CHONDRON®, the first Korean cell therapy product for cartilage repair

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Despite of splendid achievement in medical and pharmaceutical science, a number of disorders still remain unveiled and one of which is replacement of damaged or malfunctioning organs. Artificial organs have been available as a substitute to a human damaged organ. However, artificial organ still needs to be improved for biological acceptance and its life span. Another available substitute is allograft organ transplant technology, though it has also problems due to the unbalance of supply and demand, infectious disease and other downsides. The real ex vivo organ reconstruction seems not to be able to occur in the near future.

Tissue engineering, which started since 1990, is beginning to shed light on possible reconstruction of malfunctioning organ. Cell transplantation therapy is a practical progress in terms of organ reconstruction, specially in cartilage repair. Cellontech has taken the lead since 1996 and invested R&D in biotechnology. The first achievement by Cellontech, CHONDRON®, was approved by kFDA as the first biotechnology medicine in Korea. CHONDRON® is made of chondrocytes, which are isolated from a patient's cartilage biopsy, expanded in number for a month and packaged into a vial in the GMP facility.