

**Clinical Question:**

**In patients with early stage unfavourable or bulky Hodgkin lymphoma, is addition of radiotherapy to chemotherapy indicated?**

**Evidence summary**

A meta-analysis (Blank et al., 2017) and two randomised controlled trials (RCT) (Andre et al., 2017, Radford et al., 2015) addressed this clinical question.

None of the trials directly addressed patients with early stage unfavourable (GHSG or EORTC definition) or bulky Hodgkin lymphoma. However, they were significantly represented in the included patient cohorts.

Blank et al. (2017) conducted a Cochrane meta-analysis that included seven RCTs involving 2,564 patients. There was heterogeneity in the studies included in the meta-analysis including interim PET scanning to dictate treatment management. The chemotherapy and radiotherapy doses patients received were consistent in most studies. However, the radiotherapy techniques differed between the studies.

The overall results favoured the addition of radiation to chemotherapy for progression-free survival when compared to chemotherapy alone (HR 0.42; 95% CI 0.25 to 0.72; P = 0.001; moderate-quality evidence).

The latest trial reported did not show significant difference in progression-free survival in a predetermined subgroup analysis (Andre et al., 2017). In early PET (ePET) negative patients, 5-year PFS rates in the favourable group were 99.0% versus 87.1% (HR, 15.8; 95% CI, 3.8 to 66.1) in favour of ABVD + INRT (doxorubicin, bleomycin, vinblastine, and dacarbazine and involved-node radiotherapy); the unfavourable group, 92.1% versus 89.6% (HR, 1.45; 95% CI, 0.8 to 2.5) in favour of ABVD + INRT. Noninferiority could not be demonstrated as the upper bound of the 95% CI for the estimated HR (2.50) exceeded the prespecified noninferiority margin (2.10).

Overall survival was not statistically significant between combined modality therapy versus chemotherapy alone.

There was no robust data on late toxicity in these studies

**Recommendation:**

Patients with early stage unfavourable (GHSG or EORTC definition) or bulky Hodgkin lymphoma should have a consultation with a radiation oncologist as part of a multidisciplinary management of their disease.

**Quality/Level of Evidence:** Moderate

**Grade of recommendation:** Strong

**Recommendation:**

In patients with early stage unfavourable (GHSG or EORTC definition) or bulky Hodgkin Lymphoma decision to treat is made in conjunction with the patient.

**Quality/Level of Evidence:** Low

**Grade of recommendation:** Strong

### Good practice point

Patients with early stage unfavourable or bulky hodgkin lymphoma should be discussed at a multidisciplinary team meeting.

### Good practice point

The appropriate equipment and expertise is available to allow treatment to be optimised.

### Practical issues

- Items for discussion during shared decision making with the patient include: long term toxicities, secondary malignancies, cardiotoxicity and salvage therapy.
- The patient should have a follow up plan which includes linking with primary care.
- Patient education should be provided on long term implications of treatment.
- Patients should be empowered around lifestyle issues such as blood pressure check.
- Patient should have acces to a Clinical Nurse Specialist.

### Abbreviations

GHSg	German Hodgkin Study Group
EORTC	European Organisation for Research and Treatment of Cancer
RCT	Randomised Controlled Trial
ABVD	Doxorubicin, Bleomycin, Vinblastine, and Dacarbazine
INRT	Involved-Node Radiotherapy

### References

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- BLANK, O., VON TRESCKOW, B., MONSEF, I., SPECHT, L., ENGERT, A. & SKOETZ, N. 2017. Chemotherapy alone versus chemotherapy plus radiotherapy for adults with early stage Hodgkin lymphoma. *Cochrane Database Syst Rev*, 4, Cd007110.
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