Secondary Hyperparathyroidism and Parathyroid Carcinoma

Sensipar® (cinacalcet) Tablets
Zemplar® (paricalcitol) Capsules and Injection

What is secondary hyperparathyroidism?1,2

- When the parathyroids (4 glands in the neck) are overactive, there is an increase in parathyroid hormone. This condition is called hyperparathyroidism.
- Secondary hyperparathyroidism is when another medical condition causes an increase in parathyroid hormone. This is a response to low calcium levels in the blood, a phosphate imbalance, or both.
- Common causes of secondary hyperparathyroidism are chronic kidney disease and vitamin D deficiency.

What are the symptoms of secondary hyperparathyroidism?1

- Some people may experience weakness, bone pain, and broken bones.

How can I help manage secondary hyperparathyroidism?1, 3, 4

Listed below are some tips:

- Learn as much as you can about your condition.
- Take your medications.
- Limit foods that have phosphorus (for people with high phosphorus level in their blood).
  Limit foods like:
  - Dried beans and peas
  - Beer, cola, cocoa
  - Nuts, seeds, chocolate
  - Dairy products (milk, cheese, yogurt, ice cream, etc)
  - Liver and organ meats
  - Hot dogs, sausages
  - Processed foods
- Talk to a dietician who can help you find the right foods and portion sizes for you.
- Get your blood tested regularly for levels of parathyroid hormone, calcium, and phosphorous.
What treatments are available for secondary hyperparathyroidism?⁵

To treat secondary hyperparathyroidism, the root cause needs to be corrected. Depending on the cause of the secondary hyperparathyroidism, treatment options may include:

- Zemplar® (paricalcitol), Rocaltrol® (calcitriol), Hectorol® (doxercalciferol) – Replaces deficient vitamin D in your body.
- Sensipar® (cinacalcet) - Helps lower parathyroid hormone. It also helps lower your calcium and phosphorus levels.
- Renagel® (sevelamer), Fosrenol® (lanthanum carbonate), Phos-Lo® (calcium acetate), Os-Cal® (calcium carbonate), Caltrate® (calcium carbonate) – Helps lower phosphorus level in your body.
- Limit the intake of phosphorus in foods (eg, limit processed foods, dairy products).
- Parathyroid surgery is generally reserved for patients with severe secondary hyperparathyroidism that cannot be controlled with drug therapy and limiting dietary phosphorus.

Your doctor will determine which treatment option is best for you.

What is parathyroid carcinoma?⁶,⁷

- Parathyroid carcinoma is a rare form of cancer that is found in the parathyroid gland.
- The cancerous tumor in the parathyroid gland causes an increase in parathyroid hormone, which leads to high calcium levels.
- High calcium levels in the blood can cause problems in your kidneys and bones. It can result in kidney damage and osteoporosis.

What treatments are available for parathyroid carcinoma?⁶,⁷

- Treating parathyroid carcinoma is difficult.
- Parathyroid carcinoma is resistant to chemotherapy and radiation.
- Removing the parathyroid gland is an option, but surgery is not always successful. It’s also common for the cancer to have spread.
- Sensipar is used to treat high calcium levels in the blood in patients with parathyroid carcinoma.
What is Sensipar?[^8]

- Sensipar is a medication that helps regulate calcium and phosphorus in the body by lowering high levels of parathyroid hormone.
- Sensipar is used for treating secondary hyperparathyroidism in patients with chronic kidney disease on dialysis. It is also used for treating hypercalcemia in patients with parathyroid carcinoma.

What is Zemplar?[^9]

- Zemplar is a medication that is similar to vitamin D in the body.
- Zemplar can help lower high levels of parathyroid hormone in the body.
- Zemplar is used for preventing and treating secondary hyperparathyroidism in patients with chronic kidney disease on dialysis.

What are some helpful information to know about Sensipar and Zemplar?[^8, 9]

Table 1 lists the most common side effects and important safety information.

### Table 1. Common Side Effects and Important Safety Information

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Common Side Effects</th>
<th>Important Safety Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensipar (cinacalcet)</td>
<td>• Nausea, diarrhea, and vomiting (mild to moderate).</td>
<td>• Before you start the medication, tell your doctor if you have had a seizure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Call your doctor if you have muscle spasms, aches, cramping, or tingling in your arms or legs.</td>
</tr>
</tbody>
</table>
| Zemplar (paricalcitol) | • Dizziness  
                       | • Allergic reaction  
                       | • Arthritis  
                       | • Rash | • Call your doctor if you have symptoms such as: |
|                    |                                          | ▪ Weakness  
                       |                     | ▪ Headache  
                       |                     | ▪ Nausea/vomiting  
                       |                     | ▪ Constipation  
                       |                     | ▪ Muscle pain  
                       |                     | ▪ Bone pain  
                       |                     | ▪ Metallic taste |
**Why is it important to take my medication?**[^1][^2]

- Taking your medication is an important step to keeping yourself healthy.
- If you don’t take your medication, it can cause serious problems. You can be at an increased risk of hospitalizations and death.
- Examples of problems associated with secondary hyperparathyroidism are:
  - Osteoporosis
  - High blood pressure and congestive heart failure
  - Kidney damage or kidney stones
  - Peptic ulcers

Don’t stop taking your medication without talking to your doctor first.

**What other resources are available for secondary hyperparathyroidism?**

For more information, please contact the following resources:

**National Kidney Foundation**
Phone: **1-800-622-9010**
Website: www.kidney.org

**American Association of Kidney Patients**
Phone: **1-800-749-2257**
Website: www.aakp.org

**References:**

The information in this educational handout doesn’t substitute the medical advice, diagnosis, or treatment provided by your doctor. Always seek the help of your doctor or a qualified health provider for any questions about your medical condition.