

## **Abstract**

### **Title of the study:**

Cycling – The use of power meters in a race

### **Study aim:**

The aim of this study is to prove power meters usability during races which are full of variable conditions and to find out in which situations it is suitable or unsuitable to follow this data.

### **Methods:**

This study is based on quantitative research. We used a questionnaire with open-ended questions.

### **Results:**

The study confirmed the usability of power meters during races. Power meters are used especially after post-race analysis (92 %). 79 % of all respondents use it for the informative purpose during the race and 67 % ride the race according to the data given by power meters. Power meters are mainly used in time-trials or longer performance, such as climbing or breakaway. The results has shown a significant difference between amateurs and professional cyclists. 83 % of amateurs stated that they often ride according to their critical values when riding more than 15 minutes whereas professionals regularly ride beyond their critical values.

### **Conclusions:**

Cyclists using power meters while practicing use them also during the races. Amateurs use them especially during races because of more frequent solo ride. Getting data from this questionnaire by World Tour riders would be very interesting as we would be able to compare the results together.

### **Key words:**

cycling, power meter, practise, competition