



**Programme of obligatory examinations in the UCI medical programme  
for ProTeams and Continental Professional Teams**

*Version in force from 1<sup>st</sup> February 2013*

**1. General**

- 1.1 In accordance with article 13.1.015 of the regulations, each examination in the medical monitoring shall include a sport medicine interview and clinical examination and the examinations stipulated below.
- 1.2 These examinations shall be carried out in such a way that their results are known and provide a basis for assessing the fitness of the cyclist before the end of the period in which they must be carried out.
- 1.3 For the 1<sup>st</sup> and 3<sup>rd</sup> examinations, the rider must come in person to the laboratory recognized by the UCI.

**2. Biannual examination**

- 2.1 Any cyclist who joins a team for the first time and those riders referred to in article 2.16.035 shall be obliged to undergo the biannual examination.

This examination must be conducted in the month preceding the first competition in which the cyclist participates for the team.

Subsequently, this examination shall be carried out every two years, regardless of the team to which the cyclist belongs at that time.

For the sake of simplicity, it is advised to conduct the biannual examination in the period from 1<sup>st</sup> December to 31<sup>st</sup> January, at the same time as the annual examination. Thus, if the first biannual examination is not carried out in this period, the second biannual examination will be carried out less than two years after the first, i.e. during the second period from 1<sup>st</sup> December to 31<sup>st</sup> January after the first biannual examination.

The team must verify, each time it employs a new cyclist, when the cyclist last completed a biannual examination.

- 2.2 The biannual examination shall include the following examinations:
  - *A cardiological examination, including an echo-doppler and a stress-electrocardiogram. These exams must be done alternately (one year echo-doppler, one year stress-electrocardiogram);*
  - *For the riders who suffer from asthma, an annual pulmonary function testing will have to be done ;*
  - *A visual acuity test ;*
  - *The annual biological examinations underlined on point 3.1 (examination from December 1<sup>st</sup> to January 31<sup>st</sup>).*

**3. Periodical examination**

- 3.1 In the period from **1<sup>st</sup> December to 31<sup>st</sup> January** of each year (**1<sup>st</sup> period**), the team shall have its cyclists undergo the following examinations:

- *A sport medicine interview and clinical examination;*
- *A blood test including:*
  - SODIUM
  - POTASSIUM
  - CHLORIDE
  - CALCIUM
  - UREE
  - GLUCOSE
  - TOTAL CHOLESTEROL
  - HDL CHOLESTEROL
  - TRIGLYCERIDES
  - TSH
  - FULL BLOOD COUNT
  - RETICULOCYTES
  - C-REACTIVE-PROTEIN or SEDIMENTATION RATE
  - FERRITIN
  - yGT
  - ALAT (GPT)
  - ASAT (GOT)
  - TOTAL BILIRUBIN
  - ALKALINE PHOSPHATASE
  - CPK
  - CREATININE
  - TOTAL PROTEINS or ALBUMIN
  - TOTAL TESTOSTERONE
  - BASAL CORTISOL
- *A cardiological questionnaire*
- *An electrocardiogram (12 leads)*
- *A urinary stick*

If the cyclist enters the team after the month of January and if he or she has not completed an annual examination, he or she must do so before his or her first event for the team.

The blood test shall be carried out by a laboratory recognized by the UCI.

3.2 The examinations passed during the period from **March 1<sup>st</sup> to April 30<sup>th</sup> (second period)** must include:

- *A sport medicine interview and clinical examination;*
- *A blood test including:*
  - FULL BLOOD COUNT
  - RETICULOCYTES
  - ALAT (GPT)
  - ASAT (GOT)
  - CREATININE
  - C-REACTIVE-PROTEIN or SEDIMENTATION RATE
  - FERRITIN
  - TOTAL TESTOSTERONE
  - BASAL CORTISOL

3.3 The examinations passed during the period from **June 1<sup>st</sup> to July 31<sup>st</sup> (third period)**

- *A sport medicine interview and clinical examination;*
- *A blood test including:*
  - *FULL BLOOD COUNT*
  - *RETICULOCYTES*
  - *ALAT (GPT)*
  - *ASAT (GOT)*
  - *CREATININE*
  - *C-REACTIVE-PROTEIN or SEDIMENTATION RATE*
  - *FERRITIN*
  - *TOTAL TESTOSTERONE*
  - *BASAL CORTISOL*

The blood test shall be carried out by a laboratory recognized by the UCI.

3.4 The examinations passed during the period from **September 1<sup>st</sup> to October 30<sup>th</sup> (fourth period)** must include:

- *A sport medicine interview and clinical examination;*
- *A blood test including:*
  - *FULL BLOOD COUNT*
  - *RETICULOCYTES*
  - *ALAT (GPT)*
  - *ASAT (GOT)*
  - *CREATININE*
  - *C-REACTIVE-PROTEIN or SEDIMENTATION RATE*
  - *FERRITIN*
  - *TOTAL TESTOSTERONE*
  - *BASAL CORTISOL*

*Cyclists taking part in a major tour shall have to undergo examinations in the period in which the tour in question is taking place before the start. Failing which, the cyclist shall not be permitted to take part in the race, without prejudice of the sanctions stipulated in article 13.1.036 of the regulations.*

#### **4. Recommended examinations**

It is recommended that cyclists undergo the following examinations:

- *Serology for :*
  - *HIV*
  - *HBV*
  - *HCV*
- *Anti-tetanus vaccination.*



## **PROCEDURES TO FOLLOW IN THE EVENT OF AN ABNORMAL RESULT**

### **FERRITIN**

- The level of ferritin must always be correlated with the level of C-reactive-protein or with the sedimentation rate.
- If **ferritin > 300 ng/ml**, it is not permitted to take iron even orally. Repeat the examination at the next control.
- Genetic test (once in a lifetime) for gene abnormality HFE if:
  - **ferritin > 1000 ng/ml**
  - **ferritin > 500 ng/ml** in two consecutive tests
    - If test + for homozygosity/heterozygosity: ask for specialised opinion (gastro-enterologist or hepatologist or haematologist)
    - If test -: specialised opinion (gastro-enterologist or hepatologist or haematologist) if still high at the next test

### **CORTISOL**

- In the event of a plasmatic cortisol level **< 50 ng/ml (<140 nmol/l)**, and the athlete does not justify a corticosteroid treatment, repeat the examination at 08.00 am, in the 3 days following the reception of the result. If the athlete has received a corticosteroid treatment, the examination will be repeated in the 7 days following the reception of the result. The attitude to adopt will be decided by the team doctor.

### **TOTAL TESTOSTERONE**

- In the event of a total plasmatic testosterone level of **< 2 ng/ml or > 12 ng/ml (< 7 nmol/l or > 42 nmol/l)**: repeat the examination in the 10 days following the reception of the result as well as LH determination. If both values are abnormal, consult an endocrinologist in the 20 days following the reception of the result and inform the UCI doctor.

### **HAEMATOPOIESIS**

- Abnormal levels:
  - **Haematocrit: > 50 %**
  - **Haemoglobin: > 17 g/dl (10,5 mmol/l)**
  - **Reticulocytes : < 0.4 % or > 2.4 %**  
**< 20000/μl or > 120000/μl**
- In the event of an abnormal result of one of these parameters: redo all the haematological tests within a deadline of 10 days following the reception of the results. If the abnormal result is confirmed, the procedure to follow should be discussed with the UCI doctor.