral solution during pregnancy because there is no safe level of alcohol exposure during pregnancy. Tell your healthcare provider if you become pregnant during treatment with lopinavir and ritonavir oral solution.
• Lopinavir and ritonavir tablets may reduce how well hormonal birth control works. Women who may become pregnant should use another effective form of birth control or an additional barrier method of birth control during treatment with lopinavir and ritonavir tablets.
• Pregnancy Registry. There is a pregnancy registry for women who take antiretroviral medicines during pregnancy. The purpose of the pregnancy registry is to collect information about the health of you and your baby. Talk to your healthcare provider about how you can take part in this registry.
• are breastfeeding or plan to breastfeed. Do not breastfeed if you take lopinavir and ritonavir tablets.
• You should not breastfeed if you have HIV-1 because of the risk of passing HIV-1 to your baby.
• Talk to your healthcare provider about the best way to feed your baby.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Many medicines interact with lopinavir and ritonavir tablets.
Keep a list of your medicines to show your healthcare provider and pharmacist.
You can ask your healthcare provider or pharmacist for a list of medicines that interact with lopinavir and ritonavir tablets.
Do not start taking a new medicine without telling your healthcare provider. Your healthcare provider can tell you if it is safe to take lopinavir and ritonavir tablets with other medicines. Your healthcare provider may need to change the dose of other medicines during treatment with lopinavir and ritonavir tablets.

How should I take lopinavir and ritonavir tablets?
• Take lopinavir and ritonavir tablets every day exactly as prescribed by your healthcare provider.
Stay under the care of your healthcare provider during treatment with logipinar and rnitorn tablets.

- It is important to set up a dosing schedule and follow it every day.
- Do not change your treatment or stop treatment without first talking with your healthcare provider.
- Swallow logipinar and rnitorn tablets whole. Do not chew, break, or crush logipinar and rnitorn tablets.
- Logipinar and rnitorn tablets can be taken with or without food.
- If you are taking both disodium and logipinar and rnitorn tablets:
  - Disodium can be taken at the same time as logipinar and rnitorn tablets, without food.
  - Take diosodium either 1 hour before or 2 hours after taking logipinar and rnitorn oral solution.
- If you are pregnant:
  - You should not take logipinar and rnitorn tablets at a time each day dose schedule.
- If your child is prescribed logipinar and rnitorn:
  - Tell your healthcare provider if your child's weight changes.
  - Logipinar and rnitorn should not be given to children on a same each day dose schedule. When giving logipinar and rnitorn to your child, give logipinar and rnitorn exactly as prescribed.
  - Use the dosing cup (supplied) or an oral syringe with ml (milliliter) markings to give the prescribed dose of logipinar and rnitorn oral solution to your child. Your pharmacist should provide an oral syringe to you.
  - Logipinar and rnitorn oral solution contains propylene glycol and a large amount of alcohol. Logipinar and rnitorn oral solution should not be given to babies younger than 14 days of age unless your healthcare provider thinks it is right for your baby.
  - You may have a greater chance of getting diarrhea if you take logipinar and rnitorn tablets 1 time each day than if you take it 2 times each day.
  - Do not miss a dose of logipinar and rnitorn tablets. This could make the drug harder to reach. If you forget to take logipinar and rnitorn tablets, take the missed dose right away. If it is almost time for your next dose, do not take the missed dose. Instead, follow your regular dosing schedule by taking your next dose at its regular time. Do not take more than the prescribed dose of logipinar and rnitorn tablets at one time.
  - If you or your child take more than the prescribed dose of logipinar and rnitorn tablets, call your healthcare provider or go to the nearest emergency room right away.

What are the possible side effects of logipinar and rnitorn tablets?

Logipinar and rnitorn tablets can cause serious side effects, including:

- See “What is the most important information I should know about logipinar and rnitorn tablets?”
- Diabetes and high blood sugar (hyperglycemia). You may develop new or worsening diabetes or high blood sugar during treatment with logipinar and rnitorn tablets. Tell your healthcare provider if you get any of the following signs or symptoms:
  - Unusually thirsty
  - Unusual or unusual weight loss
  - Increased fatigue or thirst
  - Increase in your blood sugar levels
  - Your healthcare provider may need to start you on medicine to treat high blood sugar or change your diabetes medicines.
- Changes in your immune system (Immune Reconstitution Syndrome) can happen when you start taking HIV-1 medicines. Your immune system may get stronger and begin to fight infections that have been hidden in your body for a long time. Call your healthcare provider right away if you start having new symptoms after starting your HIV-1 medicine.
- Increased fat (Triglycerides and cholesterol) in your blood. Large increases of triglycerides and cholesterol can be seen in blood tests results of some people who take logipinar and rnitorn tablets. Your healthcare provider should do blood tests to check your triglyceride levels before you start taking logipinar and rnitorn tablets and during your treatment.
- Changes in body fat can happen in some people who take anti-HIV-1 therapy. These changes may include increased amount of fat in the upper back and neck (buffalo hump), breast, and around the middle of your body (trunk). Loss of fat from the legs, arms and face may also happen. The exact cause and long-term health effects of these changes are not known at this time.
- Increased bleeding in people with hemophilia. Some people with hemophilia have increased bleeding with logipinar and rnitorn tablets.
- Kidney stones

Common side effects of logipinar and rnitorn tablets include:

- Diarrhea
- Nausea
- Increased fats in blood (triglycerides or cholesterol)

These are not all of the possible side effects of logipinar and rnitorn tablets. For more information, ask your healthcare provider or pharmacist.

How should I store logipinar and rnitorn tablets?

- Store logipinar and rnitorn tablets at 68° to 77°F (20° to 25°C).
- Store logipinar and rnitorn tablets in the original container.
- Do not keep logipinar and rnitorn tablets out of the container. It comes in for longer than 2 weeks, especially in areas where there is a lot of humidity.
- Keep the container closed tight.
- Throw away any medicine that is out of date or that you no longer need.

Keep logipinar and rnitorn tablets and all medicines out of the reach of children.

General information about the safe and effective use of logipinar and rnitorn tablets.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use logipinar and rnitorn tablets for a condition for which it was not prescribed. Do not give logipinar and rnitorn tablets to other people, even if they have the same condition you have. It may harm them.

You can ask your pharmacist or healthcare provider for information about logipinar and rnitorn tablets that is written for health professionals.

What are the ingredients in logipinar and rnitorn tablets?

Active ingredients:
- Logipinar USP and rnitorn USP

Inactive ingredients:
- Logipinar and Rnitorn Tablets USP, 200 mg/50 mg: Collodial silicon dioxide, copovidone, sodium starch fumarate, sorbitan monolaurate and quercin yellow which contains colloidal anhydrous silica, hypromellose, hydroxypropyl cellulose, iron oxide yellow, polyethylene glycol, polysorbate 80, talc, and Titanium dioxide.
- Logipinar and Rnitorn Tablets USP, 100 mg/25 mg: Collodial silicon dioxide, copovidone, sodium starch fumarate, sorbitan monolaurate and quercin yellow which contains colloidal anhydrous silica, hypromellose, hydroxypropyl cellulose, iron oxide yellow, polyethylene glycol, polysorbate 80, talc, and Titanium dioxide.

For more information, call 1-866-495-1995.

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Manufactured by:

This Medication Guide has been approved by the U.S. Food and Drug Administration.

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