Comments on the citing of other evidence from some NF(s) in response to the ETC proposed rule changes

Tim Parkin (Professor of Veterinary Epidemiology; member of the FEI Endurance Temporary Committee; member of the FEI Veterinary Committee).

It is noted that the evidence cited has not been widely published and has not been subject to the usual academic peer review process. As such there is no independent assessment as to the quality, veracity or accuracy of the work quoted. It is this peer review process (described in the guidance notes related to MOOCP rule proposals) that constitutes quality control and assurance when applied to any scientific or statistical analysis. This provides the reassurance for those wishing to use such work to formulate policy or regulatory change, that those changes will have the desired effect.

Comments from NF(s) are in black and my response is in blue

'The results of the scientific and practical study by "Equirating", an equestrian research analytics company that has conducted several FEI studies, by analyzing 62,288 results, 618 competitions and 13280 horses show the following:

- 'Horses seriously injured are those who have returned to competition after a long break (When assessing rest periods for horses, the most significant increase in risk to horse welfare are those horses who have not competed within the last 365 days)'

Comment – the very likely causal link for this association is not that a significant out of competition period itself results in increased risk for those horses when they return to competition. A more realistic conclusion is that there is a reason for an extended period out of competition (such as injury) and it is this previous injury that results in the increased risk for horses returning from this recovery from injury. There is plenty of evidence from Thoroughbred racing that shows that one of the most significant risk factors for (fatal) injury during racing is previous injury. Horses in this situation never return to original 'base-line' risk. Once they have incurred an injury their risk of subsequent (fatal) injury remains elevated throughout the rest of their racing career.

References:

Georgopoulos, S. P., Parkin T.D.H. (2017) Risk factors for equine fractures in Thoroughbred flat racing in North America. Preventive Veterinary Medicine. 139:99-104. doi: 10.1016/j.prevetmed.2016.12.006.

Georgopoulos, S. P., Parkin T.D.H. (2016) Risk factors for equine fatal injuries in Thoroughbred flat racing in North America. Journal of the American Veterinary Medical Association. 249:931-939.

- 'Horses that are constantly involved in Endurance events develop fewer injuries.'

This is a well-recognised phenomenon – it is described as the 'healthy-horse' effect. Horses that are able to compete regularly, do so simply because they do not get injured. This is repeatedly seen in many Thoroughbred racing injury studies. It is not that being constantly involved in events results in fewer injuries. This is a classic example of drawing an incorrect conclusion based on an incorrect assumption related to cause and effect. In other words mixing up which of two factors is most likely to be causing (or at least contributing to an increased risk of) the other.

- ‘While research shows that speed is undoubtedly a risk factor, a finding that we do not dispute in any way, the reality in the sport is that horses with faster completion rates have higher qualification rates in their next competition, this is simply because those capable of producing high levels of performance are more likely to be successful in future competitions. This evidence suggests that elite horses should not be required to rest for longer periods between competitions as they are already producing higher qualification rates than lower performing horses.’

There is undoubtedly a small proportion of the most elite horses that have the capability to ride at speed and be successful at repeated competitions, but the impact of this on their overall career longevity has not been examined. However, the clear message from the peer-reviewed literature indicates that the faster horses go the greater the risk of FTQ – in particular when horses are achieving average speeds over 20-22kph. For horses that ride at speeds greater than 20-22kph the percentage of horses that end the ride with FTQ increases as the speed increases: The risk of FTQ almost doubles for horses being ridden at 24kph compared with those ridden at 20kph. Selecting from the data a particular group of horses that are successfully completing lots of rides and comparing them to lower performing horses could perhaps be regarded as ‘cherry-picking’ the data. But without actual sight of exactly how the analysis was conducted it is not really possible to comment with any authority on this part of the response.

- ‘Horses with poor performance in past competitions have low qualification rates in future competitions.’

This is correct and also shown by our peer-reviewed work. Previous injuries or FTQs are shown to increase the risk of subsequent FTQs. Hence the rules proposals that relate to increased MOOCPs for horses that have sustained previous FTQ. Increased MOOCP will help to mitigate against some of the increased risk associated with the previously incurred FTQ.

- ‘Horses with faster completion speeds have higher qualification rates in their next competition.’

Again, this is an example of the ‘healthy-horse’ effect. A minority of elite horses with outstanding natural ability and who have not yet succumbed to injury, may be able to race at speed and also qualify in their next competition. But this particular comment ignores the majority of horses that are ridden at speed but FTQ at the end of that ride and perhaps are unable to enter their next scheduled competition. Again, sight of the actual analysis conducted would have been useful.

- In 2018, The proposed rule was to apply an additional 7 days rest period for Horses exceeding the average of 20kph, and this year the proposed speed became 22 km kph which indicates that there is no field-based study that clearly shows what exactly the average speed require an additional mandatory rest period. This suggests that more field studies should be conducted before an extra mandatory period is imposed

The increased threshold for an increased MOOCP at 22kph was proposed at the FEI Sports Forum in April 2019. The original speed-related analysis was conducted on data up to the end of 2016. Further

analysis, since that data, has shown that in fact the average speeds of horses over completed stages has not altered significantly over the last few years since. Therefore, we propose to return to the original cut-off of 20kph for extended MOOCPs. The plot included in the additional guidance notes clearly shows that when horses are ridden at over 20kph the risk of FTQ ME (in this case) increases in an approximately linear fashion. The fact is, as evidenced from the 'risk or cost-benefit' analysis presented in the guidance notes, there is clear benefit to be derived (in terms of reduced risk of FTQ) by ensuring additional out of competition periods for horses that have been ridden at speed.