

A guide to Bone Marrow Specimen (Aspirate and Trepine Biopsy) Histopathology Reporting



Clinical details		
S1.02	Clinical info. on request form (complete as narrative or use the structured format below)	Text
	Indication	Text
	Clinical details	Text
	Relevant results	Text
	Test requested	Text
S1.03	Pathology accession number	Text
S1.04	Principal clinician caring for the patient and contact details	Text
G1.01	Other clinical information received	Text

Record of procedure		
S2.01	Date of the BM specimen collection	Text
S2.02	BM Biopsy performed by	Text OR Not known
S2.03	Anatomical site of the aspirate/biopsy (include side)	Text
G2.01	Ease/difficulty of the aspiration	Text
G2.02	Sedation	Text
S2.04	Specimen type(s) (select all that apply)	Peripheral bld smear Aspirate-smear Aspir.-squash prep Trepine biopsy Trepine imprint
S2.05	Distribution of biopsy material/additional tests requested (select all that apply)	Flow cytometry Immunohistochem. Cytogenetics FISH Molecular studies Microbiology Tissue banking Other (specify)
G2.03	Additional comments	Text
S2.06	BLOOD COUNT RESULTS	
	Date of last FBC	Date
	FBC results (Numeric for each parameter in units indicated)	Hb in g/L WCC in $\times 10^9/L$ MCV in fL NEU in $\times 10^9/L$ LYM in $\times 10^9/L$ MON in $\times 10^9/L$ EOS in $\times 10^9/L$ BAS in $\times 10^9/L$ Other (specify) PLT in $\times 10^9/L$
	Blood film results	Text

Morphological findings - ASPIRATE		
S3.01	Cellularity of particles/trails (Note: Report particles and trails separately if cellularity of particles and trails is discordant.) <i>If hypocellular, or hypercellular degree may be optionally added</i>	See Cellularity p4 OR Dry Tap OR Blood tap OR Haemodilute marrow sample AND (if applicable) Scant particles for assessment Mildly Moderately Markedly
	Cellularity of imprint (if required)	As above
S3.02	Nucleated differential cell count	Inadequate specimen OR Total number of nucleated cells counted AND List each cell type counted & numeric value
	Lymphoid aggregates (if seen)	Text
	M:E Ratio	____:_____
S3.03	ERYTHROPOIESIS	
	Cellularity	Absent Mildly reduced Moderately reduced Markedly reduced Normal Mildly increased Moderately increased Markedly increased
	Type (select all that apply)	<ul style="list-style-type: none"> • Normoblastic • Megaloblastic (nuclear-cytoplasmic asynchrony) • Dyserythropoietic • Other eg giant pronormoblast (specify)
	<i>If dyserythropoietic, describe features, including % of abnormal cells</i>	Text
S3.04	GRANULOPOIESIS	
	Cellularity	Absent Mildly reduced Moderately reduced Markedly reduced Normal Mildly increased Moderately increased Markedly increased
	Maturation (select all that apply)	Normal OR <ul style="list-style-type: none"> • Left-shifted • Dysgranulopoietic • Maturation arrest (specify stage) • Other (specify)

Morphological findings - ASPIRATE (cont.)

S3.04	<i>If not normal, describe the</i> Leucocyte subpopulations <i>(including blasts (where relevant), mast cells - a qualitative and quantitative description)</i>	Text
	Myeloid morphology <i>(including percentage of abnormal cells)</i>	Normal OR Text
S3.05	MEGAKARYOPOIESIS	
	Cellularity	Absent Mildly reduced Moderately reduced Markedly reduced Normal Mildly increased Moderately increased Markedly increased
	Morphology <i>(select all that apply)</i>	Normal OR <ul style="list-style-type: none"> • Micromegakaryocytes • Nuclear hyplobation • Multinucleation (widely separated nuclei) • Other eg pyknotic (specify)
	<i>If not normal, give the percentage of Abnormal megakaryocytes</i>	___%
	Large platelet clumps	Absent Present
S3.06	LYMPHOCYTES	
	Number	Reduced Normal Increased
	Morphology <i>(including size and nuclear and cytoplasmic features)</i>	Text
S3.07	PLASMA CELLS	
	Number	Normal Increased
	Morphology <i>(including size and nuclear and cytoplasmic features)</i>	Text
G3.01	Other marrow cells (if required) <i>(choose all that apply)</i>	<ul style="list-style-type: none"> • Histiocytes (macrophages) • Osteoblasts • Osteoclasts • Other (specify)
	Morphological features	Text
G3.02	Abnormal infiltrating nonhaematopoietic cells <i>(if present)</i>	Text

Morphological findings - ASPIRATE (cont.)

G3.03	Haemophagocytosis	Mild Moderate Marked
	Cell types ingested	Text
S3.08	IRON STORES	Absent Reduced Normal Increased Markedly increased AND/OR 0 1 2 3 4 5 6
	Sideroblasts (if relevant)	Absent Present
	If present, record percentage	___%
	and morphology <i>(eg coarse / ringed)</i>	Text
S3.09	Other significant features of the aspirate <i>(if required)</i>	Text
S3.10	Other comment on the aspirate <i>(if required)</i>	Text
S3.11	Reporting haematologist/ pathologist (aspirate) <i>(include designation)</i>	Text
	Date	Date

Morphological findings-TREPHINE BIOPSY

S3.12	Trephine biopsy id.	Text
S3.13	MACROSCOPIC	
	Number of cores	___
	Aggregate length	___mm
	Adequacy	Adequate for exam. Inadequate
	Description <i>(if required)</i>	Text
S3.14	Trabecular bone architecture	Text
S3.15	Cellularity	See Cellularity p4
	Degree may be optionally added	Mildly Moderately Markedly AND/OR Numeric: ___%
	Architecture	Normal / Abnormal AND if abnormal select all that apply: <ul style="list-style-type: none"> • Interstitial infiltrate • Focal infiltrate <ul style="list-style-type: none"> o Paratrabecular o Nonparatrabecular o Other (specify) • Nodular infiltrate • Diffuse infiltrate • Distorted due to fibrosis • Other (specify)

Morphological findings-TREPHINE BIOPSY

S3.15	Areas of abnormality (if present) (eg necrosis, amorphous eosinophilic material, serous atrophy, haemorrhage or fibrosis)	Absent Present (describe)
	Artefactual changes	Absent Present (describe)
S3.16	ERYTHROPOIESIS	
	Number	Absent Mildly reduced Moderately reduced Markedly reduced Normal Mildly increased Moderately increased Markedly increased
	Maturation	Normal OR Left-shifted Other (describe)
	If not normal, record Morphological abnormalities	Text
S3.17	GRANULOPOIESIS	
	Cellularity	Absent Mildly reduced Moderately reduced Markedly reduced Normal Mildly increased Moderately increased Markedly increased
	Maturation	Normal OR • Left-shifted • Maturation arrest • Preponderance of immature cells • Other (describe)
	If not normal, record Morphological abnormalities (if required)	Text
	Abnormal localisation of immature precursors (if req'd)	Text
S3.18	MEGAKARYOPOIESIS	
	Number	Absent Mildly reduced Moderately reduced Markedly reduced Normal Mildly increased Moderately increased Markedly increased
	Morphology	Text
	Distribution in the marrow (if required eg clusters)	Text
S3.19	LYMPHOCYTES (if req'd)	
	Number	Normal Reduced Increased

Morphological findings-TREPHINE BIOPSY

S3.19	LYMPHOCYTES (if req'd)	
	If increased, record Distribution	Paratrabeular Interstitial Nodular Diffuse
	Size and number lymphoid aggregates (if required)	Text
	Morphology (eg size, N:C ratio etc)	Text
S3.20	PLASMA CELLS	
	Number	Normal OR ___% of nucleated cells
	If abnormal record, Morphology (eg immaturity, inclusions)	Text
	AND	
	Distribution	Normal OR • Interstitial • Microaggregate (10-50 cells) • Nodular (>50 cells) • Diffuse
S3.21	Other cells (if required)	Text
	Nonhaematopoietic infiltration (if required)	Text
	Granuloma formation (if required)	Text
G3.04	RETICULIN	
	Grade	For myeloproliferative neoplasms use: • 0 • 1 • 2 • 3 OR else use: • Normal • Mildly increased • Moderately increased • Markedly increased
	Pattern	Diffuse Focal
G3.05	Other comment on the trephine biopsy	Text
G3.06	(Immuno)histochemical stains	Text
S3.22	Reporting pathologist (trephine biopsy) (include designation)	Text
	Date	Date

Additional study findings

G4.01	IMMUNOHISTOCHEMISTRY	Text
	FLOW CYTOMETRY	Text
	CYTOGENETICS	Text
	MOLECULAR STUDIES	Text
	FISH	Text
	MICROBIOLOGY (<i>including staining cultures and PCR</i>)	Text
	Additional test result	Text

Synthesis and overview

S5.01	WHO disease subtype	Text
G5.01	Conclusion	Text
S5.02	Reporting haematologist / pathologist (Integrated report)	Text

NOTES

Cellularity

- Acellular
- Hypocellular: Reduced with regard to the patient's age
- Normocellular: Normal for the patient's age
- Hypercellular: Increased with regard to the patient's age