YERVOY® (ipilimumab)
Concentrate for solution for infusion

Risk Minimisation Information for Healthcare Professionals

Guide for prescribing

YERVOY® (ipilimumab) is indicated for the treatment of advanced (unresectable or metastatic) melanoma in adults.[1]

This Guide

- Is provided for healthcare professionals (HCPs) who are involved in the treatment of patients on ipilimumab.
- Is essential to ensure the safe and effective use of ipilimumab and appropriate management of immune-related adverse reactions.
- Is to be read before prescribing and administering ipilimumab.
- Presents the Patient Information Guide and Patient Alert Card. It is important to review the Patient Information Guide with patients before each treatment cycle to reinforce understanding of side effects and the need to contact a HCP if they develop side effects.

Bristol-Myers Squibb

Summary of Important Information

- Ipilimumab increases the risk of severe immune-related adverse reactions (irARs), which can include colitis, hepatitis, skin inflammation, neurological adverse reactions, endocrinopathies and other immune-related adverse reactions. These irARs can occur several months after the last dose of ipilimumab.
- Early diagnosis and appropriate management of irARs are essential to minimise life-threatening complications.
- Suspected adverse reactions must be promptly evaluated to exclude infectious or other alternate aetiologies.
- Based on the severity of symptoms, ipilimumab should be withheld or discontinued and systemic high-dose corticosteroid therapy may be required.
- Patients should be informed about the symptoms of these irARs and the importance of reporting them immediately to the treating physician. For this reason, there is a Patient Information Guide and a Patient Alert Card.
- Patients should be advised to carry the Patient Alert Card at all times and to show it to the HCP at all medical visits.

Guide for Prescribing Ipilimumab

Ipilimumab is a medicine designed to help the immune system to fight tumours by increasing the activity of T-cells. It is a fully human, monoclonal IgG1 antibody and it works by blocking CTLA-4 (cytotoxic T lymphocyte associated antigen 4), a molecule on T-cells that acts as a natural brake on the immune response.[1]

Before prescribing ipilimumab, and before each infusion, check:

- liver function tests (LFTs)
- thyroid function tests
- signs or symptoms of irARs, including diarrhoea and colitis
- if the patient is pregnant or planning to become pregnant

Caution

Ipilimumab should be avoided in patients with severe active autoimmune disease where further immune activation is potentially life-threatening.[1]

Additional information concerning ipilimumab is available in the Summary of Product Characteristics (SmPC) and package leaflet.

Immune-Related Adverse Reactions

Immune-related Adverse Reactions (irARs) can occur with ipilimumab and can include:

- **Colitis** that can progress to bleeding or bowel perforation.
- **Hepatitis** that can lead to liver failure.
- **Skin inflammation** that can progress to severe skin reaction (e.g. Toxic Epidermal Necrolysis [TEN], drug reaction with eosinophilia and systemic symptoms [DRESS] syndrome).
- **Neurological** adverse reactions that can result in motor or sensory neuropathy.
- **Endocrinopathies** involving the pituitary, adrenal or thyroid glands that may affect their function.

There were isolated reports of **severe infusion reactions** in clinical trials.

Additional irARs: uveitis, eosinophilia, lipase elevation, and glomerulonephritis. In addition, iritis, haemolytic anaemia, amylase elevations, multi organ failure, and pneumonitis have been reported in particular conditions.

Early Diagnosis and Appropriate Management

- Prompt recognition of adverse events and appropriate treatment are essential to minimise life-threatening complications. Systemic high-dose corticosteroids with or without additional immunosuppressive therapy may be required for the management of severe irARs.[1]
- Please refer to the Summary of Product Characteristics (SmPC) for guidelines on treatment and report any suspected adverse reaction to the National Health Authority in accordance with the national reporting system.
- Onset of irARs can occur up to several months after the last dose of ipilimumab[1].

Treatment Modifications

IMMUNE-RELATED REACTION	SEVERITY	TREATMENT MODIFICATIONS
Gastrointestinal (diarrhoea, colitis)	Mild or moderate	Patient may remain on ipilimumab. Symptomatic treatment and close monitoring are advised. If symptoms recur or persist for 5-7 days, withhold ipilimumab and initiate corticosteroids at 1 mg/kg orally once daily. If resolution to Grade 0-1 or return to baseline occurs, ipilimumab may be resumed.
	Severe or very severe	Permanently discontinue ipilimumab and start IV corticosteroid therapy (methylprednisolone 2 mg/kg/day). If symptoms are controlled, start corticosteroid taper based on clinical judgement. Tapering should occur over a period of at least 1 month to avoid recurrence of reaction.
Hepatotoxicity	AST/ALT > 5 - ≤ 8 x ULN or total bilirubin >3 - ≤ 5 x ULN	Withhold ipilimumab and monitor LFTs until resolution. If LFTs levels return to baseline, ipilimumab may be resumed.
	AST/ALT > 8 x ULN or total bilirubin > 5 x ULN	Permanently discontinue ipilimumab and start IV corticosteroid therapy (methylprednisolone 2 mg/kg/day). If symptoms are controlled, start corticosteroids taper based on clinical judgement. Tapering should occur over a period of at least 1 month to avoid recurrence of reaction.
Skin (rash, pruritus, DRESS, TEN)	Grade 1 and grade 2 rash or pruritus	Patient may remain on ipilimumab. Symptomatic treatment (e.g. antihistamines) is advised. If symptoms persist for 1-2 weeks and do not improve with topical corticosteroids, initiate oral corticosteroids (prednisone 1 mg/kg/day).
	Grade 3 rash or intense pruritus	Withhold ipilimumab. If symptoms return to mild (Grade 1) or resolve, ipilimumab may be resumed.
	Grade 4 rash or Grade 3 pruritus	Permanently discontinue ipilimumab and start systemic high-dose IV corticosteroid therapy (e.g. methylprednisolone 2 mg/kg/day). If symptoms are controlled, start corticosteroids taper based on clinical judgement. Tapering should occur over a period of at least 1 month to avoid recurrence of reaction.

Severity according to NCI-CTCAE v3

When to withhold a dose of ipilimumab

Withhold ipilimumab dose in patients with the following irARs:

- Moderate diarrhoea or colitis that either is not controlled with medical management or that persists (5-7 days) or recurs
- Moderate elevations in transaminases (AST or ALT > 5 to ≤ 8 x ULN) or total bilirubin (> 3 to ≤ 5 x ULN) levels
- Grade 3) skin rash or widespread/intense pruritus
- Severe endocrinological adverse reactions
- Moderate (Grade 2) unexplained motor neuropathy, muscle weakness, or sensory neuropathy
- Moderate adverse reactions other than moderate infusion reactions

Treatment Modifications (cont)

IMMUNE-RELATED REACTION	SEVERITY	TREATMENT MODIFICATIONS
Neurological (Guillain-Barré syndrome, myasthenia gravis-like symptoms, muscle weakness, sensory neuropathy)	Moderate neuropathy	Withhold ipilimumab. If symptoms resolve to baseline, ipilimumab may be resumed
	Severe (Sensory)	Permanently discontinue ipilimumab if suspected to be related to ipilimumab. Treat according to guidelines for sensory neuropathy, and start IV corticosteroids (methylprednisolone 2 mg/kg/day).
	Severe (Motor)	Permanently discontinue ipilimumab, regardless of causality.
Endocrinopathies (hypophysitis, hypopituitarism, adrenal insufficiency, hypothyroidism)	Signs of adrenal crisis	Administer IV corticosteroids with mineralocorticoids, and evaluate the patient for presence of sepsis or infections.
	Signs of adrenal insufficiency (no crisis)	Consider further investigations (including laboratory and imaging assessment). Consider assessing endocrine function before to initiate corticosteroid therapy.
	Abnormal pituitary imaging or endocrine function laboratory tests	Withhold ipilimumab and start short course of corticosteroid therapy (dexamethasone 4 mg every 6 hours). Appropriate hormone replacement should be started. If symptoms are controlled, start corticosteroid taper based on clinical judgement. Tapering should occur over a period of at least 1 month to avoid recurrence of reaction.
Other irAR (uveitis, eosinophilia, lipase elevation, glomerulonephritis, iritis, haemolytic anaemia, amylase elevations, multi-organ failure, pneumonitis)	Severe	Permanently discontinue ipilimumab and start systemic high-dose IV corticosteroid therapy (e.g. methylprednisolone 2 mg/kg/day).
	Ipilimumab related uveitis, iritis, episcleritis	Consider corticosteroid eye drops as medically indicated.

Severity according to NCI-CTCAE v3

When to permanently discontinue ipilimumab

Permanently discontinue ipilimumab in patients with the following irARs:

- Grade 3 or 4 diarrhoea or colitis
- AST or ALT > 8 x Upper Limit of Normal (ULN) or Total bilirubin > 5 x ULN
- Grade 4 skin rash (including Stevens-Johnson syndrome or toxic epidermal necrolysis) or Grade 3 pruritus
- Grade 3 or 4 motor or sensory neuropathy
- ≥ Grade 3 immune-related reactions
- ≥ Grade 2 for immune-related eye disorders NOT responding to topical immunosuppressive therapy
- Severe infusion reactions

Management of these adverse reactions may also require systemic high-dose corticosteroid therapy if demonstrated or suspected to be immune-related (see SmPC).

Patient Information Guide & Alert Card

It is important to distribute a Patient Information Guide to any patient receiving ipilimumab treatment for the first time or asking for a new copy. You can use the Patient Information Guide to discuss ipilimumab treatment.

The Patient Information Guide will help the patients understand their treatment and how to act should they experience adverse reactions (e.g. irARs). Moreover, **it includes a Patient Alert Card, with contact details, for the patients to carry at all times.**

Checklist for patient's visit (first or following)

FIRST VISIT

- **Distribute** the Patient Information Guide and discuss the treatment with the patient. Fill in the Patient Alert Card and inform the patient to carry it at all times.
- **Inform the patient not to treat their own symptoms and to seek immediate medical attention should any adverse reaction occur or worsen.**
- **Inform the patient that they may experience growth of existing tumours or develop new tumours.**
- **Check** appropriate laboratory tests.
- **Check** for signs and symptoms of irARs.

ANY FOLLOWING VISIT

- **Check** appropriate laboratory tests.
- **Check** for signs and symptoms of irARs.
- **Remind the patient not to treat their own symptoms.**
- **Remind the patient to contact you immediately should they experience an adverse reaction, as some can worsen rapidly if not treated.**
- **Remind** the patient that early diagnosis and appropriate management are essential to minimise life-threatening complications.

1. Yervoy Summary of Product Characteristics

YERVOY®
for adults
with advanced
melanoma

To learn more about YERVOY®, please visit www.YERVOY.country
or call AM Mangion Ltd – 00 356 2397 6505 for
Medical Information

Any suspected adverse events should be reported to Medicines Authority. ADR report forms can be downloaded from www.medicinesauthority.gov.mt/adrportal and sent to postlicensing.medicinesauthority@gov.mt or sent to Medicines Authority, Sir Temi Zammit Buildings, Malta Life Sciences Park, San Gwann SGN 3000, Malta.