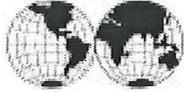


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FINA Doping Panel 1/02

The

FINA Doping Panel,

comprised of

Harm Beyer	Chairman
Farid Ben Belkacem	Member,
Bernhard J. Favaro	Member

in the proceedings against

the swimmer

**Marko Strahija**

affiliated to the

Croatian Swimming Federation

**on 15 July 2003 decided:**

The athlete is found to have committed a doping offence under FINA Rules DC 2.1(a) and DC 9.1.1.

He shall be

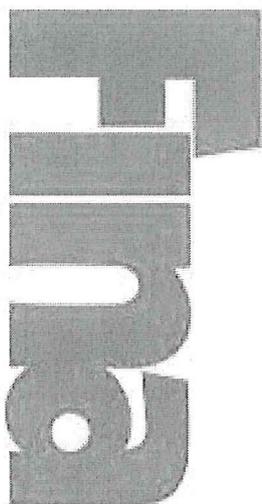
**suspended for four (4) years,**

commencing on 27 November 2002.

This judgement shall become effective immediately.

All results achieved by the swimmer during the period from 22 January 2002 to 26 November 2002 shall be cancelled.

The swimmer shall be responsible for all costs related to this case with the exception of the costs of the Panel and the members of the Panel.



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## I THE PARTIES INVOLVED

The Fédération Internationale de Natation (FINA) is the world-wide aquatic sports organisation. FINA has established and is carrying out *inter alia* an "Out-of-Competition-Doping Control Program".

Mr. Marko Strahija is a male elite class swimmer. He is affiliated to the Croatian swimming Association (CRO) which is a Member Federation of FINA. He has been engaged in national competitions as well as in international competitions in which he represented his country.

## II THE FACTS

In the year 2002 Mr. Strahija underwent several out-of-competition doping controls with the following results:

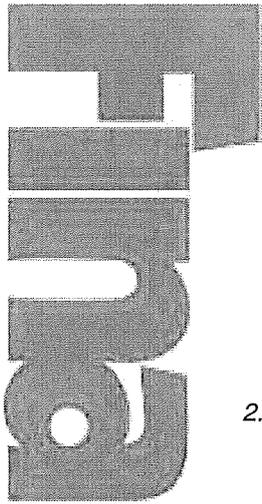
<u>test:</u>	14.03.02	<u>result:</u>	negative		
<u>test:</u>	26.03.02	<u>result:</u>	positive	to	hCG (human chorionic gonadotrophin)
<u>test:</u>	11.07.02	<u>result:</u>	negative		
<u>test:</u>	22.07.02	<u>result:</u>	positive	to	hCG (human chorionic gonadotrophin)

The sample taken on 26.03.02 was analysed in the IOC accredited laboratory in Dresden (GER). The other samples were analysed in the IOC accredited laboratory in Barcelona (ESP).

According to FINA's DC Rules, Appendix B, Section I C the presence of an abnormal concentration of hCG in the urine of a male competitor constitutes a doping offence unless it has been proven to be due to a physiological or pathological condition.

After having received the positive result of the test conducted on 26.03.02 the FINA Executive consulted the FINA Doping Control Review Board (DCRB), which by letter of 14 June 2002 provided the following recommendation:

1. *These results constitute "an adverse analytical finding" not necessarily a positive doping violation. In order to further investigate this case, the DCRB would like*



*additional laboratory information, specifically the testosterone and epitestosterone concentrations of the A sample.*

2. *Two additional unannounced samples should be collected in the next two or three weeks and subjected to expedited laboratory analysis (results available within 5 working days). The report of these analyses should specifically describe the levels of hCG, testosterone and epitestosterone present in the samples. If it is not possible to conduct such tests within the time period indicated, the Chairman of the DCRB should be immediately advised.*

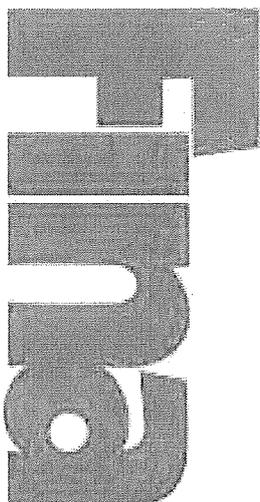
*The laboratory be requested to provide details regarding the immunoassay "kits" used in the analysis of the sample. More specifically, the following information should be sought:*

- i) *the specificity of the antibodies contained in the kit (what epitopes are recognised by the antibodies);*
- ii) *the population values for negative results derived using these kits should be provided.*

The urine samples A and B collected from the competitor on 22.07.02 were provided with the code number 366059 and were sent to the IOC accredited laboratory "Institut Municipal d'investigacion Medica, IMIM" in Barcelona (Spain). The samples arrived at IMIM on 24 July 2002 and the A sample was subsequently analysed, beginning on 25 July 2002. Validation results date was the 9<sup>th</sup> of September 2002. According to the laboratory's report the "complete analysis of the sample A 366059 showed the presence of an abnormally elevated concentration of chorionic gonadotrophin ( $\beta$ -hCG)".

This finding was reported by the IMIM to FINA, who received the report on 4<sup>th</sup> October 2002. The FINA Executive, after another consultation of the FINA Doping Control Review Board (DCRB) on 27 November 2002 decided to provisionally suspend Mr. Strahija beginning on the same day "until a hearing before the FINA Doping Panel can be made following the test result of the B sample".

On request of Mr. Strahija the B sample was analysed on 15 April 2003. He did not wish to attend the opening and analysing of the B sample. It was opened and analysed in his absence. Validation results date in so far was the 15<sup>th</sup> of January 2003. According to the laboratory's report also "the complete analysis of the sample B 366059 showed the presence of an abnormally elevated concentration of chorionic gonadotrophin ( $\beta$ -hCG)".



### III PROCEEDINGS

On 29 January 2003 the matter was referred to the FINA Doping Panel in accordance with FINA Constitutional Rule C 21.5.

On 1<sup>st</sup> February Mr. Strahija was informed by the Panel about his right to a hearing before the FINA Doping Panel. The swimmer by e-mail announced to be represented at the hearing by a lawyer and a doctor. However, he did not inform the Panel, whom he did appoint to represent him. The hearing was then scheduled for 7 May 2003 and held in the FINA Office in Lausanne.

The hearing was attended by

- the swimmer, accompanied by
- Mr. Tomislav Karlo, General Secretary Croatian Swimming Federation.

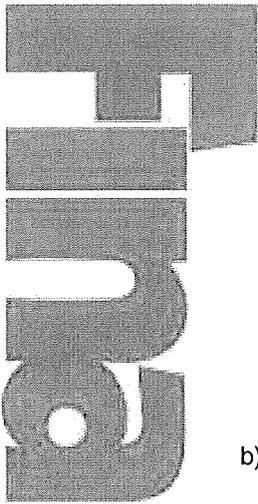
In the hearing of 7 May 2003 the swimmer submitted a number of scientific material to which he referred. With reference to this material he argued that he cannot be found to have committed a doping offence. The Panel felt unable to evaluate the scientific material without scientific advice. The hearing therefore was postponed and the Panel consulted the DCRB in regard to the scientific material submitted. After having received the response of the DCRB the hearing was re-scheduled and held on 15 July 2003 in Barcelona, Grand Marina Hotel. It was attended by

- the swimmer, accompanied by
- Mr. Tomislav Karlo, General Secretary Croatian Swimming Federation,
- Mr. Gunnar Werner, representing FINA,
- Dr. Larry Bowers, member of the DCRB, expert witness.

### IV MOTIONS and CONTENTIONS

The swimmer is claiming not to have committed a doping offence.

- a) The swimmer denies to have taken any prohibited substance. Initially he was shocked when he was informed about the result of the analysis, as it was possible that he had a cancer. However, after consultation of a doctor, he was informed



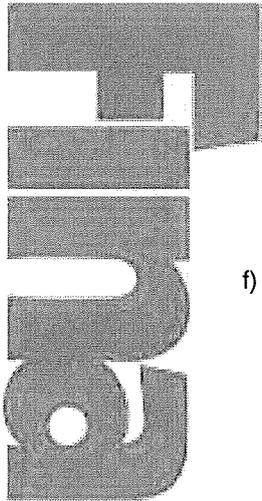
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that there are no indications in this regard. Then he started to study hCG. He contacted some experts in this field, and referring to them he is convinced that the findings of the laboratory are wrong.

- b) Researching this subject he came across many cases of false positive hCG tests. He was told that hCG tests are not standardised and most urine tests can be faulty. Usually before any claims are made about a positive hCG it must be confirmed with a serum test, which is generally more accurate. (Reference is made to the scientific investigations, made by Laurence A. Cole, PhD, University of New Mexico.) Considering the unreliability of urine tests he should have been summoned for a blood test before being accused to have committed a doping offence.
- c) Mr. Strahija stresses that he did not take any drugs. He refers to the many doping control tests he had to undergo during his competitive career. So far he never was informed about any test to be positive. When on 22 July 2002 the sample was collected from him he was in the middle of an intensive training period. He was preparing for the European Championships in Berlin (GER). And he had just started a protein diet. At the day of the test the temperature was 35 Celsius. He had two very hard workouts, and the sample was taken immediately after practice. He is certain that there was a high level of dehydration and that his urine was highly concentrated. According to Ani Tzoncheva, Ph.D., head of endocrinology department at Medical Academy in Sofia this given situation can lead to false positive results of hCG.
- d) Also the described stress situation leads to an elevated secretion of hormones on the athlete's body. And this can lead to a false positive result. But he is assuming that his level of testosterone was not raised, not in the test of 22 July 2002 and also not in one of the previous tests.
- e) According to his knowledge a positive hCG analysis can be found only by using different test methods. Currently the only way of measuring small concentrations of hCG is immunoessay, and this does not have a discrimination power as great as gas-liquid chromatography with mass-spectrometry which is necessary to satisfy IOC requirements (reference is made to Kicman AT, Brooks RV, Cowan DA. Human chorionic gonadotrophin and sport. Br J Sports Med 1991; 25(2): 73-80)



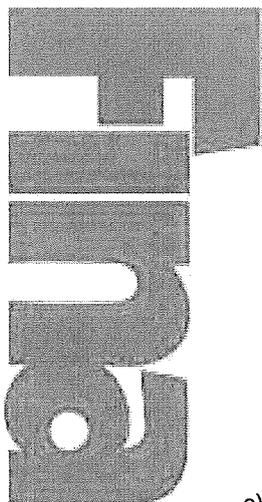
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- f) The presence of hCG in the urine of a male competitor constitutes a doping offence only when the prohibited substance is found to be present "an abnormal concentration". However, the FINA DC Rules do not specify under which circumstances the concentration of hCG in the urine is to be considered as "abnormal". A cut off limit is missing. And as there is no cut off limit, the positive test result is only a quantitative one and not a qualitative one. As long as there is no careful determination of the concentration of hCG alleged to be present in his urine it cannot be determined to what extent the concentration of hCG found does exceed the cut off limit or not. This is important with regard to the question whether or not the determination of the accuracy of the test having been conducted is relevant for the actual test result obtained, as any test result for a quantitative determination needs to be corrected for the so-called "measurement uncertainty".

FINA, represented by Mr. Gunnar Werner, is referring to the report of the IOC accredited laboratory in Barcelona, according to which an abnormal concentration of hCG was found in the urine of the swimmer. The report of the laboratory is reliable. The IOC accredited laboratory is presumed to have conducted tests and analyses in accordance with the highest scientific standards and the results of such analyses shall be presumed to be scientifically correct (FINA Rule DC 8.3.2). None of the arguments put forward by the swimmer is putting into question these facts. There is no way not to confirm that the swimmer has committed a doping offence.

Dr. Larry Bowers, member of the FINA Doping Control Review Board (DCRB), was heard by the Panel as an expert witness. He stated:

- a) The DCRB was very careful in ensuring that a number of urine samples were analysed before forwarding the conclusion a doping offence to have been committed. The tests of the samples in question (sample A 366059 and sample B 366059) were performed in an IOC accredited laboratory consistent with IOC guidelines, and two different immunoassays were utilised.
- b) The presence of hCG in the urine of a male can be attributed only to be exogenous administration or the presence of a pathological condition. A pathological reason can be excluded. The swimmer has informed that after consultation of his doctor no indication of cancer in his body was found. And in case the swimmer would suffer from cancer the concentration level of hCG would



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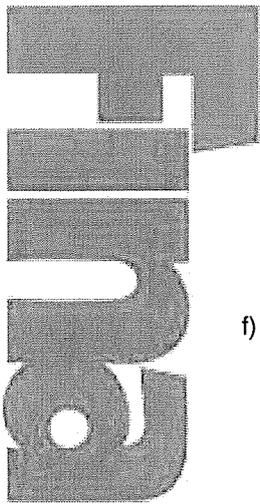
have increased rapidly from test to test which is not the case. However, the concentration level of hCG found in the urine of the swimmer is that high that it must be considered as "abnormal" and – as it has no pathological reason - can be explained only by exogenous administration.

- c) The athlete has suggested that because there is no threshold for the detection of hCG that it is inappropriate to proceed on the findings. However, a number of scientific investigations (Alfthan et al. 1992; Laidler et al. 1994; Delbelke et al. 1998) clearly demonstrate that only very low levels of hCG are to be found in the urine of males. More specifically their studies demonstrated the following:

Alfthan et al.	Mean <1 UI/L
Laidler et al.	in 1400 athletes only 3 results higher than 5 mIU/ml. (author noted that 3 outlying results were probably hCG abuse)
Delbelke et al.	in 5663 athletes mean = 0.56 mIU/ml.

As noted above the levels normally found in the urine of males are miniscule; the levels found in the urine of this athlete, however, are dramatically in excess of normal values, namely 27 mIU/ml according to the analysis of the sample A 366059 and 25 mIU/ml according to the analysis of the sample B 366059.

- d) The test methods used in the laboratory were two different immunoassays. It may be right that mass-spectrometry will lead to more accurate results. However, so far the mass-spectrometry method is not reliable enough in regard to the finding of hCG. The IOC accredited laboratories are advised by the IOC not to make use of the mass-spectrometry as far as hCG is concerned. The IOC laboratories are advised to use immunoassays only but to make use of two different immunoassays in each specific case. The reference made by the swimmer to the book of Kicman is presented only as an "abstract". And it is not in conformance with IOC guidelines.
- e) When the DCRB after consideration of the test results of 12.03.02 and 17.04.02 recommended to carry out two more doping controls on the swimmer the DCRB expressed their interest these analyses to specifically describe not only the concentration of hCG but also the levels of testosterone and epitestosterone present in the urine. However, the values of testosterone and epitestosterone given in the laboratory reports about the analysis of the samples in question is not allowing any conclusion neither in favour of the athlete nor against him.



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- f) The athlete's contention that the detection of an abnormal concentration of hCG by a urine tests can be faulty, and that usually before any claims are made about a positive hCG it must be confirmed with a serum test, which is generally more accurate is not in consistence with his medical expertise. In the contrary: Urine tests are much more reliable in regard to the detetion of an abnormal concentration of hCG than serum tests..
- g) The laboratory findings, produced by the application of two separate immunoessays completely eliminate the possibilty of a "false positive" result for hCG. There are no indications as to the "uncertainty of the measurements" applied in analysing these samples. The values encountered in these tests are very significantly greater than values normally encountered in humans and in excess of any uncertainty of measurement that might be contemplated.
- h) The athlete's contention that the findings may have been produced by "a high level of dehydration" is inconsistent with the specific gravity of the urine measured by the laboratory which is completely normal ( any degree of dehydration would result in the production of a concentrated urine with an elevated specific gravity).

In summary there is nothing in the material or arguments presented by the swimmer to refute the findings of the laboratory analyses.

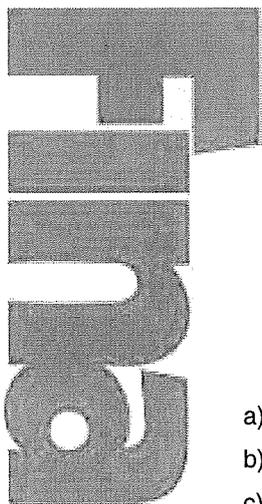
## V IN LAW

According to FINA Rule C 21.5 *"the Doping Panel shall hear all controversies regarding doping control within FINA and shall apply sanctions in accordance with FINA Rule DC 9 to those individuals or Member Federations who are found to be in violation of FINA's Rules relating to doping control"*.

FINA has issued specific rules which, *inter alia*, contain doping provisions. The Doping Control Rules ("DC") are applicable in this case.

FINA Rules DC 1.1 and DC 2.1 are stating that the "finding" of a prohibited substance in an athlete's body tissue or fluids (doping) is strictly forbidden and considered a doping offence.

Appendices A and B attached to FINA's DC Rules are classifying hCG (human chorionic gonadotrophin) under "peptide hormones". FINA Rule DC 9.1.7 is



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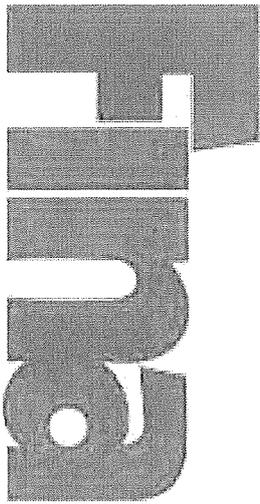
stating that an athlete testing positive to a substance classifying as "peptide hormones" can contest only

- a) whether the correct body tissue or fluid has been analysed,
- b) whether the body tissue or fluid has deteriorated or been contaminated,
- c) whether the laboratory analysis was correctly conducted,
- d) whether the minimum suspension for a first offence should be exceeded, and
- e) whether a minimum sanction can be lessened in accordance with DC 9.10.

At first sight these Rules contain a description of objective elements only. They do not provide for any appreciation of subjective elements. However, these Rules must be interpreted that way that an equitable distribution of the burden of proof for the objective and subjective elements shall be achieved.

- a) The burden of proof with respect to the objective elements of the doping offence, i.g. the presence of a forbidden substance in the body of the athlete, lays with FINA. The successful proof of the objective element then creates a presumption that the doping offence has been committed either intentionally or negligently. This presumption has to be considered in assessing the appropriateness of disciplinary matters. The athlete may rebut this presumption by adducing clear evidence that he/she acted neither intentionally nor negligently.
- b) To meet this burden of proof FINA has to allege the existence of a forbidden substance in the urine of the athlete. In this respect FINA may rely on a positive test result issued by a laboratory. The athlete in turn may contest this result. However, it is not sufficient to advance a number of unspecific allegations. The athlete has to provide specific facts that are likely to call into question the reliability of the test result. It is then again up to FINA to show that these circumstances were not material in a way that they would have altered the test result.
- c) In this concept there is no room to apply concepts of criminal law such as the "presumption of innocence" or the standard of proof to be "beyond reasonable doubt".

These principles are providing a reasonable and well balanced solution. On the one hand it allows FINA to ensure an efficient fight against doping and, on the other hand, it takes into account the rights of each athlete, especially his/her right to due process and the essential "human rights".



## **VI CONCLUSION**

Mr. Strahija has committed a doping offence.

FINA has produced laboratory reports proving that the A sample and the B sample of Mr. Strahija's urine, taken on 22 July 2002 in an out-of-competition test are showing the presence of an abnormal concentration of hCG (human chorionic gonadotrophin) There is no indication, that this finding may be due to a physiological or pathological condition.

Mr. Strahija is not claiming the urine analysed not to be his. He is also not claiming that the urine analysed has been contaminated or deteriorated.

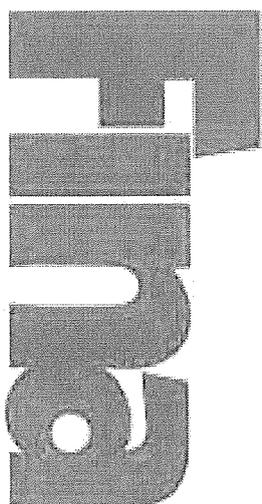
The swimmer is claiming, however, that the analyses of the samples A 366059 and B 366059 by the laboratory did not lead to reliable results. The Panel has dealt with the submissions put forward by the swimmer in this regard (see pages 5 and 6 above), and the Panel has considered the statements made by the expert witness Dr. Bowers in the hearing.

The Panel found that the arguments put forward by the swimmer have been rebutted by the expertise of Dr. Bowers.

- a) The concentration of hCG in the urine of the swimmer is abnormal high.
- b) The high concentration level of hCG has no physiological or pathological reason.
- c) The analyses carried out in the IOC accredited laboratory of Barcelona were in conformance with IOC guidelines. The presumption the laboratory to have conducted the analyses correctly in accordance with prevailing and acceptable standards of care has not been rebutted by the swimmer.

## **VII SANCTION**

The sanction provided for in FINA Rules, effective at present, for a first doping offence involving "peptide hormones" is a suspension of minimum four (4) years (FINA Rule DC 9.1.1).



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The doping offence committed by the swimmer is his first offence.

The Panel did not see any reason to increase the minimum sanction (FINA Rule DC 9.1.7, lit d)).

However, there was also no reason to lessen the sanction according to FINA Rule DC 9.1.7, lit e). The swimmer was not able to clearly establish how the prohibited substance got into his body and that it did not get there as a direct or indirect result of any negligence (FINA Rule DC 9.10).

It is known that the administration of hCG in males can increase testosterone levels and reverse lowered sperm counts which can occur following the administration of testosterone. It is also suspected that hCG is used to mask the presence of exogenous testosterone use. It is for these reasons that hCG is banned in sport. As a consequence of the clinical importance of this product and its potential abuse by sportsmen much is known about the levels which might normally be identified in the urine of male athletes.

On these grounds a

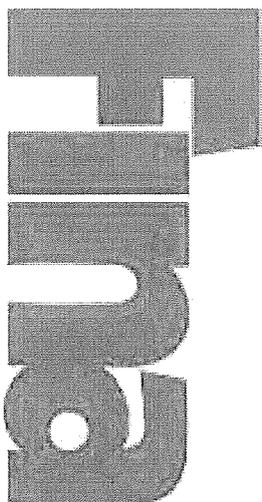
### **suspension of four (4) years**

was to be imposed on the swimmer.

The swimmer is under provisional suspension already since 27 November 2002. The time period between that date and the date of this judgement shall be included in the four years suspension, which therefore will expire on 26 November 2006.

In addition a retroactive sanction was to be imposed on the swimmer according to FINA Rule DC 9.1.1 involving cancellation of all results achieved by the swimmer in competitions during the period prior to the 26<sup>th</sup> November 2002 and extending back to 22<sup>nd</sup> January 2002.

The Doping Panel is well aware that the FINA Congress on 11 July 2003 adopted new FINA DC Rules which will become effective only on 11 September 2003 (FINA Rule C 15.10). The minimum four year term of ineligibility pursuant to FINA



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Rule DC 9.1.1 does not comply with the shorter sanction provided for in the new DC Rules. Also the new DC Rules do not provide a retroactive sanction any more. The Panel has no authority to apply the new DC Rules already now. However, the representative of FINA has stated in the hearing that provisions have been taken already by the FINA Bureau that the four year term of ineligibility now being imposed on the swimmer may be shortened in a way to harmonise with the shorter sanctions provided for in the DC Rules becoming effective on 11 September 2003.

## VIII THE COSTS

All costs related to this case are to be paid by Mr. Strahija, as he has committed a doping offence. However, according to a decision by the FINA Executive the costs of the FINA Doping Panel including the expenses of the Members of the Panel will be covered by FINA.

Harm Beyer

Farid Ben Belkacem

Bernhard J. Favaro

### Appeal Instruction

An appeal may be submitted against this judgement at the Court of Arbitration for Sport, Lausanne, Switzerland within one (1) month after receipt of this judgement (FINA Rule C 10.8.3 (old version) C 12.8.3 (new version)).