Grade 3 Left Laryngeal Movements in Young Thoroughbreds
Do Not Impair Future Racing Performance

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Introduction
A 5-point grading system for laryngeal movements (LM) is used at Thoroughbred sales in New Zealand and Australia. Grade 4 and 5 horses fail (arytenoid cartilage cannot be fully abducted) and likely have significant RLN. Grade 1,2 and 3 LM pass. Grade 3 LM show resting arytenoid asymmetry and full arytenoid abduction is achieved but not sustained. We hypothesised there would be no difference in racing performance between horses with Grade 3 LM and those with <3 LM.

Materials and Methods
Horses with left Grade 3 LM were compared to horses with <3 LM from the same sale. For continuous measures of racing performance, the significance of LM grade (<3/3) was determined using the Kruskal-Wallis test. Categorical measures of racing performance and LM score <3 and 3 was assessed using the Chi-squared test statistic.

Results and Discussion
Between 2003 and 2014; 10,862 yearlings and 1,905 two-year-olds were scoped. Of these, 917 had a LM grade of 3. Comparison with 1,601 horses with a LM<3 showed no significant difference in number of starts (p = 0.28), number of race wins (p = 0.59), prize money (p = 0.78), strike rate (0.86) or ratings (p = 0.83). The proportion of horses that had started in a race did not differ between the two grades (p = 0.38) nor did the proportion of horses that won a race (p = 0.34).

Relevance to Australian clinical equine practice
Future racing performance is not significantly different between horses with LM grade 3 and <3.