



Sun States: Blood Banks for Animals
2927 NE 6 Ave
Wilton Manors FL 33334

Transfusion Worksheet for RBC-containing Components

Whole Blood

Indications for use:

- Life-threatening, acute hemorrhage (> 1 patient blood volume) *and*
- Adequate resuscitation with crystalloid (or colloid, crystalloid preferred) *and/or*
- Anemia (Hb < 8 g/dL, PCV $<24\%$) *plus* coagulopathy (prolonged bleeding likely due to both diminished platelet function/number *and* clotting-factor deficiency) *plus* symptoms

Calculate the dose:

_____ mL required = _____ Estimated blood loss (mL)

Packed Red Blood Cells

Indications for use:

- Anemia (Hb < 8 g/dL, PCV $<24\%$) *plus*
 - Symptoms (e.g., tachycardia, EKG changes, hypoxemia, signs of ischemia) *and/or*
 - Ongoing blood loss (continued hemorrhage or intraoperative bleeding) *and/or*
 - Refractoriness to EPO, Iron, or other appropriate therapy *and/or*
 - Reduced timeframe for response to EPO, Iron, or therapy (e.g., emergency surgery)

Calculate the dose:

_____ mL required = [_____ kg x 70 x (_____ PCV_{desired} - _____ PCV_{current})] / _____ PCV_{prbcs}

(assume PCV_{prbcs}=60%; pt. wt in kg= pt. wt. in lbs / 2.2)

Assess adequacy of therapy:

- Improvement in anemia (Hb ≥ 7 g/dL, PCV $\geq 21\%$ *and* resolution of symptoms)
- Clinical correction of coagulopathy (resolution of bleeding)

Notes:

- Target PCV will vary depending on clinical status of patient. *It is not necessary to routinely transfuse patients to achieve PCV $>30\%$.*
- Evaluate coagulopathies clinically (cessation of active bleeding) rather than strictly by lab values. *PT/aPTT* are unlikely to completely correct.
- *Minor elevations in the PT/aPTT are unlikely to result in clinically significant bleeding and do NOT require treatment in the absence of clinical symptoms.*
- If ongoing blood loss occurs despite apparent correction of coagulopathy, *search for a source of bleeding that has not been appropriately addressed (e.g., hemoperitoneum).*