

## **SOP- CD34/BRM/09**

### **Sort purification with increased viability of CD34+ cells using AQIX technology**

#### STEPS:

1. Isolate CD34+ cells from whole blood and then incubate for 10-15 minutes in (a) supramagnetic nanoparticle elutant (e.g., Easystep™) at RTP or, (b) AQIX® RS-I + magnetic nanoparticles at RTP.
2. Pour off nanoparticle supernatant and resuspend in fresh, magnetic elutant (a) and (b) and incubate for a further 5 minutes of separation at RTP in .
3. Remove tube containing positively selected CD34+ cells from magnetic machine and pour off supernatant.
4. Resuspend CD34+ cell fraction in media type;  
a) AQIX® RS-I, or  
b) AQIX® RS-I + 10% human AB serum  
c) Comparator media of choice (e.g., RPMI)
5. Incubate overnight (12-18 hours) with media type a), b) and c) using a 5% CO<sub>2</sub> in humidified air at 37 °C.
6. Assess % yield and viability of CD34+ cells (or CFU's)