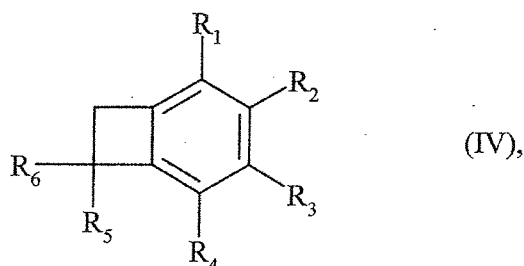


ABSTRACT

**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_1 , R_2 , R_3 and R_4 , which may be identical or different, each represent a hydrogen atom, a linear or branched (C_1 - C_6)alkyl group, a linear or branched (C_1 - C_6)alkoxy group, a fluorine atom, a chlorine atom, a protected amine group, a protected hydroxyl group, an alkoxy carbonyl group in which the alkoxy group is linear or branched (C_1 - C_6), or a CF_3 group, or $R_1=R_4=H$ and R_2 and R_3 together with the carbon atoms carrying them form a 1,3-dioxolane group,
- 5 R_5 represents a saturated or unsaturated, linear or branched (C_1 - C_6)alkyl group, a linear or branched (C_1 - C_6)hydroxyalkyl group in which the hydroxyl function is protected, or a CO_2R_7 group in which R_7 is a linear or branched (C_1 - C_6)alkyl group,
- 10 R_6 represents a cyano group or a CO_2R_8 group in which R_8 is a linear or branched (C_1 - C_6)-alkyl group.

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

No Figure