

## METHOD FOR COLLECTING A DESIRED BLOOD COMPONENT AND PERFORMING A PHOTOPHERESIS TREATMENT

### Abstract of the Invention

An improved method for separating whole blood into components and collecting a desired blood component. The method allows a desired blood component to be subjected to centrifugal forces within a separator for prolonged periods of time, yielding a cleaner cut and higher yield of the desired blood component. Whole blood is drawn from a source and pumped into a separator, the undesired blood components are removed from the separator at rates so as to build up the desired blood component in the separator. The desired blood component is only removed after a predetermined amount of the desired blood component has built up in the separator. It is preferred that the desired blood component be buffy coat and that the method be used to perform photopheresis treatments. In another aspect, the invention is a method of performing a full photopheresis treatment to treat diseases in a reduced time, preferably less than about 70 minutes, and more preferably less than about 45 minutes.

Figure 26