

The Survival Time Studies, while involving a limited number of organisms, resemble the clinical situation in that the infection is well established before antibiotics are administered.

The conclusion:

1. An important factor in protecting test animals is the rapidly attained therapeutic concentrations of Vibramycin. (Mice infected with *Staph. aureus* are generally moribund about four hours after inoculation.)

2. Even at a fraction of the dosage of other tetracycline antibiotics tested, Vibramycin provided a greater and more persistent chemotherapeutic effect.

With Vibramycin[®] (doxycycline)—Excellent therapeutic results in humans [over 90% clinical success rate]:

Diagnostic group	Clinical response			Percent success
	Favorable	Poor	Total	
Lower respiratory infections.....	172	11	183	94
Upper respiratory infections.....	143	11	154	93
Soft-tissue infections.....	133	8	141	94
Genitourinary infections.....	57	19	76	75
Venereal (gonococcal infections).....	175	14	189	93
Miscellaneous infections.....	31	3	34	91
Total.....	711	66	777	92

Note: For criteria used in evaluating results of therapy, see end of brochure.

Summary of side effects in patients treated with Vibramycin[®] (doxycycline) not all of whom met the criteria established for efficacy:

Side Effect	Number of cases	Side Effect—Continued	Number of cases
Nausea	24	Flare-up of colitis.....	1
Vomiting	13	Glossitis	1
Diarrhea	8	Stomatitis	2
Photosensitivity	7	Nail discoloration.....	1
Dermatitis	4		

As with other tetracyclines, elevation of SGOT or SGPT values, anemia, neutropenia, eosinophilia or elevated BUN have been reported, the significance of which is not known at this time.

With Vibramycin[®]—Minimal untoward reactions in the lower G.I. tract as confirmed by the occurrence of only 8 cases among the patients treated.

The Key: efficient absorption:

Since absorption of Vibramycin is high, a minimal quantity of antibiotic is left in the G.I. tract. This would suggest the possibility of a lesser likelihood of monilial or bacterial overgrowth.

Vibramycin:

With Vibramycin[®] (doxycycline)—Low degree of binding with calcium than any other tetracycline analogue.

Per cent of binding with calcium¹ (Based on *in vitro* studies) with equal amounts of each antibiotic:

Vibramycin	19.0
Oxytetracycline	36.0
Methacycline	39.5
Tetracycline	39.5
Demethylchlor-tetracycline	74.5

This study would suggest that less Vibramycin is bound to bones or teeth.

With Vibramycin[®] (doxycycline)—The lowest effective dose—once a day after the first day

The Key: Long half-life:

Half-life of Vibramycin is significantly longer than that of other agents—based on single dose studies:

Doxycycline 15.1¹ hours (4)

Demethylchlorotetracycline, 12.7 hours (4)

Tetracycline, 8.2 hours (5)

¹ With multiple dosing, the cumulative half-life has been reported to be approximately 22 hours.