Lancashire and South Cumbria Haematology guideline: classical Hodgkin's lymphoma – February 2026

1 Pre-treatment evaluation

1.1
- The diagnosis should be made on a lymph node excision biopsy, or when this is not possible, at least a good quality needle core biopsy.
- Management will be based on the diagnosis made following expert haematopathology review at HMDS Leeds.
- All new and relapsed cases must be discussed at the regional Lymphoma MDT prior to commencing treatment. If there is an urgent need to start treatment prior to the next MDT, the case must be discussed with an MDT Core Member.

1.2 The following tests are to be performed at presentation followed by MDT discussion:
- FBC, ESR, U&Es, creat, LFTs, calcium
- Hepatitis B, C and HIV serology
- Chest X-ray
- PET-CT scan where treatment is with curative intent, or at least a CT scan of neck, thorax and abdomen if PET-CT scan is not possible.
- MRI scan if required for assessment of disease in the oropharynx and Waldeyer's ring, sinuses and nasal cavity, CNS and paraspinal areas where there is a suspicion of spinal cord compromise.
- If PET-CT scan is not possible, bone marrow trephine biopsy unless: stage I/IIA non-bulky disease, or if knowledge of marrow infiltration will not affect management e.g an elderly patient with stage III disease, or palliative management.
- ECG and assessment of cardiac function in patients with a history of or risk factors for cardiac disease or when mediastinal irradiation may be indicated.
- Pulmonary function tests and transfer factor in selected patients with pre-existing pulmonary disease or unexplained breathlessness.
- Determination of stage, treatment risk group according to the EORTC and German Hodgkin's Study Group (GHSG) criteria (appendix 1) or Hasenclever score (appendix 2) for advanced stage. The lymph node groups defined by the EORTC or GHSG will be used, noting that (appendix 1). The maximum tumour diameter (MTD) and presence of bulk disease – defined as a thoracic ratio >1/3 at T5/6, or mass >10cm - will also be noted.
- Note that novel prognostic models employing continuous rather than dichotomised variables have been developed and validated on more modern datasets than EORTC/GHSG and appear to be more prognostic. Online calculators are available (Holistic E-HIPI and A-HIPI scores).
- Patients with stage IIB disease with a bulky mediastinal mass or extra-nodal disease will be managed as for advanced stage disease as per GHSG risk groups.
- Patients with early stage disease will be defined as early-favourable and early-unfavourable (the term 'intermediate' may be preferable to 'unfavourable' when discussing with patients).

- Where appropriate patients must be offered referral for reproductive counselling, and sperm cryopreservation/oocyte harvesting/ovarian preservation prior to commencing potentially gonadotoxic therapy.

2 Post-treatment and interim evaluation

2.1
- If interim PET response-adapted therapy is indicated repeat PET after two cycles
- Otherwise in cases of advanced stage disease there should be a formal response assessment of after four cycles of chemotherapy. If this is not possible clinically e.g absence of palpable disease, a CT scan should be performed.
- On completion of treatment the patient must be reassessed clinically and, where treatment is given with curative intent, all abnormal tests at baseline repeated followed by MDT discussion with review of an end of treatment PET-CT scan performed at least 6 weeks after the last dose of chemotherapy, or three months after the last dose of radiotherapy.
- In selected cases e.g bulk disease, extra-nodal sites, the MDT must consider the role of consolidation radiotherapy (RT) in the presence of a Radiation Oncologist.
- There should be repeat biopsy or at least close follow up of residual FDG-avid lesions with repeat PET-CT scan before additional treatment.

3 Early stage favourable risk (figure 1)

3.1
- Initial treatment will be with ABVD followed by an interim PETCT (iPET2) scan on day 22-25 of cycle 2.

3.2 **iPET2 negative patients (DS 1-3).** Options are:
- HD16 approach with 20Gy involved site radiotherapy (ISRT) is appropriate (but only if favourable by GHSG criteria).
- EORTC H10F approach with a further AVD x 2 cycles and no radiotherapy, or a further AVD x 1 cycle plus 30Gy ISRT (but see 2.5).
- In patients with stage IA/IIA, no bulk, where it is planned to omit radiotherapy, treatment with one further cycle AVD and without radiotherapy is appropriate (RAPID trial approach, but see 2.5)

3.3
- If iPET2 is negative bleomycin will be omitted from further cycles.

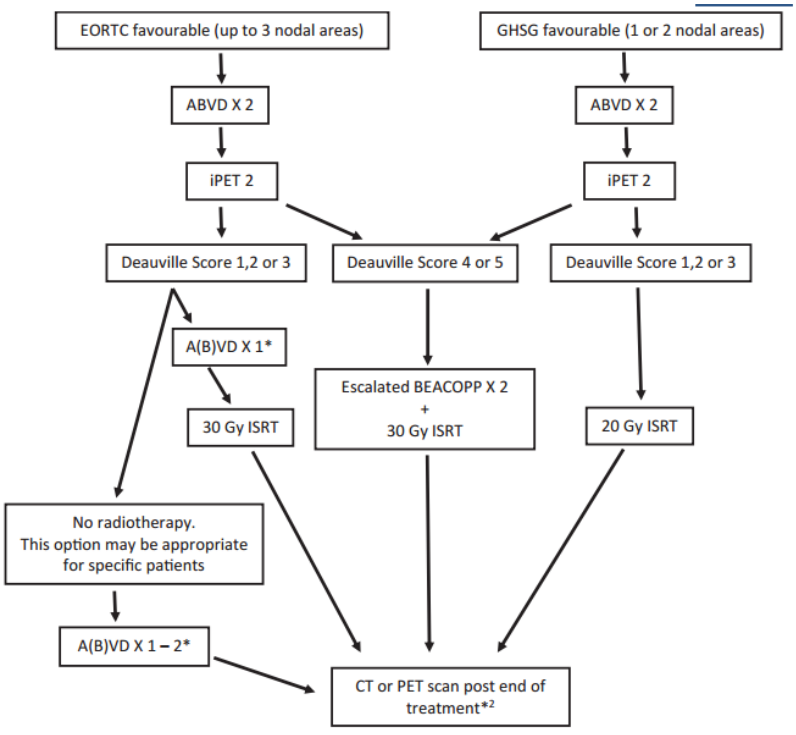
3.5
- Note that three trials have shown that radiotherapy may be omitted in patients in complete metabolic remission (CMR, DS 1-3) on iPET with no reduction in overall survival. This approach is associated with a reduction in progression-free survival of 5-10% at five years but there is no detriment to overall survival. However, omission of radiotherapy may benefit some patients in terms of reduction in late toxicities. Decisions to omit radiotherapy or not must be discussed early in the treatment course at MDT with a Radiation Oncologist where age, sex, pattern of disease, and patient choice will be considered.

- Note also that MTD is associated with a higher risk of relapse as a continuous variable when treated with chemotherapy alone – calculation of the E-HIPI may also inform decisions.

3.6 **iPET2 patients positive patients (DS 4-5).** Options are:

- EORTC H10 approach with intensification to escalated BEACOPDac x 2 cycles followed by 30Gy ISRT.
- ABVD x 2 cycles followed by 30Gy ISRT noting that outcomes are significantly worse when compared to intensification.
- Note that in the RAPID trial the small group of patients who were iPET DS5 after ABVD x 3 cycles had poor outcome despite ABVD x 1 plus RT, therefore consider treatment intensification either with escalated BEACOPDac or as per management of relapsed and refractory disease.

Figure 1: Algorithm for early stage favourable disease



4 Early stage intermediate (unfavourable) risk (figure 2)

4.1 There are several options:

- If there are no concerns regarding the use of RT, a standard H10 approach with ABVD x 4 and ISRT if iPET2 negative is appropriate.

- If <50 years, fit and it is desirable for RT to be omitted, a HD17 (2+2) approach with initial escalated BEACOPDac is suitable, noting that although iPET2 was not performed in this trial the findings of iPET may influence further management.
- For less fit patients and where desirable to omit RT, a H10 approach with A(B)VD x 6 without RT if iPET2 negative.
- Note that patients with stage IIB disease were included in the RATHL trial for advanced stage disease (see 4.5) and the RATHL PET-directed approach is a further option for this group.
- Note escalated BEACOPDac should not be used for patients with intermediate stage disease who are >50 years.

4.2 **GHSG HD17 approach if fit and <50 years**:

- Escalated BEACOPDac x 2 cycles followed by iPET2.
- If DS 1-3 for further ABVD x 2 followed by iPET4.
- If iPET4 D1-3 RT can be omitted.
- If iPET2 D4-5 consider either further escalated BEACOPDac x 4 or BEACOPDac x 2 followed by ISRT 30Gy, depending on suitability for BEACOPDac and feasibility of RT.

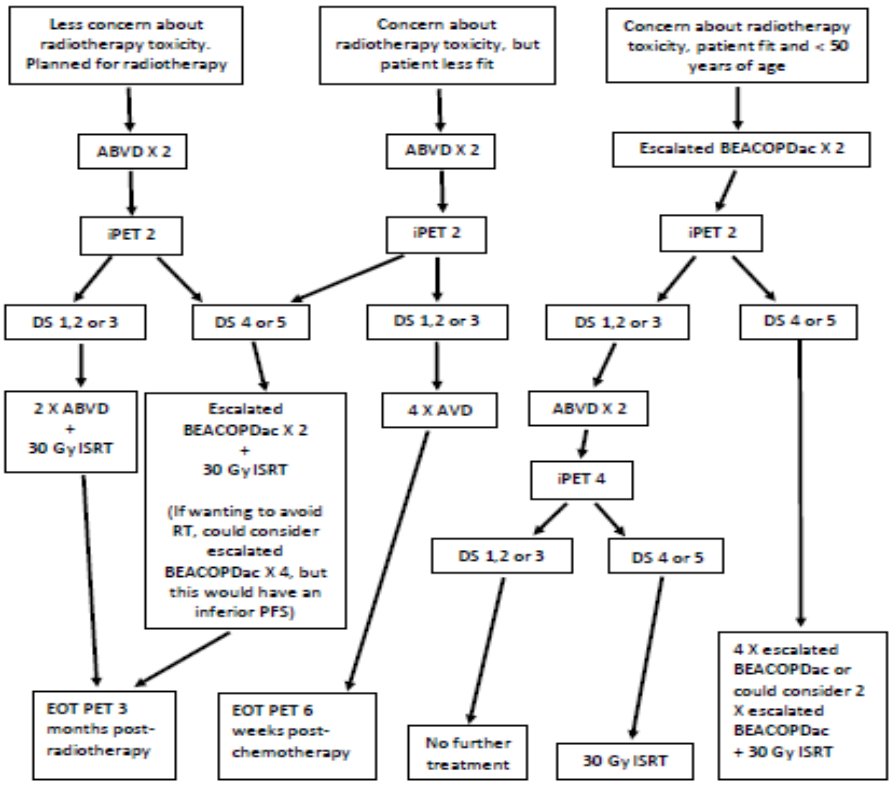
4.3 **EORTC H10 approach with a view to omitting RT where patient is less fit:**

- Initial ABVD x 2 cycles followed by iPET2.
- Those with iPET2 DS1-3 should have further AVD x 4 cycles and radiotherapy may be omitted.
- If iPET is DS 4-5 intensify treatment with escalated BEACOPDac x 2 cycles followed by ISRT 30Gy, or escalated BEACOPDac x 4 accepting omission of RT is associated with poorer progression-free survival.

4.4 **EORTC H10 approach where there is less concern about omission of RT:**

- Initial ABVD x 2 cycles followed by iPET2. If iPET DS1-3 give AVD x 2 then 30Gy ISRT. If iPET is DS4-5 escalate to escalated BEACOPDac x 2 followed by ISRT 30Gy.
- If iPET2 is DS4-5 and where escalation is inappropriate consider further ABVD x 2 cycles followed by 30Gy ISRT but noting this is associated with significantly worse outcomes.

Figure 2: Algorithm for unfavourable/intermediate stage disease



5 Advanced stage disease

5.1
- Advanced stage includes patients with stage III/IV disease and those with stage IIB with a bulky mediastinal mass or extra-nodal disease.

5.2
- A choice must be made between initial ABVD-like (RATHL approach) or escalated BEACOPP-like therapy (HD18 approach), noting that the latter must not be used in patients over 60 years, and with caution in those >50 years, is associated with greater efficacy but also has greater acute and long term toxicity, a high risk of permanent infertility but a lower risk of cardiotoxicity.
- Also note that patients with Hasenclever score ≥ 3 or stage IV disease have a 20-25% chance of having an iPET scan with DS 4-5 after two cycles ABVD, so would usually be offered intensification to escalated BEACOPDac, and after ABVD have a higher risk of requiring second line therapy and transplant. BEACOPDac may also be preferable as initial therapy in cases where any post-treatment consolidation radiotherapy would be difficult or too toxic.
- Patients with stage III or IV disease should be treated with AVD-brentuximab (A^2VD) in place of ABVD.

5.3
- A PET-adapted response will be used with iPET on day 22-27 of cycle 2 after ABVD/A^2VD or day 17-21 of cycle 2 of escalated BEACOPDac.

5.4
- Note escalated BEACOPDac will be used in place of BEACOPP since this appears to be equally effective but may be associated with reduced gonadal toxicity, neutropenia and stem cell toxicity.

5.5 **Initial ABVD/A^{2}VD (RATHL approach, figure 3).**

ABVD/A^{2}VD x 2 cycles followed by iPET on day 22-27:

- iPET DS 1-3 patients should complete AVD x 4 cycles or A^{2}VD x 4 cycles followed by an end of treatment PET-CT scan.
- iPET DS 4-5 patients should be offered escalated BEACOPDac x 4 cycles if considered sufficiently fit followed by an end of treatment PET-CT scan and MDT discussion to consider consolidation radiotherapy.
- Note that patients who have DS 5 on iPET have a poor outcome, even if treatment is intensified to BEACOPDac, and further management as for relapsed/refractory disease should be considered.

5.6 **Initial escalated BEACOPDac (GHSG HD18 approach, figure 4).**

BEACOPDac x 2 cycles followed by iPET on day 17-21:

- iPET DS 1-3 patients should complete a further escalated BEACOP x 2 cycles followed by an end of treatment PET-CT scan.
- iPET DS 4-5 patients should complete a further escalated BEACOP x 4 cycles followed by end of treatment PET-CT scan and MDT discussion to consider consolidation radiotherapy.

5.7
- Patients with end of treatment PET DS 4-5 should be considered for a biopsy if feasible, or follow up scan after three months, or consolidation radiotherapy to residual lesions. Patients with end of treatment DS 1-3 will not usually be offered consolidation radiotherapy.

6 Patients over 60 years or younger patients with significant comorbidities

6.1
- Fitness for chemotherapy should be carefully assessed in older patients including performance status, comorbidities, frailty, cardiac and pulmonary function.

6.2
- Note that outcomes are better in older patients when treated with anthracycline-containing regimens but there is a high risk of pulmonary toxicity when treated with bleomycin.

Figure 3: Algorithm for advanced stage Hodgkin's lymphoma – RATHL approach

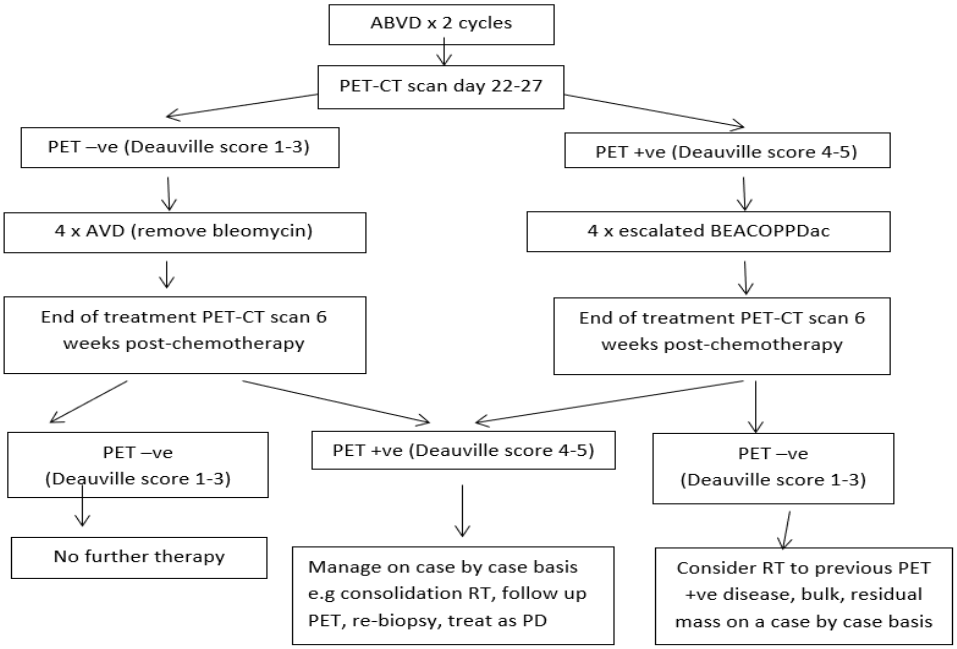
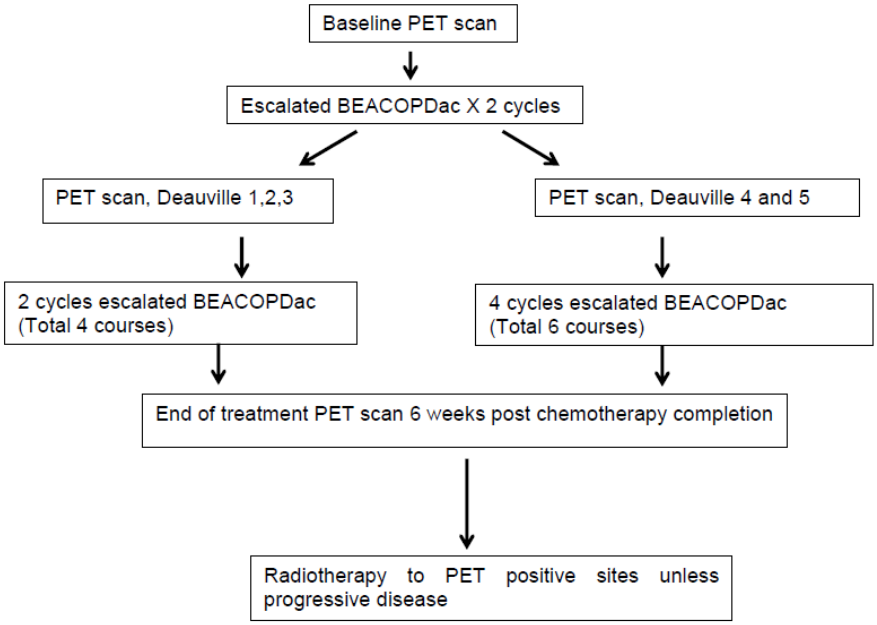


Figure 4: Algorithm for advanced stage Hodgkin's lymphoma – HD18 approach



6.3 • If the patient is considered sufficiently fit for ABVD (and radiotherapy if required) and < 70 years old, the approach used above in younger patients should be followed. However, no more than two cycles with bleomycin should be given and treatment with AVD alone may also be considered. An alternative regimen without bleomycin is ACOPP.

6.4 • If considered unfit for ABVD or ACOPP, options are VEPEM-B, ChlVPP or GDCVP x 6 cycles for stage IIB–IVB disease. For earlier stage disease options are a combined modality therapy with three cycles chemotherapy

followed by ISRT or six cycles of chemotherapy alone, particularly if there is a concern regarding the toxicity of RT.

6.5 • Options for frail patients to be considered are DECC, single agent etoposide, single agent vinblastine or vinorelbine, radiotherapy alone.

7 Management of relapsed, primary refractory or progressive disease

7.1 • Rebiopsy is generally recommended if relapse is suspected, particularly if there has been a long remission duration. There should also be repeat biopsy of residual metabolically active lesions on end of treatment PET-CT scan where possible.

7.2 • Where further treatment with curative intent is possible patients must be restaged with PET.

7.3 • Prognostic factors at relapse should be noted: remission duration < 1 year, extra-nodal disease, B symptoms (appendix 3). However, note that the metabolic remission status following salvage is the most powerful prognostic factor.

7.4 • If there is localised relapse > 5 years after primary therapy and without B symptom standard treatment will be with standard dose chemotherapy and radiotherapy without high dose therapy and stem cell rescue.

7.5 Patients who are candidates for high dose therapy

- The goal of salvage therapy is to achieve complete metabolic remission (CMR, DS1-3) before proceeding to PBSC mobilisation.
- Initial salvage regimen will be GDP for two cycles followed by a PET-CT scan. If there is a CMR a third cycle will be given followed by PBSC mobilisation and LEAM autologous stem cell transplant.
- If CMR is not achieved change to brentuximab (+/- bendamustine) followed by PET-CT after four cycles. Proceed to PBSC mobilisation and autologous transplant if in CMR. If there has been partial metabolic remission continue brentuximab and repeat PET-CT scan.
- If at least partial remission has not been achieved change to pembrolizumab and repeat PET-CT scan after four cycles.
- It is unclear whether the number of lines of salvage therapy required to achieve CMR influences outcome following autologous transplant. However, where > 1 line of therapy was required and particularly in younger patients or those with disease primary refractory, the option of allogeneic transplant should be considered. and the patient offered an opinion from an allogeneic transplant centre.
- If the response remains less than CMR despite salvage therapy, autologous transplant may still be offered with curative intent although the outcomes are significantly poorer compared to patients in CMR at time of transplant.
- The role of consolidation RT should be reviewed at MDT, especially if there were residual metabolically active sites prior to transplant, sites of bulky disease or dominant sites at relapse.

7.6 Patients relapsing following autologous transplant

- Further salvage chemotherapy, or brentuximab (+/- bendamustine), pembrolizumab or nivolumab, and referral for consideration of allogeneic transplantation should be offered for younger, fit patients.
- Repeat autologous transplant may be considered if there is a long duration of remission e.g > 5 years since first transplant. Note this is presently not routinely funded by commissioners.

7.7 Patients who are not candidates for high dose therapy

- Salvage RT alone is an alternative option, especially for older patients with early stage relapse, without B symptoms and good performance status.
- Combined-modality therapy should be considered, especially when there is early stage relapse, patients have not previously received RT or have relapsed outside an initial RT field.
- The most appropriate chemotherapy regimen will depend on age, performance status, frailty status, comorbidity and organ function, previous treatment e.g whether has had brentuximab, availability of funding and access to compassionate use programmes. Options are: brentuximab, gemcitabine or gemcitabine combinations (Gem-P, GDCVP), ChlVPP, VEPEM-B, bendamustine, pembrolizumab, nivolumab, single agent vinblastine or vinorelbine, DECC, single agent etoposide/steroids.
- Radiotherapy for local disease control may also be considered.

Appendix 1: Early stage Hodgkin's lymphoma risk groups and nodal areas

EORTC

Risk factors; A: Bulky mediastinal mass -mediastinal/thoracic ratio ≥ 0.35 at T5/6
B: Age >=50yrs
C: Raised ESR
D: ≥ 4nodal involved regions

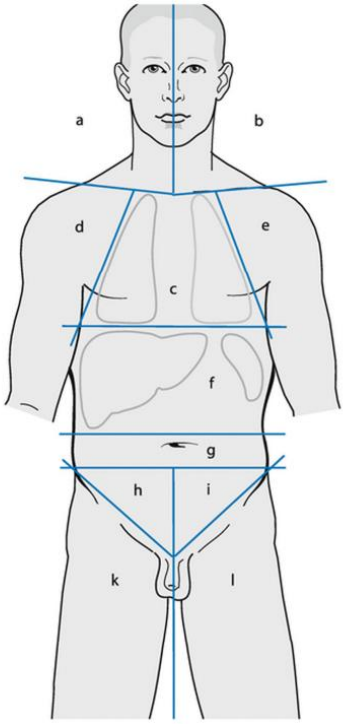
German Hodgkin's Study Group (GHSG)

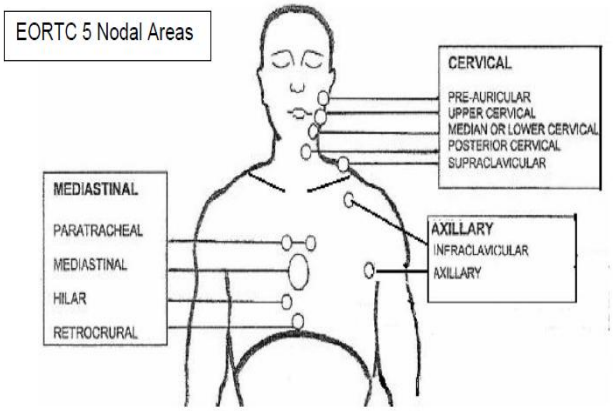
Risk factors: A: Bulky mediastinal mass ≥ 1/3 mediastinal diameter at T5/6
B: Extra-nodal disease
C: Raised ESR
D: ≥ 3nodal involved regions

Raised ESR means >50mm/hr without B symptoms, > 30mm/hr with B symptoms

	EORTC	**GHSG**
Early favourable	CS I-II, no risk factors	CS I-II with no risk factors
Early unfavourable (intermediate)	CS I-II, ≥1 risk factor	CS I, CS IIA with ≥ 1 risk factor CS IIB with risk factor C/D but without A/B
Advanced	CS III-IV	CS IIB with A/B; CS III-IV

Nodal areas – GHSG and EORTC





Appendix 2: Hasenclever score for advanced stage Hodgkins' lymphoma

Prognostic factors are: male, >45yrs, stage IV disease, Hb <10.5, albumin<40, lymphs <0.6 or < 8% WBCs, WBC > 15

IPI	% cases	DFS 5yrs	OS 5yrs
0	7	84	89
1	22	77	90
2	29	67	81
3	23	60	78
4	12	51	61
5+	7	42	56
For grouped IPIs			
0 or 1	29	79	90
≥2	72	60	74
0-2	58	74	86
≥3	42	55	70
0-3	81	70	83
≥4	19	47	59

Appendix 3: Predictive factors in Hodgkins' lymphoma at relapse in patients undergoing autologous stem cell transplantation

Risk factors are remission duration < 1 year, extra-nodal disease, B symptoms

Risk factors	EFS 5yrs
0 - 1	83%
2	27%
3	10%

Author: Dr MP Macheta
Date: Feb 2026
Date ratified by NSSG: