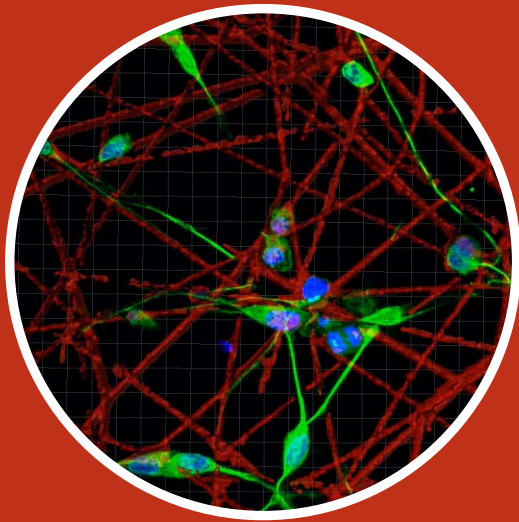


# STEP1 - A NEW THERAPY FOR SPINAL CORD INJURY

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Traumatic injuries of the central nervous system is a serious health and socio-economic problem for which there is no treatment. The invention is a new solution of pharmacotherapy based on the introduction of 2 drugs in a polymeric biomaterial for controlled drug delivery to be used in the prevention of secondary degeneration after the traumatic event.

**Protection:** International

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## INVENTION

The incidence of traumatic spinal injury, which can result in permanent motor and sensory disability, is estimated at 23 cases per million in the world, and in 16 cases per million in Europe.

The severity of disability is proportional, not only to the primary lesion (derived from the traumatic event), but also to the secondary degeneration that, triggered by the trauma, evolves in the following days.

The invention is a new solution of pharmacotherapy achieved through the introduction of two drugs in a polymeric material which allows the local controlled release of the drugs, to be used by surgical implant in the prevention of secondary degeneration of traumatic event.

## ADVANTAGES

- The advantages are primarily of a clinical nature, since the invention tackles a phase of the lesion not yet subject to therapy.
- The invention aims to limit secondary degeneration, which is responsible for the chronic disability resulting from the primary injury.

## APPLICATIONS

- Traumatic spinal cord injury requiring surgical stabilization of the vertebral column
- The different processing of polymeric materials will allow the device to be used on pathologies/injuries that do not involve surgical intervention

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