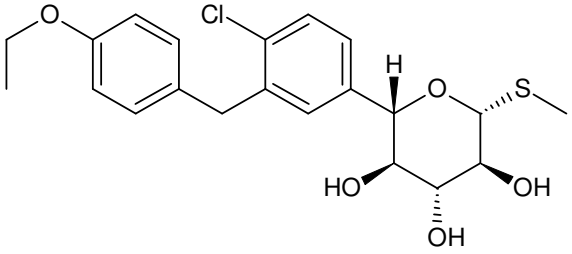
In effect, continuous flow synthesis has many advantages over conventional batch type synthesis since it may achieve better yield, better purity, reduced cost and better reproducibility.

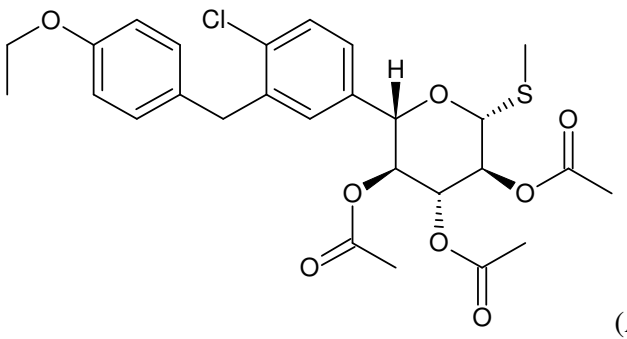
Thus, it is specifically intended to provide such a process.

SUMMARY

In one aspect, the present disclosure provides a process for the preparation of the crystalline form II of sotagliflozin:



from the following compound of formula (A):



(A)

said process being continuously performed and comprising at least the steps of:

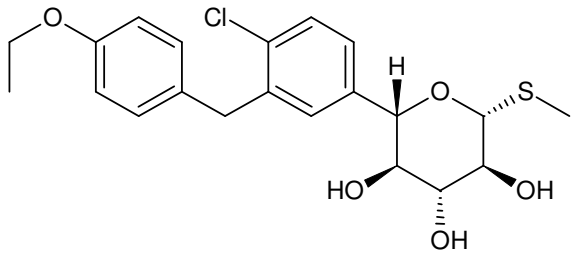
a) performing in a reaction chamber the reaction of said compound of formula (A) in solution in toluene or in xylene or in mixture thereof, and at least sodium methoxide and methanol, at a temperature below the boiling point of methanol, to form sotagliflozin in mixture with sodium salts;

b) conducting in a crystallization chamber the crystallization of sotagliflozin formed in step a), in a non-aqueous solvent medium including at least toluene, or xylene, or mixture thereof, and free of sodium salts, at a temperature of crystallization of the form II of sotagliflozin; and

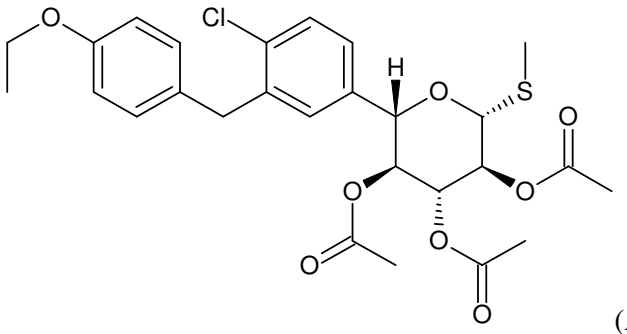
c) isolating the crystalline form II of sotagliflozin.

DESCRIPTION

In particular, exemplary embodiments relate to a particular process for the preparation of the crystalline form II of sotagliflozin:



from the following compound of formula (A):



(A)

said process being continuously performed and comprising at least the steps of:

a) performing in a reaction chamber the reaction of said compound of formula (A) in solution in toluene or in xylene or in mixture thereof, and preferably in toluene, and at least sodium methoxide and methanol, at a temperature below the boiling point of methanol, to form sotagliflozin in mixture with sodium salts;

b) conducting in a crystallization chamber the crystallization of sotagliflozin formed in step a), in a non-aqueous solvent medium including at least toluene, or xylene or mixture thereof, and free of sodium salts, at a temperature of crystallization of the form II of sotagliflozin; and

c) isolating the crystalline form II of sotagliflozin.