

# SCHERING-PLOUGH ANIMAL HEALTH TECHNICAL SERVICE BULLETIN

## Compatibility of GARASOL® (Brand of gentamicin sulfate, veterinary) Chick Injection with Marek's vaccines (HVT and/or SB-1)

No. 220



Since early mortality problems caused by bacteria in day old chicks can be prevented by the use of antibiotics, attempts have been made to administer the antibiotic simultaneously with Marek's vaccine. However, it should be emphasized that all antibiotics are not compatible with Marek's vaccines (Eidson, et al. 1973). Garasol for chicks is primarily administered in combination with Marek's vaccines (HVT or SB-1) for two reasons: 1) to subject the chick to the least possible trauma and 2) to reduce labor costs.

Garasol does not significantly reduce titers of either vaccine type. *In vitro* research done by Schering-Plough and independent evaluators has confirmed consistently that when Garasol was mixed with Marek's disease vaccine at the recommended therapeutic dosage level (0.2 mg/chick) it did not affect the total number of virus particles (titer) found in the vaccine (data in file) . Most recently, Dr. Hiram Lasher, Lasher Associates, Inc., P.O. Box 345, Millsboro, DE 19966 ran a study to evaluate the compatibility of Garasol with currently available Marek's vaccines. Summary of his results is given in the following tables:

TABLE 1

Compatibility of Garasol Chick Injection with Marek's Vaccine (HVT)

Groups	Time (Hrs.)	PFU per Dose	
		Garasol	Controls
A	0	5780	4420
B	0	5360	4780
A	1	5060	5140
B	1	5220	5040
A	2	5320	5380
B	2	4940	5820

Remarks: Pooled 3 ampules of HVT vaccine (3 different manufacturers). Added 2 ml of vaccine to each 200 ml of diluent (ESL407166) tested. Garasol (100 mg/ml) used at 2 ml/200 ml of vaccine.

Note: The controls were a separate pool of vaccine, not one pool split.

## Compatibility of Garasol Chick Injection with Marek's Vaccine (SB-1)

<u>Groups</u>	<u>Time (Hrs.)</u>	<u>PFU per Dose</u>	
		<u>Garasol</u>	<u>Controls</u>
A	0	3640	4080
B	0	3980	4360
A	1	3340	3900
B	1	3420	4000
A	2	3220	3820
B	2	3500	3880

Remarks: Pooled 3 ampules of SB-1 vaccine (3 different manufacturers). Added 2 ml of vaccine to each 200 ml of diluent (ESL407166) tested. Garasol (100 mg/ml) used at 2 ml/200 ml of vaccine.

Note: The controls were a separate pool of vaccine, not one pool split.

The results of this laboratory study confirm prior reports that Garasol has no deleterious effect on Marek's vaccine virus and therefore it could be used safely in combination.

## References:

Eidson, C.S., S.H. Kleven, and D.P. Anderson, 1973. Effect of Antibiotics on Turkey Herpesvirus Vaccine. Poultry Dis. 15: 312-322