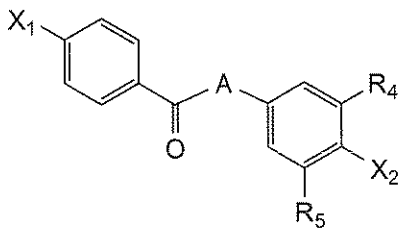
seeking to assess in NASH drugs as antioxidants but none of these treatments has yet showed convincing results (Nelson A et al., 2009).

The need for novel therapeutic options for the management of liver disorders, in particular those involving liver fibrosis and/or steatosis, is still clear and urgent.

SUMMARY OF INVENTION

A clinical study has surprisingly shown that the treatment of patients with a 1,3-diphenylprop-2-en-1-one derivative provides a statistically relevant reduction of liver-specific biochemical markers in the plasma, demonstrating the hepatoprotective properties of a family of compounds that is defined by means of a General Formula (I).

In one aspect, there is provided a use of a compound of General Formula (I)



in which:

X1 represents a halogen, a R1, or G1-R1 group;

A represents a CH=CH or a CH2-CH2 group;

X2 represents a G2-R2 group;

G1 and G2, identical or different, represent an atom of oxygen or sulfur;

R1 represents a hydrogen atom, an unsubstituted alkyl group, an aryl group or an alkyl group that is substituted by one or more halogen atoms, an alkoxy or an alkylthio group, cycloalkyl groups, cycloalkylthio groups or heterocyclic groups;

R2 represents an alkyl group substituted by at least a –COOR3 group, wherein R3 represents a hydrogen atom, or an alkyl group that is substituted or not by one or more halogen atoms, cycloalkyl groups, or heterocyclic groups;

R4 and R5, identical or different, representing an alkyl group that is substituted or not by one or more halogen atoms, cycloalkyl groups, heterocyclic groups;

in the manufacture of a medicament for treating of liver disorders.

In another aspect, there is provided a use of a pharmaceutical composition comprising a compound of General Formula (I) as defined herein, in the manufacture of a medicament for treating liver disorders.

The present ~~invention~~ disclosure provides novel 1,3-diphenylprop-2-en-1-one derivatives of General Formula (I) (said derivatives being elsewhere also referred to as the "compounds") or pharmaceutical compositions comprising the same for use in a method for treating liver disorders, in particular those ones that lead to the increase of plasma level of biochemical markers such as aminotransferases. The 1,3-diphenylprop-2-en-1-one derivatives of General Formula (I) and pharmaceutical compositions comprising the same have hepatoprotective properties and can be used in methods for treating liver disorders involving the pathological disruption, inflammation, degeneration, and/or proliferation of liver cells, such as liver fibrosis, fatty liver disease and non-alcoholic steatohepatitis.

Further objects of the present ~~invention~~disclosure, including specific general formulas of the compounds of interest, are provided in the Detailed Description.

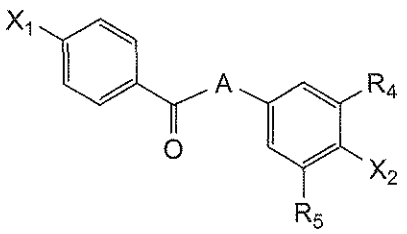
DESCRIPTION OF THE FIGURES

Abbreviations used in the figures and in the text:

- ALAT = alanine aminotransferase
- CCL5 = chemokine (C-C motif) ligand 5
- Col1a1 = collagen, type I, alpha 1

CLAIMS

1. Use of a compound of General Formula (I)



in which:

X1 represents a halogen, a R1, or G1-R1 group;

A represents a CH=CH or a CH2-CH2 group;

X2 represents a G2-R2 group;

G1 and G2, identical or different, represent an atom of oxygen or sulfur;

R1 represents a hydrogen atom, an unsubstituted alkyl group, an aryl group or an alkyl group that is substituted by one or more halogen atoms, an alkoxy or an alkylthio group, cycloalkyl groups, cycloalkylthio groups or heterocyclic groups;

R2 represents an alkyl group substituted by at least a –COOR3 group, wherein R3 represents a hydrogen atom, or an alkyl group that is substituted or not by one or more halogen atoms, cycloalkyl groups, or heterocyclic groups;

R4 and R5, identical or different, representing an alkyl group that is substituted or not by one or more halogen atoms, cycloalkyl groups, heterocyclic groups;

in the manufacture of a medicament for treating of liver disorders.

2. The use of claim 1 wherein the compound is of general formula (I) in which:

X1 represents a halogen, a R1, or a G1-R1 group;

A represents a CH=CH group;

X2 represents a G2-R2 group;