**Serum and Plasma QC**

Evaluation for RBC lysis

1. Use a standard spectrophotometer to measure the AU of 100 ul serum or plasma at 415 nm. The AU of a PBS control should also be measured

2. The [AU sample – AU PBS] should be 0.41-0.43.

3. For precious samples, dilute the sample 1:3 in PBS. In this case, [AU sample – AU PBS] should be 0.1-0.15.

Evaluation of WBC lysis

1. This is done using a luciferase-based assay for ATP.

2. The concentration of ATP should be <500 nM.

3. Even low intensity physical exercise can increase the ATP concentration to 1000 nM, although this should resolve after 20 minutes of rest.

4. EDTA inhibits degradation of ATP, so collection of plasma using EDTA as the anticoagulant is ideal.