SafetY of a topical deltamethrin solution (Deltanil®) in horses

Introduction
Deltamethrin is commonly used as a treatment for lice in horses, with two applications at 2 week intervals, and as a convenient topical fly repellent when animals are at risk of fly-induced allergic skin disease, usually by monthly application. The most frequently used dose is 100 mg per horse, or 50 mg for small ponies. However, it is widely believed that there is a risk of cutaneous reactions where deltamethrin products are applied to horses. A new topical deltamethrin-based product (Deltanil®, Virbac, France) was recently authorized for use in cattle and sheep as a 10 mg/ml pour-on and a 100 mg in 10 ml monodose spot-on. The objective of this study was to assess the safety of frequent application of the product to horses.

Materials and Methods
Eight young, adult, leisure horses, in good health and not destined for human consumption, were included in the study. Each animal received 10 ml (100 mg Deltamethrin) of product per day, applied to the area of the withers, for 7 days. Photographs of the area were taken just before each application and 24 hours after the last application. A veterinary examination was performed on each occasion and the photographs were further scored by another veterinarian in a blinded manner. One month after the last application, a further veterinary examination was performed to assess any delayed reactions.

Results
No adverse reactions were noted in any animals during the study. The only observable effect was a slight greasy appearance of the application site.

Conclusions
The product was well tolerated in all the animals despite a frequency of application that was significantly higher than commonly used in practice and the repeated application of the product to a relatively limited area. This confirms that application spread over a larger area at a lower frequency can be expected to be very well tolerated in horses.