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Preparation of s/o/w emulsion using SPG membrane

PLOS One

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Works for me

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ABSTRACT

Solid-in-oil-in-water emulsion of miriplatin is prepared by pushing miriplatin suspension through 20 μ m SPG membrane (SPG technology) using a syringe pump. 0.8w% HCO solution is used as a outer aqueous phase.

EXTERNAL LINK

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KEYWORDS

mono-dispersed, emulsion, miriplatin

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- 1 Prepare  **10 mL** half-saline and add  **0.08 mg** of Polyoxyethylene hydrogenated castor oil 60 (HCO 60).
Use a stirrer to make the solution.
- 2 Aspirate the solution to 10mL syringe and connect it to a filter kit with 20µm hydrophilic-coated SPG membrane (SPG Technology Co., Ltd).
Push the whole solution into the filter kit.
- 3 Aspirate  **3 mL** of Lipiodol (Gurbet, Villepinte, France) in a syringe and add it to the bottle of miriplatin (Dainippon Sumitomo Pharma, Osaka, Japan), thus prepare miriplatin suspension.
- 4 Aspirate miriplatin suspension with a syringe and connect to the filter kit, which was prepared in step 2.
First, aspirate air in the system and then set a syringe to a syringe pump.
Set stirrer beneath the filter kit.
Start a syringe pump with a speed of 20ml/hr and start a stirrer at the same time with a speed of 300rpm.
- 5 Increase the speed of stirrer by 200rpm every 5 minutes.