

olite nor-propoxyphene, when infused into an anesthetized dog, produced delay in conduction—that is to say, heart block—in a dose-related manner; namely, as the dose was increased, the degree of conduction delay was increased. This conduction delay is referred to by cardiologists as heart block.

I submit that anyone with a reasonable knowledge of cardiac physiology would have regarded the abstract sent to the FDA describing this work as containing the essence of the information, the necessary information on which to make a judgment regarding this experimental cardiac effect. I can assure you that the cardiac abnormalities that have been described in the medical literature and individuals taking a fatal overdose indicate that the cardiac problems arise when respiration is depressed or ceases. These people accumulate carbon dioxide in the bloodstream and become depleted of oxygen. This is a bad situation for the heart, and it makes the patient vulnerable to abnormal heart action. When respiratory movements are restored by a mechanical ventilator and the carbon dioxide is washed out of the body and normal oxygenation occurs, the heart abnormality—with rare exception—disappears. This occurs over a timespan of minutes to hours, which precludes any significant change having occurred in the concentration of nor-propoxyphene.

Furthermore, studies by Dr. Tennet in California, in which he administered at least twice the routine dosage of propoxyphene to individuals in a heroin-maintenance program, have shown in such individuals, for a period of more than 2 years, that electrocardiograms taken at 3-month intervals showed no effect whatsoever of the long term use of large doses of propoxyphene.

Our own studies on volunteers equipped with a Holter monitor, which makes a continuous tape recording of the EKG, show that the recommended dose of propoxyphene for periods as long as a week produces no discernible effect on the EKG.

Senator HATCH. Thank you.

Senator NELSON. Anything else?

Senator BAUCUS. I have one question concerning cost. What would be the changes in cost to Lilly if Darvon is rescheduled to schedule II.

Dr. FURMAN. The cost changes?

Senator BAUCUS. Manufacturing costs on a per unit basis.

Dr. FURMAN. Senator, I have no idea. I am sure it would increase manufacturing costs, but this is beyond my area of knowledge and capability. Sorry.

Senator BAUCUS. You have any estimate, any guess?

Dr. FURMAN. It would be the wildest guess, sir. I would not hazard a guess.

Senator BAUCUS. But you do think the cost would increase?

Dr. FURMAN. Oh, yes, I believe so.

Senator BAUCUS. Just a rough guess. Is it a 1-percent increase, 5 percent? Your guess.

Dr. FURMAN. Your guess is as good as mine, Senator.

Senator BAUCUS. Yours is a lot better than mine.

Dr. FURMAN. I am not sure.

Senator BAUCUS. The same line of questioning with respect to consumer costs. Would you expect the market price to increase if Darvon is rescheduled as schedule II?