

32.1 per cent for cost of goods sold to total sales for the twenty-two largest firms in the industry, as cited above. Dexamethasone therefore combines a lower price with much higher costs—a phenomenon impossible in pure competition.

It is inappropriate to attempt to trace in corresponding detail the course of price competition, product by product, and in the light of existing patent licensing agreements, in the other drug group markets. They all reveal the same general features, hence only a sketch will be given of prices, the relation of prices to computed costs and competitive bids, and of patents, in the other three markets.

B. *Oral Antidiabetic Drugs*

The oral antidiabetics market may readily be summarized in this regard. Each of the three products is either patented or produced under patent application arrangements. Upjohn set the price of 'Orinase' in such a way as to be almost exactly equal to the price of insulin on a per dose basis, at 13.9 cents per 500-milligram tablet, comparable to 14.0 cents for 10 units of insulin.⁵² This price was not based on cost, for the cost of insulin is no doubt considerably greater than the cost of 'Orinase', or tolbutamide, since animal pancreas is undoubtedly more expensive to obtain and process than the industrial chemicals required to produce tolbutamide.⁵³ Yet the greater convenience of administration of an oral drug over an injectable drug would probably support a higher price than the insulin equivalent. The price was simply set equal to insulin's price, apparently in deference to the industry's tradition of pricing new products at (or very near) the price of existing drugs used to treat the same disorder. (The price set is actually below the total cost of insulin therapy, including syringe and needle.) The price of insulin itself had not been changed since 1947. Had the practice of medicine not changed, we might still be paying second-century A.D. prices for the remedies of Galen.

Pfizer priced its drug, chlorpropamide ('Diabinese') at 15 cents per 250-milligram tablet, but since Pfizer's drug is somewhat more potent than tolbutamide, the daily cost may run somewhat less. The third drug, phenformin, is made by one of the smaller firms, U.S. Vitamin. Phenformin is still more potent than chlorpropamide, a 50-milligram tablet costing 12 cents. The range of possible daily cost (minimum to maximum recommended dosage) is from 14 to 56 cents for tolbutamide, from 7 to 30 cents for chlorpropamide, and from 12 to 55 cents for phenformin.⁵⁴ The drug buyer seems to have

⁵² Testimony of Dr. Upjohn, *ibid.*, Part 20, pp. 11037-9.

⁵³ *Report*, *op. cit.*, p. 99.

⁵⁴ *Hearings*, *op. cit.*, Part 20, p. 11120.