



Disopyramide (003): sc-66034

BACKGROUND

Disopyramide is a Class IA antiarrhythmic medication used to treat two forms of arrhythmia, ventricular and supraventricular arrhythmias, especially following heart attacks. It has no effect on α or β adrenergic receptors. Disopyramide works to stabilize irregular heart beats by interfering directly with the depolarization of the cardiac membrane, thereby acting as a membrane-stabilizing agent. It functions by shortening the sinus node recovery time, lengthening the effective refractory period of the atrium and having a minimal effect on the effective refractory period of the AV node. Disopyramide has a depressant action on the heart similar to that of guanidine, and it also possesses some anticholinergic and local anesthetic properties. Common side effects of this drug include dizziness, feeling of faintness, fainting, dry mouth, heartbeat sensations, shortness of breath and unusual tiredness.

REFERENCES

1. Nelson, W.L., Sneed, C.K., Giacomini, K.M., Giacomini, J.C., Stauss, J., Blaschke, T.F. and Cox, B.M. 1981. Synthesis and anticholinergic properties of the enantiomers of 4-(isopropylamino)-2-(2-pyridyl)-2-phenylbutyramide, the mono-N-dealkylated metabolite of Disopyramide. *J. Med. Chem.* 24: 614-617.
2. Le Corre, P., Ratanasavanh, D., Chevanne, F., Gibassier, D., Sado, P., Le Verge, R. and Guillouzo, A. 1991. *In vitro* assessment of stereoselective hepatic metabolism of Disopyramide in humans: comparison with *in vivo* data. *Chirality* 3: 405-411.
3. Juvancz, Z., Markides, K.E. and Jicsinszky, L. 1997. Enantiomer separation of Disopyramide with capillary electrophoresis using various cyclodextrins. *Electrophoresis* 18: 1002-1006.
4. Sugiyama, A., Satoh, Y., Ishida, Y., Kugiyama, K. and Hashimoto, K. 2002. Effects of Disopyramide and mexiletine on the terminal repolarization process of the *in situ* heart assessed using the halothane-anesthetized *in vivo* canine model. *Circ. J.* 66: 857-862.
5. VerNooy, R.A. and Mounsey, J.P. 2004. Antiarrhythmic drug therapy of atrial fibrillation. *Cardiol. Clin.* 22: 21-34.
6. 2004. Atrial fibrillation: rate control often better than rhythm control. *Prescribe Int.* 13: 64-69.
7. Sugao, M., Fujiki, A., Nishida, K., Sakabe, M., Tsuneda, T., Iwamoto, J., Mizumaki, K. and Inoue, H. 2005. Repolarization dynamics in patients with idiopathic ventricular fibrillation: pharmacological therapy with Bepridil and Disopyramide. *J. Cardiovasc. Pharmacol.* 45: 545-549.
8. Malik, A., Ali, S.S. and Rahmatullah, A. 2005. Deglutition-induced atrial fibrillation. *Tex. Heart Inst. J.* 32: 602-604.

SOURCE

Disopyramide (003) is a mouse monoclonal antibody raised against Disopyramide.

PRODUCT

Each vial contains 100 μ g IgG₃ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Disopyramide (003) is recommended for detection of Disopyramide by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.