

### What is Imatinib?

Imatinib is an anti-cancer agent mainly used to treat certain types of leukaemia's classed as Philadelphia positive, and some types of solid tumours.

### How does it work?

Imatinib blocks tyrosine kinases, enzymes that are responsible for cell growth and division. It is most commonly used to inhibit Bcr-Abl tyrosine kinase, the abnormal gene product of the Philadelphia chromosome seen in some types of leukaemia. Inhibiting this enzyme blocks proliferation and promotes the death of cells..

### How is it given?

Imatinib is given by mouth as a capsule.

### Special instructions:

- Read the directions on the bottle carefully to make sure you take this medicine correctly.
- Try to take each day's dose at the same time each day.
- Take imatinib with food to help avoid an upset stomach.
- If you vomit within 30 minutes after taking your imatinib, inform your doctor or nurse right away.
- If you cannot swallow the capsule, the capsule can be opened and dispersed in water or apple juice. See below for further instructions.
- Imatinib can interact with a number of medications either increasing or decreasing their effect. For example paracetamol. Check with your doctor or pharmacist before taking imatinib, to check for interactions with your other medications and how best to manage the interaction.

### Safe Handling:

All chemotherapy taken by mouth can pose a health hazard to caregivers and patients. Take care when handling this medicine and try to prevent the medication from touching your skin. Taking precautions will protect both the patient and the caregiver.

- We suggest that the caregiver wears gloves while handling this medicine. If your skin comes into contact with the medicine, wash your hands or the area of contact right away.
- Prepare a clean area where the drug can be handled safely (away from areas where food is prepared, out of reach of children and away from any fans or air vents). Clean up spills in the area where the medicine is prepared.

If your child cannot swallow the imatinib capsule(s), the capsules may be given in the following way:

- You will need the following:
  - An oral syringe or dedicated spoon
  - A dedicated measuring cup or glass or container
  - Dedicated rubber gloves or disposable gloves (optional) –not to be used for any other purpose
- 1) Place a little water or apple juice (approximately 120 to 240mL) into a cup. If your child can not swallow a large amount water or juice, each 100mg capsule can be dispersed in as little as 50mL of fluid. However, this may increase the risk of stomach irritation.
- 2) Open the contents of the capsule(s) onto the water or apple juice and allow the powder to disperse. This may take a few minutes. With the oral syringe, or dedicated spoon, gently mix the powder into the water.
- 3) Using the oral syringe, draw up the liquid in the measuring cup and give the dose to your child.

- 4) Rinse the oral syringe, measuring cup and rubber gloves (if not disposable) in warm water and allow to dry. These can be used again for further doses but do not use them for any other purpose. Do not place the oral syringe in the dishwasher.

### Possible Side Effects:

Listed below, but not limited to, are the more commonly experienced side effects that you may see. The side effects your child might experience may be temporary and some may be permanent.

|   | <b>Likely</b><br>Happens to 21-100 children out of every 100   | <b>Less Likely</b><br>Happens to 5-20 children out of every 100   | <b>Rare but serious</b><br>Happens to <5 children out of every 100   |
|---|--|---|--|
| <b>Immediate</b><br>Within 1-2 days of receiving the medicine | <ul style="list-style-type: none"> <li>▪ Nausea and or diarrhoea</li> <li>▪ Puffiness or swelling around the eyes<sup>^</sup></li> <li>▪ Fluid retention<sup>^</sup></li> </ul>  | <ul style="list-style-type: none"> <li>▪ Fever and chills including shaking chills.</li> <li>▪ Flu like symptoms with fever, tiredness, aches and pain</li> <li>▪ Tummy pain</li> <li>▪ Chest pain</li> <li>▪ Reflux or upset stomach (heart burn)</li> <li>▪ Flatulence</li> <li>▪ Vomiting</li> <li>▪ Dizziness</li> <li>▪ Difficulty sleeping or falling asleep</li> <li>▪ Constipation</li> <li>▪ Night sweats</li> <li>▪ Weight gain</li> <li>▪ Abnormal taste or change in taste</li> </ul>   | <ul style="list-style-type: none"> <li>▪ Severe allergic reaction which can be life-threatening with rapid build-up of fluid under the skin, in the lining of the intestine and possibly in the throat or swelling of the tongue which could make it difficult to breathe</li> <li>▪ Increased pressure in the brain which can lead to difficulty seeing, pressure in the eyes and headaches</li> <li>▪ Build-up of fluid in the brain</li> <li>▪ Dehydration</li> </ul>   |
| <b>Prompt</b><br>Within 2-3 weeks, prior to the next course   | <ul style="list-style-type: none"> <li>▪ Fewer white blood cells and platelets in the blood. A lower number of white blood cells may make it easier to get infections. Fewer platelets may cause you to bruise and bleed more easily<sup>^</sup></li> <li>▪ Tiredness and/or weakness</li> <li>▪ Rash</li> <li>▪ Muscle pain</li> <li>▪ Cramps</li> <li>▪ Aches and pains in the joints<sup>^</sup></li> </ul> | <ul style="list-style-type: none"> <li>▪ Fewer red blood cells in the blood. Fewer red blood cells may make you feel tired and weak.</li> <li>▪ Loss of desire to eat or appetite, and/or weight loss</li> <li>▪ Muscle and joint aches and pains</li> <li>▪ A bleeding disorder that can lead to bleeding</li> <li>▪ Difficulty swallowing</li> <li>▪ Inflammation and/or sores in the mouth, throat and/or oesophagus</li> <li>▪ Painful or difficulty in swallowing</li> <li>▪ Cough</li> <li>▪ Nose bleeds</li> <li>▪ Itching<sup>^</sup></li> <li>▪ Build-up of fluid in the abdomen</li> <li>▪ Nerve problems that may affect the way you walk or the feelings in your fingers or toes</li> </ul> | <ul style="list-style-type: none"> <li>▪ Elevation in the blood of bilirubin and certain enzymes found in the liver which may mean the liver is not working as well<sup>^</sup></li> <li>▪ Build-up of fluid around and/or in the lungs</li> <li>▪ Damage to the lungs that can lead to fluid in the lungs and/or inflammation and scarring of lung tissue, cough, and affect your ability to breathe and the level of oxygen in your blood</li> <li>▪ Shortness of breath</li> <li>▪ Fluid buildup around the heart</li> <li>▪ Severe rash which can result in loss of skin and damage to mucous membranes</li> <li>▪ Haemorrhage (bleeding) without a low platelet count including the head, eyes, lungs and gut.</li> <li>▪ Conjunctivitis</li> <li>▪ Blurred vision</li> <li>▪ Dry eye</li> <li>▪ Lower levels of salts in the blood such as potassium, phosphate and sodium</li> <li>▪ Anxiety</li> <li>▪ Mood alterations</li> <li>▪ Infections</li> </ul> |

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## Patient/Caregiver Information

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|---|--|--|---|
| <b>Delayed</b><br>Anytime later<br>during therapy,<br>excluding the<br>above conditions |  | <ul style="list-style-type: none"> <li>Changes in skin colour (vitiligo)</li> <li>Hair loss</li> </ul> | <ul style="list-style-type: none"> <li>Elevation of certain enzymes in the blood associated with the liver which may indicate liver irritation or damage<sup>^</sup></li> <li>Kidney function impairment.</li> <li>Severe kidney damage</li> <li>Severe damage to the spleen which could lead to pain and loss of blood into the abdomen, and may be life threatening</li> <li>Inflammation in one or more joints</li> <li>Damage to the bone<sup>^</sup></li> <li>Muscle weakness (described as temporary and in the lower extremities)</li> <li>Cardiac dysfunction (secondary to cardiac muscle cell damage)</li> <li>A bleeding disorder that can lead to excessive clotting in blood vessels including those that lead to the brain</li> </ul> |
| <sup>^</sup> Toxicity may occur later   |  |  |   |

This information sheet is a brief overview. Each individual can respond differently to the medication, it is vital that you communicate all signs and symptoms you observe to your doctor or nurse.

If you have any questions about the information provided please discuss them with your oncologist or haematologist.

Further information can be obtained from your doctor, nurse or pharmacist or at the following website:  
<http://medsafe.govt.nz/consumers/medicine/where.asp>