

### **Supplement 3.** Example of the first-round assessment of content validity

#### Case 1

1. A 45-year-old breast cancer patient visited an emergency room with stomatitis and fever as chief complaints on the seventh day after the administration of anti-cancer drugs started. The result of a CBC test was Hb 9 g/dL, Hct 18%, and platelets 5000/mm<sup>3</sup>. Therefore, 2 units of packed red blood cells were prescribed.

2. Question before modification:

Which are the appropriate general examinations that should be performed to confirm compatibility before blood transfusion?

- 1) Cross-matching test, HBsAg Test
- 2) Antibody screening test, HIV test
- 3) ABO and Rh type, cross-matching test
- 4) ABO and Rh type, genetic testing
- 5) Antibody screening test, cold agglutinin test

3. Job of corresponding nurse: F3 Transfusion Nursing

4. Corresponding learning objective: 3. Cancer Management

5. Mean job validity: 3.9

6. Mean learning objective validity: 3.2

7. Advice of expert: Learning objective 5-2) seems more appropriate.

8. Modification of case

9. Final question: Question modification

#### Case 2

1. A 45-year-old breast cancer patient visited an emergency room with stomatitis and fever as chief complaints on the seventh day after the administration of anti-cancer drugs started. The result of a CBC test was Hb 9 g/dL, Hct 18%, and platelets 5000/mm<sup>3</sup>. Therefore, 2 units of packed red blood cells were

prescribed.

2. Question after modification:

Which Hb level would be normally expected after the transfusion?

- 1) 9 g/dL
- 2) 10 g/dL
- 3) 11 g/dL
- 4) 12 g/dL
- 5) 13 g/dL

3. Job of corresponding nurse: F3 Transfusion Nursing

4. Corresponding learning objective: 2. Activity-Rest Nursing

5. Mean job validity: 3.9

6. Mean learning objective validity: 3.1

7. Advice of expert: Learning objective 5-2) seems more appropriate.

8. Modification of case

9. Final question: question modification