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CORRESPONDENCE

IN-USE LIFE OF LEVOTHYROXINE SODIUM TABLETS

SIR. Further to our paper on the effect of excipients on the stability of levothyroxine sodium tablets (1), the in-use life of the tablets from both manufacturers was determined. Tablets of 0·2 and 0·3 mg strengths were studied up to 100 days after exposing them to air for approximately 40 s every day, the usual time required for a patient to take the tablet out of a bottle. This study did not find any significant difference in the in-use lives of the tablets from both the manufacturers. The loss in potency after the 100-day exposure varied between 2·3 and 6·1%. All the tablets still met the USP-NF (2) requirements.

In conducting this study, the assay samples were collected in amber-coloured bottles (1). The previously reported catalytic effect of the excipient on the decomposition of levothyroxine sodium in a solution of 0·2-mg pink tablets from manufacturer A was not observed when the tablets were exposed to air in the solid state. Furthermore, the effect is apparent only when the analyte is collected in clear bottles (1). This indicates that for the excipient to act as a catalyst, the drug must be in solution and the solution must be exposed to light.

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