SESLHDPR/611
Ustekinumab for Crohn's Disease

Prescribing Protocol	
Title	**Ustekinumab for Crohn's Disease**
Areas where Protocol/Guideline applicable e.g. District, Hospital, ITU, Ward	Ambulatory care, peri-operative units, gastroenterology wards.
Areas where Protocol/Guideline not applicable	Non-gastroenterology wards
Authorised Prescribers	Gastroenterologists
Indication for use	Treatment of adult patients with moderately to severely active Crohn's disease in accordance with PBS criteria.
Clinical condition	Patients with moderately to severely active Crohn's disease who have had an inadequate response, lost response, or were intolerant to either conventional therapy (oral steroids or oral immunosuppressive therapy) or a biological medicine (e.g. TNFα antagonist) or have medical contraindications to such therapies. For detailed requirements see: http://www.pbs.gov.au/medicine/item/11164N-11182M
Place in Therapy	Prescribed after oral steroids and oral immunomodulators. in line with PBS requirements
Precautions	**Infection** Caution should be exercised when considering the use of ustekinumab in patients with a chronic infection or a history of recurrent infection. Stop treatment if serious infection occurs. The medication should not be administered until serious infection resolves Prior to initiating treatment, patients should be evaluated for tuberculosis (TB) infection. May reactivate inactive hepatitis B and latent TB (begin TB treatment before starting ustekinumab). Should not be given to patients with active TB. **Malignancy** Do not use in active malignancy, use with caution in patients with a history of malignancy. **Serious skin conditions** In patients with psoriasis, exfoliative dermatitis has been reported following ustekinumab treatment. **Pregnancy/breastfeeding** Avoid use in pregnancy. Ensure effective contraception until at least 15 weeks after the last dose. Manufacturer does not recommend breastfeeding during, and for up to 15 weeks after, treatment.

<table>
<tr><td>Dosage
(Include dosage adjustment for specific patient groups)</td><td>Induction dose via a SINGLE intravenous infusion.
The recommended treatment regimen is to initiate ustekinumab with a single intravenous (IV) dose based on body weight (see table 1 below). The infusion solution is to be composed of the number of vials of ustekinumab 130 mg as specified in table 1 below.

Table 1: Initial IV dosing of ustekinumab
<table>
<tr><th>Body weight of patient at the time of dose</th><th>Dose</th><th>Number of 130 mg ustekinumab vials</th></tr>
<tr><td>≤ 55 kg</td><td>260mg</td><td>2</td></tr>
<tr><td>> 55 kg to ≤ 85 kg</td><td>390mg</td><td>3</td></tr>
<tr><td>> 85 kg</td><td>520mg</td><td>4</td></tr>
</table>
After the initial IV dose, ustekinumab should then be administered subcutaneously at a standard dose of 90mg. The first subcutaneous dose should be administered 8 weeks after the initial intravenous dose, then every 8 weeks thereafter. If response is adequate, consider giving every 12 weeks, according to clinical judgement.</td></tr>
<tr><td>Duration of therapy</td><td>Every 8-12 weeks indefinitely according to response</td></tr>
<tr><td>Important Drug Interactions</td><td>Live vaccines: should not be given concurrently (see precautions)
CYP450 substrates: (e.g. warfarin, ciclosporin) - monitoring for therapeutic effect or drug concentration should be considered and the individual dose of the drug adjusted as needed.
Immunosuppression: Caution should be exercised when considering concomitant use of immunosuppressive agents and ustekinumab or when transitioning from other biologic agents.
Immunotherapy:
Allergy immunotherapy: ustekinumab may affect allergy immunotherapy. Caution should be exercised in patients receiving or who have received allergy immunotherapy particularly for anaphylaxis.</td></tr>
</table>

Administration instructions	**For single IV dose administration (induction dose):** Ustekinumab solution must be diluted and prepared for IV infusion using asceptic technique. 1. Calculate the dose and the number of ustekinumab 130mg vials needed based on the patient's weight (refer to table 1 above). 2. Withdraw, and then discard, an equivalent volume of the 0.9% w/v sodium chloride solution from the 250 mL infusion bag, to the volume of ustekinumab to be added (26mL per 130mg vial) e.g. 2 vials = 52 mL 3 vials = 78 mL 4 vials = 104 mL 3. Withdraw 26mL of ustekinumab from each vial needed and add it to the 250 mL infusion bag. The final volume of the bag should be 250mL. Gently invert or swirl the bag to mix the solution. Do not shake. 4. Visually inspect the diluted infusion solution before administration. Do not use if visibly opaque particles, discolouration, or foreign particles are observed. 5. Once diluted, the infusion solution may be stored for up to 8 hours (at room temperature, up to 25°C) prior to infusion. 6. Infuse the diluted infusion solution over a period of at least 1 hour. 7. Use only an infusion set with an in-line, sterile, non-pyrogenic, low protein-binding filter (pore size 0.2 micrometer) 8. Do not infuse ustekinumab concomitantly in the same IV line with other agents. 9. Ustekinumab solution for injection does not contain preservatives. Each vial is for single use only. Discard any remaining solution. Dispose of any unused medicinal product in accordance with local requirements **After the initial IV dose, ustekinumab should then be administered subcutaneously**. The first subcutaneous dose of 90 mg (2 x 45mg vials) should be administered 8 weeks after the initial intravenous dose, then every 8 weeks thereafter.

Monitoring requirements Safety Effectiveness	Monitor for hypersensitivity reactions during and immediately post-administration, e.g. rash, urticaria (rarely angioedema, anaphylaxis) Monitor for adverse drug reactions, including: infections, dizziness, headache, fatigue, diarrhoea, itch, arthralgia, myalgia, pain, injection site reactions, malignancies, pustular psoriasis, exfoliative dermatitis Monitor Crohn's Disease Activity Index (CDAI) score and biomarkers to ensure adequate response to treatment. Consider stopping ustekinumab if there is no clinical response by week 16.
Management of complications	If an anaphylactic or other serious hypersensitivity reaction occurs, appropriate supportive therapy should be instituted and administration of should be discontinued immediately. Other adverse reactions should be managed supportively with consideration for discontinuing treatment based on risk/benefit assessment.
Basis of Protocol/Guideline: (including sources of evidence, references)	Stelara® Product Information Stelara® Infusion Protocol Australian Medicines Handbook
Groups consulted in development of this guideline	SESLHDQUM Committee

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GOVERNANCE	
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