**Stereospecific Metabolism of \( R \)- and \( S \)-Warfarin by Human Hepatic Cytosolic Reductases**


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**Supplemental Methods**

The identification of TLC isolated warfarin alcohols diastereomers was achieved using a previous reported strategy (Chan et al., 1972). In that effort, silica gel TLC separated four warfarin diastereomers in which faster moving isomers were \( RS \) and \( SR \). This conclusion was based upon clever detective work composed of three parts. First, a simplified NMR data for cyclic dehydrated derivatives of the warfarin alcohols aided the assignment of configuration at the chirality centers. Second, cyclic dehydration of warfarin (Hermodson, 1971) followed by double bond reduction with \( D_2 \) and NMR analysis verified the NMR configurational assignments from the first step. Third, the use of \( ^{18}\text{O} \) enabled the determination of the structure of the dehydrated derivatives and, thus verify the lack of inversion of the chirality centers of the warfarin alcohols during first step.

We then used various NMR techniques to make our assignments of the \( ^1\text{H} \) and \( ^{13}\text{C} \) chemical shifts for the warfarin alcohols according to those numbered in Figure S1. To our knowledge, those assignments may be the first for these molecules.

**Figure S1.** Warfarin structure indicating the atom numbering used for NMR analyses.

**References**
