The Questionnaire

The first 4 case vignettes examine intraoperative transfusion decisions. Each case vignette has 2 sections (1&2) and each section has 3 cardiac index scenarios (a,b & c). For each cardiac index scenario, please indicate below what hemoglobin concentration you would transfuse red blood cells. The 4 case vignettes describe patients with different ages and sex.

Case Scenario 1* Factors affecting red cell transfusions *INTRAOPERATIVELY* in women.

A 55-year-old female is having primary elective coronary artery bypass surgery. She has no preoperative morbidity. Her heart rate is 90 beats /minute and her blood pressure is 110/70 mm Hg. She is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following intraoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Case Scenario 2* Factors affecting red cell transfusions *INTRAOPERATIVELY* in women.

A 75-year-old female is having primary elective coronary artery bypass surgery. She has no preoperative morbidity. Her heart rate is 90 beats /minute and her blood pressure is 110/70 mm Hg. She is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following intraoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Case Scenario 3* Factors affecting red cell transfusions *INTRAOPERATIVELY* in men.

A 55-year-old male is having primary elective coronary artery bypass surgery. He has no preoperative morbidity. His heart rate is 90 beats /minute and his blood pressure is 110/70 mm Hg. He is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following intraoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Case Scenario 4* Factors affecting red cell transfusions *INTRAOPERATIVELY* in men.

A 75-year-old male is having primary elective coronary artery bypass surgery. He has no preoperative morbidity. His heart rate is 90 beats /minute and his blood pressure is 110/70 mm Hg. He is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following intraoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

The last 4 case vignettes examine POSTOPERATIVE transfusion decisions in the intensive care unit (ICU).

<u>Case Scenario 5*</u> Factors affecting red cell transfusions <u>*POSTOPERATIVELY*</u> (<u>ICU only) in women.</u>

A 55-year-old female is having primary elective coronary artery bypass surgery. She has no preoperative morbidity. Her heart rate is 90 beats /minute and her blood pressure is 110/70 mm Hg. She is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following postoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Case Scenario 6* Factors affecting red cell transfusions *POSTOPERATIVELY* (ICU only) in women.

A 75-year-old female is having primary elective coronary artery bypass surgery. She has no preoperative morbidity. Her heart rate is 90 beats /minute and her blood pressure is 110/70 mm Hg. She is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following postoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Case Scenario 7* Factors affecting red cell transfusions *POSTOPERATIVELY* (ICU only) in men.

A 55-year-old male is having primary elective coronary artery bypass surgery. He has no preoperative morbidity. His heart rate is 90 beats /minute and his blood pressure is 110/70 mm Hg. He is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following postoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Case Scenario 8* Factors affecting red cell transfusions *POSTOPERATIVELY* (ICU only) in men.

A 75-year-old male is having primary elective coronary artery bypass surgery. He has no preoperative morbidity. His heart rate is 90 beats /minute and his blood pressure is 110/70 mm Hg. He is euvolemic and has a mixed venous oxygen saturation of 70%. Below what hemoglobin concentration would you transfuse red cells in the following postoperative scenarios? (Check one in each scenario.)

Case Scenarios	**Hemoglobin Concentration (g/dL)**					
	5.0	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**
1.a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						
2. If she has intraoperative myocardial ischemia and						
a)Cardiac index >2.5						
b)Cardiac index between 2 and 2.5						
c)Cardiac index <2						

Please rank the 3 most significant factors that affect your decision to transfuse **red blood cells** in the **intraoperative** setting. Place the numbers that appear next to these 3 factors in their respective ranking boxes.

Factor	**Rank**
1.Intraoperative blood loss	
2.Age	☐ Most Significant
3.Sex	
4.Cardiac index	
5.Intraoperative hemoglobin concentration	☐ Second
6.Myocardial ischemia	
7.Lactic Acidosis	
8.Mixed venous oxygen saturation	☐ Third
9. Comorbid illness; PLEASE SPECIFY	
10.Other; PLEASE SPECIFY	

Please rank the 3 most significant factors that affect your decision to transfuse **red blood cells** in the **postoperative setting (ICU only).** Place the numbers that appear next to these 3 factors in their respective ranking boxes.

Factor	**Rank**
1.Intraoperative blood loss	
2.Age	☐ Most Significant
3.Sex	
4.Cardiac index	
5.Intraoperative hemoglobin concentration	☐ Second
6.Myocardial ischemia	
7.Lactic Acidosis	
8.Mixed venous oxygen saturation	☐ Third
9. Comorbid illness; PLEASE SPECIFY	
10.Other; PLEASE SPECIFY	

The following questions characterize your practice.

1. Please describe your specialty. Please check

    1. Anesthesia
    2. Cardiovascular Surgery

2. Please describe your primary practice setting. Please check.

    1. Academic
    2. Community

3. When are you involved in the decision to transfuse red cells to CABG patients? Check ALL that apply.

    1. Preoperative
    2. Intraoperative
    3. Postoperative

4. How many CABG cases are performed at your centre in one year?

5. How many CABG cases are you involved with in one year?

6. How many years have you been practicing anesthesia or cardiovascular surgery after completing post-graduate training?

7. Please state your age in years.

8. Please indicate your sex.

    1. Male
    2. Female

Please provide us with any comments about any of the topics raised or the survey itself.

Thank you for taking the time to complete this questionnaire.