Abstracts of the Specification

This invention pertains to the disclosure of a paclitaxel submicron emulsion. The paclitaxel submicron emulsion in this invention comprises paclitaxel/steroid compound, oil for injection, water for injection, emulsifier, assistant emulsifier and isotonic agent, in the paclitaxel/steroid compound as described, the mole ratio between paclitaxel and steroid is 1:0.2~4; preferably 1:0.25~2. This invention also discloses the preparation procedure and application of the paclitaxel submicron emulsion. An oil-in-water submicron emulsion with an average particle diameter of 400 nm and pH of 3.5-6 is prepared by dissolving paclitaxel steroid compound into oil phase using steroid compound as vector and based on the improvement of compound on the oil solubility of the drug, and this submicron emulsion provides superior safety and efficiency when used to treat malignant tumor.