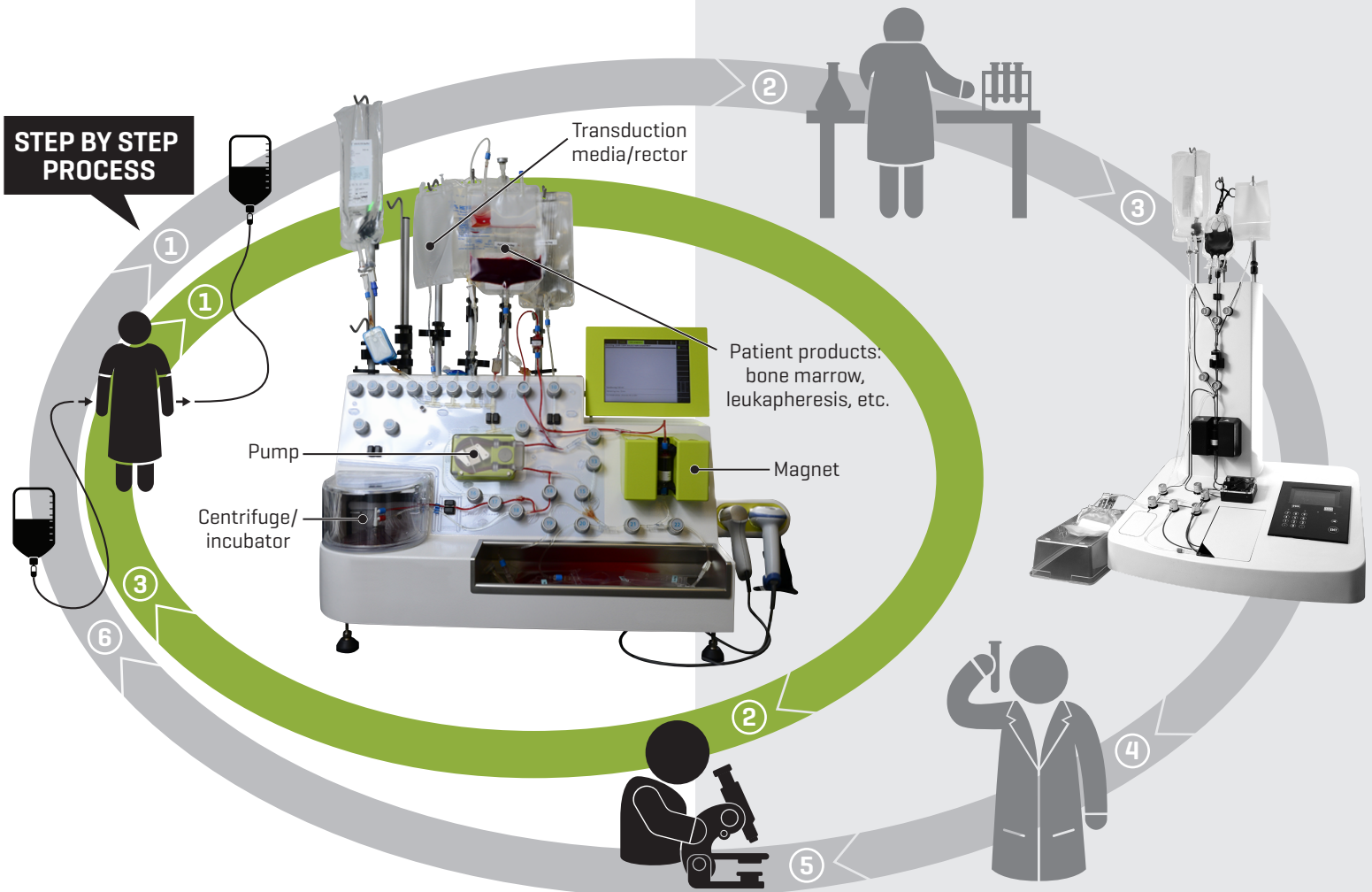


Point-of-Care Blood Stem Cell Gene Therapy

Emerging technology can transform blood stem cell gene therapy from a cost-prohibitive, highly-specialized and complex infrastructure into an inexpensive strategy with a small footprint for global utility.

POINT-OF-CARE APPROACH

CURRENT INFRASTRUCTURE



- 1 Patient cell product remains at point-of-care institution. Small footprint, semi-automated device performs product preparation, stem cell isolation, gene transfer and final formulation steps with minimal user interface. **[≤30 hours]**
- 2 Samples of the final cell product are tested for infusion safety while product remains at point-of-patient care. **[1-2 hours]**
- 3 Cells are infused back into the patient. **[1-2 hours]**

- 1 Patient cell product is transferred to cGMP compliant facility. **[1-2 hours]**
- 2 Highly trained staff manually prepare product for stem cell isolation. **[3-6 hours]**
- 3 Automated stem cell isolation is performed on a previous generation technology with minimal staff interface. **[1 hour]**
- 4 Isolated stem cells are manually cultured during the process of gene transfer requiring highly trained staff and clean room procedures. **[2-3 days]**
- 5 Samples of the cell product obtained throughout manufacturing are subjected to testing for infusion safety. **[1-2 hours]**
- 6 Cells are transferred back to the patient bedside for infusion. **[2-3 hours]**

MAXIMUM TIME TO COMPLETE ENTIRE PROCESS

