

## Oral medications

### Cytotoxic treatments

#### Methotrexate

##### How to use

- Taken by mouth or injection
- Usually taken weekly
- Indicated for severe disabling psoriasis where standard therapeutic intervention fails
- **Do not take if you:**
  - Have severe kidney problems
  - Are pregnant
  - Are breastfeeding
  - Have psoriasis and alcoholism, chronic liver disease, immunodeficiency (your resistance to infectious diseases is reduced) or blood disorders

##### What it does

- Slows the rate of skin cell growth

##### Potential side effects\*

- **Most common side effects include:** upset stomach, stomach pain, vomiting, nausea, loss of appetite, dizziness, chills and fever, diarrhea, sores on lips or mouth, a fall in the number of white blood cells (which may reduce your resistance to infection and increase your chances of cold sores, blood poisoning or swelling of blood vessels) and tiredness
- **Other side effects:** Because of the way medicines like methotrexate act on the body, there is a chance that they might cause other unwanted effects that may not occur until months or years after the medicine is used. These delayed effects may include certain types of cancer, such as leukemia
- **Less common side effects:** headaches, hair loss, mood changes, confusion, ringing in the ears, sore eyes, skin rashes, increased sensitivity to sunlight, unexplained weight loss, a fall in the number of other blood cells (which may increase your chances of bruising, bleeding or tiredness), damage to the lungs, harm to an unborn baby, and convulsions
- **Most common serious side effects include:** diarrhea, vomiting, abdominal pain, mouth ulcers, sore throat, fever, chills, and swollen glands. Less common serious side effects include chest pain, cough, shortness of breath, fever, unusual bleeding or bruising, and severe headaches
- **Rare but serious side effects include:** signs of severe allergic reaction, pain or difficulty urinating, lower back or side pain, blood in urine or stools, dark urine, and yellow colour of eyes or skin

### Immunosuppressant treatments

#### Cyclosporine (NEORAL®)

##### How to use

- Taken by mouth, typically in 2 equal doses per day (i.e., the same amount each time)
- Indicated for severe psoriasis that does not respond to other therapies or when patients cannot tolerate other therapies
- **Do not take if you have:**
  - Abnormal kidney function
  - Uncontrolled blood pressure
  - Any type of cancer
  - Uncontrolled infection
  - Inherited or acquired immunodeficiency

## Cyclosporine (NEORAL®) (continued)

### What it does

- Suppresses the immune system and slows the growth of skin cells

### Potential side effects\*

- **Most common side effects include:** high blood pressure, kidney or liver problems, headache (including migraine), increased levels of lipids (e.g., cholesterol) in the blood, loss of appetite, nausea, vomiting, constipation, diarrhea, acne or oily skin, slight trembling of the hands, increased growth of fine hairs on the body, muscle or joint pains or cramping, weakness, anxiety, tingling in the fingers, toes or mouth, night sweats, hearing loss, swelling of the face, increased potassium in the body (your doctor may instruct you to avoid high dietary potassium intake), tender or swollen gums, decreased ability to fight infection, low level of white blood cells, high level of sugar in the blood, hot flashes, stomach ulcer, and rash
- **Other side effects:** Cyclosporine reduces the function of your immune system. This means you are more likely to get bacterial, viral or fungal infections. Although very rare, the decreased function of your immune system may also increase your chances of developing cancer. Cyclosporine may increase your risk of an infection of the brain called multifocal leukoencephalopathy
- **Side effects that occurred with unknown frequency were:** low levels of magnesium in the blood, vomiting and sensitivity to light, inflammation of the pancreas with severe upper stomach pain, muscle spasm, pain in legs and feet, breast enlargement in men, tiredness and weight gain, and a high level of uric acid in the blood
- **Common serious side effects include:** tremor, high blood pressure, tingling, bacterial, fungal or viral infection, vomiting or diarrhea, muscle or joint pains or cramping, weakness, anxiety, swelling at the back of the eyes which may be associated with blurred vision and possible visual impairment due to an increase in pressure inside the head (benign intracranial hypertension), high level of potassium in the blood, low level of red blood cells or platelets (which may be associated with pale skin, tiredness, breathlessness, dark urine [sign of breakdown of red blood cells]), bruising or bleeding with no obvious reasons, confusion, disorientation, decreased alertness, and kidney problems
- **Uncommon serious side effects include:** ulcers, convulsions, brain disorder (with signs such as seizures, confusion, disorientation, decreased responsiveness, personality changes, agitation, sleeplessness, sight disturbances, blindness, coma, paralysis of part or all of the body, stiff neck, loss of coordination with or without abnormal speech and eye movements), and allergic reactions. Abnormal menstrual cycle was a rare serious side effect and tumours/malignancy was a very rare serious side effect

## Apremilast (OTEZLA®)

### How to use

- Taken by mouth twice a day
- Dose should be increased gradually to reduce the risk of gastrointestinal symptoms
- **Do not take if you:**
  - Are breastfeeding
  - Are pregnant or intend to become pregnant

### What it does

- Reduces the activity of a molecule called PDE4, resulting in less inflammation in the skin and joints

### Potential side effects\*

- **Side effects include:** diarrhea, nausea, vomiting, headache, upper respiratory tract infection (e.g., common cold), flu (body aches and pains, tiredness, fever), decreased appetite, abdominal discomfort, indigestion, fatigue, trouble sleeping, back pain and dizziness
- **Common serious side effects include:** migraine, depression and weight loss
- **Uncommon serious side effects include:** fast heartbeat and/or heart palpitations, allergic reaction (rash; hives; swelling of the face, lips, tongue or throat; difficulty swallowing or breathing), infection of the lungs (shortness of breath, difficult and painful breathing, cough, wheezing, and fever)

## Oral retinoid therapies

### Acitretin (SORIATANE®)

#### How to use

- Taken by mouth once a day
- Indicated for severe psoriasis (includes erythrodermic and pustular types) that does not respond to other standard therapies or when patients cannot tolerate other standard therapies
- Women must use effective birth control while taking it
- **Do not take if you:**
  - Are pregnant or plan to get pregnant
  - Are breastfeeding
  - Have severe liver or kidney disease
  - Have consistent high blood lipid levels
  - Take tetracyclines
  - Take methotrexate
  - Have high vitamin A levels

#### What it does

- The exact mechanism of action is unknown, but its most important effect is a more normal pattern of growth for skin cells
- It is a synthetic form of vitamin A

#### Potential side effects\*

- **Most common side effects include:** dry eyes, particularly if you wear contact lenses; dry mouth, chapped lips, runny or dry nose; dry skin, peeling of fingertips and/or palms and soles, itchiness, rash, sticky skin, brittle nails; chills, joint pain, increased sensitivity to touch; most people experience some degree of hair loss or abnormal hair texture but the condition varies. The extent of hair loss and whether or not all hair will return to normal after treatment cannot be predicted
- **Common side effects include:** nosebleeds; ear problems such as pain, wax build-up, or buzzing in the ear; eye problems such as blurred vision, light sensitivity, pain, impaired vision; inflammation along the edge of the eyelid (blepharitis), inflammation or infection of the membrane lining the eyelids (conjunctivitis); tiredness, pain, thirst; swelling of leg, foot, ankle (edema); bleeding or inflammation of the gums, or inflammation of the mucous lining of the mouth; nausea or abdominal pain; infections, including skin around the finger nail; decreased or increased appetite; back pain, bone pain or muscle pain; headache, trouble sleeping; skin problems such as cold sweat, excessive sweating, sensitivity to sunlight; inflamed, ulcerated, and oily or cracked skin
- **Uncommon side effects include:** decreased night vision, other eye problems, and impaired hearing
- **Common serious side effects include:** abdominal pain, diarrhea, headache, nausea, vomiting, fragile skin, hair loss, inflamed lips, itching, peeling of fingertips and skin, redness or rash, and sticky skin
- **Uncommon serious side effects include:** blurred vision, dizziness, persistent feeling of dry eyes, yellowing of the skin or eyes and/or flu-like symptoms and/or dark urine, shortness of breath, weakness, nausea, dizziness, chest pain, trouble speaking, swelling of a leg, ankle, foot or arm
- **Rare/very rare serious side effects include:** decreased night vision, impaired hearing, aches or pain in joints or difficulty moving, rectal bleeding, changes in mood/depression, thoughts of suicide, and aggressive behaviour
- Bone changes have been detected in patients taking SORIATANE®

\* Always speak to your doctor and read the product information before trying a new treatment. Please consult the Patient Information for each product for warnings, precautions and prescribing considerations. The lists above do not include an exhaustive list of side effects. Your healthcare professional can provide the complete list. Also, speak to your healthcare provider if you experience any serious side effects or if side effects persist.