The Royal College of Pathologists
Pathology: the science behind the cure

Haematology audit template

Date of completion	(To be inserted when completed)
Name of lead author/ participants	(To be inserted)
Specialty	Haematology
Title	**An audit of compliance with the British Committee for Standards in Haematology (BCSH) guideline for the use erythroid stimulating agents (ESAs) in adult MDS patients in Dorset**
Background	The BCSH has published guidelines on the management of adult MDS. This includes guidance on the use of ESAs for the treatment of symptomatic anaemia in IPSS low and intermediate-1 risk MDS. This audit will review compliance of current practice with this aspect of the BCSH guideline.
Aim and objectives	1. To review which MDS patients were commenced on ESAs against the recommendations in the published BCSH guidance document 2. To review the dose of ESAs given, and whether dose escalation was required 3. To review if the dosage regimen followed the published guideline 4. To document the response rate (complete, partial, no response) 5. To document how many transfusions (units of blood) patients required during the initial 16 weeks of therapy 6. To review how many patients were able to self-administer ESAs
Standards and criteria	**Criteria range:** 100%, or if not achieved there is documentation in the case notes that explains the variance. • Patients commenced on ESAs should have a diagnosis of adult MDS with an IPSS score of low or intermediate-1 • Patients commenced on ESAs should have a high (0) or intermediate (1) predictive score for responding to ESA according to the published BCSH guidelines • The recommended starting dose for EPO (Eprex®) is 30,000 units per week for 8 weeks. If there is no response at 8 weeks, the dose can be doubled to 60,000 units per week or 30,000 units per week for a further 8 weeks • Patients with sideroblastic types of MDS should receive G-CSF • All patients should discontinue ESAs at 16 weeks if no response according to the published criteria • Patients with a response should discontinue blood transfusions • Patients with a complete response should have the dose reduced if able

<table>
<tr><td>Method</td><td>Sample selection:
All patients with adult MDS commenced on an ESA over a 12-month period.
Collect data on the proforma (see below).</td></tr>
<tr><td>Results</td><td>The results of this audit show the following % compliance with these standards:

<table>
<tr><th>Standard</th><th>% compliance</th></tr>
<tr><td>All Patients commenced on ESAs should have a diagnosis of adult MDS with an IPSS score of low or intermediate-1</td><td></td></tr>
<tr><td>Patients commenced on ESAs should have a high (0) or intermediate (1) predictive score for responding to ESA according to the published BCSH guidelines</td><td></td></tr>
<tr><td>Patients should commence on Epoetin alfa (Eprex®) every week for 8 weeks, this dose should be continued for a further 8 weeks or in non-responders increased to 60,000 every week, or 30,000 twice per week, for an initial total treatment duration of 16 weeks</td><td></td></tr>
<tr><td>Patients with sideroblastic types of MDS should receive G-CSF</td><td></td></tr>
<tr><td>All patients should discontinue ESAs at 16 weeks if no response according to the published criteria</td><td></td></tr>
<tr><td>Patients with a response should discontinue blood transfusions</td><td></td></tr>
<tr><td>Patients with a complete response should have the dose reduced if able</td><td></td></tr>
</table>

Commentary:</td></tr>
<tr><td>Conclusion</td><td>(To be completed by the author)</td></tr>
<tr><td>Recommend-ations for improvement

Action plan</td><td>Present the result with recommendations, actions, and responsibilities for action and a timescale for implementation. Assign a person/s responsible to do the work within a timeframe.
Some suggestions:
• highlight areas of practice that are different
• present findings.

(To be completed by the author – see attached action plan proforma)</td></tr>
<tr><td>Re-audit date</td><td>(To be completed by the author)</td></tr>
<tr><td>Reference</td><td>Killick SB et al. 2013. Guidelines for the diagnosis and management of adult Myelodysplastic syndromes. BJH</td></tr>
</table>

Data Collection Proforma

An audit of compliance with the British Committee for Standards in Haematology (BCSH) guideline for the use erythroid stimulating agents (ESAs) in adult MDS patients in Dorset

Patient name:	Date of birth:
Hospital number:	Consultant:

	1 Yes	**2** No	**3** If no, was there documentation to explain the variance? Yes/No plus free-text comment	**4** Compliant with guideline based on **Yes** from column 1 or an appropriate explanation from column 3. Yes/No
Has the patient got a diagnosis of adult MDS with an IPSS score of low or intermediate-1?				
Does the patient have a high (0) or intermediate (1) predictive score for responding to ESA according to the published BCSH guidelines?				
Is the patient established on blood transfusions and have a score of 0 or 1 for responding to ESA according to the published BCSH guidelines?				
Was the patient commenced on Epoetin alfa (Eprex®), 30,000 every week for 8 weeks, then response assessed.				
Was the patient escalated to Epoetin alfa (Eprex®), 60,000 every week or 30,000 twice per week at 8 weeks if they had no response?				
Were patients with sideroblastic types of MDS given G-CSF?				
Were all patients discontinued on ESAs at 16 weeks if no response?				
Did patients with a response discontinue blood transfusions?				
For those patients achieving a complete response, was the dose of Epoetin alfa reduced if able?				

Audit action plan

An audit of compliance with the British Committee on Standards in Haematology (BCSH) guideline for the use of bisphosphonate therapy in patients with myeloma

Audit recommendation	Objective	Action	Timescale	Barriers and constraints	Outcome	Monitoring