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pce2:2516

[redacted]
Head, Antibiotics Section

FILE NOTE

REGISTRATION APPLICATION
TEICOPLANIN ("TARGOCID") POWDER FOR INJECTION 100, 200 and 400 mg
MARION MERRELL DOW

It is suggested that you include the following information on bioavailability in your summary for ADEC, viz :

In support of the registration application for this product, the company provided the results of two bioavailability studies (dated 1984 and 1990) comparing the bioavailability of teicoplanin when administered by IV and IM routes. The 1990 study was evaluated by an external evaluator who noted that the major conclusions of the two studies were very similar.

Details of the 1990 bioavailability study are as follows :

The pharmacokinetics and bioavailability of teicoplanin following single dose intravenous and intramuscular administration of 6 mg/kg to 23 normal healthy male volunteers was investigated using the 400 mg/3 mL formulation (proposed for registration in Australia).

The external evaluator agreed with the sponsor that teicoplanin given by intramuscular administration could be considered bioequivalent to teicoplanin given by intravenous administration with respect to extent of absorption. However, for the intramuscular administration, there was an increase in Tmax and reduction in Cmax when compared with the intravenous administration. The mean values (± sd) of the estimated pharmacokinetic parameters and 90% confidence intervals of the ratio IM/IV are given below :

Parameter	IM	IV	Ratio (%) IM/IV (90% C.I.)
AUC0-00 (mg/Lxh)	644.7±100.4	575.9±86.3	111.9 (107.6-116.3)
T1/2 (h)	198.9±48.7	177.9±40.5	111.2 (102.1-120.3)
Cmax (mg/L)	12.9±5.9	46.3±12.0	note 1
Tmax (h)	4.1±1.2	0.51±0.02	note 1

Note 1: Since Tmax and Cmax after intravenous infusion depends on the rate and duration of the infusion, comparison with results for intramuscular injection was not made.

The mean plasma concentration - time profiles are given in appendix 1.

[redacted] in addition to the above information for the ADEC summary, it is suggested that the external evaluator's comments under Product Information (see f.205) should be brought to the attention of MSA, evaluation unit 2.

The external evaluator did not list any bioavailability questions to be raised with the company.

[redacted]
PHARMACEUTICAL CHEMISTRY EVALUATION SECTION
DRUG EVALUATION BRANCH
[redacted] 3/3/93

FIGURE1. MEAN TEICOPLANIN SERUM CONCENTRATION TIME PROFILE FOLLOWING SINGLE DOSE IV AND IM ADMINISTRATION OF 6 MG/KG (102-018)