

Active Pharmaceutical Ingredient and Impurity Profiling Nimesulide

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Abstract: *The first nimesulide was launched in Italy for the first time as Aulin and Mesulid in 1985, it is the most frequently prescribed drug for pain and fever. It is listed as one of the Essential Medicines. Nimesulide is available throughout the world as original product. The first marketing authorization for nimesulide was approved by Italy in 1985. After one quarter of a century we evaluated its peculiar characteristics compared to other NSAIDs. Nimesulide is the only NSAID related with arylsulfonamide class and is a COX-2 preferential NSAIDs, because despite having prevalent effect on COX-2, has a balanced action on both cyclooxygenase. The gastrointestinal absorption is rapid and complete and explain the shorts onset of action. Nimesulide is rapidly distributed in the synovial fluid, where it persists longer than in the blood, thus contributing to effectiveness of the drug in pain control. From the standpoint of safety, nimesulide arises NSAIDs with lower risk of upper gastrointestinal bleeding thanks to its preferential activity on COX-2. In relation to the risk of severe hepatic reactions, the benefit profile of nimesulide was considered by European regulatory authorities similar to other NSAIDs. Respecting international guidelines, the use of nimesulide in pain management, as that of other NSAIDs, must be considered as that of other NSAIDs alternative therapy when paracetamol is ineffective or where the pain is caused or supported by inflammatory process.*

Objective:

1. To tell, an antipyretic anti inflammatory drug.
2. Describing nimesulide.
3. To use chromatography to evaluate the impurity profile

Keywords: Mimesulide

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