Patent Search

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Abstract:

A method of evaluation of a reconstitutable dry suspension to improve the dissolution of poorly water-soluble celecoxib. A poorly aqueous soluble non-ionizable polymer; wherein said nanoparticles have an average size of less than 500 nm; and said nanoparticles comprise a solid core. A COX-2 inhibitor having a solubility in water of less than 1 mg/mL over the pH range of 6.5 to 7.5 at 25°C, wherein at least 90 wt% of said COX. Wet granulating celecoxib or a pharmaceutically acceptable salt thereof and one or more excipients to obtain a wet granulate, wherein said wet granulate does not include amlodipine. The water-soluble polymer carrier is a celecoxib solid dispersion, characterized in that the polyvinylpyrrolidone (PVP). Dissolving celecoxib, a water soluble polymer carrier, and a solubilizer in a solvent to form a solid dispersion solution. Mixing the adsorbent with the solid dispersion solution to form a mixed liquid. The excipient(s) are selected from the group consisting of pharmaceutically acceptable diluents, disintegrants, binding agents, wetting agents and lubricants.

Complete Specification

Technical Field

[0001] The embodiments herein generally relate to method of evaluation of a reconstitutable dry suspension to improve the dissolution of poorly water-soluble celecoxib.

Description of the Related Art

[0002] The present invention relates to nanoparticles comprising COX-2 inhibitors and a poorly aqueous soluble non-ionizable polymer. Formulating COX-2 inhibitors as a nanoparticle. The nanoparticles must be stabilized so that they do not aggregate into larger particles in aqueous suspensions. Often surface modifiers such as surfactants are used to stabilize the nanoparticles, but such materials can have adverse physiological effects when administered. In addition, without a surface modifier present, the surface of the nanoparticles is unprotected, leading to a decrease in performance and stability because of particle aggregation and/or coalescence.

[0003] Celecoxib is a non-steroidal anti-inflammatory drug (NSAID) that has anti-inflammatory, analgesic, and antipyretic properties. The mechanism of action of celecoxib is believed to be due to inhibition of prostaglandin synthesis, primarily via inhibition of cyclooxygenase.

[0004] Celecoxib, represented by the chemical name 4- [5 [(4-methylphenyl) -3- (trifluoromethyl) -1H-pyrazol-1-yl] benzene sulfonamide, is cyclooxygenase (COX) As a selective inhibitor for -2, it has the effect of treating and preventing arthritis without side effects on the gastrointestinal tract. It is currently marketed under the brand name Celebrex Capsule.

SUMMARY

[0005] In view of the foregoing, an embodiment herein provides a many conditions that can cause pulmonary fibrosis include chronic inflammatory processes sarcoidosis, Wegener's granulomatosis, infections, environmental agents asbestos, silica, exposure to certain gases, exposure Used in ionizing radiation such as radiation therapy for

View Application Status