Biological Support for Kidney Patients (BioKid)

At a Glance

- Status: Completed Consortium
- Year Launched: 2010
- Initiating Organization: Biomedical Materials
- Initiator Type: Industry
- Location: Europe

Abstract

Work is now underway on Biological Support for Kidney Patients (BioKid), a bioreactor of kidney cells to remove toxins that remain after hemodialysis. BioKid is an outstanding aid in improving the quality of hemodialysis treatments and in reducing the risk of complications, such as cardiovascular problems, resulting from the accumulation of toxic waste products.

Mission

The bioreactor is a good supplement to present-day hemodialysis and can make the lives of many kidney patients much more tolerable. In effect, BioKid mimics the function and operation of our nephrons. We can achieve this with “live membranes” from special polymers that are covered with a bioactive layer on which human kidney cells can grow. Aside from these smart membranes, we have generated special long-lived kidney cells. With an innovative culture system that is also being developed, these kidney cells can be widely used in the hospital or in the clinic. BioKid is an outstanding aid in improving the quality of hemodialysis treatments and in reducing the risk of complications, such as cardiovascular problems, resulting from the accumulation of toxic waste products. However, it will still take several years before the research is completed and this technique
can actually be applied in patients.

Financing

Budget: € 4.000.000

Publications

Homepage


Points of Contact

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