

Publication

A survey on cellular and engineered tissue therapies in Europe in 2008

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Cellular therapy is an evolving investigational treatment modality in regenerative medicine, but little published information is available on its current use. Starting from the established European group for Blood and Marrow Transplantation activity survey on hematopoietic stem cell transplantation, a joint committee of four major scientific organizations made a coordinated attempt to collect detailed information in Europe for the year 2008. Thirty-three teams from 16 countries reported data on 656 patients to a "novel cellular therapy" survey, which were combined to additional 384 records reported to the standard European group for Blood and Marrow Transplantation survey. Indications were cardiovascular (29%; 100% autologous), musculoskeletal (18%; 97% autologous), neurological (9%; 39% autologous), epithelial/parenchymal (9%; 18% autologous), autoimmune diseases (12%; 77% autologous), or graftversus-host disease (23%; 13% autologous). Reported cell types were hematopoietic stem cells (39%), mesenchymal stromal cells (47%), chondrocytes (5%), keratinocytes (7%), myoblasts (2%), and others (1%). In 51% of the grafts, cells were delivered after expansion; in 4% of the cases, cells were transduced. Cells were delivered intravenously (31%), intraorgan (45%), on a membrane or gel (14%), or using three-dimensional scaffolds (10%). This data collection platform is expected to capture and foresee trends for novel cellular therapies in Europe, and warrants further consolidation and extension.

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