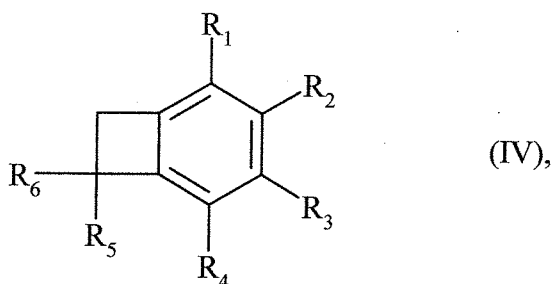


**ABSTRACT**

**NEW PROCESS FOR THE PREPARATION OF FUNCTIONALISED  
BENZOCYCLOBUTENES, AND APPLICATION IN THE SYNTHESIS OF  
IVABRADINE AND ADDITION SALTS THEREOF WITH A  
PHARMACEUTICALLY ACCEPTABLE ACID**

Process for the preparation of compounds of formula (IV) :



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub>, which may be identical or different, each represent a hydrogen atom, a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxy group, a fluorine atom, a chlorine atom, a protected amine group, a protected hydroxyl group, an alkoxycarbonyl group in which the alkoxy group is linear or branched (C<sub>1</sub>-C<sub>6</sub>), or a CF<sub>3</sub> group, or R<sub>1</sub>=R<sub>4</sub>=H and R<sub>2</sub> and R<sub>3</sub> together with the carbon atoms carrying them form a 1,3-dioxolane group,

- 10 R<sub>5</sub> represents a saturated or unsaturated, linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a linear or branched (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl group in which the hydroxyl function is protected, or a CO<sub>2</sub>R<sub>7</sub> group in which R<sub>7</sub> is a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group,  
R<sub>6</sub> represents a cyano group or a CO<sub>2</sub>R<sub>8</sub> group in which R<sub>8</sub> is a linear or branched (C<sub>1</sub>-C<sub>6</sub>)-alkyl group.

Application in the synthesis of ivabradine, addition salts thereof with a pharmaceutically acceptable acid and hydrates thereof.

No Figure