Novel catheter - balloon-tipped for continuous nerve block

Value proposition/USP
Imagine leaving the hospital with no pain! In a time where health expenses rise and hospitals all over the world are challenged financially providing safe and reliable pain relief after surgery new interventions are needed. Conventional pain therapies with opioids have several adverse effects. Preliminary studies with cPNBs, where the patient is sent home with a nerve-block catheter continuous delivering local anesthetic show the drawback that the catheter tip easily gets displaced with huge pain for the patient. The current invention is a balloon-tipped cPNB that fixes the tip of the catheter in close proximity of the nerve, securing patient safety and a pain free experience with re-hospitalization.

Business Opportunity/Objective/Commercial Perspectives
The market is enormous worldwide:
The number of orthopedic surgeries is estimated to reach 6.6 M/year in the US 2020. And the market is not only in the US nor limited to orthopedic surgery. Besides arthroplastic surgery cPNBs can be used for pain relief in patients undergoing surgery for fractures, removal of tumors, arthroscopic surgery, plastic surgery, burns etc.

Technology Description/Technology Summary
The invention consists of a catheter for continuous nerve block. The catheter has an inflatable balloon at the tip. The catheter has two internal lumens, one for inflating of the balloon and the other for delivering the local anesthetic to block the nerve. The balloon serves to keep the tip of the catheter in close proximity to the nerve so that the local anesthetic continuously is delivered around the nerve making a consistent nerve block as long as wanted.

Development Phase/Current state
A patent application has been filed and progress into national phase for major markets. Drawings have been presented to potential manufacturers of whom one is going to be chosen. A pilot study in 20 consecutive patients at Rigshospitalets department for orthopedic surgery for major shoulder surgery will be carried out during summer 2018.

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Technology Seeking: Funding/Investors Licensee Partner/Research Collaboration/IPR Sales


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