

## APPENDIX 1A. Systematic Review Questions and Literature Search Strategies

1. **In situations where transfusion of red blood cells (RBC) is necessary, transfuse the minimum number of units required to relieve symptoms of anemia or to return the patient to a safe hemoglobin range (7 to 8 g/dL in stable, non-cardiac in-patients).**

**Question:** What is the optimal approach to red blood cell transfusion?

### **Search Strategy**

#### ***Clinical Practice Guidelines***

##### *MEDLINE*

1. Exp erythrocyte transfusion/
2. Blood transfusion/
3. ((red adj2 cell:) and transfusion:).mp.
4. (RBC adj2 transfusion:).mp.
5. (PRBC adj2 transfusion:).mp.
6. erythrocyte transfusion:.mp.
7. or/1-6
8. exp practice guidelines/
9. practice guideline.pt.
10. practice guideline?.mp.
11. evidence-based medicine/
12. evidence-based medicine.mp.
13. or/8-12
14. 7 and 13
15. limit 14 to English language

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology (BCSH)*

Searched using keywords: RBC transfusion, red blood cell transfusion, red cell transfusion.

2. **Do not test for thrombophilia in patients with venous thromboembolism (VTE) occurring in the setting of major transient risk factors (surgery, trauma or prolonged immobility).**

**Question:** Is there a role for thrombophilia testing in patients with venous thromboembolism (VTE) secondary to transient risk factors?

### **Search Strategy**

#### ***Clinical Practice Guidelines***

##### *MEDLINE*

1. Exp thrombophilia/
2. Thrombophilia:.mp.
3. 1 or 2
4. exp practice guidelines/
5. practice guideline.pt.
6. practice guideline?.mp.
7. evidence-based medicine/

8. evidence-based medicine.mp.
9. or/4-8
10. 3 and 9

*Searches in NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology (BCSH)*

Searched using keywords: thrombophilia

**3. Do not use inferior vena cava (IVC) filters routinely in patients with acute venous thromboembolism (VTE).**

**Question:** What is the role of inferior vena cava (IVC) filters in patients with venous thromboembolism (VTE)?

**Search Strategy**

***Clinical Practice Guidelines***

*MEDLINE*

1. Exp Vena Cava Filters/
2. Ivc filter:.mp.
3. Inferior vena cava? Filter:.mp.
4. Or/1-3
5. exp practice guidelines/
6. practice guideline.pt.
7. practice guideline?.mp.
8. evidence-based medicine/
9. evidence-based medicine.mp.
10. or/5-9
11. 4 and 10

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology (BCSH)*

Searched using keywords: IVC filter, inferior vena cava filter.

**4. Do not administer plasma or prothrombin complex concentrates for non-emergent reversal of vitamin K antagonists (i.e., outside of the setting of major bleeding, intracranial hemorrhage or anticipated emergent surgery).**

**Original Question:** What is the role of plasma infusion (fresh frozen plasma) or prothrombin complex (PCC) in patients with an International Normalized Ratio (INR) less than 1.6?

**Original Search Strategy**

***Clinical Practice Guidelines Search***

*MEDLINE*

1. Exp plasma/
2. Prothrombin/
3. Plasma infusion:.mp.
4. Plasma transfusion:.mp.
5. Fresh frozen plasma:.mp.
6. Ffp:.mp.

7. Prothrombin complex:.mp.
8. Pcc:.mp.
9. Beriplex.mp.
10. Octaplex.mp.
11. Or/1-10
12. exp practice guidelines/
13. practice guideline.pt.
14. practice guideline?.mp.
15. evidence-based medicine/
16. evidence-based medicine.mp.
17. or/12-16
18. 11 and 17

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology*  
Searched using keywords: plasma, prothrombin, FFP.

### **Systematic Reviews and Meta-Analyses Search**

#### *MEDLINE*

1. exp plasma/
2. prothrombin/
3. plasma infusion:.mp.
4. plasma transfusion:.mp.
5. fresh frozen plasma:.mp.
6. ffp:.mp.
7. prothrombin complex:.mp.
8. pcc:.mp.
9. beriplex.mp.
10. octaplex.mp.
11. or/1-10
12. meta-analysis as topic.mp.
13. meta analysis.pt.
14. (meta analy\$ or metaanaly\$ or metanaly\$).tw.
15. (systematic review\$ or pooled analy\$ or statistical pooling or mathematical pooling or statistical summar\$ or mathematical summar\$ or quantitative synthes?s or quantitative overview?).tw.
16. (systematic adj (review? Or overview?)).tw.
17. (exp review literature as topic/ or review.pt. or exp review/) and systematic.tw.
18. or/12-18
19. (Cochrane or embase, or psychlit or psychlit or psychinfo or cinahl or cinhal or science citation index or scisearch or bids or sigle or cancerlit).ab.
20. (reference list\$ or bibliography\$ or hand-search\$ or relevant journals or manual search\$).ab.
21. (selection criteria or data extraction or quality assessment or jaded scale or methodological quality).ab.
22. (study adj selection).ab.
23. 21 or 22
24. review.pt.
25. 23 and 24
26. 18 or 19 or 20 or 25

27. (comment or letter or editorial or note or erratum or short survey or news or newspaper article or patient education handout or case report or historical article).pt.
28. 26 not 27
29. 11 and 28

*Cochrane Database of Systematic Reviews*

Searched using keywords: plasma infusion, plasma transfusion, fresh frozen plasma, FFP, prothrombin, PCC.

**Updated Question:** What is the role of plasma infusion (fresh frozen plasma) or prothrombin complex for non-emergent reversal of vitamin K antagonists (i.e., outside of the setting of major bleeding, intracranial hemorrhage or anticipated emergent surgery)?

**Updated Search Strategy**

***Clinical Practice Guidelines Search***

*MEDLINE*

1. Exp plasma/
2. Prothrombin/
3. Plasma infusion:.mp.
4. Plasma transfusion:.mp.
5. Fresh frozen plasma:.mp.
6. Ffp:.mp.
7. Prothrombin complex:.mp.
8. Pcc:.mp.
9. Beriplex.mp.
10. Octaplex.mp.
11. Warfarin: reversal:.mp.
12. Coumadin: reversal:.mp.
13. Vitamin K.mp.
14. Or/1-13
15. exp practice guidelines/
16. practice guideline.pt.
17. practice guideline?.mp.
18. evidence-based medicine/
19. evidence-based medicine.mp.
20. or/14-19
21. 14 and 20

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology*

Searched using keywords: plasma, prothrombin, FFP, warfarin, Coumadin, vitamin K.

No Search for Systematic Review or Meta-Analyses was conducted for the updated question as the ASH Choosing Wisely Task Force felt that the evidence from clinical practice guidelines sufficient to not warrant further searches for systematic reviews or for primary literature.

**5. Limit surveillance CT scans in asymptomatic patients following curative-intent treatment for aggressive lymphoma.**

**Question:** What is the appropriate schedule and follow-up period for computed tomography in the surveillance of asymptomatic patients following curative intent therapy for aggressive non-Hodgkin lymphoma (NHL)?

**Original Search Strategy**

***Clinical Practice Guidelines Search***

*MEDLINE*

1. Exp lymphoma, non-Hodgkin/
2. Non-Hodgkin: lymphoma:.mp.
3. NHL:.mp.
4. Diffuse large B-cell lymphoma:.mp.
5. DLBCL:.mp.
6. DLBC lymphoma:.mp.
7. Or/1-6
8. Surveillance:.mp.
9. Follow-up:.mp.
10. 8 or 9
11. 7 and 10
12. exp practice guidelines/
13. practice guideline.pt.
14. practice guideline?.mp.
15. evidence-based medicine/
16. evidence-based medicine.mp.
17. or/12-16
18. 11 and 17

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology*  
Searched using keywords: lymphoma, NHL, surveillance, or CT.

***Systematic Review and Meta-Analysis Search***

*MEDLINE*

1. Exp lymphoma, non-Hodgkin/
2. Non-Hodgkin: lymphoma:.mp.
3. NHL:.mp.
4. Diffuse large B-cell lymphoma:.mp.
5. DLBCL:.mp.
6. DLBC lymphoma:.mp.
7. Or/1-6
8. Surveillance:.mp.
9. Follow-up:.mp.
10. 8 or 9
11. 7 and 10
12. meta-analysis as topic.mp.
13. meta analysis.pt.
14. (meta analy\$ or metaanaly\$ or metanaly\$).tw.
15. (systematic review\$ or pooled analy\$ or statistical pooling or mathematical pooling or statistical summar\$ or mathematical summar\$ or quantitative synthes?s or quantitative overview?).tw.

16. (systematic adj (review? Or overview?)).tw.
17. (exp review literature as topic/ or review.pt. or exp review/) and systematic.tw.
18. or/12-18
19. (Cochrane or embase, or psychlit or psyclit or psychinfo or cinahl or cinhal or science citation index or scisearch or bids or sigle or cancerlit).ab.
20. (reference list\$ or bibliography\$ or hand-search\$ or relevant journals or manual search\$).ab.
21. (selection criteria or data extraction or quality assessment or jaded scale or methodological quality).ab.
22. (study adj selection).ab.
23. 21 or 22
24. review.pt.
25. 23 and 24
26. 18 or 19 or 20 or 25
27. (comment or letter or editorial or note or erratum or short survey or news or newspaper article or patient education handout or case report or historical article).pt.
28. 26 not 27
29. 11 and 28

*Cochrane Database of Systematic Reviews*

Searched using keywords: (lymphoma or NHL) and (CT or computed tomography)

**Primary Literature Search**

*MEDLINE*

1. Exp lymphoma, non-Hodgkin/
2. Non-Hodgkin: lymphoma:.mp.
3. NHL:.mp.
4. Diffuse large B-cell lymphoma:.mp.
5. DLBCL:.mp.
6. DLBC lymphoma:.mp.
7. Or/1-6
8. Surveillance:.ti.
9. CT.ti.
10. Computed tomography.ti.
11. Follow-up.ti.
12. Or/8-11
13. 7 and 12

The original search strategy was missing key terms for some aggressive lymphomas such as t-cell lymphoma and Burkitt's lymphoma. The literature search strategy was updated with terms for these lymphomas and re-run. The updated search strategy is below:

**Updated Search Strategy**

**Clinical Practice Guidelines Search**

*MEDLINE*

1. Exp lymphoma, non-Hodgkin/
2. Non-Hodgkin: lymphoma:.mp.
3. NHL:.mp.
4. Diffuse large B-cell lymphoma:.mp.

5. DLBCL:.mp.
6. DLBC lymphoma:.mp.
7. t-cell: lymphoma:.mp.
8. Burkitt: lymphoma:.mp.
9. Or/1-8
10. Surveillance:.mp.
11. Follow-up:.mp.
12. 10 or 11
13. 9 and 12
14. exp practice guidelines/
15. practice guideline.pt.
16. practice guideline?.mp.
17. evidence-based medicine/
18. evidence-based medicine.mp.
19. or/14-18
20. 13 and 19

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology*  
Searched using keywords: lymphoma, NHL, surveillance, or CT.

### **Systematic Review and Meta-Analysis Search**

#### **MEDLINE**

1. Exp lymphoma, non-Hodgkin/
2. Non-Hodgkin: lymphoma:.mp.
3. NHL:.mp.
4. Diffuse large B-cell lymphoma:.mp.
5. DLBCL:.mp.
6. DLBC lymphoma:.mp.
7. t-cell: lymphoma:.mp.
8. Burkitt: lymphoma:.mp.
9. Or/1-8
10. Surveillance:.mp.
11. Follow-up:.mp.
12. 10 or 11
13. 9 and 12
14. meta-analysis as topic.mp.
15. meta analysis.pt.
16. (meta analy\$ or metaanaly\$ or metanaly\$).tw.
17. (systematic review\$ or pooled analy\$ or statistical pooling or mathematical pooling or statistical summar\$ or mathematical summar\$ or quantitative syntheses or quantitative overview?).tw.
18. (systematic adj (review? Or overview?)).tw.
19. (exp review literature as topic/ or review.pt. or exp review/) and systematic.tw.
20. or/14-19
21. (Cochrane or embase, or psychlit or psyclit or psychinfo or cinahl or cinhal or science citation index or scisearch or bids or sigle or cancerlit).ab.
22. (reference list\$ or bibliography\$ or hand-search\$ or relevant journals or manual search\$).ab.
23. (selection criteria or data extraction or quality assessment or jaded scale or methodological quality).ab.
24. (study adj selection).ab.

25. 23 or 24
26. review.pt.
27. 25 and 26
28. 20 or 21 or 22 or 27
29. (comment or letter or editorial or note or erratum or short survey or news or newspaper article or patient education handout or case report or historical article).pt.
30. 28 not 29
31. 13 and 30

*Cochrane Database of Systematic Reviews*

Searched using keywords: (lymphoma or NHL) and (CT or computed tomography)

### **Primary Literature Search**

#### *MEDLINE*

1. Exp lymphoma, non-Hodgkin/
2. Non-Hodgkin: lymphoma:.mp.
3. NHL:.mp.
4. Diffuse large B-cell lymphoma:.mp.
5. DLBCL:.mp.
6. DLBC lymphoma:.mp.
7. T-cell: lymphoma:.mp.
8. Burkitt: lymphoma:.mp.
9. Or/1-8
10. Surveillance:.ti.
11. CT.ti.
12. Computed tomography.ti.
13. Follow-up.ti.
14. Or/10-13
15. 9 and 14

## **6. Do not diagnose or initiate treatment of lymphoma on the basis of tissue obtained exclusively with fine needle aspiration (FNA).**

**Question:** Is there a role for FNA in the diagnosis of new suspected lymphoma?

### **Search Strategy**

#### **Clinical Practice Guidelines**

#### *MEDLINE*

1. Exp lymphoma/
2. Lymphoma:.mp.
3. 1 or 2
4. diagnos:.mp.
5. exp diagnosis/
6. 4 or 5
7. 3 and 6
8. exp practice guidelines/
9. practice guideline.pt.
10. practice guideline?.mp.
11. evidence-based medicine/



12. evidence-based medicine.mp.
13. or/8-12
14. 7 and 13

*NGC, CMA Infobase, SIGN, British Committee for Standards in Haematology*  
Searched using keywords: lymphoma, FNA, fine needle aspiration.

**APPENDIX 1B – Ten Recommendations short-listed for the ASH Choosing Wisely® Campaign**

**Table 4:**

	Recommendation
1	In situations where transfusion of red blood cells is necessary, transfuse the minimum number of units required to relieve symptoms of anemia or to return the patient to a safe hemoglobin range (7 to 8 g/dL in stable, non-cardiac, in-patients).
2	Do not test for thrombophilia in adult patients with venous thromboembolism occurring in the setting of major transient risk factors (surgery, trauma or prolonged immobility).
3	Do not use inferior vena cava filters routinely in patients with acute venous thromboembolism.
4	Do not administer plasma or prothrombin complex concentrates for non-emergent reversal of vitamin K antagonists (ie. outside of the setting of major bleeding, intracranial hemorrhage or anticipated emergent surgery).
5	Limit surveillance CT scans in asymptomatic patients following curative-intent treatment for aggressive lymphoma.
6	Do not diagnose or initiate treatment of lymphoma on the basis of tissue obtained exclusively with fine needle aspiration.
7	Outside of a clinical trial, do not use anti-cancer therapy in patients with benign monoclonal gammopathy or smoldering myeloma and no evidence of related organ or tissue injury (such as hypercalcemia, renal insufficiency, anemia, or lytic bone lesions), regardless of cytogenetic abnormalities.
8	Do not prescribe oral iron for non-pregnant, adult patients with anemia without confirming a diagnosis of and investigating the cause of iron deficiency.
9	Intravenous gammaglobulin (IVIG) should not be routinely administered to patients with acquired hypogammaglobulinemia secondary to lymphoproliferative disease. Administration should be limited to those patients with recurrent bacterial infection who have either failed antibiotic prophylaxis, or are not candidates for antibiotic prophylaxis.
10	Avoid testing and/or treating for heparin-induced-thrombocytopenia (HIT) in patients with a low pre-test probability for HIT based on accepted clinical scoring systems.